The History of Architecture 1905-2008  
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PART ONE: MODERN ARCHITECTURE

Part One Chapter 1: Precursors

1.1 The Arts & Crafts Movement

More than any other problem, the new century was plagued by the condition of industrial production made possible by machines. What role could be played by the craftsman in an era when everything was to be mass produced? What role was played by creativity, manual skill, the one-off, in a world progressing at the unstoppable pace of the clock and where time, marking the rhythms of production, was equivalent to money? In a similar condition how were beauty and truth to be redefined? It is a question with an aesthetic and practical, but above all moral implication. It affects the type of society one wishes to realise, an equilibrium of values in the absence of which any ideas about building or urban planning lose their meaning. If the machine upsets equilibriums, uses, times and spaces, the world must be redesigned. Inevitably the architect becomes a prophet, a utopian, a demiurge.

Having anchored architecture to morality, the leading figures of this period turned to the traditions of the Arts & Crafts. Developed in Great Britain in the mid-eighteenth century and championed by William Morris, this movement inspired the Viennese Otto Wagner and his disciples: Josef Hoffmann and Koloman Moser who, in 1903, created the Wiener Werkstätten, and Joseph Maria Olbrich, who would decant its spirit into the construction of a colony in Darmstadt. Berlage and the Amsterdam School, also heard the calling, influenced by a neo-medieval aesthetic. The Belgian Henry van de Velde, the German Peter Behrens and his young assistant Walter Gropius, who would be so taken that he would adhere to the Werkbund born in Munich in October of 1907. Or the British architects: Francis Annesley Voysey, William Richard Lethaby, Charles Robert Ashbee, C. Harrison Townsend, Charles Rennie Mackintosh. Finally, Frank Lloyd Wright, who sought to introduce these principles in the United States of America in a manifesto read in 1901 in Chicago and entitled “The Art and Craft of the Machine”. Wright spoke about technology as an indispensable partner, emphasising the importance of the use of new materials, criticising commercial architecture and the obsession, on the rise in America following the 1893 Chicago World’s Fair, of using “archaeological relics of bones that dry out and blanche under the sun”.

It was above all in the field of residential design that a new collective approach developed. The homes realised in these years by Voysey, Olbrich, Mackintosh and Wright, beyond the specific aspects of style, share the same concerns with structural honesty, the use of natural materials, the integration of the natural environment, the articulation of volumes, a prevalence of horizontal dimensions
and the absence of rhetorical accentuations or classical ornamentation. The interiors were free, anti-hierarchical, with linked spaces projected outside through large bay windows or centred on the symbolical interior element of the hearth. More than any of the others, Wright was obsessed by the theme of the dwelling. He understood that his clients were the new bourgeoisie, free of the flaccid habits of the aristocracy, but dedicated to entrepreneurial endeavours and lovers of sport and nature. For this new social class, which now travelled by automobile, and during its free time by bicycle, he tirelessly invented new models of dwelling that he advertised in trade reviews and women’s magazines. These were the so-called Prairie houses. In 1900, for example, he launched a campaign in *Ladies’ Home Journal*. He proposed two homes, one that could be built for 7,000.00 US dollars, the other for 5,800.00. The plan of the larger home was an assembly of fluid spaces with only a minimum of interior partitions. The ground floor featured a kitchen serving a single space comprised of a living room, dining area and study. The upper floor provided two bedrooms overlooking this common space.

A masterpiece of the Prairie style is the Robie House, from 1908. Here the theme of horizontality achieves its maximum intensity. Cantilevered planes open the house up and project it into its surroundings. The ground floor moves in the long direction, and the first floor perpendicular to it. “Terraces, low walls, sills”, Bruno Zevi noted, “above all at the extremities, accentuate the inclination of the two levels to break free of a boxy prison”. The entire composition is re-stitched by the fireplace; on the exterior it functions as a hinge and on the interior as the fulcrum of the living room, a fluid space extended out through two bay windows offering a view of the surrounding panorama. Despite decorations with a liberty flavour, even if reinvented in the American architect’s personal style, the house is an excellent example of pared down modernism. It is the culmination of a process of close-set events: the Willits House from 1901-02, the Dana House from 1902-04, the Martin House from 1904 and the Coonley House from 1907-08.

### 1.2 Sullivan and Wright

Frank Lloyd Wright was a multifaceted figure and only with great difficulty can he be classified as belonging to a single style or trend. Born in 1867, he was one year older than Mackintosh and Behrens (1868), three years older than Loos (1870) and four years younger than van de Velde (1863). In 1887, after leaving his university studies midway, he moved to Chicago. The city was in the throes of economic expansion and a new generation of architects was producing the first skyscrapers, made possible by the introduction of the structural steel skeleton and the mechanical lift.
It was a moment of excitement, marked by continuous technological advancements and a new aesthetic founded on structural sincerity, the pursuit of economy in construction and the rethinking of ornamentation, reduced to the essential and, in all cases, rationalised in standardised and repeatable forms. In 1879 and 1889 William Le Baron Jenney erected two commercial buildings with steel structures, known as the Leiter Buildings. With the Monadnock Building from 1891, characterised by an undulating sequence of bay windows and a majestic tapering at the corners, John Wellborn Root reached a height of twenty storeys. With the Reliance Building Daniel Burnham realised a prototype of the skyscraper with perfect gradients of chiaroscuro.

Wright initially worked in the office of Joseph Lyman Silsbee, the assertor of the Shingle Style, an eclectic entangling of elements immune to classicist trends; he later worked for Beers, Clay & Dutton before moving to Adler & Sullivan, where he would remain at length. One of the most important practices in the city, it was managed by two complementary figures: Dankmar Adler, a solid and technically skilled professional and an expert with few equals in acoustics, and Louis Sullivan, an artistic genius whose exuberance and generosity compensated for his lack of personal skills. Wright quickly became attached to the latter, only a few years his senior (Sullivan was born in 1856, and Adler in 1844); Wright referred to Sullivan as “lieber Meister”, the beloved master. They spent much time discussing architecture while working on numerous projects, including the Chicago Auditorium, a multipurpose complex whose attic became the office’s new home. In the meantime, Wright married Catherine Tobin and, supported by a loan from his boss, acquired a lot in Oak Park where he built his own home and, on the side, began his own private practice in parallel to his work for the office, also to maintain a growing family. He designed a dozen homes, all correct but none of any particular interest. They served to test the expressive possibilities of a wide range of styles: from the Romanesque to the renaissance. His moonlighting was eventually discovered by Sullivan, who fired him for breaking the terms of the contract of exclusivity that bound him to the practice.

Changing times saw the pioneering phase about to come to an end, making it increasingly more difficult to propose innovation in architecture. Just prior to losing his job, Wright participated with Sullivan in the Columbian Exhibition held in Chicago in 1893. He was thus able to witness the progressive marginalisation of his master, and the affirmation of the Beaux-Arts style, the triumph of a rhetorical and whitewashed classicism, the end of the heroic period of the Chicago School, to research unconditioned by style and the abandonment of an exuberant creativity that, despite accepting the joyous teachings of the Liberty style, refuted its frivolities and sought a continuous dialogue with the forms of nature.
For the Exhibition Sullivan designed the stunning Golden Doorway for the Transportation Building whose design he had been commissioned: a series of concentric recessed arches inscribed in a portal made from prefabricated square elements decorated with floral bas reliefs. The result was a plastic force combined with a decorative lyricism. The portal was flanked by small pagodas beautiful even to ward off any sense of kitsch. The comments of visitors reveal a state of shock. The correspondent for the Australian *Melbourne Argus* judged it the worst piece of the entire exhibition. Yet there were also those who openly praised the work. The critic at the *Revue des Arts Décoratifs* praised the building without reservation. The young Adolf Loos was of course present: he took away very positive memories of Sullivan.

Sullivan’s destiny – he and Adler separated in 1895 – was marked by a slow and inexorable decline, accelerated by his alcoholism. Wright, at the peak of his energies, put an addition onto his Oak Park home which he used as his office, and embarked on a brilliant career. While we have already briefly mentioned his residential projects, there were also a number of public projects, among which two standout: the Larkin Building in Buffalo and the Unity Temple in Oak Park.

The building for the offices of the Larkin Co. of Buffalo, realised between 1904 and 1905, is a unique single height space, marked by a gigantic giant order that serves to suspend mezzanines used as offices. It appears to be the exact antithesis of his Prairie homes. On the exterior it resembles an Assyrian-Babylonian brick fortress, whose rhythm is dictated by vertical plastic masses. To the side, conceived as a portal, eight giant pilasters divide the windows and a loggia perforates the volume, emphasising capitals as gigantic as they are abstract, and treated as sculptural inserts. The building is extremely introverted and magnetically drawn toward the interior space, almost prohibiting any contact with the exterior to stimulate total concentration on one’s work. The interior is permeable in every direction to favour communication but above all the new technology of air conditioning. It is considered one of the first buildings to have adopted this innovation.

The Unity Temple in Oak Park, where Wright worked in 1904, is made of a limited number of solids rendered in exposed concrete. The cubic space of the assembly hall dialogues with the lower volume of the service block, also composed of a matrix of three perfect squares legible in plan. This additional introverted space is also highly central. To exalt its function the space is illuminated from above by a coffered ceiling/skylight. It recalls buildings from the Renaissance for its absolute control of space obtained through plastic articulation, marked and emphasised, *alla* Brunelleschi, by bands of inserts (Wright’s, however, are in wood) and for its intense and almost scenographic luminosity.

In 1905 Wright travelled to Japan to discover a culture he was already familiar with and had been able to appreciate during the Columbian Exhibition, which
featured the reconstruction of a temple. His voyage would have a notable influence on his future. He saw the Japanese house as a “temple of supreme study in elimination – not only of dirt but the elimination, too, of the insignificant”. He was struck by the spatial fluidity of linked spaces, separated by lightweight and sliding diaphragms, by the close integration between building and nature. From Japanese gardens he learned the art of disorganised order and the artifice of miniaturising objects, to offer man the sensation of a greater control over the spaces in which he lives. He was fascinated by oriental prints, becoming a collector; the sale of these pieces would later help him weather economic difficulties. Japanese and Mesoamerican culture, which he studied after the war, would become the obligatory signs for fleeing from the classicism and formalism of the Beaux-Arts. In this, his profile is not dissimilar to that of the artists of Paris and Germany who, during the same years, discovered African masks and primitive cultures, supported by the hypothesis that these arts were closer to the truth than those filtered through formalism and the academic world. Starting in 1905, Wright began to condense his beliefs in a series of articles entitled “In the Cause of Architecture”, published in The Architectural Record. He focused on six principles that constitute the nucleus of organic architecture: measuring art through simplicity and repose; allowing as many styles as there are kinds of people; allowing a building to flourish in its context and enter into harmony with the environment; harmonising or “conventionalising” colours with the surrounding environment, simulating nature; revealing rather than concealing the nature of materials; building with character and energy rather than in accordance with predominant styles. The objective was ambitious: reconciling architecture and nature to restore man to the centre of the living cosmos. The large hearth at the centre of the Prairie House would be the symbolic explication of this individualistic religion, with strong pantheistic overtones. Through the teachings and influence of Wright, the Prairie style spread through Chicago and the Midwest. It would be developed by a very talented group that included: Walter Burley Griffin, George Grant Elsmie and William Gray Purcell. They would share a love for the horizontal, for long and projecting roofs, for the choice of natural materials and also for an unmistakable approach to the presentation of their projects, immersed in a delightful flow of trees and flowers.

1.3 Wagner, Olbrich, Hoffmann

While in America Sullivan and Wright assimilated the Art Nouveau revolution without being imprisoned by it, charging their research with an ideal tension and laying the foundations for contemporary architecture, in Europe, between 1905 and 1914, a number of leading figures of exceptional talent were coming to the
fore. They understood that the set of references was changing and did not hesitate to question ideologies and poetics. In Austria they were Wagner, Olbrich, Hoffmann, in Scotland Mackintosh, in the Netherlands Berlage, in Belgium Horta and van de Velde. During the same period in Spain, a lone genius, Gaudí, was experimenting with architecture that was simultaneously archaic and modern, and whose full potentialities remain unsounded to this day. Finally, in France we can look to Perret and Garnier. The first presented the problem of using reinforced concrete with an innovative aesthetic, the new building material that would be used for the majority of constructions from this moment forth. The second developed an innovative scheme for the industrial city, with the intuition that the leading problem of new architecture was its contextualisation in an urban setting. Otto Wagner trained as a classicist. He studied the texts and projects of Karl Friedrich Schinkel, Gottfried Semper and Theophil Hansen. He was inspired by the grandiose Viennese style, which was not extraneous to Baroque flourishes. After 1894, with a rapid turn of face, he was seduced by Art Nouveau, though he refused its excesses. Between 1894 and 1901, thanks also to the mediation of Olbrich, he sounded the principles of buildings in metropolitan Vienna. In 1895 he published his lessons from the first year course at the Academy of Fine Arts, entitled Moderne Architektur. His theses were innovative, though not dissimilar to those supported in other nations by other innovative figures, for example van de Velde, who he met in 1897: he believed the time had come to move toward a modern life, to pursue simplicity, to understand the new conditions of the metropolis, to be realistic about the choice of techniques and materials of construction. He was an enthusiastic figure to the disciples who gravitated around his studio: Schöntal, Fabiani, Kammerer, Bauer, Ehn, the Gessner brothers, Kotera, Plečnik, Perco, Schindler, Hoppe, Pirchau, Lichtbau, Olbrich and Hoffmann. He claimed: “In this new society one can no longer let the choice of a style dictate architectural creation. The architect must create new forms adapting those that best meet the construction techniques of the time and the requirements of the era. It is the only way it has any true meaning”. He was not long in adding: “The architect can certainly draw on the rich chest of tradition: do not copy the selected models, but adapt them to their own ends radically renewing them.” Far from any medieval-esque nostalgia, Wagner created works of measured composure and refined construction. Among them is his masterpiece, the Austrian Postal Savings Bank building in Vienna, realised between 1903 and 1912. The building is characterised by finishes denounced as such by exposed bolts used to hold the stone slabs in place, by refined construction details with a vaguely mechanical flavour and a poetic of sober, measured and luminous spaces. Josef Hoffmann continued along the path laid out by his master toward the conciliation between new forms and the motifs of a classical tradition. His most
successful work is the Stoclet Palace (1905-11) where, however, he moved away from this subject to embrace a more authentically modern experimentation. The building is surprisingly dynamic both in the horizontal, thanks to the free layout of the plan, and in the vertical, thanks to a vibrant articulation of volumes that culminates in a characteristic tower. The “personification”, according to Edoardo Persico, “of the most virile ideals of the European bourgeoisie”, Stoclet Palace is also a warehouse of creativity home to the most important artists of the Secession: Klimt, Moser, Czeschka, Metzner, Minne and Khnopff. The objective was total art. The same that drove van de Velde to create dresses for his wife and, in America, led Wright to design stained glass windows and vases, assisted by sculptors and expert craftsmen.

It was Joseph Maria Olbrich, Wagner’s other great disciple, who passionately and joyfully moved with greater coherence toward the renewal of the arts and a new season of expression. Responsible, on behalf of Wagner, for the Vienna metro, in 1897 together with Hoffman, Koloman Moser and Gustav Klimt, he founded the association of artists known as the Viennese Secession. Between 1897 and 1898 he realised its new home: a cubiform volume whose heaviness is juxtaposed against an incredibly light dome covered in gold leaf. Wright admired this building for its skilful play with the logic of contrasts.

The author of magnificent interiors whose spatial fluidity and intelligent decoration recall those of Mackintosh and Wright, Olbrich fully committed himself to the realisation of a centre dedicated to research and artistic production. He was provided an opportunity by the Grand Duke Ernst Ludwig von Hessen, who wished to relaunch craftsmanship and artistic production in the Gran Duchy of Hesse, inspired by Baillie Scott and Charles Robert Ashbee, who in 1888 founded the Guild and School of Handicraft in London.

The colony’s first project dates back to 1898, when the Grand Duke invited the thirty-one year old architect and six other artists to Darmstadt, including the painter and artist-craftsman Peter Behrens. In 1899 he imagined the realisation of an atelier building surrounded by five villas, a cistern and an outdoor theatre. They would be part of an exhibition emblematically entitled A Document of German Art. Olbrich prepared the project and its variations. The inauguration of the Ernst Ludwig Haus and the first constructions, together with the exhibition pavilions, took place on the 15th May 1901. It centred around a theatre performance with a powerful scenographic effect and romantic-symbolic connotations, under the talented direction of the thirty-three year old Behrens, who stated: “beauty for us returns to being a quintessence of maximum strength and at its service is a new cult. We wish to build a house in its honour, a home in which all art unfolds solemnly as the consecration of our life”. The exhibition attracted a vast public. All the same, it failed in its primary objective to render artisanal products
economically accessible. Financial failure was soon followed by the first defections, as the first group of artists left the colony in 1902. Behrens took his leave the following year. Only Olbrich, unperturbed, remained to complete the work that had been begun; in 1908, the year of his premature death, he realised the stunning Wedding Tower, a work of architecture with an expressionist flavour that appears suspended in the atmosphere of some traditional fable.

1.4 Mackintosh

Another unfortunate genius was the Scottish Charles Rennie Mackintosh. He lived an intense and dramatic life, in complete professional isolation in a Glasgow substantially extraneous to the cultural debate developing in other European nations. Yet in 1896, Mackintosh was the unexpected winner, on behalf of the office Honeyman and Keppie, of the competition to build the new Glasgow School of Art. Yet to turn twenty-eight, he had already begun a promising career. In only a few years, in fact, he was commissioned with the design of Queen’s Cross Church (1897-99), the Daily Record Building (1890-1904) and Windyhill (1900-01). In 1901 he became a partner with the office Honeyman and Keppie. Successive projects include the Willow Tea Rooms (1903), Hill House (1902-1904) and the Scotland Street School (1903-06). There were also invitations to the international exhibitions in Vienna (1900), Turin (1902) and Berlin (1905); publications in specialised magazines (The Studio, Dekorative Kunst, Deutsche Kunst und Dekoration, Ver Sacrum); and, a certain international notoriety, thanks also to the support of Muthesius.

Mackintosh’s involvement with the Glasgow School of Art unfolded primarily in two different periods: from 1896 to 1899, when he designed a two-storey building plus basement that, for financial reasons, was only half-built; and from 1907 to 1909, when he completed the project, building the remaining portion and adding one storey and a library.

The first portion is a work full of figurative openings constructed by a very young architect who, for details related to construction, had to be assisted by Keppie. The project is striking for the simplicity and functionality of its interior spaces, the attention to detail, managed with skill though without affectation, and for the introduction of modern technical devices such as centralised heating and forced ventilation.

The building is characterised by an elegant elevation in which stone and glass alternate in a refined play of symmetry and asymmetry, and between solidity and transparency. The plastic values of the project are reinforced by a number of carefully calibrated projections: the bay window of the guardhouse and the second floor toilet and, finally, the small tower. The balcony, which ties these elements
together, emphasises the entrance to the building and determines a visual gap between the verticality of the sequence of chiaroscuro that is counterbalanced against the horizontal.

For its completion between 1907-09, Mackintosh pulled the elevation back, removing it from the play of proportions established in the earlier façade. He left the east elevation unaltered, already fully completed during the first phase and characterised by a syncopated alternation of openings with a Romanesque flavour. Instead, he concentrated on the southwest node, where he planned the space of the library. He inserted a plastic element in the form of a tower, an architectural reference of significant urban value, clearly visible also from the streets below; at the attic level he created a glazed walkway that overlooks the roofs of the entire city. The result: Glasgow can be viewed from the Glasgow School and the Glasgow School can be viewed from Glasgow.

To identify the ideal prism of the tower and render it more slender using ascending ribs, Mackintosh invented a system of tall windows that run along the length of the main construction, defining a unitary volume and, at the same tie, articulating it as a sum of prismatic buttresses that lift the building upward. One side – the west – is dominated by projections: three full height windows that ideally converge toward the tympanum of the roof that, however, is set back from the plane of the façade. On the other side – the south – the wall mass is carved out at its centre and the full height window is created as if in the negative. The landmark role of the tower is reinforced by semi-circular niches to create a strong plastic energy. The reference is to Michelangelo, whose work left Mackintosh in awe during his travels to Italy in 1891, as evidenced in his sketchbooks.

The interior of the library recalls instead the fluid spatiality of Japanese architecture. Its simplicity and calibrated luminosity make it one of the most effective documents of contemporary architecture. It is a text dense with promises, though unfortunately without a follow-up.

On the exterior, the primary system of large signs is accompanied by a secondary system of details, also inspired by Michelangelo. The effect is one of explosive power.

However, there is no eclecticism. Having abandoned the grammar of styles, architecture was forced to turn to its constituent parts: the plane, the volume the line and the play of functions, in a sort of cancellation of language. There was a rediscovery of the value of forms, of a history that was not to be copied, but whose principles of building were to be assimilated. There was an awareness of a dynamic order of nature that architecture could both discover and investigate.

In 1909, when the Glasgow School of Art was complete, Mackintosh entered into a professional crisis. When, in 1913 on the eve of the First World War, he left Honeyman and Keppie to open his own practice, his professional future was further
darkened by the negative concomitance of objective factors, including the economic difficulties that plagued this period and the reduced professional opportunities offered by a city that remained provincial, coupled with subjective factors such as a moody character and alcohol.

1.5 Berlage

The Dutch architect Berlage was not an exceptional creator of forms, in the sense that he was not on the same level as the more talented Olbrich, Mackintosh or Wright. He was however responsible for the renewal of architecture in the Netherlands. His urban projects, initially for South Amsterdam, for their methodological rigour and architectural openness, were true trailblazers. His merits include the diffusion of Wright’s language in Europe and, together, a sort formal Calvinism, founded on structural sincerity, the primacy of the bare wall, the cult of harmony and proportion and the absence of dogmas. In 1908 he stated: “In architecture, decorations and ornaments are entirely secondary; while the true essential elements are the creation of space and the relationship between volumes”.

His work would be appreciated by all those youthful innovators who found inspiration in his neo-medieval pathos, fascinated by his ability to articulate space, and breathe life into bricks. Among them was Mies van der Rohe who, it is said, had an argument after the Second World War with Philip Johnson following the latter’s judgement of the Dutch architect’s work.

Standouts among Berlage’s work include the Amsterdam Stock Exchange, realised between 1896 and 1903. This neo-Romanesque work is closed toward the exterior and characterised by a tower that creates a plastic hinge. The interior is denoted by large halls, vaulted on slender trusses and illuminated from above. Decorations are reduced to a minimum and substituted by coloured bricks alternating with surfaces in exposed common bricks and by plays of chiaroscuro created by loggias and parapets.

Successive buildings, such as the Peace Palace in The Hague from 1907 and the project for the Beethovenhuis from 1908 are evidence of a research that rotates around Richardsonian themes. Later works, up to his death in 1934, lacked the same strength. Common sense and reason prevailed over poetry. In 1921, after an initial period of enthusiasm, in occasion of the publication of a dossier on Wendingen, Berlage reconsidered his opinion of Wright’s work and wound up accusing him of individualism and romanticism. Two characteristics that clashed with the placid research pursued by the Dutchman, for whom style and calmness moved hand in hand: “Ancient architecture”, he affirmed in 1905, “precisely
because it has style, expresses a consoling calmness. Style is the reason for calmness”.

1.6 Gaudí

A figure who seemed more than capable of doing without this calmness was Antoni Gaudí, a wholly atypical figure, operating outside of the major architectural currents. From his home in Catalonia he imagined a world in which art, poetry, industry and craft coexisted in a sublime synthesis. Alien to the fascination with the ideology of progress, he admired the mud constructions of North Africa. He appreciated the simplicity of the means, the intelligence of the structure, the profound religiousness of form. He devoured the books of Ruskin, fascinated by the vigour and moral tension of this man of lofty ideals. Ultra-religious – his beatification was recently proposed – he believed in the ethic of a trade in which art and morality were inseparable. He refuted all things arbitrary and conserved the sensation that mechanical forms were the fruit of an unbearable simplification. This gave birth to line of research oriented in three directions: structural honesty, the skills of the craftsman and an open use of symbolism.

Structural honesty because it was the only intelligent way to combine materials, to ensure that they worked together in accordance with their real qualities and, because nature is a gift from God, to be used to realise his celestial designs. The skills of a craftsman because it is the work of human hans that renders objects worthy of attention and, by humanising them, transforms them into goods. This is why Gaudí adopted very poor materials, such as chips of ceramic tile, poorly baked bricked and broken pieces of stone: the harder it was to give them value, the more merit the work deserved and the more satisfaction it rendered; the smaller the fragments, the more the work resembled a marvellous mosaic. An openness toward symbolism because nothing has meaning if it expresses only itself, if it is not connected to something other and, in particular, to something transcendent. It is in the overabundance of meanings, in the polysemy of the work, in the kaleidoscopic exchange and overlapping of images that the richness of creation triumphs. This is why a baldachin can resemble a tent, a sail or a crown of thorns; a church a termitary and a gothic cathedral.

Gaudí also possessed a wild fantasy about space, manifest from his earliest works. The Palau Güell in Barcelona (1888), for example, unfolds around a prodigious central void. Between 1904 and 1907 Gaudí was at work on the Casa Battló and between 1905 and 1910 he completed the Casa Milá. The first is characterised by scales that resemble small waves on the sea, the second by concavities and convexities that produce a sinuous and plastic movement. It could be a seaside
cliff, a pile of stones, a mass eroded over time. What is certain, through its form, is that the block of the Casa Milá brings a vital energy to the otherwise squarish public plaza it faces, negating the rigid checkerboard of the city of Barcelona. Its terrace, dotted by splendid chimney stacks, vaguely reminiscent of the heliocoidal fantasies of the cupola of Borromini’s Church of Sant’Ivo, offers views of an alternative city that is vital, energetic, parsimonious and colourful.

So archaic as to be paradoxical, the gardens of the Parc Güell (1900-14) and the Church of the Sagrada Família (begun in 1883, and on-going to the present day, similar to an immense medieval building site), oscillate between the chthonic and the celestial. Exasperating, excessive, undoubtedly oversize, the two complexes possess the robustness of the Doric and the lightness of the Gothic. Sounding unexplored beliefs, they attack our system of values with a communicative power rarely achieved by a work of architecture.

Too antique and too modern to be understood by the prophets of a reductive and internationalist vision of contemporary architecture, Gaudí was forgotten and judged in a reductive manner. He is missing, for example, from the first version of Pevsner’s *Pioneer’s of the Modern Movement* and from *Space, Time and Architecture* by Sigfried Giedion. He was instead defended by critics and historians who refused to consider contemporary architecture only in the vein of Post-Cubist, mechanistic and functionalist abstraction. For this reason he represents a sort of unresolved problem, yet to be fully explored by the historiography of Modernism.

### 1.7 Perret

Coupled with a line of neo-medieval and romantic research, which culminated in Expressionism and organicism, this was also the period of a rigoristic and classicist approach that, through Cubism and later Purism, would flow into what would later become known as the International Style. Thus, if on the one hand we find the research of Horta, van de Velde, Berlage, Mackintosh, Olbrich, Sullivan, Wright and Saarinen, on the other is the work of Behrens, Perret and Wagner.

However, disappointment awaits anyone wishing to reduce this opposition to a rigid formula. It would become clear that the confines are blurry and that it is not easy to define a precise demarcation between the two groups. Furthermore, it would become clear that the passages between the two fronts were both continuous and frequent. Thus Berlage, while producing works with a strong neo-Romanesque connotation, intended his work in the classical sense and looked down upon the expressionist intemperance of Michel de Klerk and the Amsterdam School. Wagner, despite being a strong classicist hired Olbrich, giving free reign to his research and even allowing himself to be influenced by him. Behrens, after an early romantic phase that corresponded with the experience of Darmstadt, would
continue along a line of rigorism that would lead to projects of a bland monumentalism, such as the German Embassy in Saint Petersburg from 1912, though not without late reconsiderations and majestic projects, such as the expressionist administrative building for the Höchster Farbwerke from 1920-24. Hoffmann would indulge himself in the refinements of the Liberty style and a stripped though severe rigorism. Not to mention figures such as Mies, Gropius and Le Corbusier, who oscillated between the two proposals. Mies and Gropius also spent time, among others, with Taut and Häring. Le Corbusier, following professional experiences with Perret (1908-09) and Behrens (1910), abandoned the neo-medieval and anti-classical teachings of Charles L'Éplattenier. As mentioned, there were three leading interpreters of the rigorist line. Wagner in Austria, Perret in France and Behrens in Germany. We have already spoken of Wagner, and will look at Behrens later in relation to the experience of the Werkbund. This leaves us with Auguste Perret. Born in Brussels in 1874, Perret was younger than Wright by seven years and thirteen years older than Le Corbusier. The son of a mason who founded a construction company in 1882, Auguste studied in Paris at the École des Beaux-Arts. His professor was Julien Gaudet, author in 1902 of the treatise *Eléments et théories de l’architecture*, a manual based on the eighteenth century method of Durand: a rigorously classicist theory, constructed from mechanics and the rational combination of types.

In 1897, after three years of study, he left school to join his brothers in working for the family business, one of the first to make systematic use of reinforced concrete. Auguste studied this material in-depth: it is said that two of his favourite books were the text on the Hennibique system *Le béton armé et ses application*, from 1902, and *l'Historie de l'architecture* by Auguste Choisy, published in 1899. The second of the two examines the role of inventions in the evolution of the system of forms.

Perret’s masterpiece is the house in Rue Franklin in Paris, built between 1903 and 1904. Its strength, as William J.R. Curtis noted, resides in the authoritative manner by which it announced the potentiality of a new material using a phrasing rooted in tradition.

The house is the demonstration of the immense possibilities offered by a technique that almost annuls the restrictions imposed by load bearing masonry using slender columns, large openings, a lightness of construction and a flexibility in plan. The entire building is projected toward light. Yet, faced with the possibility that it might be the bearer of incalculable overtures, Perret, almost out of fear of pushing things too far, sought to demonstrate that this new approach allowed for the recovery of tectonic values, and thus of the classical tradition.
In Rue Franklin this demonstration occurs by clearly denouncing how the structure functions. The structure is exposed on the façade and clad in smooth ceramic panels, differentiated from the infill panels characterised by delicate floral motifs. Similar to a Greek temple, each component clearly states its role and function: nothing is arbitrary and everything has its own rational justification.

In 1906 Perret abandoned any cladding and, with the garage at 51 Rue de Ponthieu in Paris, experimented with a structure in exposed reinforced concrete. The formal intentions of the project are left entirely to the rhythm of beams and columns. The result is an alternation in the elevations of small and large bays, defining a composition that resembles an abstract canvas.

Between 1908 and 1909 the twenty-one year old Le Corbusier worked as the lead designer in the office that, in the meantime, had become one of the principal points spreading the gospel of reinforced concrete construction in France. This experience would leave an indelible mark, imposing a radical reflection that would lead him, during the 1920s, to translate the possibilities offered by this new technique into precise aesthetic precepts: the Five Points of a New Architecture.

Following the exploit in Rue Franklin, and the garage at 51 Rue de Ponthieu, Perret’s research appears to have lost its bite, moving toward increasingly more asphyxiated and rhetorical technicisms with drifts into monumentalism. His theatre on the Champs-Élysées (1911-13) is a delusion, and the admittedly fascinating Notre-Dame du Raincy from 1922-24, despite being a mannerist exercise, is nonetheless the best of his successive works.

1.8 Garnier

Tony Garnier (1869-1948), not without contrasts, had been developing a project for an industrial city since 1901 during his time at the Villa Medici in Rome. His objective was to realise an ideal model that could serve as a realistic inspiration to plans for the agglomerations arising everywhere across Europe, and in particular in the urban area of his native Lyon. With this in mind the urban lessons of Ancient Rome were deemed precious, if assumed as a method. Thus in 1904, upon completion of his studies, he did not hesitate to present in Paris a reconstruction of the Tuscolo archaeological area alongside drawings of his new city.

Published only in 1917, Garnier’s project for a *Cité industrielle* is stunning for the simplicity of its parti and for the clarity of its conceptual structure: a settlement for 35,000 residents divided into zones. On one side is the ancient city centre, on the other the industrial city and, finally the residential area. The centre of this latter features an area designed to host public spaces and is structured in functional nuclei, each of which contains facilities at the scale of the neighbourhood,
including schools. In a healthier hillside area, separated from the rest of the city, he placed the hospital and other medical-health facilities.

The subdivision of urban space into specialised zones – a choice that would later be adopted by the Modern Movement and sanctioned by the Charter of Athens in 1933 – pursued a twofold objective: allowing for the realisation of the city by typological inserts, similar to modular elements, studied on the drawing board and thus already resolved in terms of their function; furthermore, when necessary, allowing for the expansion of urban space and the simple addition of new modules. The method is borrowed from a consolidated academic tradition of typological studies ranging from Durand to Gaudet, Garnier being a disciple of the latter. However, the method of its application, for its unabashedly functional intentionality, was such a breath of fresh air that Le Corbusier was fascinated enough to meet Garnier and, in 1920, to publish a few illustrations of the *Cité industrielle* in the pages of *Esprit Noveau*.

A socialist by family tradition, by education and by choice, Garnier imagined the industrial city as a community in which each inhabitant possessed the right to an independent home, even if modest. This led to the predilection for a substantially compact development and, as a rule, limited to two storeys. There were also condominiums and, in the second edition of the publication of the *Cité industrielle* from 1932, also plans for districts with higher densities. We are still far from the densities of the speculative city being developed at this time, and from the vast models of the garden city imagined by Ebenezer Howard in 1898, and realised in the city of Letchworth in 1903.

The material used to build the *Cité Industrielle* was reinforced concrete (it is interesting to note that Gaudet’s other important disciple at the École des Beaux-Arts in Paris was Perret). This material served to create simple and essential forms, stripped of useless decorations, characterised by stereometric volumes and flat roofs. Each construction, for Garnier, was instead to feature a correct exposure, adequate illumination, a position near a park and accessibility also from an exclusively pedestrian path. The result, as shown in the numerous perspectives accompanying the project, is an extremely pleasant space, though without an exceptional architecture. Garnier, as demonstrated also in his projects for the municipal government of Lyon, with whom he collaborated for many years (the slaughterhouse, 1906-32, the Grange-Blanche Hospital from 1903-1930, the États-Unis district from 1924-35), was a talented urbanist, an impeccable technician though not an architect of extraordinary talent.
Part One Chapter 2: The Avant-Garde: 1905-1914

2.1 The Acceleration of Technology and Science

The years between 1905 and 1914 were witness to rapid accelerations in every field. In 1905 the twenty-six year old Albert Einstein proposed the first formulation of the general theory of relativity, the most important revolution in modern science. The same year also saw the exhibition of the “wild beasts”, the Fauves, painters whose use of pure colours flew in the face of the canons of the academic world. The year 1905 also saw the founding in Dresden of the Die Brücke (The Bridge), a movement that, in the wake of the teachings of Van Gogh and Munch, introduced the tensions of Expressionism. In 1909 Filippo Tomasso Marinetti published the “Primo Manifesto del Futurismo” (The First Manifesto of Futurism) in Le Figaro. He exalted vitality and modern technology in the face of bourgeois misoneism. He celebrated new inventions, first and foremost the automobile, more beautiful than the Nike of Samothrace and now within the grasp of the masses at affordable prices; one need only recall that in 1908 Henry Ford launched the Model T. The futurists soon celebrated a new vehicle, the airplane, whose first flight, piloted by the brothers Wilbur and Orville Wright, took place in 1903. It was not long before its utility as a tool of war became clear: the first aerial bombing occurred in 1909.

Architecture was in a tumult. It metabolised the inventions of technology capable of questioning its very principles: lightweight structures in steel and reinforced concrete, the mechanical lift, electricity, air conditioning, the telephone. The first electrical lamp appeared in 1879, followed by the first neon light in 1910; the first mechanical lift was presented by Otis in 1900 and in 1902 the first artificial air conditioner for office buildings, patented in 1906.

Everything seemed to be in a state of crisis during this period. First and foremost scientific theories. However, it was the theory of relativity that became almost an obsession for artists, poets, writers and architects. The most striking thing about relativity was its paradoxes: different movements of time viewed from two different systems of reference, measurements that grew shorter, matter that transformed into energy. They were striking because they contested traditional points of view, founded on absolute concepts of space and time, and introduced a spiritualist dimension whose irrationality and mysticism were extraneous to the ideas of the scientific world.

Evidence can be found during this period of the fortune met by discussions of the fourth dimension. Between the end of the 1800s and the early 1900s, Marcel Proust, Fyodor Mikhailovich Dostoyevsky, Oscar Wilde and Gertrude Stein all made mention of it. In 1903 Jouffret wrote an elementary treatise on geometry in four dimensions. Vladimir Lenin, in Materialism and Empiriocriticism (1908), defined a
hypothesis that, while illogical, was nonetheless scientifically credible. It would be
with the German physicist Hermann Minkowski in 1908, and later in 1909 with P.D.
Ouspensky, that the theory of relativity and the fourth dimension would officially
come together. Minkowski would proclaim the co-penetration between space and
time.

The Cubist painters saw this new synthesis as a means for breaking free of the
banality of empirical space and without the fourth dimension and relativity it would
be impossible to comprehend numerous architects of the Modern Movement, such
as Theo Van Doesburg or such critical works as *Space, Time and Architecture* by
Sigfried Giedion.

On more than one occasion Einstein was surprised, not to say vexed, by such
daring associations. All the same, the theory of relativity contained a new spatial
condition, which José Ortega Y Gasset was quick to capture at the dawn of the new
century to develop his philosophy of perspectivism. It would later be summarised
by Stephen Kern in a 1983 essay entitled “Space and Time” as follows:
“The dilation of time was only a perspectival effect created by relative motion
between an observer and the thing observed. It was not some concrete change
inherent in an object but merely a consequence of the act of measuring”.

Viewed from this point of view, the Einsteinian revolution is a theory of
observation: it multiplies points of view, founding its project on the synchronicity
of seeing. It produces a four dimensional perspective, an anamorphosis, one could
say, of space-time. As a theory of vision and deformation, it could not help but
enthral the artists of an era with an almost innate bearing for invention and
rebellion. It appeared to have finally demonstrated that two plus two was no
longer equal to four, that a measurement was never absolute and that innovation
could be obtained only under the condition of inventing new forms for the
organisation of reality, believing more in one’s own system of convictions than in
the dominant credo. Einstein transmuted into James Joyce or William Faulkner, but
also into Pablo Picasso, Le Corbusier and Theo Van Doesburg: we will come back to
this.

There is no need to state that a similar approach ran the risk of upsetting the very
sense and meaning of Einstein’s synthesis, in some cases orienting artistic and
architectural research toward subjectivism, or an agnosticism and mysticism that,
as we have seen, could not help but embarrass the scientist. For his part, instead,
Einstein was a strong monist: a four-dimensional Parmenides, to use the acute
definition coined by Paul Feyerabend. All the same, there is no doubt that few
theories like relativity, or better yet, its vulgate, managed to shape the spirit of an
era, providing countless operative hypotheses, in some cases ingenious in others
far-reaching. It transformed the plurality of vision into a hypothesis of avant-garde
research that would guide the entire twentieth century.
2.2 A New Vision of Time

At 10 a.m. on the 1st July 1913 the first time signal ever transmitted was broadcast from the Eiffel Tower, following an international convention on time held in 1912 that developed a uniform method for calculating and preserving these signals. This marked the end of a non-homogeneous and fragmented temporal universe: in 1870 the United States of America used no less than eighty different timetables for its railroads, a number not overly superior to that of other countries. The synchronisation of time and the control of space were the leitmotifs of a research that straddled the late nineteenth/early twentieth century. It comported the unification and standardisation of systems of surveying and measurement. This included the division, sanctioned in 1884, of the Earth into 24 time zones, the creation of the Zero Meridian, the establishment of the length of one day and the determination of the beginning of the universal day.

Space and time, without offending any form of relativism, were considered at the beginning of the twentieth century for practical issues of standardisation, infinitely divisible and measurable. The same was true of movement, defined as a mechanical linking of spaces and times. This is how it was imagined by photographers at the time. It was in 1882 that Etienne-Jules Marey invented a photographic device that allowed him to capture numerous exposures on a single plate. Eadweard Muybridge, using a battery of cameras, managed to analyse the movement of humans and animals. He published a portion of his research in the book *The Human Figure in Motion*, from 1885. This marked the birth of chronophotography. It would inspire the avant-garde artists and lead to the invention of cinema, between 1893 and 1896. A film is in fact nothing other than a chronophotograph organised on a continuous ribbon moving in time at a uniform speed.

The success of this new technique was guaranteed. Both in terms of visitors: in 1910 there were more than ten thousand cinemas in the United States alone; and in technical terms: it was the only art to immediately offer a plurality of images perceived from a moving point of view. In this manner it relativized spaces and times with rapid close ups or long shots, with overlapping scenes from different eras, with the simultaneous presentation of events occurring in distant locations. The art *par excellence* of the century, it would influence painting, sculpture and architecture. Without the invention of film, without its sequences, it is almost impossible to understand the majority of contemporary art. In 1910 Umberto Boccioni realised *The City Rises*. In 1912 Marcel Duchamp completed his *Nude Descending a Staircase, No. 2* (what is more, reminiscent of a sequence of 24 Muybridge photograms studying precisely the descent of a flight of stairs by a
nude woman). The same year Giacomo Balla presented *Dynamism of a Dog on a Leash*. Architects began to assemble spaces as if they were cinematographic sequences: this is evident in Loos' *Raumplan*, in the *promenade architecturale* of Le Corbusier and in the fluid spaces of Mies van der Rohe. Together with the boom of cinema, there was also a portentous acceleration in communications: via radiotelegraph and telephone. They contributed to the creation of an extensive and spatially homogenous community, in which news travelled fast and even a drama such as the sinking of the Titanic, on the night of the 14th April 1912 amidst the icebergs of the North Atlantic, could be experienced live, as pointed out in the editorial that appeared in the *London Times* on the 16th of April: “The wounded monster’s distress sounded through the latitudes and longitudes of the Atlantic, and from all sides her sisters great and small hastened to her succour [...] We recognise with a sense near to awe that we have been almost witness of a great ship in her death agonies.” Rapid communications accelerated information. The press, newspapers, with news that arrived almost in real-time, contributed to the diffusion of ideas. People were on the move. Adolf Loos travelled to America, where he most likely encountered Louis Sullivan and Frank Lloyd Wright at the 1893 Chicago World’s Fair. In 1909 Wright travelled to Europe. In 1911 Hendrik Petrus Berlage was in America. Walter Gropius, Le Corbusier and Mies van der Rohe all visited the studio of Peter Behrens around 1910. The Bauhaus, soon after the war, would host professors from Austria (Herbet Bayer), Hungary (Marcel Breuer, László Moholy-Nagy), Switzerland (Johannes Itten, Hannes Meyer) and Russia (Wassily Kandinsky). The Modern Movement would be the first to gain international adherents and diffusion. Though Paris, Vienna, Berlin, Moscow and Zurich continued to be characterised by a specific role and function, frontiers had never been so permeable. The control of time, the control of space. This was the tune that accompanied the development of the assembly line and studies of ergonomics. Already in 1883 Frederick W. Taylor began to divide productive activities into elementary movements, assigning each its necessary time. In 1909 his pupil, Frank B. Gilbert, applied his method to invent an adjustable structure for storing bricks and tripling production. Ford organised production based on the assembly line, similar to a film, a chronophotography that allowed for the examination of movement frame by frame, in order to control whether efforts were essential, whether there was a waste of energy, and thus a loss in productivity. Between 1912 and 1914 the time required to produce an automobile dropped from fourteen hours to ninety-three minutes. In 1925 a car rolled off the line every ten seconds. The same conceptual bases would be used at the end of the 1920s to produce the Existenz minimum homes and the Frankfurt kitchen.
The turn of the century was marked by the watch: its keeping of time in equal seconds. The factory of *Modern Times* resembles precisely the sprockets of a watch. The watch with its cycles of ten hours marked the time of the film *Metropolis*. The watch, and the obsession with punctuality and time were the reference for John Girdner’s essay “Newyorkitis” from 1910, Willy Hellpach’s *Nervosität und kultur* from 1902, for George Simmel who in 1900 published *The Metropolis and Mental Life* and Louis-Ferdinand Céline when in *Journey to the End of the Night*, published in 1932 though set soon after First World War, speaks of his experience working on an American assembly line.

In antithesis there was a need for a different temporality. Not tied to a mechanical measurement, but to the unrepeatable instances of our existence, to the brief or lasting moments in our lives, to the uniqueness of existence, to the lengthy duration of memory. Marcel Proust, James Joyce, William Faulkner... There was also a rediscovery of archaic and primitive cultures, extraneous to homogenous and measurable space-time. In the field of architecture we need only remember Wright’s interest in Japan and Mesoamerican constructions, or the young Le Corbusier’s travels to the Orient.

This was the period of rapid advances in anthropological studies: Henri Hubert and Marcel Mauss. Even sociologists and philosophers raised the issue: Émile Durkheim and Ernst Cassirer. Language and myth confronted one another. On the one hand there was a growing rationality of logos, of language, arriving at the symbolic logic of truth-tables, the premise for the design of the computers we use today; on the other hand was the vital irrationality of myth and the unconscious, the primordial, the oneiric: Freud and Jung.

### 2.3 The Artistic Revolution: Expressionism

At the 1905 Salon d’Automne in Paris a group of young artists exhibited their work, characterised by a cruel use of colour. They were led by the thirty-six year old Henri Matisse. They shared the abandonment of the conventions of representation: perspective, chiaroscuro, il modellato. They were inspired by a famous affirmation by Derain: a canvas is not a “flat surface covered by colours arranged in a certain order”. The idea was not new: it had been instituted and developed by Van Gogh, Cézanne and Moreau.

The novelty of the proposal advanced by the Fauves (the wild beasts) is however the limit to which they pushed this operation: a horizon where the image disappeared and was transformed into a sign. In other words, as it was summarised by the critic Giulio Carlo Argan, into a pure signifier. We have yet to arrive at absolute abstraction, though, at the end of the 1910s, the definitive step
would be taken by Wassily Kandinsky, Kazimir Malevich and Piet Mondrian, respectively with abstraction, suprematism and neoplasticism.

The year 1905 also marked the founding in Dresden of the group Die Brücke (The Bridge). It consisted of Ernst Ludwig Kirchner, Fritz Bleyl, Erich Heckel and Karl Schmidt-Rottluff. The oldest among them was twenty-five, and the youngest yet to turn twenty-two. The majority had studied architecture at the Technische Hochshule in Dresden, which they abandoned to dedicate themselves to artistic research.

The art of Kirchner and his companions, charged with an intense expressive strength, introduced terms such as irrational, formless, sentiment, temporality, individuality and organic. It transformed the canvas into a projection of the Id in colours and pure, sharp and disturbing forms.

Expressionism had a notable influence on architectural research. It found fertile ground in the romantic architecture of Berlage, Gaudí, Mackintosh and, if we wish, of Sullivan and Wright. Expressionist poetics were undoubtedly pursued by masters who were particularly active at the turn of the century: Hans Poelzig, Max Berg, late Olbrich and in part Peter Behrens. While expressionist figures such as the brothers Bruno and Max Taut, Hugo Häring, Erich Mendelsohn and Otto Bartning began their work just before the Great War, it was only after the conflict that they developed their poetics. The climate of Expressionism also permeated the education of Walter Gropius, Mies van der Rohe and other masters: some would join the Bauhaus after the war that, at least for a certain period of time, thanks also to the teachings of Johannes Itten, would be strongly influenced by its spirit.

Kirchner and his companions were steeped in architecture. They sensed that Expressionism was the art *par excellence* of a metropolitan condition sweeping across the Western city, with its epicentre in Berlin. As stated by Max Weber, one of the most acute theoreticians of the metropolitan condition: “I believe it impossible to imagine that some of the formal values of modern painting could have been produced without the absolute and distinct impression offered by the modern metropolis, a phenomenon that has never before been manifest in the history [...] and characterised above all by a state in which [...] pure technology has an enormous significance for artistic culture”.

Metropolitan panoramas, or by contrast, tormented natural landscapes, were the backdrop to many of the masterpieces created by the artists of Die Brücke. Kirchner subordinated architecture to its inhabitants, petrified figures, rendered them almost inanimate and brought his backgrounds to life. Other Expressionist artists, such as the Viennese Egon Schiele, painted scenarios of dense and simultaneously dead cities. George Grosz represented a war between the body and space. If Futurism would be the representation of the city through external
movement, Expressionism did the same for internal movement. There was no shortage of points of contact: Expressionist-Futurist scenarios were outlined in the work of Sant’Elia, with equally violent and imposing scenarios in movies that either presented or denounced the urban condition, culminating in Fritz Lang’s acclaimed *Metropolis* from 1926.

In this sense the research of painters, artists and visionaries, perhaps even more than the acerbic expressionism of the first professional architects, constitutes an inexhaustible source of ideas and reflections on architecture, as it presented the comparison between man and space in radically new terms. It liquidated the beauty of construction, the search for extenuating ornamentation, for cultured stylistic citations and focused, by developing it in its exemplary aspects, on a highly actual architectural theme: the relationship between the human subject, with all of his aspirations, neuroses, instances of liberation, and the urban object that, with its violence and different energy, represented a limit, a straightjacket.

This is when architecture either flexed, attempting to follow human movement in its forms, or began a renewed dialogue with nature, putting into play organic dimensions repressed by the urban condition. Or, further still, it sought to dematerialize itself, becoming transparent glass, pure crystal. As Paul Scheerbart wrote in his book *Glasarchitektur*, published in 1914, a text that would have a vast influence on the ideas of Bruno Taut: “We live for the most part within enclosed spaces. These form the environment from which our culture grows. [...] If we wish to raise our culture to a higher level, we are forced for better or worse to transform our architecture.”

### 2.4 The Artistic Revolution: Cubism

The characteristic trait of this period was cosmopolitanism. Vienna, Munich and Berlin, in the wake of the secessions, were hives of debate, creation and passionate controversies. In Moscow Michel Larionov and Natalia Goncharova laid the groundwork for events that would ripen after 1909. However, the “Twentieth Century was in Paris” – to use the expression of the American Gertrude Stein.

One of the meeting places was precisely Stein’s parlour at 27 Rue de Fleurus, frequented by Matisse and Picasso and other leaders of the avant-gardes. Between 1905 and 1906 Matisse created his masterpiece: *Joy of Life*, a work to which he would return on many variations, one being the renowned *Dance* from 1910: a seemingly weightless painting, constructed around the fluidity of lines and with vast fields of colour. Pure musicality. In 1906 Picasso responded by creating his famous portrait of Gertrude, a heavy canvas with a strong plasticity and only a few colours. In 1907 he presented *Les demoiselles d’Avignon*. The masks of African sculptures define the faces of three of the five figures. The canvas is of an
unprecedented violence. What counts is not the subject, but the destruction of space, conceived in antagonistic and concomitant planes. It is an exorcism of the invisible figures that each of us wrestles with. It is an attempt to give form to the formless, exactly as our primitive ancestors did. The result is a new space in which the observer is not positioned at a precise point, as in Renaissance perspective, but in which numerous points of view encounter and overlap one another, almost as if the image had been created inside our minds. Cubism was born. Together with Futurism it would be the first truly international avant-garde movement. It would influence Russians, Americans, the English, Germans and Italians. Many would pass through an early phase of Cubism: Kazimir Malevich, Marcel Duchamp, Robert Delaunay, Piet Mondrian and Theo van Doesburg. The techniques for decomposing space would also be taken up by a number of architects, led by the Dutch. There were also Cubist authors. Experiments, with controversial results, were made by Gertrude Stein, some in the form of portraits: of sounds and words. They led to the masterpieces of James Joyce, extraneous to any trend, though whose works only with great difficulty could have come into being without this fervid climate of experimentation.

The fortune of Cubism, as with so many artistic movements, was not however due to a precise programme, as much as to a horizon that opened up. Picasso and Braque, the movement’s other leading figure, refused to offer any scientifically exhaustive explanation of their work. The explanations proffered by others would also be less than convincing, founded on the fourth dimension or precise principles of formal decomposition. In short: in purely theoretical terms, the movement could not but give rise to a few perplexities. However, this opinion changes when the movement is viewed from a less categorical point of view; there is an emphasis on constant exchanges with Expressionism, with its rival Futurism, Abstraction and later with Dada; there is evidence of the liberating value of an approach the decomposes form, only to recompose it, even arbitrarily in relation to displaced points of view, even temporally. Without the lens of Cubism it would be impossible to understand the art and architecture of the new century.

2.5 Architecture and Cubism
Cubism, different from Expressionism, did not produce an immediate reaction in architecture. Even the Maison Cubiste, the first example of an openly Cubist architecture, designed by Raymond Duchamp-Villon for the exhibition at the Salon D’Automne in 1912, was a let down. More than the splendid canvases from this period, it recalls perhaps some of the works completed a few years earlier by Peter Behrens. In particular, the Hamburger Halle in Turin from 1902, a gothically inspired exhibition, not without elements borrowed from Expressionism, with
simplified forms, mouldings and statues rendered in multifaceted squarish planes. It was based on a formula for reducing volumes and the human figure to simple geometric and fragmented matrixes. Though it was later successfully adopted during the early 1900s by numerous architects, Wright included, it appears too reductive to speak of the Cubist decomposition of space.

A masterpiece of perspective occurred immediately after the Great War. It was activated by the avant-garde movements, such as Suprematism, Neoplasticism and Constructivism, inspired by Cubism, though more involved in architectural research. It was activated above all by Purism, a movement that, in fact, coincides with one figure – Le Corbusier – gifted with an enormous charisma for communication and very talented in spreading his own interpretation of modernity. Together with his partner, the painter Ozenfant, in 1918 he wrote Après le cubisme and the following year founded the review L’Esprit Nouveau, laying the foundations for a systematic reflection on the inheritance of the Cubist phenomenon in architecture. This inheritance opposed the tensions of Expressionism with an art that spoke to the mind, intent on awakening the certainty advanced during the Enlightenment that behind chaos the natural world conceals a fundamental harmony.

From this moment onward the theory of a genealogy of Cubism would be referenced by the majority of critical interpretations attempting to explain the advent of the Modern Movement. The most well known would be advanced by Sigfried Giedion in Space, Time and Architecture, published in 1941. Giedion compared Picasso’s L’Arlésienne, painted in 1911-12, with the Bauhaus building in Dessau, completed in 1926. He pointed out that both works abolish the traditional perception of perspective and introduce a dimension of space-time exalted by planarity, by transparency and the multiple points of view required to appreciate these works. There is also the thesis of Colin Rowe, presented in another celebrated essay, “Transparency: Literal and Phenomenal”, written in 1956 and published in 1963. For Rowe transparency could not be conceived in a literal way, as in Giedion. The problem was not optical, but compositional, or to use his terminology, phenomenological. In other words, the Modern Movement, in its loftiest works, imported a new spatial order from Cubism, corresponding with the planes and volumes of buildings that can only be observed from ideal points of view situated at infinity. This led to the widespread recourse, from the earliest phases of design, to tools of representation that were more abstract than perspective, such as orthogonal projections and axonometric, or hybrids of the two, such as axonmetrics with two coinciding axes.

The two theses share the merit of summarising a great number of issues enunciated since the 1920 and ‘30s, when the dogma of Cubist genealogy was consolidated. So much so that Edoardo Persico, in an attempt to refute them, had
already proposed another genealogy in 1935 – what is more contrary to the affirmation made by his ideal master Lionello Venturi who considered it indubitable that a new architecture would be born “together with a special style of painting or sculpture known as Cubism”. The Neapolitan critic wrote that: “New architecture is born [...] in the furrows of Impressionism: I allude to Frank Lloyd Wright. [...] Wright’s factories, the Willits House from 1901, the Barton House from 1904, or the Coonley House from 1908 [...] are simple volumes undivided by interior walls: the entire apartment is one space, almost without divisions. The exterior develops in horizontal lines, with projecting terraces, barely pitched and almost flat roofs. The windows run on the upper levels in continuous bands at the top of walls. The play of masses – and this is an important detail – speaks of the influence of the architecture of the Far East, of China, of Japan. The road is always parallel to the lines of the front of the house. The garden cannot be imagined without the house. [...] Cubism is yet to come, not only because we are in 1901 or 1904, but also because to define the figurative elements of this construction we must refer to the Impressionist vision, to the vision of Cézanne. Wright, for the intimate sense of his work and for the resonance of the style that influenced not only American architects, but also Europeans from Berlage to Dudok, from Loos to Hoffmann, and through Tony Garnier even Le Corbusier, Wright might be considered the Cézanne of the new architecture. [...] In the hypocrisy of north American Puritanism, in the abstinence of an era of pioneers [...] the work of this architect is a testament to a full and fecund life, rendered in an infinitely poetic style.”

Furthermore, Persico emphasised the vital and anti-intellectual aspects of the research of Wright and the Rationalists: contemporary architecture cannot be reduced to cubes, to cerebral decompositions.

Finally, there is the thesis advanced by Nikolaus Pevsner, whose fundamental essay *The Pioneers of Modern Architecture*, from 1936, does not embrace either the hypothesis of Cubist ascendence nor the primacy of Impressionism. For the historian it would be the encounter between industrial production and abstraction that would generate a new architecture. Hence Cubism, but also all of the other artistic research that abandoned nineteenth century naturalism. The thesis, apart from the intentions of its author, reveals the discovery by the general figures of the scientific and artistic disciplines of the power of abstract form. Of a form that is sufficient to take into account the structure of reality even without mimetically representing it. The futurist Boccioni would state in the summer of 1910: “If I can do it (and I hope to) the emotion will be presented with as little recourse to the objects that have given rise to it. The ideal, for me, would be a painter who, wishing to represent *sleep*, would not turn his mind to the creature (man, animal, etc.) sleeping but who could, by means of lines and colours, bring out the idea of
That is, sleep as something universal entirely beyond the mere chance factors of time and place.”

Analysed from this point of view, cubist, futurist, expressionist forms are equally abstract; the same can be said of rayist, suprematist and neoplastic forms and, if we wish, those of Dada. Indeed, they are attempts to achieve universal ideas by reducing, fragmenting, projecting and simplifying. Figures such as Kirchner and Kandinsky, Schoenberg, Boccioni, Klee and Picasso all share more than a few common points of contact. This generated the nonchalance that saw artists pass from one experiment to another, in some cases from one movement to another, based on a magmatic dynamic in continuous definition, arriving at the extreme example of Theo Van Doesburg, who was together neoplastic, dada and constructivist.

2.6 Art and Life, Form and Abstraction

Never as during this decade was the word “form” so widely used. In art, in science, in philosophy. Form served as a shortcut for arriving at the essence of things. Form as the result of a human operation that gave meaning to reality. Form as the destiny of art, but also as a curse, when it reduced representation to a formula or a geometric, mechanical and atemporal universe. Form as a new language, as the structured assemblage of signs used to simplify the world.

In Germany, since the end of the 1800s, art historians, artists and philosophers all worked on this theme. They included Konrad Fiedler (1841-1895) who claimed that art elaborates concepts based on its own laws, in virtue of its conformative power. He would state: “Each form of art is justified only to the degree it is necessary to represent something that could otherwise not be represented”. Thus was born pure visibility: the true meaning of a work of art was not to be found in extrinsic contents, in the theme represented, but in the way in which it was made visible, fixed in the structure of a form, that characterises specificity of any artistic creation.

This theme was developed also by the Italian Benedetto Croce in *Aesthetics* from 1902: art is a pure language precisely because it is a concrete form. His thinking, which spread across Europe in dozens of translations, contains an equation that, while not new, was now expressed with extraordinary clarity: art = form = language.

Yet, if both science and art established reality through forms, what is the difference between the two approaches? Croce responded that art speaks to the individual and science to the general population. This was the same line pursued by the French philosopher Henri Bergson in his book *Creative Evolution* published in 1907. Bergson agreed that without crystallising reality in abstract forms there was no way we could control it. There would be no science, no industry, nor any
standardisation. All the same, life is a concrete act, impossible to bind to mathematical formulas. It is a flow and becoming, unique and non-repetitive. Duration and not an assembly line. By depriving science of the possibility to know the intimate temporal essence of reality, Bergson attributed art with a rare power, though in fact impossible to define, precisely because it was impossible to intellectualise. It is a shared conclusion, with more or less diverging arguments, advanced by almost all of the great thinkers of the early twentieth century, including Georg Simmel, José Ortega y Gasset and Martin Heidegger.

In the vein of this clash between art and life it is interesting to read the misery of the architects of the early 1900s, consistently suspended between the search for pure ideas and a dissatisfaction with an excessive abstraction that crystallised life in structures that, in the end, proved empty: between forms and shadows. This problem emerged in all of its virulence following the Great War, when the trends of Expressionism, which exposed the magmatic side of reality by charging form with a subjective energy, and the more coldly formalist which dissect the image on the operating table of reason by referring to abstract geometric schemes, would tend to diverge and clash. Until the predominance of these latter that, however, would pay a price for victory that translated into the substantial stylistic banalisation of what they proposed.

In 1908 a text was published in Germany that would have a notable influence. It was the work of the twenty-six year old Wilhelm Worringer entitled *Abstraktion und Einfühlung* (Abstraction and Empathy). Art was no longer a tradition rooted in craft, a trade based on know-how, but an activity projected toward making, in other words, recreating the world. *Einfühlung*, the ability to enter into a state of empathy, a relation with objects, leads us to realism, to a condition of dominion over the external world; *Abstraktion*, instead, is the sublimation of fear, of anxiety toward the reality of the world. It corresponds with our higher need to understand it. Worringer was not a particular fan of abstract art. He considered it rigid, crystallised, dead. All the same, together with Bergson, Worringer indicated a direction for artists: toward the production of a non-realistic art, able to overcome the limitations of a technical and objectivising way of thinking, sufficient to render the meaning of a work of research infinite, focalised on the objective of transcending reality.

Nothing tells us that Kandinsky ever met Wilhelm Worringer. Yet they operated in an almost perfect temporal accord. While 1908 saw the publication of Worringer’s book, Kandinsky was already rapidly moving toward pure abstraction. In 1909, the Russian painter created the *Neue Künstlervereinigung* (New Union of Artists), issuing his first abstract work in 1910. The same year he wrote *Concerning the Spiritual in Art*, whose publication was so successful that the first two editions sold out in one year, in 1912. In 1911, together with Marc, he published the *Blau Reiter*
Almanac, a collection of texts by different authors that sought to fix the state of contemporary artistic research with openings toward the art of the Fauves, Cubism and Futurism.

Kandinsky sought to penetrate beyond appearances to arrive at the point of origin. Having abandoned the materiality of the concrete object, art became a search for harmonies and emotions. In the autobiographical Sguardi sul passato, published in 1913, the forty-six year old painter spoke about five aspects of abstract art: the dissolution of the realistic image until it is reduced to pure colour; the translatability between colours and sounds; the act of fragmenting in order to rearticulate nature in accordance with a number of guiding principles; the awareness that colours acquire value and meaning only within a context whose duration they define; the moment of a renewed relationship with nature, uncompromised by preconceptions and cultural filters. It would thus be erroneous to take the poetic abstraction of Kandinsky for a sort of aesthetic subjectivism, where every form, for the mere fact of being the expression of an individual, is worth any other. This does not come from the subject, but is discovered in the object, in the world. It is thus objective and absolutely non-arbitrary: pure musicality and as such supported by ideal laws.

This perhaps explains the painter’s continuous efforts to establish a genesis and reasons in universal laws. Even at the cost of losing in freshness and energy and burning up his research in a method that led in 1926 to the publication of Point, Line and Surface, when the artist, engaged as a professor at the Bauhaus, sought to elaborate a method of abstraction that could be transferred to his students.

Two other giants were operating alongside Kandinsky: Malevich and Mondrian. We will come across both figures in the next chapter when dealing with the evolution of artistic research matured during the Great War. In the years prior to the conflict, the Russian and the Dutchman, diverse in character and temperament – exuberant to a fault the one, Calvinist and obsessed with disorder to the point of paranoia the second – matured their research. Both travelled to Paris in 1912. Both considered Cubism. It appears that Malevich, in 1913, took a decisive step with Black Square, giving birth to Suprematism. However, it is possible that this canvas was predated. Abstraction soon passed from the canvas to architecture. The passage was conceptually consequent: exactly as a painting is a two-dimensional surface and sculpture a three-dimensional volume, architecture becomes a spatial object. However, the rhythm of space is marked solely through time. As demonstrated in Loos’ Raumplan, in the promenade architecturale of Le Corbusier and the fluidity of Mies. They are three variations, studied after the war, on the same theme: the investigation of space as form. It is thus an idea perfectly congruent with the harmonic notions of Kandinsky, Malevich and Mondrian. Malevich would use it to produce highly refined architectural compositions. Mondrian would develop a
vocabulary that his friend and rival Theo Van Doesburg would appropriate and interpret as he saw fit.

2.7 Upside Down

For as much as there was a search to give form to the formless, when the reasons of art clashed with those of science, there exploded an uncontainable irrationality. The dark sides of the Id, the absurdities and contradictions, were no longer seen as accidents of reason to be eliminated at all costs, but as the constitutive factors of consciousness, through which to better understand the reality of human life. This generated the interest, on the one hand, for humour and, on the other, for the unspeakable. Humour, as a play of contradictions, exposes the unsuitability of a mechanical conception of life, the antinomies of reason, the presence of the absurd. The topic of humour would be confronted in writings by, among others, Henri Bergson (1900), Sigmund Freud (1905) and Luigi Pirandello (1908). Humour, provocations and eccentricity would be the keys for unhinging the unsupportable seriousness of the 1800s, for overcoming the constrictions of the Victorian era, for poking fun at respectability, even that of the artists of the avant-gardes themselves. In 1896 Alfred Jarry published the comedy *Ubu Roi*, an opera in four acts of violent and paradoxical humour. On the 10th of December 1906, the evening of the premiere, all hell broke loose. The piece, which would be resurrected only after Jarry’s death in 1907, was only performed once. However, the scandal was enough to make Jarry famous, at the tender age of twenty-three. From this moment he decided to live his life as if he were the lead character in one of his works, inventing “pataphysics”, a so-called science governing exceptions rather than regular conditions. While in the dialectic between genius and promiscuity, Jarry undoubtedly crossed the line of good taste, he was not alone. The community of artists living in Montmartre in Paris and Bloomsbury in London lived a life of transgression. Figures such as Gertrude Stein, who openly professed her homosexuality while collecting the works of the avant-gardes and producing Cubist writings; Leo Stein, who counselled his beloved Nina how to behave with her lover; Walter Gropius, who stoically supported the exuberance of Alma Schindler Mahler; or Virginia Woolf, who imagined marrying the openly homosexual Lytton Strachey, who in his turn decided to triangulate his life with the painter Dora Carrington and Ralph Partridge, were difficult to comprehend outside of the destructive and regenerative tensions of those years. Besides, the Viennese and Germans were no better: we need only consider the perverse images of young women represented by Egon Schiele, the atelier of Ernst Ludwig Kirchner conceived as a space of free expression of one’s sexuality, of *The Immoralist* by André Gide from 1902, or the ambiguous lead characters of *The Confusions of
Young Törless from 1906, The Man Without Qualities by Robert Musil, or the amoral Berlin of stone depicted by Stefan Zweig or the Vienna so loved and derided by Karl Kraus and analysed by Sigmund Freud. It is still early to find this counter-current, mocking and together desperate and paradoxical dimension in architecture. All the same, it is precisely during this period that the premises were laid for a new way of living and dwelling. They comported the abandonment of all things serious, a critique of respectability, the refusal of nineteenth century rhetoric, the search of a simple life, free of too many overriding structures, the denunciation of the dusty home-mausoleum, the appearance – to use the words of a recent exhibition at the MoMA – of the unprivate house, the pursuit of a new and more authentic social dimension of public space.

It is no accident that during these years the very geographies of the spaces of dwelling, communication and roles were called into question, with the majority of artists feeling a sense of political involvement. Women included: Virginia Woolf, for example, was tied to the suffragette movement, which led to the right to vote. Wright’s lover, Mamah Cheney, was in contact with the Swedish feminist Ellen Key, whose writings she translated. The world was upside down. As Nietzsche had predicted, prior to his death precisely at the dawn of the new century, before Nazism elected him its poet through an ingenious reading fomented by the able though ideologically obtuse philosopher’s sister, victim of a cult of personality.

The pages of Thus Spoke Zarathustra would form the young generations of this century: architects included. Mies van der Rohe, Le Corbusier and Walter Gropius, were all strongly influenced by Nietzsche’s rhetorical and syncopated prose. In his autobiography Henri van de Velde spoke of a pilgrimage to Weimar that led to his renovating part of the house-temple of the intellectual who created philosophy with a hammer.

The philosophy of Nietzsche led to the tragic vision of a world without God, as well as a liberating need for fun, irony and an invitation to accept one’s destiny, shaping rather than suffering it. To a century that celebrated its triumphs thanks to the seriousness of science and technology, artists responded with pleasure and free time, with interminable meetings in cafés, praising laissez-faire and pleasure, or through the exaltation of action, introducing a moral identified and exercised in the world of art into the practical world. This aestheticising attitude would lead far too many young people to seek a beautiful death in the horrifying slaughter of the first mechanised war; it also led to a disenchanted and anti-middle-class approach to life, to a desire to scandalise and be eccentric. This theme found common ground among artists of different cultures and temperaments. From the wealthy Picabia who travelled around in luxurious automobiles and proclaimed an absolute
nihilism; to the digressions of Wright who raced through the streets of Oak Park at breakneck speed terrorising pedestrians; to Picasso who in 1908 organised a wild drunken party in the streets of Montmartre dedicated to the painter Henri Rousseau, known as Le Douanier (the customs officer); to Duchamp, who submitted a urinal to the Armory Show in 1917; to the painter Vanessa Woolf, sister of the more famous Virginia, who furnished her home with space, light, cleanliness and a few pieces of furniture and about who it was said that, during her Thursday evening gatherings, would have sex under the bored gaze of her intellectual and homosexual friends. This not to mention the numerous meetings of the Futurists, and later Dadaists, the ended in insults, raspberries, vulgar gestures and furious fisticuffs to the sound of noise machines.

2.8 The Avant-Gardes
Thus was born the avant-garde. A term that refers to a continuous search that consistently questioned all that had been acquired previously. From the destruction of styles and nineteenth century art to the complete annihilation of form, even beyond abstraction, at the moment when it became clear that even an abstract canvas could be limited to the banal representation of what was already known without managing to go beyond it. From this moment onward, if contemporary art could exist, it would only be from this incessant disruption, the continuous overcoming of frontiers, from a condition of perennial research that, with religious fervour, would manage to attack the very foundations of language: the point at which process of signification occurs.
It is impossible to understand the art of the early twentieth century outside of such a strong mystic tension, and such a profound laic faith. Kandinsky spoke of spirituality. Malevich ideally substituted a black canvas on a black background for a religious icon and in 1935, in the midst of Stalin’s reign, organised his own suprematist funeral. Mondrian and Theo van Doesburg linked abstract forms with theosophy. Klee explored the world suspended between the values of the spirit and those of fantasy. Architects such as Loos, Le Corbusier and Mies were also steeped in mystic values and, after the war, for their architecture they turned to the philosopher Wittgenstein and the iconologist Warburg to spatialise their innovative conceptions of the world; the first in a house for his sister, the second in the parti of a library with the role of conserving memory and universal knowledge. Obviously, notwithstanding this commonality of intentions, the numerous figures differed notably in their approach and results. However, among the many, one produced special results because he approached head on, almost in hand to hand combat, the themes of the absurd, analogy, the projection of forms and concepts and the inversion of meanings: this was Marcel Duchamp.
Duchamp had already made a name for himself in America in occasion of the *Armoury Show* exhibition of 1913, with the Cubist-Futurist work entitled *Nude Descending a Staircase, No. 2*, that the American public, shocked and stunned, waited hours in line to see. After returning to Europe he began working on the *readymades*, even more problematic pieces: the work of art was not even produced by the artist, but taken from the everyday (a bottle rack, a shovel ...) and declared to be a piece of art.

Traditionalist critics wished to see the *readymades* as symptoms of a defeat, of a definitive crisis. Of the death of art predicted by Hegel and from this moment onward announced as imminent. In reality, it was entirely something else. It was proof of a surprising richness and vitality, beyond the revolution of pure form predicted by Kandinsky. Without Duchamp art would have died with abstraction and suprematism. Where could one go after pure essence? With the *readymades* Duchamp instead explored unknown territories: his works opened up to their context and became less object-oriented and more mental, less concrete and more relational.

Architecture would be slow in becoming aware of this game-changing revolution (perhaps understood by the artists themselves only after the 1950s), even if it would not be insensitive toward analogous techniques employed by the artist and other leading figures from this period. During the same years the Italian painter Giorgio De Chirico invented a technique of combining everyday objects, based on pure analogies, to create *Metaphysics*, which he theorised in 1916, though he had been putting it into practice before this time. Perhaps in 1910, when he moved from Munich to Paris, where he spent time with Valéry and Apollinaire. *Metaphysics* and the *readymades* would later give birth to Dada and Surrealism.

### 2.9 Futurism

Marinetti brought Futurism to the attention of the world with his manifesto in *Le Figaro*, on the 20th February 1909. His choice was a clear effort at distancing himself from Rome and a recognition of Paris as the international capital of art.

Besides, during this period Rome was still at work on the construction of the national monument to King Victor Emanuel II, a pseudo-historic wedding cake designed by the academic Giuseppe Sacconi, inaugurated in 1911, twenty-six years after the idea was first presented.

In this context, Futurism, even with all of its cocky behaviour, represented a possibility for change and the return of Italian art, otherwise irremediably Carduccian and Pascolian, to the world of European culture.

The programme enunciated in the manifesto concerned literature. It would be followed by many others. They were prepared by Marinetti, Boccioni, Carrà,
Russolo, Balla, Severini, Depero and the other intellectuals who joined the movement. August of 1909, for example, saw the publication of *Uccidiamo il chiaro di luna!* (Let’s Kill the Moonlight), February 1910 the *Manifesto of Futurist Painters*, April 1910 *The Technical Manifesto of Futurist Painting*, January 1911 *The Manifesto of Futurist Playwrights*, April 1912 *The Technical Manifesto of Futurist Sculpture*, May 1912 *The Technical Manifesto of Futurist Literature*, May 1915 *Futurist Scenography and Choreography*, the same year as *Futurist Reconstruction of the Universe*, and November 1916 *Futurist Cinematography*. There were numerous others: they covered every aspect of human activity, including cooking. Art and life appeared to coincide in all of their aspects.

For Marinetti, as made clear in the first Manifesto of 1909, the context of the Futurist discourse was the metropolis. “We” it held, “sing the vibrant nocturnal fervour of arsenals and of street corners illuminated by the violence of electric lights; we sing the train station devouring smoking serpents; factories hung on clouds by the crooked lines of their smoke; bridges that stride the rivers like giant gymnasts”. It was between 1910 and 1912, as Kandinsky invented abstraction in Munich and the cubists were at work in Paris, that the artists of Futurism, and in particular the two most talented – Boccioni and Balla – described the new city, made of lights, movement and dynamic tensions. They prefigured a formal grammar that would have countless consequences for new architectural space. Dynamism, mutation, lightness, an interest in networks of communication, a drive for verticality, new materials, lines of force and chromatics are the themes transferred from futurist paintings and projects to the *carnet* of young European architects, in some cases not always directly, though contemporary critics are doing their best to reconstruct this story.

The Futurists developed love-hate relationships with the Cubists. The official arrival in France was in 1912, with the exhibition in Paris at the Galerie Bernheim Jeune. There were also contacts before and after this event. The Futurists scolded the Cubists for their trend toward the static and an excessive formalism, the lack of emotion, an incapacity to entertain a pulsating relationship with the environment. They accused them of plagiarism in an article with the injurious title “I Futuristi plagiati in Francia” (The Futurists Plagiarized in France), because the “French” introduced dynamic elements and lines of force into their compositions. Vice versa, the Italians were claimed to suffer from provincialism and be enslaved by the rhetoric of vitalism. The Futurists exercised a notable influence on Apollinaire, Delaunay, Léger, the Orphists and the Russian avant-gardes.

The reciprocal play of influences is evident. So much so that in 1913 Boccioni, in Paris, together with Guillaume Apollinaire, launched the proposal for a front of avant-garde movements that was to have brought together Futurists, Cubists and Expressionists. However, as always, jealousy got the best of them.
Many of the ideas and proposals of the Futurist painters appear ahead of their time even today. As Carlo Carrà stated: “What we are thinking of [is] an architecture similar to the dynamic and musical architecture achieved by the Futurist musician Pratella. Architecture is found in the movement of colours, of smoke from a chimney and in metallic structures, when they are expressed in states of mind which are violent and chaotic”. In 1914 Prampolini claimed: “Futurist architecture must have an atmospheric genesis because it mirrors the intense life of motion, light and air which nourishes Futurist man”. The same year, in a Futurist architectural manifesto that remained unpublished, Boccioni wrote: “We live in a spiral of architectural forces. In the past, construction unwound in a successive panorama: one house followed another, one street followed another. Now around us we see the beginnings of an architectural environment that develops in every direction: from voluminous basements of large department stores, from several levels of the tunnels of the underground railways to the gigantic upward thrust of American skyscrapers”.

The Manifesto of Futurist Architecture, drawn up by Antonio Sant’Elia, was published on the 1st of August 1914 in Lacerba, the journal that followed the movement. The words would prove well ahead of their time, if we consider that in 1914 Europe was still unable – as demonstrated by the Werkbund exhibition in Cologne – to securely define a new architectural lexicon: “The lifts must no longer be hidden away like tapeworms in the niches of stairwells; the stairwells themselves, rendered useless, must be abolished, and the lifts must scale the lengths of the façades like serpents of steel and glass. The house of concrete, glass and steel, stripped of paintings and sculpture, rich only in the innate beauty of its lines and relief, extraordinarily "ugly" in its mechanical simplicity, higher and wider according to need rather than the specifications of municipal laws. It must soar up on the brink of a tumultuous abyss: the street will no longer lie like a doormat at ground level, but will plunge many stories down into the earth, embracing the metropolitan traffic, and will be linked up for necessary interconnections by metal gangways and swift-moving pavements”.

In 1916 the architect from Como was killed during the Great War, to which he had so enthusiastically adhered. Boccioni, the movement’s other genius, was also killed. Of the fleeting work of Sant’Elia all that remains are drawings and projects for how to “invent and rebuild the Futurist city like an immense and tumultuous shipyard, agile, mobile and dynamic in every detail; and the Futurist house [...] like a gigantic machine.” His works are amazing, especially considering just how young he was: in 1914 he was just twenty-six and only twenty-eight when he died, yet many of the themes he raised and suggestions he offered were still unripe; thus his drawings offer notable glimpses of the future coupled with the residues of the symbolist and decadent culture of his era. Too little to breathe life
into a true architecture of Futurism, what is more considering the less than gigantic stature of the other architects who adhered to the programme: Mario Chiattone, Virgilio Marchi, Fortunato Depero and Enrico Prampolini. Sant’Elia and Chiattone would however be studied and analysed by the leading figures of the Modern Movement, for example in the pages of the journal De Stijl by Robert Van’t Hoff and Jacobus Johannes Pieter Oud in 1919; and by Ludwig Hilberseimer and Adolf Behne. I return for a moment to the idea expressed by Boccioni and Apollinaire in 1913 about a union between the avant-gardes. It would certainly have been decisive. With the passing of the years, despite the reiteration of meetings organised in various countries across Europe, in the end walls were raised between the various movements. Walls erected by their leaders to vindicate a historic primacy or creative originality. They did not hesitate to provide invented or imprecise stories and to backdate works and events. Yet, observed without preconceptions, the artistic situation of this period was magmatic, happily confused and open to mutations. Not even the Great War, with all of its devastating power, would manage to crush it. On the contrary, as we shall see, it was precisely in the midst of the war that some of the most interesting and transversal artistic hypotheses developed into something else.

Part One Chapter 3: Industry and Ornament: 1905-1914

3.1 Ornament is Crime

Not every artist we have encountered lived a dissolute life, assailed by the imperative épater le bourgeois, to shock the rich and uncultured bourgeoisie at all costs. It is certain that even in the most moderate of case their exploded a desire to live an authentic life, unfettered by a-critically accepted uses and conventions: aware that society expected the artist to move against the grain, delegated with the role of its critical conscience, of the talking cricket. Some, such as Frank Lloyd Wright, managed this with an extraordinary media savvy, transforming events, even scabrous, such as the abandonment of the family, the murder of his lover and her children by a mentally disturbed man, bankruptcy and imprisonment into reasons of interest and publicity. Louis Sullivan, Charles Rennie Mackintosh, Adolf Loos, to mention only three, dramatically suffered the indifference of a society that was consistently late in evaluating the reasons of architecture, losing themselves to alcohol or depression. This explains the often disillusioned, in some cases vitriolic, in other ironic texts penned by Loos, above all during the period between
1908 and 1910, or found in The Autobiography of an Idea, written by Sullivan near the end of his life, which ended in 1924.

While this period saw the discovery of the power of communication and the fascination with a certain primadonna-ism, we are still far from the mediatic amorality of the contemporary star system. Despite the architects and artists seeking public attention in a flood of texts, manifestos and spectacular undertakings, in the end they were always instrumental techniques for drawing attention to titanic programmes, enchanting utopias, demiurgic ideas designed to save the world, and finally give meaning to industrial production. When, a few years later, Le Corbusier would synthesise this programme in the slogan “Architecture or revolution”, he would highlight this exalting bouillabaisse of concepts and aspirations in perennial tension, in which form and reason, architecture and moral are interchangeable.

It was the attempt to resolve these contradictions between concepts belonging to diverse worlds of form, economics and ethics that gave birth to modern architecture. Its debate was undoubtedly introduced by the querelle on function and ornamentation that would involve Europeans and Americans at the dawn of the new century. On the one hand there were those who, in the wake of the slogan “ornament is crime”, coined by Loos, would attempt to redimension an unmotivated creative exuberance; on the other were those who, strengthened by the imperative form follows function, much less functionalist than it would seem, proposed by Louis Sullivan and taken up by Frank Lloyd Wright, sought to introduce fantasy and complexity within this process, while stripping decoration of any fake applied quality, extrinsic to the form of the object.

In reality, beyond the slogans, the concrete responses offered by architects were anything but univocal and definitive. Adolf Loos, considered the headmaster of the rigorist group, would make ample use of decorative elements, admitting them when comforted by the use and constructive rationality of material or simply by a taste for all things classical. For their part, Sullivan and Wright, considered eccentric and free creators, would invent systems of prefabrication founded on the repetition of base modules of decorative tiles or concrete blocks made possible by modern processes of industrialised manufacturing. Already during the 1910s and ’20s they achieved results that were far more interesting than those obtained by the rigorists, who often limited themselves to eliminating decorations and simplifying geometries, without ever touching on processes of construction. Besides, the fact that things are much more complex than they appear was demonstrated by the fact that Loos, at a certain point in his life, thought of inviting Sullivan to Paris, as he neared his tragic end, so that he could teach with him at a school of architecture he was attempting to establish, also to resolve the many economic issues that plagued both.
3.2 The Werkbund

While less attentive to the craft based traditions of the Arts & Crafts movement, the Germans were no less intent on integrating artistic research with experimentalism. In 1907 the AEG nominated Peter Behrens its artistic councillor. On the 5th and 6th October of the same year the Werkbund was born in Munich. It drew a hundred or so artists, industrials and art lovers. The objective was to improve design and the quality of industrial products, to ensure that artists and entrepreneurs worked together, to search for an aesthetic and moral unity in light of the future of industry, to make Germany none competitive, above all with regards to its French neighbour.

The year 1913 saw the birth of the Swiss Werkbund, followed by that of Austria in 1910. In 1903, we can recall, Josef Maria Hoffmann and Koloman Moser founded the Wiener Werkstätten and as far back as 1893 Frank Lloyd Wright had attempted to found an association based on the Arts & Crafts movement in Chicago.

There were three key figures of the association. Each with a different character, education and background: Hermann Muthesius, Friedrich Nauman and Henry van de Velde.

Thanks to the charismatic role of these three figures, and others of no lesser importance added over the years (for example Gropius, who joined in 1910), the Werkbund grew rapidly, arriving at some 3,000 members in 1929.

From the founding of the association positions differed. They ranged from ultra-reactionaries who championed the Heimatstil, to artists who looked at machines with suspicion but believed in a certain form of modernisation, to classicists who supported a return to order and harmony, to factionalists who believed in standardisation and typification. This diversity of ideas guaranteed openness and pluralism, but also produced moments of controversy, some of surprising intensity. They would explode in 1914 at the Cologne meeting, when Muthesius clashed with van de Velde. Despite the risks of a rift, the association prepared an important exhibition to accompany the event, with works by Gropius, Taut and van de Velde. More will be said about this in the final paragraph of this Chapter. In 1927 it would be the turn of the more notable and controversial exhibitions of contemporary architecture, the Weissenhofsiedlung in Stuttgart, entrusted to Mies van der Rohe. More about this in the Chapter Four.

3.3 Loos in Vienna

Adolf Loos, Vienna’s leading architect at the beginning of the century, was hostile toward the Werkbund. He claimed that the applied artist was a monstrosity, that
no institution or organism could teach simplicity, that modernist research produced only ugliness. He thus saw in van de Velde a corrupter of habits, alluding to him, in a spiteful and in some sections venomous text from 1900 entitled "The Poor Little Rich Man", when he pokes fun at the architect who ridiculed the lifestyle of a client because he wanted him to design his domestic environment, slippers included. Loos also considered equally monstrous the attempts to reform art proposed by the Viennese Secession founded in 1897 by Gustav Klimt, Joseph Maria Olbrich, Josef Hoffmann and Koloman Moser. He attacked them in the texts "Ornament and Crime" and "Cultural Degeneration", both from 1908.

For his attitude open to innovations and simultaneously hostile toward easy formalisms, Loos was equally far from Austria’s aristocratic tradition – Francesco Giuseppe avoided modern inventions like the plague, avoiding as much as possible the telephone, the automobile, the typewriter and electricity – and from the enthusiasms of the parvenu for extravagant new forms. For Loos dwelling was a bit like getting dressed. In both cases it was necessary to communicate a sense of measure and, at the same time, an authentic, free and hygienically effective manner of confronting the world.

The key to better reading the poetic of Loos is linguistic. Filtered through the reflection by Karl Kraus, the ingenious investigator of verbal expression, director and sole editor of the 922 issues of the journal Die Fakel, published between 1889 and 1936. With the same intensity that Loos opposed the spirit of the Secession, Kraus, was adverse to the technique of feuilleton, to those highly rhetorical fragments in which any sort of adjectivisation triumphs. Where hypocrisy, instead of being stripped bare, is sublimated.

An incorrect language – this is the thesis postulated by Kraus and adopted by Loos, but also by the philosopher Wittgenstein and the composer Schoenberg, all fond readers of the journal – mixes facts and values. In architecture this occurs when one wishes, at all costs, to render the everyday artistic, giving a basic object an uncommon importance. Confusing the urn with the chamber pot. It is cultural evolution that leads toward the elimination of decoration from the everyday, purging its mixture with the arts. If instead we wish to skip over the problem of civilisation, proposing the shortcut of formal invention, the only possible outcome is a disaster, that renders the world historical, in other words inauthentic – and thus ugly and farcical:

“And I repeat my question: why is it that the architect, no matter whether good or bad, desecrates the lake [alongside which he chooses to build a house, unlike the farmer who raises no question of aesthetics]? Like almost all city dwellers, the architect lacks culture. He lacks the sure touch of the farmer, who does possess culture. The city dweller is rootless. What I call culture is that balance between our
physical, mental and spiritual being which alone can guarantee sensible thought and action.”

Loos was not against all decoration. What is more, it would be unfair to associate him with the poetics of post-Cubism or Purism, despite Le Corbusier’s merit of having proposed Loos’ ideas in France with the publication of “Ornament and Crime” in *L’Esprit Nouveau.* He would state, “[...] I did not mean what some purists have carried ad absurdum, namely that ornament should be systematically and consistently eliminated. What I did mean was that where it had disappeared as a necessary consequence of human development, it could not be restored, just as people will never return to tattooing their faces.”

For Loos ornament was permissible so long as it was organically tied to cultural life, in which it belongs to tradition. Use is the form of culture, the strength that forms objects. “*We*”, he claimed, “do not sit in a particular way because a carpenter has made a chair in such and such a manner. A carpenter makes a chair in a particular manner because that is how we wish to sit.” No revolution is possible in design; at best this could only be attempted by art. “Form, or ornament”, he would state in 1924, “is the result of the unconscious cooperation of men belonging to a whole cultural sphere. Everything else is art. Art is the self-imposed will of the genius. God gave him this mission. Wasting art on objects of practical use is uncivilised.”

At this point the parallelism between architectural language and verbal language is almost perfect: words are forms. As they already exist, they cannot be invented. Changes to them are the fruit of a complex and slow social dynamic, and never of an individual desire. Grammar is provided by proper tradition, made to coincide with classical tradition and above all with that of Roman construction (the architect, he stated, is a bricklayer who speaks Latin). The sense of the text derives from use, from the appropriateness of a construction with respect to the needs it must satisfy. This generates three imperatives: proceeding from inside to outside, a familiarity with materials, spatial control of a project, including three-dimensional verifications rather than of mere surfaces. Following these precepts, which represent a Calvinist definition of Sullivan’s and Wright’s method, it should be possible to exorcise any fatuity or frivolity, and to avoid being overrun by fashions.

Emblematic of this attitude, more evolutionary than revolutionary, is the Goldman & Salatsch building realised by Loos in the heart of Vienna, in front of the Michaelerkirche and the Imperial Palace, between 1910 and 1911. The building, devoid of traditional architectural decorations, caused an uproar. It was accused of being ultra-modernist, a face without eyebrows, a façade based exactly on the banal pattern of a manhole cover. In reality, it is a classical building, with a good modern sense and an austere monumentality. It has a base, a middle and a
crown, the entrance is identified by columns and it boasts a notable composure rendered plastic by recessed bay windows. However, in a city as reactionary as Vienna, more inclined to pardon the formal intemperance of the Secessionists than the dry and laconic tact of a snob, it could not be understood.

Interesting for its absolute rigorism is the Steiner House, realised in Vienna in 1910. It appears a prelude to the abstract constructions that the key figures of the Modern Movement would realise beginning in the 1920s. In reality, it is something else entirely. In the intentions of its author, it is a work of proper construction, written in Latin by an architect-builder, with no desire to confuse an urban with a chamber pot. Hence it is symmetrical, solid, clearly composed and so banal that it flirts with a sublime elegance. Once again it has nothing to do with the experiments of the avant-garde and the successive work of the Purists, Constructivist and De Stijl.

3.4 Behrens and the AEG, Gropius and the Fagus Factory

As we have seen, Behrens’s early designs were in the vein of the Arts & Crafts, revisited through German eyes. Behrens actively participated in the experience of Darmstadt, though he left in 1903 when, thanks to the support of Muthesius, he assumed the direction of the Kunstgewerbeschule in Dusseldorf, where he introduced a curriculum oriented toward functionality. Between 1905 and 1908 he completed a crematorium in Hagen-Delstern that returned to the motifs of Florentine church architecture, though with a classical severity that, from this moment onward, would become, with rare though significant exceptions such as the Hoechst AG building (1920-24), his hallmark; simple volumes, square forms, scarce concessions to decorative flair, admitted only under the condition that they were functional to a better visual explication of the overall logic of the building. In 1907 he moved to Berlin, where he was among the founders of the Werkbund. It was here that he would become the architect responsible for the image of the AEG, the general electric company headquartered in the capital.

It was during this period that Behrens expanded his office and surrounded himself with three assistants who would go on to create the architecture of the Modern Movement: Walter Gropius, Mies van der Rohe and Le Corbusier. Gropius joined the office after leaving university in 1907, after returning from a lengthy trip to Spain. He would remain only until 1910, when he decided to open his own practice, taking Adolf Meyer with him. Mies arrived in 1908 and remained until 1913, perhaps because he was struck by the architecture of Berlage, little loved by Behrens, though more likely due to professional disagreements in the wake of the project for the Kroller House in The Hague, after the assistant sought to usurp the commission from his boss. Le Corbusier spent five months in the office in 1910,
though the experience would suffice to definitively move him toward the classicism that permeated the office; he would abandon his passion for medieval architecture, an inspiration garnered from his professor and mentor Charles L’Eplattenier.

In 1909 Behrens completed his masterpiece, the AEG turbine hall. The building is a warehouse crowned by a hexagonal tympanum, in steel and plastered masonry. Brick was used, other than for the tympanum, for the solid corner pilasters, whose bands recall stone coursing. It is marked by a rhythm of slender steel profiles, elegantly hinged at their base, and large windows on the side elevations. The tympanum projects slightly, as does the front window: this creates a play of chiaroscuro sufficient to articulate the mass. Equally articulated in the play at the sides between the steel beams, glass and masonry. The result is that from the exterior the building appears to be composed, simple and solid, though anything but banal. It recalls classical tradition, or a Greek temple. In particular the Doric order: the most solid and essential. Inside the space is clean, luminous and functional. It is a space of industrial production. The operation is not without its rhetoric: history was borrowed to validate the company’s image, simultaneously ancient and exceedingly modern.

Attempting to resolve this ambiguity, efficacious in rhetorical terms though artistically and technically inconceivable, we find Walter Gropius and Adolf Meyer, with an important work realised between 1911 and 1912: the Fagus Factory in Alfeld on the Leine. The building appears to start precisely where Behrens left off. Glass and piers, as in the turbine hall, alternate at regular intervals with a simple though effective play of projections and setbacks. In this case, the projecting elements are glazed, while the solid piers pull back. There is no tympanum, a rhetorical excess that new architecture can do without. What is more the corners, no longer emphasised and reinforced by masonry columns, are dematerialised in glass that turns the corner. There remains the classical play of structures, but the overall appearance is more modern, with effects of transparency and lightness unimaginable in Behrens.

The building by Gropius and Meyer is not without its rough parts and naïve elements, such as the entrance in brick coursing added to the main volume also with the intention of introducing some movement. The door is trivially cut into the wall, static, set at the centre at the peak (al centro al culmine) of a stair, also out of place; too small to be monumental, too large not to be rhetorical. Wright had already taught that a new architecture preferred an entrance after a path that moved along the wall containing the entrance, from the side, and not frontally. In the Fagus Factory, instead, also on axis with the stair and door is the clock above it. What is more, the bands at the base and crown are a little to heavy in appearance. The logic remains that of a box.
A determined logical and aesthetic leap toward a greater formal abstraction had, all the same, been undeniably made. The English critic Pevsner, in his *Pioneers of Modern Design. From William Morris to Walter Gropius*, from back in 1936, did not hesitate to recognise the building as one of the fundamental works of modern architecture.

### 3.5 Wright in Europe

When Wright decided in 1909, at the age of forty-two, to leave his wife and six children and flee to Europe with Mamah Borthwick Cheney, the wife of one of his clients, he was already key figure: he had worked for the most important office in Chicago, he was a promoter of the Arts & Crafts movement in the United States, he had built over one hundred homes, commercial buildings and a church, he wrote for journals and possessed his own original philosophy of architecture. So it was only natural that he wished to spread his verb across the Old Continent, organising an exhibition and printing books about his work.

Before 1909, Wright had never visited Europe, even if he was familiar with its styles and trends thanks to the publications that arrived from Adler and Sullivan, such as the widely available *The Studio*. This journal had already dedicated an issue to the Secession in 1906. His employer and friend Sullivan, for as much as he sought to deny it, was steeped in European culture, having studied in France. Richardson, the ideal master of both men, had also studied in France. Sojourns in Europe had become an imperative for American architectural apprentices hungry to affirm themselves in the professional world. It appears that a study trip had been offered to the young Wright by Daniel Hudson Burnham, the author, together with Root, of some of the most important skyscrapers in Chicago, including the Reliance and Monadnock buildings. However, Wright – judging from his own story, that, like all others, is to be taken with the benefit of the doubt – refused the offer to avoid being corrupted by classicism rampaging across Europe. Adler and Burnham, both born in Germany, were also part of the large German community living in Chicago, and were thus in touch with events there. Wright, for his part, had visited the 1904 St. Louis World’s Fair, where he was able to admire the works of Olbrich and Behrens, remaining impressed by those of the former. We have already spoken of his relations with the Arts & Crafts movement; in particular, we can recall that Ashbee visited Chicago in 1900, where he fraternised with Wright, returning the invitation prior to departing.

Wright left Chicago in September. First stop: Berlin. On the 24th November he signed a contract with the editor Wasmuth for the publication of his work in two volumes: the more economical Sonderheft and a Portfolio for connoisseurs. The operation was largely self-financed by the American architect. During the same
days, in all likelihood, Wright prepared an exhibition of his work, however, as noted, as no trace remains of the event, either it never took place or, in any case, was less important than the tradition of architectural historiography would have us believe.

During these years Berlin was one of the principal centres of new architecture and Behrens the architect most involved in experimentation. Wright appears to have taken little or no notice. He was fascinated instead by the genius of Olbrich, certainly more akin in style. There was more than one reason for this: they were born the same year, though his tragic premature death at a young age meant he was no longer able to cast a shadow over Wright; he was alien to any historicist rigorism; he possessed a sacred vision of architecture and a romantic conception of the architect, seen as a craftsman and, together, a rationaliser of forms. Hence it was obvious that he would be infinitely more interesting to Wright than Behrens, who would instead have a strong influence over those architects who, like Mies and Le Corbusier, would be guided by him toward a more classical approach and more austere and cold forms.

After Berlin Wright travelled to Paris, then to Florence, and back to Paris, and finally to Fiesole, where he rented a villa with the objective of preparing, assisted by his son who joined him from Chicago, drawings for the Wasmuth publication. There were other travels: to Berlin and Vienna. At the time Vienna, as we have seen, was in the throes of a fertile moment. Der Ring, now travelled by automobiles, was complete. Loos had completed the Café Nihilismus (1898-99) and the American Bar (1907) and was at work on the building fronting the Michaelerplatz (1909-11). Wagner’s works decorated strategic points across the city: from the famous subway stations to the celebrated home of the Post Bank, completed in 1906, and later adjusted between 1910 and 1912, as well as the church of St. Leopold am Steinhof (1902-1907). There was also Olbrich’s Secession building from 1898. During Wright’s stay Vienna hosted an exhibition of paintings by Schoenberg, the extraordinary musician and inventor of dodecaphonic music, not to mention a talented expressionist painter. Vienna was also witness at this time to the founding of the International Union of Psychoanalysis, thanks to Freud its capital.

It is likely that Wright was barely touched by these events. He undoubtedly appreciated the work of Klimt, whose decorative exuberance resonated with Wright’s work. He had contacts with Hoffmann, founder of the Wiener Werkstätten, whose Kunstschau (1896-1908) he admired, and with Wagner, whose book on modern architecture, we can recall, was translated in the United States back in 1901. Wright, three years later, suggested to his son John, who wished to study in Vienna, to contact Wagner. For his part, the Viennese architect had already enthusiastically presented the American architect’s work to his students in 1911.
In September of 1910 he was back in Berlin, followed by a trip to England, where he met Ashbee, to whom he entrusted the introduction to the Sonderheft. Ashbee highlighted his debts toward Japanese culture. Wright was rather put off by this and, though he left the German version unaltered, he would rework the English text, removing the sentences he judged to be lacking in truth.

The publication of the two volumes dragged on. In the end, four thousand copies of the Sonderheft were distributed in Europe, and approximately five thousand arrived in America at the end of 1912. One thousand copies of the Portfolio were printed, of which one hundred were distributed in Europe. The success of the publications was not as great as the myth surrounding Wright would have us believe, a myth inflated by the architect himself, though it would suffice to raise Wright’s profile in Europe among the most attentive observers, including Berlage in The Netherlands.

**3.6 The Werkbund Exhibition of 1914**

The first important international presentation of the Werkbund was slated for July 1914 in Cologne, in programme since 1911, soon after the success of the 1910 exhibition on concrete, visited by the young Le Corbusier on his way through Germany.

The long list of architects invited to create exemplary works for the more than 100 pavilions included Peter Behrens, Alfred Fisker, Henry van de Velde, Bruno Taut and Walter Gropius. There was no shortage of divergences, in temperament and culture. Above all between conservatives and innovators. This is clear from the closure of the exhibition to the cubist and futurist avant-gardes, whose presence was judged damaging and to the chaotic diversity of the styles of the pavilions: modern, romantic, neo-Baroque, classicist, biedermeier...

The clash, by now inevitable, occurred in occasion of the annual congress that took place at the same time in the same city. The occasion was provided by ten theses, distributed by Muthesius one week before the event opened. They summarised the guidelines for the future of the Werkbund: a priority of standardised and typified forms, group work, mass production, a mistrust in artistic research and its desire to invent new forms, an invitation to perfect existing ones, a refusal of the imitation of historic styles. They were met with strong opposition by the group of artists, headed by van de Velde, who saw the danger that the call to order and productivity concealed a desire on the part of the old guard to free itself of the most innovative creative elements.

Supporting van de Velde was Poelzig, director of the Academy of Fine Arts of Breslau, who threatened to quit the association, and the younger members, who saw this clash between fifty-year olds (Muthesius was 53 and van de Velde 51), as
an occasion to free the association from the domination of the old guard. Bruno Taut proposed naming van de Velde and Poelzig artistic directors. Gropius openly sided with van de Velde. With a discrete talent, Muthesius managed to achieve a position of compromise and hold the association together. “Leadership and opposition”, Joan Campbell writes, “refused to make a choice between art and industry or between creativity and standardized production. Instead both factions hoped that the Werkbund might reconcile these opposites and combine them into a higher synthesis.”

As mentioned, the three leading figures of the creative wing, van de Velde, Gropius and Taut, participated in the exhibition respectively with a theatre, a factory and a pavilion. The three works, none a masterpiece, laid out numerous themes of reflection for the successive period of figurative research. They included: the dynamics of the volume, a decomposition into planes and transparency.

With respect to van de Velde’s previous projects, the theatre is a simplified project, not without expressionist values. It represents an attempt to move from the whimsy of the line to the rationality of the volume without losing tension and energy and acquiring monumentality and history. However, the building lacks the force that, for example, would characterise the intense expressive dynamic of the later work of Mendelsohn. All the same, it remains an important structure, of that van de Velde, not without a hint of auto-celebration, would recall as having influenced “the development of the new architecture promoted by the Belgian, Dutch, French and German avant-garde”.

The factory and offices by Gropius and Meyer combines various suggestions. Planes and cantilevers borrowed from Wright’s language, stereometric elements reminiscent of Behrens and an original research that moved toward the ephemeral and the dematerializing effects of glass. It is a stylistic mash-up, of themes that remain juxtaposed, whose fertility would reveal itself only in later works, specifically in the Bauhaus building from 1923-26.

Wholly unusual, for its absolute search for transparency, is the glass pavilion by Bruno Taut. We have already noted the close relations between the poetic of the German architect and the Glasarchitektur of Paul Scheerbart. In the pavilion the reference is explicit and phrases by the poet alternate with elements of the architecture: “Light wants glass”, “Glass is the bearer of a new era”, “We are saddened by the culture of the brick”, “Coloured glass eliminates hate”, “The brick building is damaging”. The pavilion, however, is not without a monumental rhetoric and of scarce volumetric interest: a dome that resembles a half-lemon, vaguely gothic, with rigorously and symmetrical stairs on the interior.

The theme of light would be taken up with greater strength in two publications after the war – *Die Stadtkrone* (The Crown of the City) and *Alpine Architektur*
(Alpie Architecture), both from 1919 – and in numerous highly evocative drawings. Bruno Taut was not a particularly gifted architect, with a talent for creating memorable buildings, but instead a tireless animator of cultural proposals and activities. He understood that the contemporary city must establish a diverse relationship with nature and the landscape, to the point of becoming, from the early 1910s, one of the most ACCANITO animators of the garden city programme. He vindicated the role of new materials to free citizens of the city of stone. He returned to the German gothic and expressive traditions, though without falling into the trap of stereotyped language of traditional forms. After the war, together with Gropius, he would be the organiser of an exhibition created to launch young talent, inventing a chain of letters (the Chain of Glass) on architectural themes that would pass through the hands of some of the most relevant architects – expressionist and non – at the time and constitute one of the most interesting documents in debate during this era. Finally, he would be involved in important housing projects, seeking to apply assembly line standardisation, though without forgetting the relations between architecture, landscape and body.

The exhibition in Cologne, which opened in July, was brusquely interrupted by the outbreak of war in August of 1914. France, Italy, Russia and the United States on one side, and Austria and Germany on the other, who had fought until this moment for artistic authority, fruitfully overlapping rivalries, collaborations and intellectual competition, now found themselves squaring off in the first mechanical war in human history, the most horrendous slaughter ever witnessed. However, it would be during the course of the war, when many artists and philosophers lived desperate lives plagued by nervous exhaustion (Ernst Ludwig Kirchner, Aby Warburg, Ludwig Wittgenstein, Louis-Ferdinand Céline, to mention only a few of the most famous), that they would begin to glimpse new directions for artistic ideas and research. We will examine them briefly in the next chapter.

Part One Chapter 4: Ideas at War 1914-1918

4.1 The Mechanical War

The volunteers who left for the Front, shouting patriotic slogans, had all the time in the world to remain deluded: the conflict would drag on for four endless years. It would cause more than ten million deaths. Too many even for the futurists, who had proclaimed war to be the only possible hygienic solution for the world. War had never been so inhumane, so violent as this one. The futurists had made a tragic error when they exchanged the syncopated rhythm of free words with the spurs of machine gun fire, the booming of canons and the deafening noise of the machines of war.
Grosz, raised in military environments and enrolled as a volunteer, was overwhelmed. On the 4th January 1917 he was admitted to a horrible hospital, and later to a care facility. Heartfield fell ill and was declared unfit for duty. Max Beckmann, a bundle of nerves, was dismissed. Kirchner moved to Switzerland in the throes of a serious nervous breakdown. He would be cared for by the same psychiatrist caring for van de Velde, suffering an identity crisis for being Belgian by birth and German by adoption. Piscator developed an aversion to militarism sufficient to characterise all of his successive theatrical productions. Otto Dix, a gunner at the Front, deformed reality and depicted it as a lump of energy to avoid going mad. Moholy-Nagy sketched rhythmic and whirling dark lines. Mendelsohn developed sublime sketches of expressionist works of architecture in the trenches. Not all artists went to war. Some managed to flee, either by going into hiding or fleeing to far away or neutral countries. Gleizes, Picabia and Duchamp emigrated to the United States, the first two after sojourning in Barcelona; Mondrian returned to The Netherlands and Delaunay to Spain. Numerous intellectuals left for Switzerland, which became one of Europe's centres of culture. In Zurich, among others, was Lenin, who lived a few steps away from the Cabaret Voltaire, the birthplace between 1916 and 1917 of Dada: he wrote philosophical notebooks and prepared for the Bolshevik revolution, though exasperated by the noise from performances by reckless young men with a bourgeois mentality, he did not hesitate to call the police and denounce the nightly ruckus. Also in Zurich, Joyce was at work on Ulysses.

The Great War was the first mechanical war and indistinctly involved the entire population. Waged using modern armaments and innovative technologies, it required growing quantities, with an effort that truly tested the productive apparatuses of the nations involved. Control of the skies was pursued by testing the potentialities of aviation. Though those killed in bombing raids were only a few thousand, this new tool would have a devastating psychological effect, involving civilians and areas normally spared the horrors for war. Submarines also proved devastating, utilised to block ports and the movement of ships, which grave consequences for food supplies to the civilian population. There were also long range canons, machine guns, gases and chemical weapons and an incredible profusion of terrestrial means of transport: bicycles, cars, trucks, tanks and trains. It has been calculated that in only a few days, beginning on the 6th August 1914, 11,000 trains transported 3,120,000 German soldiers. On the other front, 2,000,000 French soldiers were moved on 4,278 trains.

If the war rolled on thanks to the gears of machines, it was managed across electrical lines. Developed across a gigantic geographic chessboard, it produced a flow of information that required a capillary network of observers communicating via telephone and telegraph. The mind and the eye were separated, and empirical
space was dissociated from its theoretical counterpart. Military commands abandoned the Front – the point of view of those at the centre of the action – to follow troop movements from safer and technologically equipped locations, where data and information converged from various points. It was a triumph of communication in real time. But also of careening and disorientation. On the battlefield, generals still unaccustomed to these new technologies made disastrous errors, with losses of human life increased tenfold with respect to traditional warfare. Relations were compromised by the errors of diplomacy, forced to meet rhythms that offered little time for reflection, consideration and mediation, due to the use of ultra-fast instruments such as the telegraph, to which it was unaccustomed.

War required almost perfect coordination between timing and equipment. Exactly like an assembly line or a film strip in which it is necessary to programme each single photogram while watches, for the first time, became standard military equipment, synchronised to the hour kept at headquarters.

Despite, or better yet due to the immense efforts to coordinate troops, supplies, information, spying and production, all of which required perfect organisation, akin to the work of Taylor, in the end the result somewhat resembles a gigantic cubist composition. This was noted by Gertrude Stein, who stated: “Really the composition of this war, 1914-1918, was not the composition of all previous wars, the composition was not a composition in which there was one man in the centre surrounded by a lot of other men but a composition that had neither a beginning nor an end, a composition of which one corner was as important as another corner, in fact the composition of cubism”.

The most farsighted military men understood that the time had come to change strategy, exploiting the potentialities of a deconstructed war, no longer defined by elementary geometry, but broken down into a more complex process, of individual and independent squadrons. The first camouflaged tanks arrived: to blend into their surroundings they adopted the principles tested by the avant-garde movements. The camoufleur section, whose symbol was a chameleon, employed some three thousand artists. Great Britain worked with the French and in 1917 implemented a camouflage technique that involved painting the sides of battleships with geometric figures and colours designed to confound spatial references for their adversaries. Similar techniques were employed by the Americans and Germans, the latter of which saw the expressionist artist Franz Marc painting nets and canvases used to conceal the German canons used at the Battle of Verdun.

Artists and architects soon acquired the understanding that art and architecture could help break find a way out of the tunnel, and create a new man. They did this by embracing palingenetic ideals, such as the Russian Revolution or, later, its
opposite, fascism; more about this later. However, if art dealt with revolution, it was through an act of cultural mediation that it would recognise the specificity and autonomy of research. If this was the time of revolutions, realised or desired, it was also one of the most rigorous formalisms. Arp recalls: “Revolted by the slaughter of the 1914 World War we devoted ourselves to the arts [...]. As the thunder of artillery rolled in the distance, we sang, painted, built and wrote for all we were worth. We were searching for an elemental art, to cure people of the madness of the age, and a new order to restore the balance between heaven and hell.”

To what degree could one mediate the effective reality of live with the virtual reality of art: this would be the problem for the next fifteen years. There would be practically no controversy without one artist accusing another of being foolishly functionalist or a dreamy formalist. Everyone, in proposing their own recipe, would claim to have perfectly solved the equation: architecture is revolution, architecture or revolution, architecture and revolution, architecture full stop, revolution full stop. Everyone would be frustrated in seeing their ideas refuted. That is until, after 1930, totalitarian regimes seized power and simplified the question, enslaving form as a tool of propaganda for their own revolution – undoubtedly effective, though betrayed.

4.2 Pure Visibility and Formalisms

In 1915 the book *Kunstgeschichtliche Grundbegriffe* (Principles of Art History), written by Heinrich Wolfflin. A pupil of Jakob Burckhardt, Wolfflin was the most eminent theoretician of “pure visibility”. According to his point of view, form is the medium that encloses the artist’s universe and acts by provoking our senses, measuring itself against our body, and favouring, or not, a certain type of tactility, also visual, either blinding or saddening us. In short: exciting us or, if we wish to use a term typical of this period, activating empathic reactions.

In all of art, and above all in architecture, these interactions occur in space. To comprehend it we can ignore all that is extraneous to it, beginning with the interpretations that privilege simple contexts, symbolic or allegorical, or aspects of construction and function. With his *Kunstgeschichtliche Grundbegriffe*, Wolfflin achieved this by defining a phenomenology of ways of perceiving. They correspond to five diverse points of view that can be described using the same number of pairs: linear/painterly, plane/recession, closed form/open form, multiplicity/unity, absolute clarity/relative clarity.

Certainly, now work of art can be perfectly linear, planar or open. Neither, to present another example, can it be painterly, unitary and of relative clarity. These terms are in fact to be intended as ideal types to be approached, without ever
actually reaching them, similar to the manner by which each of us tends toward limit states such as good/evil, without ever being absolutely one or the other. Wolfflin’s choice to refer to a classification by ideal types was undoubtedly favoured by history. Indeed, ideal types were also used by much of sociology at this time, and in particular by Georg Simmel. Max Weber also offers a brilliant theoretical explanation in his 1904 essay entitled Objectivity in Social Science and Social Policy: “An ideal type is formed by the one-sided accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent concrete individual phenomena, which are arranged according to those one-sidedly emphasized viewpoints into a unified thought construct”.

Two pieces of information would thus be acquired henceforth: the first is that art can be appreciated only when it is specifically analysed, in other words, as an activity that produces something typical to it – space – and not generic extra-disciplinary contents; the second is that of art can be classified only in relation to others. In fact, the opinion of proximity to an ideal type occurs by comparison, relativizing judgement with respect to another work that functions as a yardstick. Furthermore – and this is particularly important – having honed in on the interest in form, inevitably si fanno giocoforza strada the reasons of abstraction and the avant-garde movements. Despite the fact that Heinrich Wolfflin in Switzerland, Bernard Berenson in America and Italy and Lionello Venturi, also in Italy, had little appreciation for Picasso, Mondrian, Le Corbusier and friends, the time was ripe, also in theoretical terms, for a new approach. A new horizon was forming, based on the new formalist schools of the Moscow linguistic circle, the Opojaz in St. Petersburg and the Warburg Institute in Hamburg. Above all the former would establish intense and mutually collaborative relations with the avant-garde.

4.3 Philosophy in the Form of Architecture: The Tractatus

At little more than twenty years of age, Ludwig Wittgenstein was an enfant prodige, a logical mind with an ability to trouble even the sharpest international minds. From 1911 to 1913 he moved to Cambridge, the heart of analytical philosophy in Europe. Here he met figures of the calibre of Russell, Moore and Whitehead. He bonded immediately with the first, establishing a relationship that was both father/son and brotherly.

In 1913 and 1914, just prior to the outbreak of war, Ludwig moved to Norway, in search of solitude and to work on his own logical system, solving problems that eluded even his masters. His idea was to realise a limpid, clear, effective system that, not without a hint of juvenile naiveté, he hoped would be definitive, unassailable and far from any rhetoric or cliché. Almost a transposition into
philosophy of Kraus’s programme, though modified under the light of a perfectly logical Anglo-Saxon organisation.

In Norway, at the Hochreith, far from the civilised world and accessible only with great difficulty from a nearby village, Ludwig designed himself a wooden cabin as his refuge. It appears to be a response to parable of the house on the lake by Loos, who doubted that no architect would ever again be able to design one that was not in strong contrast with the environment. Ludwig’s was the measure of simplicity and local tradition, avoiding both concessions to folklore and nods to the contemporary style. The result, austere though intentionally banal, is seamlessly inserted within the landscape.

Just before the outbreak of war, Ludwig was in Vienna. He decided to distribute 100,000 Krones of his inheritance to artists in destitute economic conditions. They included Rilke, Kokoschka and Loos. It was on this occasion that he met the latter, with whom he engaged in lengthy discussions about architecture. They met at the Café Museum, designed by Loos himself and nicknamed the Café Nihilismus, for the laconic nature of its spaces and poverty of its decorations. The two became familiar: there were many analogies between the architecture of the first and the logic of the second. On the 7th August he left as a volunteer. During the war, in the midst of extreme difficulties, Ludwig completed his book. The *Tractatus logico-philosophicus*, the title Moore gave to the book, is founded on a premise: that language cannot increase the content of reality, as it is nothing more than an instrument. It follows that logic, the method by which language, and thus ideas are articulated, must be transparent, in other words tautological. A metaphysical language causes the intellect to move beyond its confines, confusing scientific and mystical reasoning, logic and metaphysics; a transparent and correct language, instead, renounces connotations and rhetoric, and seeks to be as pared down and concise as possible, imposing that one remain within assigned confines.

It is interesting to note that Wittgenstein’s *Tractatus* has the form of a virtual work of architecture. Between 1926 and 1928 the philosopher, having abandoned the world of teaching to flee from the latest nervous breakdown, decided to approach the construction of a house for his sister, in which he attempted to translate the principles of his logic into a concrete work of architecture, making them both visual and spatial. He built the house together with Paul Engelmann, a young architect and pupil of Loos. The house, together with the Maison de Verre by Chareau and Bijvoet, Buckminster Fuller’s Dymaxion House, the expressionist projects of Mendelsohn, Haring and Scharoun, the compositions of Malevich and van Doesburg, to the Austro-Californian syntheses of Schindler, is one of the benchmarks of the first post-war period. We will return to it in the following Chapter.
For now it is enough to note that Wittgenstein offers a correspondence between architecture, art and logic through the theme of language. There is a common ideal of rigorous syntactic articulation, the search for pure form free of any rhetoric, sensationalism or lyricism. A zero degree, in which a square is a square, a building a building and a rose – to uses Stein’s famous expression – is a rose. We are beyond Loos, for whom stylistic reduction is a problem of laconic elegance, of refined common sense, not an imperative for the construction of a logically irreproachable world. Despite the impossible to ignore points of contact, in fact, the more the two got to know one another, the more differences emerged. If Loos had trouble understanding the young Ludwig, making ironic comments about his monastic and maniacal habits, the latter could not pardon the other’s aestheticising attitudes. Ludwig raised the issue of language, Loos of style.

4.4 Language and Form

While Wittgenstein was completing his *Tractatus*, in Russia artists and critics were investigating the sense of the equation form = language. They were influenced by both the research of the symbolists, centred on the word, metaphor, rhythms and images, and by the innovations of the futurists. In 1912, Mayakovski, Burliuk, Khlebnikov, Kruchenykh had already penned a manifesto entitled “A Slap in the Face of Public Taste”. They claimed they wished to through Pushkin, Dostoyevsky and Tolstoy “overboard from the Ship of Modernity” and declared their absolute hatred for the language existing before their time. They focused their attention on significance. The supremacy of form over content, an attention to language as the “autonomous entity that organises the material of sentiments and thought”, the emancipation of the word, the revolt against meaning, to the point of pure euphony in which, as Kruchenykh affirmed, is form that determines content and not vice versa.

The research of these young Russian scholars presents many points of contact with the pure visibility theses advanced by Hildebrand, Worringer and, in consideration of his particular attention toward stylistic classification, of Wolfflin. In exquisitely linguistic and philosophic terms, we can also note the influx of the *Logical Investigations* (1913-1921) of Edmund Husserl and De Saussure, two exceptional scholars who, in Germany and in France, in the face of a generically psychological and genetic attitude, introduced a structural awareness of what it means to work with words.

In 1915 a group of young university students, dominated by the figure of Roman Jakobson, officially founded the Moscow Linguistic Circle. The following year saw the creation in St. Petersburg of the Society for the Study of Poetic Language, Opojaz. Here the most important figures was Viktor Shklovsky. The efforts of the
Moscow Circle moved toward the method and against symbolist decadence. Opojaz and Shklovsky in particular, were more oriented toward the study of poetic function, seeing art above all as the capacity to transcend the meaning of things, pure artifice that must necessarily be placed on another level with respect to that of common existence. The space where the habitual is made unusual, where the discourse appears to be slowed and oblique, in order to offer a fresh and infantile vision of things. If it were not thus, indeed, we could not manage to pull away form the world in which we live, we could not manage to look at it from the contemplative point of view typical of the artist. However, if art, as Shklovsky would have it, is “always independent of life”, and if, as Mayakovski suggested, “poetry is a type of production [...] that is highly laborious and complex, it is true, though still production”, it makes no sense to pursue it through inspiration. Unfettered of referential language, and artificiality, the creative invention of rules, and construction.

Feeling themselves to be the producers of a good so indispensable to man, and thus irreplaceable, formalists, futurists, constructivists and Suprematists threw themselves headlong into the Bolshevik Revolution of 1917, which promised a new world that offered space to liberty and art. Against the socialist realism championed by Marx and Engels, they support the laws of form, the autonomy of craft. At the outset, in the clash with bureaucrats who accused them of artistic degeneration, they appeared to take the upper hand. These would be unforgettable moments, soon followed the disillusion of a reality that was far more prosaic and far less creative.

4.5 Malevich, Tatlin and the Zero Degree of Form

According to Kazimir Malevich, Suprematism was born in 1913. However, it is possible that the famous Black Square was realised later, perhaps after the start of the war and backdated. Whatever the story, it is certain that during this period Malevich began to change, presenting an ever more crowded co-presence of diverse genres, including the difficult to define “transmental” painting. The painting Cow and Violin from 1914 already contains the embryo of a pre-Dada ideology, other than allusions to metaphysical painting for the strange insertion, in an apparently Cubist work, of figuratively well-defined icons, though out of scale and not bound by any apparent logic.

In December of 1915 Ivan Puni and Malevich (among others) presented thirty-six abstract and suprematist compositions for The Last Futurist Exhibition of Paintings 0.10, angering his rivals and, above all, Vladimir Tatlin, at the time defining his own research comprised of poor objects assembled to create a highly plastic space that preannounced Constructivism. Tatlin was unable to stomach Malevich’s formal
incoherencies, stylistic confusion and geometric simplification; in reality the relations between the two were marked by a bitter rivalry of character. Tatlin managed to question the purpose the exibition itself, motivating his opposition with the accusation, underhanded, infamous and pretentious, of his adversaries dilettantism.
The standout among the thirty-six works by Malevich is the Black Square, presented in the corner like the icons typical of rural homes. It signifies that the human dimension, represented by the canvas, has taken the place of the divine, rendered by the triangle. The painting was accompanied by other works marked by a rigorous geometric simplification, such as a black cross or black circle. They propose an annulment and extreme reduction: “I have transformed myself” he stated, “into the zero of form”.
In Malevich’s poetic, nihilistic attitudes assume a paradoxically constructive value. It is through nothing that we intuit the essence of the cosmos, that we activate the ascension toward the indescribable, the inexpressible, the zero point from which everything originates and where, “above, below, here, there no longer exist”.
It is a world without objects, so well expressed by the title of the text published during the 1920s by the Bauhaus (Die gegenstandenlose Welt): “In the vast space of cosmic repose, I reach the white world devoid of its objects, the manifestation of nothingness revealed”.
The zero degree is the obligatory passage for the successive phase of reconstruction. This was clear to El Lissitzky when, in 1922, he attempted to summarise this turning point: “Yes, the path of pictorial culture has narrowed till it reached the square, but over on the other side a new culture is beginning to bear fruit. […] Yes, the pictorial line has descended regularly… 6, 5, 4, 3, 2, 1 to 0, but at the other extremity a new line begins 0, 1, 2, 3, 4, 5…”.
In 1918 Malevich created a White on White on a white background for the 10th State Exhibition. Only a change in the tone of white distinguishes the figure from the ground. The square appears and disappears from view, almost as if it were a window open onto the infinite.

Having abandoned perspective, in other words a finite point of view, images now appear to fluctuate. Painting, rigorously two-dimensional, has now reached a virtual three-dimensionality. Some scholars have spoken of the world as it is perceived from the airplane, a satellite, an object that moves in the infinite. An orbital point of view that allows for an appropriation of the cosmos.

With ever more surprising results, painting approached architecture. This was the final goal, the synthesis of all of the arts. Already between 1914 and 1915 Malevich had created a painting entitled Stroyuschiysya dom (House Under Construction), which alludes to the overlapping of forms using planes. Also in 1915 he experimentined with spaces in three dimensions; he gave them the title of
“planits” or the contemporary environment. They were followed by the “architektons”: assemblies of cubes and prisms. Perhaps they allude to hyperspace: indeed, if a painting can present the reality of three dimensions using simple figures and planes, there appeared to be no reason why architecture could not depict the fourth dimension using primary volumes. In 1924 Suprematism officially oriented itself along the front of architecture, with projects increasingly more similar to those of De Stijl.

Faced with such abstract reasoning, almost Platonic and undoubtedly marked by a mystical undertone, Tatlin could not help but protest. The road to be travelled, in his opinion, was another one. It was made of matter and not colour, of construction and not of composition, of energy rather than spirituality. Proof was to be found in the abstract sculptures he created during this period, mixing unusual materials: concrete, copper, glass, perforated steel. Furthermore, testifying to the fact that art is not pure contemplation, he created functional work clothes and an energy efficient heater in 1918-19.

Something else entirely than mystical suprematist space, art for Tatlin was obtained by assembling real objects in real space. The revolution made sense only if it was tied to a new ethic and aesthetic of production. Thus he approved of sculpture, but not of Malevich’s pictorial works.

Certainly, for Tatlin the dream was to annul the force of gravity, to overcome weight, to conquer space. However, through scientific study, as he attempted with his Letatlin, a Leonardo-esque machine with wings designed to allow man to take flight. Or with his self-propelled monument to the Third International, designed in 1919-20: an immense tower, some four hundred meters in height. It is reminiscent of the large engineering works of the nineteenth century, in particular the Eiffel Tower. Through the differentiated movement of its internal components – each of the three rooms moves with greater or lesser velocity of rotation within the steel truss structure – marks the symbolic time of the revolution.

Tatlin and Malevich could not have been more different. However, they both lived the same contradiction, the same spirit set on the conquest of free space. The dilemma was whether research must invest a conceptual or existential sphere. Malevich would opt for the idea – the first hypothesis – while Tatlin chose matter – the second. They were united by a vision of hallucinated design, antithetical but passionate. Upon Malevich’s death in 1935, at the height of Stalin’s dark reign, Tatlin, increasingly more disillusioned and tired, felt obliged to attend his rivals funeral.

4.6 Dada and the Impossibility of Defining Art

Hugo Ball and Richard Huelsenbeck were fascinated by Marinetti: by the telegraphic style, by the use of words as pure sounds, by the decomposition of
phrases, by words spoken in liberty. They organised a talk in Berlin in 1914, a few months before Italy joined the war.
Ball fled the conflict, hiding out in Switzerland. In February of 1916 he convinced the owner of a café on the Spiegelgasse, a street in Zurich’s disreputable Niederdorf district to allow him to use it, offering in exchange an increase in sales. It would become a meeting point for artists, with the promising name Cabaret Voltaire.
Six days after opening the Cabaret, Huelsenbeck moved to Zurich. He was joined by the artists Hans Arp and the Romanians Marcel Janco and Sami Rosenstok, the latter an author of poetry under the pseudonym Tristan Tzara. The five were very different from one another. Ball was a literary figure, interested more in metaphysics than concrete reality. Arp was drawn to abstract art, to sinuous forms and pure colours, which he employed with mastery and lightness. Janco composed his paintings, rigorously two-dimensional, as if they were works of architecture, claiming, in line with the experiments in Russia of this period, that art was construction. Tzara was another literary figure, fascinated by the unconscious and contradictory aspects of reality, with a very strong personality and boundless ambition. Huelsenbeck was no less ambitious, to the point that for years he would contend with Tzara the role of the inventor of the term Dada; he was more interested in the political and controversial aspects of new art.
The name Dada was invented in April 1916. The word means nothing; it is simply a sound. It would become the new title of the periodical Cabaret Voltaire, already with one issue. Dadaism was official proclaimed on the 14th July 1916. Far from being a structured and organised movement, it was more of a collection of diverse figures inspired by Marinetti, Expressionism, Symbolism and Abstract Art.
The Cabaret hosted a Russian night and a French night, with a lecture by Kandinsky and an exhibition of paintings by Delaunay. The encounter between diverse cultures and personalities created new situations, above all when Tzara and Huelsenbeck, followed by Janco, invented daring poems spoken by different people, in different languages, true and fictitious, set to the rhythm of an invented black music with an irresistible beat.
Activities continued even after the closure of the Cabaret, moving, after 1917, to the Galerie Corray on the Bahnofstrasse, immediately baptised the Galerie Dada. The space was inaugurated with a show of Der Sturm. Other presentations included the Manifesto of Futurist Literature by Marinetti and the poetic compositions of Cendras and Apollinaire. In March 1917 an exhibition was dedicated to their precursors: Kandinsky and Klee. There was also an exhibition of the metaphysical paintings by the Italian Giorgio de Chirico and another of the work of Max Ernst. The gallery attracted the painter Hans Richter, who arrived in Switzerland seeking treatment for a wound received at the front. He would
become one of the movements points of reference and, later, the author of an
correct, documented and affectionate reconstruction entitled *Dada. Art and Anti-
Art*.
The gallery was a short lived experience. The diaspora was not long in coming. Ball
got into exile in the Ticino. Huelsenbeck, already in early 1917, returned to
Germany where he founded a Dadaist club together with Jung, Grosz, Heartfeld
and Raoul Hausmann, committed to political action. Tzara contacted the French,
attracted by the surreal side of Dadaist poetry. This was the beginning of the
spread of the movement across Europe.
In 1918 Francis Picabia arrived in Switzerland from the United States. He
reanimated the climate in Zurich and brought to Europe analogical, antilogical and
logical experiences that he and Duchamp had introduced in the United States. The
activities of the group in Zurich would henceforth be oriented toward non-
sense, anti-art and the questioning of any value. He also founded and financed a
journal, entitled *391*, an explicit allusion to the street number (291) of the New
York gallery of Alfred Stieglitz and the title *291* of the magazine he published,
created after the closure of the glorious *Camera Work*, and a point of attraction for
most of the American avant-garde: from Joseph Stella to Georgia O’Keeffe to Man
Ray.
There were scholars who wished to see in the works that Picabia, Duchamp and
Man Ray produced in America after 1915 a sort of Dadaism that was unfolding,
even without yet being named, in parallel to events in Zurich. This is true above al
for the work of Duchamp.
We have already mentioned how the readymades dated back to 1913 and were
created in Europe. In reality, it was only after moving to New York in 1915 that
Duchamp theorized them in the form of an aesthetic operation. This occurred at
the precise moment when he baptised them with a title that only apparently
makes no sense: *In advance of the broken arm*, a mass produced snow shovel
hung from the ceiling. Recalling the bottle rack from 1913, Duchamp wrote to his
sister Suzanne in Paris, asking her to write something on it: “Now, if you went up
to my place you saw in my studio a bicycle wheel and a bottle rack. I had
purchased this as a sculpture already made. And I have an idea concerning this
bottle rack: Listen. Here in N.Y., I bought some objects in the same vein and I
treat them as ‘*readymade*’. You know English well enough to understand the sense
of ‘ready made’ that I give these objects. I sign them and give them an English
inscription. I’ll give you some examples: I have for example a large snow shovel
upon which I wrote at the bottom: *In advance of the broken arm*, translation in
French, *En avance du bras cassé*. Don’t try too hard to understand it in the
Romantic or Impressionist or Cubist sense – that has nothing to do with it. […]
This whole preamble in order to actually say: You take for yourself this bottle rack.
I will make it a ‘Readymade’ from a distance. You will have to write at the base and on the inside of the bottom ring in small letters painted with an oil-painting brush, in silver and white colour, the inscription that I will give you after this, and you will sign it in the same hand as follows: (from) Marcel Duchamp”.

Thus, a work of art is not the result of form, but can be anything, even the title, so long as it betrays the artist’s intentions. Later, Duchamp would summarise the sense of this discovery: “A readymade is a form of denying the possibility of defining art”. For the world of art this affirmation would have the same explosive power as the discovery of relativity in the world of physics.

Duchamp experimented with numerous variations on this idea, even considering the Woolworth Building as a readymade: at 241 meters in height, it was the tallest skyscraper in the world. It appeared as if he intended that anything could be transformed into art and, indeed, never had art and life been so close to one another. In reality, things were exactly the opposite: if any object could become a work of art, artisticity became impalpable, imperceptible to most. This generated paradoxes and situations of nonsense to be played with.

There are more than a few parallels between Duchamp’s method and the theories of Shklovsky, above all regarding the oblique approach that distinguishes artistic activity, that “unexpected move” that consistently allows one to amaze the public, and impose new ways of looking at reality.

Midway between the readymades and a joke is the urinal entitled Fountain, produced by the artist in 1917 for the exhibition of the Society of Independent Artists, signing it with the name R. Mutt. Art, Duchamp claimed, was fleeting; a function rather than a form in the traditional sense of the term. Moreover, each work possesses a playful, paradoxical and humoristic side. Yet humour, as demonstrated by Bergson, Pirandello and Freud, is contradiction. Seen under this light, the work of Duchamp – who, mentioned in passing, is an attentive reader of mathematical texts and in particular the work of Poincaré – is an explicit claim to the fertility of this paradox, of the impossibility to transpose existence in terms of scientific language and reasoning. It is within this horizon, in which life is much more than a logical and ordered grouping of facts, that the Dadaists discovered the coincidences of chance, destroying the certainties of what is observed. They identified new definitions of art, dismantling the confines of the discipline, rediscovering the power of analogy, of meaningless sounds, of images without references, of unintelligible discourses devoid of constructs.

Dada thus absorbed from the avant-gardes of the pre-war period – Expressionism, Cubism, Futurism – all that was most energetic, explosive and innovative, putting it all back into play. It would restore it in an open and problematic form to other coeval movements, such as De Stijl and Purism, that, when searching for a newfound elasticity and intent on a renewal, drew precisely on the spirit of Dada.
This work of discovering new territories and the systematic rupture with old confines led to the birth of contemporary artistic culture.

Dada did not produce its own architecture. According to some critics it couldn’t be otherwise: because it is more of an attitude than a style and because it is very difficult to produce contradictions, analogies and nonsense in construction. In fact – if we exclude a number of exhibition designs or ephemeral events during which artists-architects like Kiesler, with great ability, played with themes of disenchantment, contradiction, amazement – they would build only two small – in truth tiny – Dadaist works. More sculpture than architecture. One was the door to Duchamp’s studio that, at the same time, was open and closed, as the leaf of the door was hinged at the midpoint of two openings set at 90 degrees to one another and thus with the possibility to close either the one or the other. The other is the Merzbau, an environment constructed by Kurt Schwitters from all manner of objects: midway between a three-dimensional existential object and a work of interior design.

Excluding these two works – that, as minute as they are, would in any case be a point of reference for experiments during the 1960s and 70s – Dada would move transversally: by highlighting the relative character of any formalism, it introduced the value of chance, of free association, of the un-programmed, freeing up the value of the signifier of any weight and significance, exposing the tragic and playful aspect of the mechanical. In so doing it influenced, in one way or another, the principal architects active during the 1920s and 30s. Adolf Loos, for example, constructed a home for Tzara; Kiesler spent time with Duchamp and realised a work based on one of his drawings; van Doesburg accompanied his neoplastic activities with a Dadaist parallel under the name I.K. Bonset; through the Surrealists Le Corbusier experimented with objects of poetic reaction.

4.7 Theo van Doesburg and De Stijl

De Stijl, like Dada, is not a movement. It is the title of a journal published in 1917, thanks the efforts of a multifaceted figure: Theo van Doesburg, painter, sculptor, photographer, art critic, poet and, from time to time, architect.

Van Doesburg possessed an undoubted capacity to bring people together around a common project. He managed to involve in the magazine the architects Jacobus Johannes Oud, Jan Wils, Robert Van’t Hoff and Gerrit Rietveld, the painters Piet Mondrian, Bart van der Leck and Vilmos Huszár and the sculptor Georges Vantongerloo. He had also hoped to attract artists such as Picasso and Alexander Archipenko. What is more, it was through Oud, a close friend, that he contacted Berlage, the spiritual father of Dutch architecture, who, all the same, did not take up the offer. With a release of approximately 1,000 copies, the magazine would be
published between 1917 and 1928, though from the outset there were ill feelings generated between the different personalities involved. Oud was a pragmatist, Mondrian an ascetic, Van’t Hoff a dreamer who in 1918 had no qualms about abandoning the architectural profession.

In 1918 van Doesburg fell out with Huszár, and in 1919 with Wils and Van’t Hoff, in 1921 with Oud, while in 1922 it was Mondrian’s turn. Energetic, multifaceted and unpredictable, he was possessed of a character that made him impossible to bear. His friends knew he was capable of railing for an entire evening against a particular theory, on to support and claim it as his own the next morning. He cultivated intense passions and deep rancour. In 1921 he moved to Weimar where the following year he established two counter-courses, antagonistic to the Bauhaus, to denounce their expressionist drifts.

This multifaceted character, united with a strong personality, induced van Doesburg to activate all manner of experiments. Even at the cost of changing his name, to flee from the judgment of his detractors or friends who, for example Mondrian, chose more rigorous paths. Beginning in May 1920, he signed texts and futurist and Dadaist poems under the pseudonym I.K. Bonset and, after 1921, used the Italian name Aldo Camini for a selection of writings. For van Doesburg neo-plasticism was an approach, but not a decisive formula. In 1922 he launched the journal *Mècano*; in 1926 he published the new elementarist manifesto, in which he broke with the static nature of perpendicular lines.

Van Doesburg encountered Mondrian a few months before Oud, in February of 1916. This was the period during which the painter was engaged in lengthy discussions with the philosopher Schönmaekers, a Catholic priest interested in theosophy. “His base”, van Doesburg would write, “is exclusively mathematical, the only and sole pure science and unique point of reference for sentiments...Mondrian applies these principles to depict his emotional disturbances, using the two most pure forms, in other words, horizontal and vertical lines”.

Mondrian believed in the atemporal value of ideas. He detested change and nature, and was afraid of the precarious exuberance of life. He saw painting as an infinite game of equilibrium involving the principles of symmetry and asymmetry, of the pondering of the different weights of colours and lines. For van Doesburg abstraction was instead a detonator of plastic energy. For Mondrian abstraction was a means of exorcising the energy of the cosmos, while for the other it was a means of reaching it. Not by chance, van Doesburg was interested in the theme of the fourth dimension, which left Mondrian entirely indifferent. It appears that Einstein’s example to explain general relativity from 1916 had been imagined specifically for him and for his Dadaist friends: an elevator drops into the void, as simple experiments are carried out inside it.
Van Doesburg met Oud in 1916. It was Oud who took the initiative, writing to him after having learned from a shared friend of the idea to found an association of painters in Leida. He proposed admitting architects as well: on the 31st May the De Sphinks association was born, with Oud its president and van Doesburg its second secretary. Oud proposed that Theo assist him, as an expert in colour, with a few architectural commissions. Beyond the real importance of both the buildings and their colouring – in reality very modest – this collaboration served to clarify the ideas of both on the relationship between the figurative arts and architecture. For Oud the intervention of the artist was wholly decorative, and served to exalt particular elements of a construction within an overall spatial conception decided by the architect. For van Doesburg it was a play of coloured surfaces that changed space, transforming architecture into a plastic event, in other words, ‘de-objectivising’ it.

The differences, after a number of collaborations, soon emerged and in 1921 the two went their separate ways. The argument arose over the housing project to design blocks VIII and IX in Spangen, Rotterdam. Oud objected that the colour proposed by van Doesburg could have practical counter indications – yellow for the doors, for example, could be easily dirtied – and, in some cases, the hues were simply too bright. Theo responded: “Like this or not at all”.

The architect – this had already been understood by the artist Bart van der Leck following his difficult collaborations with Berlage – cannot accept to realise a container that is later annulled by the painter. After 1922 Oud no longer considered himself to belong to De Stijl.

Van Doesburg learned his lesson: to obtain a neoplastic building he was not to overlap his painted work atop the design of another, but instead design his own architecture in which pictorial and spatial values were in harmony from the moment of their conception. Lacking the technical instruments, he achieved this by activating a fruitful collaboration with the young architect Cornelis van Eesteren; more will be said about this in the following Chapter.

Oud, even after breaking away from the movement, realised a number of constructions that recall the stylistic elements of De Stijl, including the Café De Unie from 1924. However, these are stylistic assonances. The successive steps of his development would lead to a refined functionalism and later to a more asphyxial classicism.

In this search for a new spatiality, paradoxically Wils and Van’t Hoff proved more coherent, intending neoplasticism as a the pretext for dismantling the box and articulating their constructions on multiple planes. They were influenced by Berlage and, through him, Wright. Between 1914 and 1918 both produced a number of buildings that recall the Prairie Houses of Chicago. Van’t Hoff even travelled to America on a pilgrimage in 1914. By the first we mention the delightful
pavilion in the public park of Groningen (1917); the second is the author of the summer residence of J.N. Verloop (1914-15) and the villa Henny, referred to as the Betonvilla for its having been realised in prefabricated reinforced concrete. They are quality constructions, though substantially DI SCUOLA. Van’t Hoff, perhaps, possessed the tools for becoming one of The Netherlands’ most sensible architects, had he not been so devastated by the Great War and political events, leading him to pack up his drafting board and henceforth attach to his signature the words “ex architect”.

Finally, there was Gerrit Rietveld: in 1924 he completed a project in Utrecht of particular interest known as the Schroder House, about which more will be said in the next chapter. In 1917, or perhaps 1918, he anticipated this work with the famous red-blue chair (the final version as we know it is however from 1923). This object clarifies the relationship between painting and construction that was assailing van Doesburg and poisoning his relations with Oud. Colour and form, if they wish to interact effectively, must not be imagined separately, but as a unity of surfaces. It would be the surface – fleeting, coloured, dynamic – and not the volume – rigid, stereometric, centralizing – that would be the instrument of the new architecture.

During the years of the spread of De Stijl, Holland was witness to the development of the so-called Amsterdam School, whose principal exponents were Johann Melchior van der Mey, Michel de Klerk, Piet Kramer and Hendricus Theodorus Wijdeveld. The proponents of an exuberant architect, designed down to the smallest detail, almost expressionistic in its exasperation of forms and motifs borrowed from tradition, they obtained important commissions from city government, above all for the realisation of public housing, in the new areas to the south, west and east of the city.

Van Doesburg considered the architecture of this group an inheritance of the past, his distaste on par with his hatred for the work of the German expressionists. Truth be told, many of their works are limited to simply designing façades in front of traditional buildings dictated by building contractors and in some cases nauseating for their decorative excesses. All the same, there are some noteworthy exceptions. They include the work of Michel de Klerk and in particular a project designed in 1917, completed only in 1921. It is the last of three blocks commissioned to him, initially by Klaas Hille and later by Eigen Haard.

The building, which sits on a triangular block, skilfully envelops a pre-existing school and reaches a level of spatial elaboration that would remain unequalled in Dutch architecture from this period.

In fact, this building by de Klerk resolves at least four problems that tended to place neoplastic architects in difficulty:
- first: the management of a complex building simultaneously home to diversity and unity, even at the cost of slipping into the picturesque, though without sliding into the vernacular. De Klerk obtained this using regular patterns, learned from Berlage (and utilised, in truth, with greater mastery and creativity, also by Wright). They order without constricting, admitting a level of diversity otherwise indigestible;
- second: the precision of detail, the reasonableness of construction without forcing the building into abstract geometric schemes which would compromise their management in terms of maintenance and duration;
- third: the satisfaction of the user, fascinated by plastic, almost fairy-tale like discoveries, abstract from the human scale of the building, thanks also to de Klerk’s capacity to articulate complex space in minor units;
- fourth: the integration with the urban context and the impeccable architectural control of semi-public spaces. De Klerk knew how to design a void: he invented small plazas at the back, characterised by a folksy tower and articulating the interior with exceptionally fascinating spaces that also tolerated the insertion, at the limits of kitsch, of a meeting room reminiscent of rural Dutch constructions.

Many of de Klerk’s generation recognised his exceptional talent. Among them we find Bruno Taut who, in his 1929 book *Das neue Baukunst in Europa und Amerika*, speaks of him as a “master with a great talent”. The year 1918 would see the publication of the elegant journal *Wendingen*. Until 1931 it would publicise the work of de Klerk and the Amsterdam School and would lend its voice to spreading the principles of organicism and expressionism in the Netherlands and Europe.

### 4.8 Purism and a Return to Order

After two years working in Perret’s office, between 1908 and 1909, and after five months working for Behrens, in 1910, Charles-Édouard Jeanneret, later known as Le Corbusier, was unable to remain any longer under the influence of two such strong personalities. Even at the cost of betraying the teachings of his master Charles L'Eplattenier, with whom he had studied in his native city of La Chaux-de-Fonds. The following year, while traveling through the Orient – during which in sixe months he visited Prague, Vienna, Budapest, Serbia, Romania, Bulgaria, Turkey, Greece and Italy – he remained fascinated with the Mediterranean, read though the eyes of classicism. Charles Jencks, in the monographic publication *Le Corbusier and the Tragic View of Architecture*, summarises the lessons learned from these travels in five points: elementary volumes, such as spheres, cubes and pyramids, from the mosques of Constantinople; the simple beauty and austere morality of entire villages of whitewashed buildings; the horrors of stylistic eclecticism and the excess of decoration suffered in the bazars of Turkey; the pleasure of living with
essential objects like monks in the convent of Mount Athos; the precision of detail, the structural clarity and honesty of the Greek temple. The Parthenon, in particular, struck him as a perfect machine. He would state: “We are in the inexorable realm of the mechanical [...] the mouldings are tight and firm [...] All this plastic machinery is realised in marble with the rigour that we have learned to apply in the machine. The impression is of naked and polished steel”.

Works of art as a machine and machines as works of art. The equation is not new. It has already been attempted by the Futurists who compared the automobile to the Nike of Samothrace. Yet, while these latter focused on dynamism, for the young Jeanneret the correspondence touched on an ideal principle. The machine and the work of art shared the same anxiety for clarity, for precision, for structural honesty, for economy. Some, jokingly, have noted that the young Le Corbusier observed the most important Greek temple through the eyes of a Swiss looking at the inner workings of a timepiece. And, in reality, the equation contains an over-evaluation of the aesthetic values of mathematics, a worrisome idealization of technique and a distaste for constructions in which the useful is not manifest in the pure forms of Euclidean geometry. Hence there is no functionalist misunderstanding. If later Le Corbusier would speak of the dwelling as a machine for living, he would do so only because he was thinking of the perfection of the mechanical object, because he sought to recreate the plastic absoluteness of a classical object. So true is this that he would stigmatize the most radical functional currents and ignore the search for the zero degree of form that, precisely during this period – we can think for example of Dada and Duchamp – was producing unexpected results.

Finally, he was concerned about the individualist or spiritualist instances that drove the majority of expressionist and organic production at his time. This generated the well founded accusations of insensibility from the sanguine Haring – with whom he would develop a ferocious polemic – and the attacks of neo-academicism that would be brought against him by the most forward-looking critics, such as Karel Teige.

The obsession with mathematics would never abandon Le Corbusier, even when, much later on, he would orient his research toward more expressive forms. It is sufficient to recall the Modulor, the unit of measurement and human proportions based on the golden section and developed between 1942 and 1948.

In 1912 the twenty-five year old Jeanneret, while considering himself above all else a painter, opened an architectural office in La Chaux-de-Fonds. In December 1914 he was at work on a low cost housing project, in view of the post-war reconstruction. He applied the principle of the reinforced concrete frame. The forms are particularly simple, and the homes arranged according to rational principles of urban planning, perhaps learned from Tony Garnier, whom he had
met in 1907 in Lyon. Garnier had been studying for some time an ideal industrial
city for 35,000 inhabitants, living in 30 x 150 meter residential units (Garnier’s
drawings would be published only in 1917 and reprinted in part by Le Corbusier in
L’Esprit Nouveau in 1920).
The young architect was more fascinated by the city than by architecture. He
planned on writing a book entitled La construction des villes. For this purpose he
travelled to Paris, where he could consult material in the Bibliothèque Nationale. In
1922 he designed a project for a contemporary city for three million inhabitants.
Between 1916 and 1917 he completed the Villa Schwob, a highly stereometric
construction whose imposing and articulated classical masses are accentuated by a
monumental large cornice wrapping the home. This was the definitive move away
from any romantic aesthetic, in favour of the methods of composition of the
Beaux-Arts.
In 1917 he moved to Paris. France was deeply scarred by the war that continued
to rage. Jeanneret set himself to work as a man of affairs and entrepreneur with
the Société d’entreprises industrielles et d’études and the Briqueterie d’Alfortville,
a brick factory. This experience kept him occupied until 1921, when the factory
closed after suffering heavy financial loses. As much as be absorbed Nietzsche,
convincing himself that he was a hard man working feverishly in the cutthroat
contemporary metropolis, the artist was unable to transform himself into a
businessman.
In May of 1917 he met the painter Amédée Ozenfant, director from 1915 to 1916
of the journal L’Elan, a publication close to Cubism. The two struck up a friendship,
sharing the same dissatisfaction toward the destructive attitudes of the avant-
gardes and a common need for new laws for painting and the arts.
Purism was born in 1918. It is a re-reading of Cubism in the light of classicism and
the industrial aesthetic whose principles can be found in the book Après le
cubisme. It is a text written by four hands, which announces the death of a certain
type of avant-garde: in primis, Dada and Cubism. “Recession”, it reads, “appears
as a result of cutting corners, laziness while doing good, indifference to beauty and
bizarre pleasures.” Or: “We have today our Ponts de Gard, we will also have our
Parthenon, our epoch is better equipped than that of Pericles to realize the ideal of
perfection.”
The first chapter is an attack on Cubism, the second an exaltation of the modern
spirit, while the third is dedicated to laws and in particular to natural selection that
leads toward the production of pure and standardised forms.
Jeanneret and Ozenfant formed an inseparable duo. This is how Jean Epstein, the
avant-garde filmmaker, described them in the 1920s: “The two reverential purist
brothers, this is how they were often called, were both serious and dressed
entirely in black, in a studio were every chair, every table and every piece of paper had its own very specifically determined use. They intimidated me terribly”.

They painted nature morte that vaguely recalled metaphysical canvases. There was however less estrangement and a greater precision. Thanks also to the use of the axonometric, often with two coinciding axes, to avoid moving too far from orthogonal projections, in other words from the technical drawing.

The first issue of *L’Esprit Nouveau* was published in October of 1920. The journal could count on only the scarcest of means, even if, thanks to the use of pseudonyms, it appeared to boast a vast number of collaborators. Though published for only a few years, it would have an important influence on contemporary architecture. More will be said in the next Chapter.
Part One Chapter 5: A Commingling of Languages: 1918-1925

5.1 Comminglings

The death toll of some ten million people during the war was further aggravated by epidemics, such as the Spanish influenza, that took more lives. Germany and Austria were broken up and crushed by the unsupportable weight of war reparations, causing an economic crisis that led to the inflation of 1923, when one US dollar could be changed for 3,760,000,000 Deutsche Marks. The hopes raised by the Russian Revolution were followed by civil war, a period of deprivations, only slightly alleviated in 1921 by the New Political Economy, and a bloody, bureaucratic and increasingly more intolerant dictatorship. Other revolutionary hopes, above all in Germany where, according to the forecasts of Marx and later Lenin, the global revolution would have its beginning, would be repressed by extreme force. This was the dawn of the era of suspicion, of witch hunts, of prohibitionism. The Sacco and Vanzetti trial was held in democratic America, in 1920, the year the vote was extended to women, only to culminate in the unjust death sentence of the two anarchists carried out in 1927. Nationalisms raged, exasperated by the territorial divisions imposed after the war. Strong figures and totalitarian regimes appeared: in 1922 Mussolini marched on Rome and on the 3rd of January 1925 he announced the definitive suppression of the free state. Authoritarian regimes followed in Spain, Portugal, Yugoslavia and Poland. In 1921 Adolf Hitler, a failed architect and amateur painter, founded the National Socialist Party. In 1922 Iosif Vissarionovich Dzhugashvili, aka Stalin, became general secretary of the Russian Communist Party. Artists and architects were confused. They oscillated between the need to project their anxieties on their work and the desire to finally realise a rational world, that functioned with the precision of a mechanical device. In the form of a dilemma between rationality and irrationality, authority and liberty, rule and free will, objectivity and individualism, autonomy and heteronomy, the problem would plague the leading figures of the avant-garde at least up to the mid-1920s. Charismatic figures such as Taut and van Doesburg oscillated between the constructive qualities of the engineer and the formativeness of the artist. The first pursued an expressionist aesthetic, dreaming of glass cathedrals, while dedicating himself personally to social housing programmes in the municipalities of Magdeburg and Berlin; the second preached the rational neoplasticism of Mondrian, with an openness toward Dada. Similar dilemmas were experienced by Gropius and Mies van der Rohe, whose works were suspended between the tension
of expressionism and the need for a new objectivity. Confusion reigned in the Bauhaus, witness to a clash between the expressionist faction and the nascent Constructivist movement. The same uncertainties could be found among the painters of the Neue Sachlichkeit, who proclaimed a pared down realism, while giving in to the temptations of expressionist deformation.

Architects faced a dearth of professional opportunities. Little or nothing was built in much of Europe and the Soviet Union, at least until 1924. That which was constructed was entrusted to mature and politically connected professionals and not to the inexpert idealists who proclaimed a desire to revolutionize the world. Paper architecture was developed, made of dreams destined to remain on the drawing board. Young architects had little option but to meet during numerous conventions across Europe, print publications, distribute manifestos and prepare the ground for the rise of an international movement that was gaining ground at this time, though it would only be consolidated in 1928 with the CIAM, the Congrès internationaux d'architecture moderne (International Congress of Modern Architecture).

The crisis shifted attention toward the United States, the only country to have come out of the war unscathed, if not strengthened, by a conflict it entered at the eleventh hour (April 1917). It was chosen by those fleeing from the war or its consequences by such figures as Schindler (1914), Neutra (1923), Kiesler (1926) and the vast community of avant-garde artists, headed by Duchamp. In 1923 the biography of Henry Ford, the American entrepreneur who revolutionised industrial production, was translated into German; it soon became a top seller across the nation. At the Bauhaus the American dream was flanked by the Oriental myth preached by Itten, attracting a very similar number of followers. In 1924 Mendelsohn was commissioned with a book on the United States by the owner of the daily *Berliner Tageblatt*. The previous year the journal *Der Sturm* (The Storm) printed a poem by Herwarth Walden: “Berlin is the capital of the United States of Europe. [...] Perhaps the United States of America has a Berlin. But Berlin lack a United States of Europe”.

The close encounters between distant and diverse cultures that had once met only sporadically, produced an exceptionally vital climate, characterised by comminglings and a variety of languages. Architecture would benefit, producing profoundly different projects, such as the house in Kings Road by Schindler, the Steinberg hat factory by Mendelsohn, Rietveld’s Schroeder House, the Melnikov Pavilion at the Paris Exposition, the La Roche House by Le Corbusier: they laid the ground work for the true season of masterpieces that would come during the second half of the 1920s.
5.2 Between Formalism and Constructivism

Poets, artists and architects joined the Russian Revolution. “In the streets, futurists, drums and poets” Mayakovski shouted. Painters such as Chagall, Kandinsky and Malevich participated in the movement. In 1918 saw the foundation of the Svomas Free State Art Studios. In 1920 they became the Vkhutemas, the Moscow Higher Art and Technical Studios, with faculties of architecture, painting, sculpture, wood working and metal working. All of the departments shared a unique preparatory course that taught the basic principles of form, similar to the Vorkurs at the Bauhaus in Weimar, the other important school created at this time. The year 1920 saw the founding of the Inkhuk, the Institute of Artistic Culture. Controversies raged inside the Inkhuk and the Vkhutemas between the supporters of the autonomous value of art, the formalists, and those who wished to tie it to more objective factors. In art, as we saw in the previous Chapter, this clash involved the leaders Malevich and Tatlin. In architecture, the atelier of Nikolai Ladovsky, a formalist and rationalist, and that of Aleksandr Vesnin, a constructivist, both professors at the Vkhutemas. The controversies were ferocious. In 1921 Tatlin presented his model of the Monument to the Third International, a steel spiral suspending two volumes to be used for meetings of the various bodies of the Third International. They rotated in accordance to different rhythms, regulated by the frequency of meetings: annual, monthly, daily. Gabo, a formalist, bitingly stated: “it is not pure constructive art, but merely an imitation of the machine”.

Of the two factions, the constructivists appeared to have the upper hand. The programme of the formalist Kandinsky at the Inkhuk was rejected and, in 1922, the artist decided to move to Weimar to teach at the Bauhaus. Gabo fled to Europe. Malevich sought refuge in Vitebsk, where he founded a suprematist school, the School of New Art. In 1922 Alexei Gan wrote the constructivist manifesto Konstruktivizm. Ilya Golosov, a functionalist who joined the constructivist movement from 1924 to 1925, during an conference in 1922 stated: “[During the early years] it was the time of paper architecture, when little or nothing was built, so young students at the Vkhutemas, architects making their debut, painters who moved into architecture, could unleash their creativity, ignoring the functional aspects of architecture and the problems of its construction. [...] The rational justification of forms was the least of their concerns. [...] It was the left wing groups at the Vkhutemas that played a leading role in this field between 1920 and 1922. This is where the widespread theories at the time on the play of volumes, of architecture as an organism, of movement, of rhythm were developed”.
The formalists, despite being a minority, did not give in. In 1923 Nikolai Ladovsky founded Asnova, the Association of New Architects. The group was active until 1932, though with scarce means at its disposition. The group’s presence could be felt above all in the field of teaching, thanks to the profuse commitment of Ladovsky and Dokucaev at the Vkhutemas. They were the promoters of a psychotechnical method oriented toward the study of form and its interrelations with human experience. Thus the role of colour, of volumes, of patterns and plastic emotion. The results produced by the school were of elevated quality and it would not be out of place to state that the Vkhutemas was the only true architectural avant-garde school of the early 1920s. The Bauhaus in Germany, which moved on similar ground, was until 1927 a school of art and trades, and not of architecture, thus its impact in this field, at least prior to this date, was more indirect. Another important figure was that of Konstantin Melnikov, one of the most gifted architects of his generation. He was the author of the surprising Soviet pavilion at the Paris Exposition of 1925, the Rusakov Club in Moscow (1927) and a home-office generated from the intersection of two cylinders (1929). Melnikov refused to reduce design to a simple technical expedient: he was fascinated by symbolism and the capacity of forms to evoke meanings that transcend pure materiality. His poetic was oriented toward expression, the logical continuation of architectural romanticism that attempted to express the dynamic of the Revolution through industrial forms.
El Lissitzky was another member of Asnova, though open to constructivist theory. His Proun, a term that speaks of “design for the confirmation of the new”, developed the many themes common to research at the Vkhutemas, pursuing a synthesis between architecture, sculpture and painting, the latter learned from the teachings of Malevich, while working in his school in Vitebsk. As we shall see, he travelled across Europe, promoting publications and playing a leading role in the constitution of an intentional network of avant-garde architects and artists. In 1925 he founded OSA, the Association of Contemporary Architects. The group, under the cultural leadership of Moisei Ginzburg, would link up with Europe’s other avant-garde formations and come together under the banner of the nascent International Movement.

5.3 Austro-American, Oriental and Mesoamerican Languages

After graduating from the Imperial Technical University of Vienna and studying with Wagner at the Fine Arts Academy, Rudolph Schindler attended the Bauschule, a private university founded by Loos to teach his principles. Fascinated by the approach to space of the master, and interested in his frequent references to American society, Schindler decided to move the America, with the hopes of
finding a job in Wright’s office. On the 8th of March 1914, a few months prior to the outbreak of the Great War, he arrived in New York, and successively Chicago, where he began working in the office of Ottenheimer, Stern and Reichert. Wright had been back in the United States since 1911, after his time in Europe. He was without work. The scandal caused by his flight with his mistress had undermined his professional position. He sought refuge in Taliesin, where he constructed a home-studio made from stone walls and low pavilion roofs. The building rested gently on the hillside and was fully integrated within the natural landscape with all the elegance of a Japanese construction. Of the few commissions received, in 1913 he was asked to design Midway Gardens, an outdoor club in the periphery of Chicago, conceived by Wright as a collection of terrace and balconies overlooking a larger space set in front of a bandstand. On the 14th August 1914, while Wright was in Chicago working on the Midway Gardens project, a mentally unstable man assassinated Mamah Cheney, her two sons and four of Wright’s employees, before setting the building on fire: “In less than half an hour”, he later recalled, “the wooden portion was completely destroyed by the fire caused by a bloodthirsty maniac”.

In November 1914, Schindler wrote a letter to Wright: “I am writing to ask for a position in your office, or the opportunity to study your buildings first-hand or some suggestion on how to breathe a better architectural atmosphere”. Still stunned by recent events, Wright offered an evasive answer in which he limited himself to offering the young architect a letter of introduction to some of his former clients.

With time Wright’s professional situation improved. He received new commissions, including that for the Imperial Hotel in Tokyo, officially entrusted to the American architect at the end of 1915; he travelled on various occasions to Japan with his new mistress Miriam Noel; he developed the general design of this large project that would keep him busy until 1922. When the time came to prepare the working drawings he recalled the interest of the young Austrian. Schindler was particularly suited to the task given his studies of both architecture and engineering. This was in 1917. Schindler would work for Wright until 1923: the only independent-minded architect who managed to remain for such a lengthy period. Though perhaps, as we will see, this was possible because the two spent long periods of time far from one another. Construction of the Imperial Hotel began in 1918 and Wright was in Tokyo from October. From this moment he would spend more time in Japan than in Chicago. Thus responsibility for running the office fell on Schindler’s shoulders. The Imperial Hotel was one of Wright’s best works. Impossible to classify in stylistic terms, it featured numerous references: to Japanese tradition and its delicate sense of balance; to Mesoamerican architecture, evident above all in the sculpted modules. There are also frequent Western suggestions, captured during
Wright’s travels in Europe: Olbrich being the most evident. It is also easy to recognise a few elements of a mature Liberty style. There is also the influence of Sullivan, the master he so abruptly abandoned in 1893, and with whom he continued to compare his work, what is more observing with concern and from afar, his tragic destiny (Schindler kept him informed). From Sullivan, his “Lieber Meister”, he learned the technique of the rhythmic use of a limited number of standard and repetitive elements, assembled to produce highly decorative compositions, in which ornamentation was an integral part of the logic of construction.

The interiors of the hotel, defined by compositions of exposed brick and stone and overlapping spaces and levels, elegant screens and surprising plays of light, would remain unsurpassed. However, realising the project as it had been conceived by Wright’s inexhaustible inventiveness multiplied costs and times and the clients threatened more than once to fire him.

Schindler, at work above all in the Chicago office, was responsible for Wright’s American projects. They included a system for the construction of 18 small homes in concrete: The Monolith House. In 1919 Schindler met and later wed Sophie Pauline Gibling, a music teacher who demonstrated a notable interest in progressive political, social and artistic movements. When Wright returned from Japan in July and invited the couple to Taliesin, Pauline wrote an ecstatic note to her parents: “There are strong contrasts – an archaic simplicity of life coupled with perfectly made objects. After eating some butter, perhaps, or having spoken for a while with a horse at pasture, I returned to the studio and observed the models of buildings under construction in Los Angeles. It was like passing from folk music to Schoenberg or Debussy”.

The projects to which Pauline referred were those for the Hollyhock House commissioned by Aline Barnsdal, a project – Wright would state, to lay total claim to its paternity – constructed by telegraph from Japan. It was an important commission, on the boards since 1914, for a very wealthy client who wished to build a home in Los Angeles together with facilities dedicated to the theatrical arts. When the time came to begin work on the Barnsdall House Wright was about to return to Japan so he asked Schindler to travel to California to monitor the progress of the works. Los Angeles at this time, thanks to the booming film industry, was in tumultuous expansion, making it the ideal place for an architect intent on beginning an independent professional career. The desire to open his own office was for Schindler the result of his responsibilities toward his new family, which he planned to grow, and a few perplexities about a certain monumentalism and decorativism of Wright’s more recent work. All the same, his admiration for Wright remained unquestioned. This is made clear in a letter from December 1920
to his friend Neutra, with whom he had shared his studies at the Imperial University in Vienna and a passion for Loos: “His [Wright’s – author’s note] art is a spatial art in the truest sense of the term and he completely set aside the sculptural aspect possessed by all architecture of the past. The room is not a box – the walls have disappeared and nature freely enters the home as if in a forest. He has complete control over each material and the new mechanical technologies are at the base of his way of developing form”.

The choice to open an office became definitive in October 1921. All the same, Schindler decided to continue working for Wright part time. With Pauline he imaged building a house and setting down his roots: it was a semi-detached home that they shared with the Chace family. Pauline was a friend of Marian Chace, and Clyde, her husband, was a businessman with the ability to organise the construction of the project.

Completed between 1921 and 1922 in Kings Road, the house was defined by Kathryn Smith, with good reason, the first modern home. In fact, it was designed to allow for an alternative lifestyle. The two couples were independent, though they shared a kitchen, in order to avoid giving too much attention to an activity that stole time away from a woman’s life. Inside each home, husband and wife each had their own bedroom-studio with a fireplace. Both homes were open toward the garden, which constituted an extension of the living space, divided from the exterior by slender and luminous sliding panels. There was also a small apartment – a study with a bathroom – for guests.

The beds were outside in couchettes on the roof, in direct contact with nature. The forms of the house, borrowed from Japanese architecture, recalled those used by Wright: horizontality and a particular approach to the combination of materials. However, with respect to the Prairie Houses and the Taliesin residence, Schindler was further advanced in stylistic terms: more pared down, more essential, more modern. When Wright would invent the Usonian houses in 1936, without a doubt he had this project in mind, so essential, so evolved and so functional, realised by his assistant at the young age of 34; without making mention, he would even borrow some of its characteristics.

In 1922 Wright was on his way home from Japan, where he had completed the Hotel. Without any prospects for work in Chicago, he decided to move to Los Angeles, also home to his son Lloyd, another architect. He wrote to Sullivan: “I find myself in a difficult situation, and there is no work in sight”. He placed his hopes in the contacts he had acquired while working on the Barnsdall house and in the economic boom underway in the city.

Four projects from his time in Los Angeles merit mention: Millard House, known as the Miniature, Storer House, Freeman House and Ennis House. Wright drew inspiration from Mesoamerican building traditions, solidly anchored to the ground
and marked by plastic modules with a strong effect of chiaroscuro. It was the latest in a long line of experiments with spontaneous languages, extraneous to classical tradition, and necessary to the identification of a different approach than that of the rationalists, which led to the modernist boxes and that, in a 1931 article ("Cardboard Houses"), he accused of being simple cardboard boxes and empty abstractions.

The four houses were all constructed using a system that Wright had been imagining for some time: panels of square prefabricated concrete, measuring 60 cm per side, and light enough to be lifted into place by hand. They could be cast on site using a few elements of standard framework. They allowed for infinite configurations of interiors illuminated also by openings in the panels that filter light. Building in accordance with the nature of materials, for Wright, meant not only working with natural materials, but knowing how to use all of them, even the most artificial – concrete – exploiting its technical characteristics and formal potentialities.

In October of 1923, no longer able to tolerate Los Angeles, or perhaps wishing to return to Taliesin, Wright left California for Wisconsin. Despite his precarious financial situation, in an interview he affirmed his desire to expand his offices in Chicago, Hollywood and Tokyo. He mentioned that he was working on two immense territorial projects; “to cost millions”, he added.

5.4 Architecture and Expressionism

The Novembergruppe was born in 1918 as an initiative of Max Pechstein and César Klein. The association was politically aligned with the left and participated in the movements that came in the wake of the war and the proclamation of the Republic. The manifesto of the Novemberists, issued in the spring of 1919, proclaimed the desire to construct a young and free Germany, founded on principles of liberty, equality and fraternity. The group promoted the construction of public buildings, the protection of monuments and the demolition of showy though artistically insignificant buildings. Active until 1933 when it was disbanded by the Nazis, the association counted such members as Georg Tappert, Conrad Felixmüller, Otto Dix, George Grosz, Ludwig Meidner, Heinrich Richter-Berlin, Lyonel Feininger, Vassily Kandinsky, Paul Klee and the architects Otto Bartning, Walter Gropius, Hugo Häring, Ludwig Hilberseimer, Hans and Wassily Luckhardt, Erich Mendelsohn, Ludwig Mies van der Rohe and Bruno and Max Taut. The Arbeitsrat für Kunst, or Workers’ Council for the Arts, was also born after the war, at the urging of Bruno Taut, the tireless figure we have already encountered in relation to the glass pavilion at the Werkbund exhibition in Cologne from 1914. Taut attracted many of the most talented German architects: Gropius, Mies,
Bartning, Mendelsohn, the critic Behne and numerous painters and sculptors. Through the association he promoted the ideals of an expressive, transparent and utopian architecture imagined during the long years of the war and described in two books published in 1919: *Die Stadtkrone* and *Alpine Architektur.*

In February 1919 Gropius assumed the reins of the association. He toned down the ideological commitment by offering a politically more moderate programme. In April of 1919, the month Gropius was named director of the Bauhaus and the direction passed to Behne, the Arbeitsrat für Kunst organised an exhibition of unknown architects entitled *Austellung für unbekannte Architekten.* "Today", Taut wrote, “there is almost nothing to be built [...] We must consciously be imaginary architects". The exhibition presented magnificent sketches. Others were realised in the years to come by an increasingly more numerous group of architects. They were the work of Bruno Taut, Wassili Luckhardt, Wenzel Hablik, Jefim Golysscheff, Paul Gosch, and two young architects, Hans Scharoun and Erich Mendelsohn, who emerged from the Berlin scene with strong projects. There was also Hermann Finsterlin, whose work was characterised by the use of amorphous, organic and vegetal forms, unlike the other projects that privileged crystalline forms or, in any case, more controlled in geometric terms.

In 1919 Bruno Taut, together with a group of twelve friends, initiated a chain letter, known as the Gläserne Kette. This correspondence focused on the problems of art and architecture and each of the twelve participants was referred to by a nickname. Naturally Taut was known as Glass (glass), and the more balanced Gropius as Mass, (measure).

In 1920 the Arbeitsrat für Kunst helped organise the exhibition *Neues Bauen*, a sign that something was beginning to move in the field of ‘real’ construction. Despite the success of the various initiatives, the association’s economic situation was increasingly more precarious, ending with its disbandment in 1921. From 1920 to 1922 Bruno Taut published the journal *Frühlicht* (The Dawn), in which he expounded the principles of expressionist architecture.

There are very few built works from this period that can be considered under this moniker. There is undoubtedly the Grosses Schauspielhaus in Poelzig, a five-thousand seat theatre built in Berlin in 1919 and characterised by an interior with the form of a large grotto of stalactites; two works by Mendelsohn from 1923, about which more will be said later: the Einstein Tower, built between 1919 and 1921 in Potsdam, and the Steinberg, Herrmann & C. Hat Factory, built between 1921 and 1923; the Skala dance and beer hall, realised in 1921 in Berlin and the fruit of a collaboration with the architect Walter Würzbach and the sculptor Rudolf Belling. Some architects received commissions from the nascent film industry, particularly active in Berlin that, until the 1930s, would display a preference for highly evocative urban scenarios (Fritz Lang’s *Metropolis* is from 1926, while in
1919, for example, Robert Herlt, Walter Röhrig and Herman Warm were developing *The Cabinet of Dr. Caligari*, while in 1920 Poelzig create the rocky ghetto for his film *Der Golem*).

Expressionist architecture fell into a state of crisis between 1922 and 1923 with the closure of *Frühlicht*, Taut’s new interest for public housing and the new cultural programme at the Bauhaus, which saw the school, under the direction of Gropius, abandon the expressionism of Itten in favour of the constructivism of Laszlo Moholy-Nagy. This was the so-called "return to order" in France and Italy, witness also to the triumph of a now objectivity in Germany, The Netherlands and the Soviet Union, and the progressive distancing of a number of architects, including Mies, from poetics deemed overly romantic and insufficiently rigorous (more will be said about these episodes in the following paragraphs). Numerous architects remained, however, both young and old – some very talented, such as Häring, Scharoun and Mendelsohn – and would continue to be very present in architectural debate, creating masterpieces far from the canons of the purists, the objectivists and the constructivists. To mention only three: the Gut Garkau complex (Häring, 1922-26), the Schminke House in Löbau (Scharoun, 1933) or the Schocken Department Store in Stuttgart (Mendelsohn, 1926-28).

### 5.5 Order and Disorder

In Germany the Dada movement began in 1917, when Huelsenbeck arrived in Berlin from Zurich. Here he found Franz Jung and Raoul Hausmann, at the helm of *Die Freie Strasse*, a periodical that dealt with artistic and social issues. The group was soon joined by Johannes Baader, a collaborator with the review and an architect known for his strange behaviour, who went under the name Oberdada. Finally, there was also George Grosz. In 1919 Hans Richter moved to Berlin, the artist and refined filmmaker with a past as an expressionist, and future director of the journal *G*.

The tools of Dada art included collage and photomontage (the latter invented – it seems – by George Grosz and John Heartfield in 1916). Photomontage brought fragments of the everyday into the frame of the canvas. Through photography, it privileges the realist narrative, pure facts of current events. It assembles different points of view, realising the multiple pursued by the cubists and futurists. It reproduces within the work of art, through the rapid succession of images borrowed from daily reality, a convincing representation of metropolitan life. It implies a form of immediate and involving communication that would be taken up by the world of advertising and that, after the 1920s, also the use of illuminated billboards at the scale of the façade of a building, became one of the dominant components of urban scenography.
While the Dadaists who gravitated around Berlin, through the use of current events and photomontage, flirted with the theme of anti-art. Kurt Schwitters, a vagabond by nature though based in Hannover, remained an artist in the fullest meaning of the word. He collected all manner of material from the streets – pieces of twine, cardboard, flyers, wires, decorative objects – and composed them to create his works. The most important is without a doubt the Merzbau: a sculpture-work of architecture created inside his studio. It was a true work in progress, a totem that created space, charging it with ancestral values. "The whole thing", Richter would state after a visit to Schwitters’s studio in 1925, “was an aggregate of hollow space, a structure of concave and convex forms which hollowed and inflated the whole sculpture”. Richter was struck by the numerous holes, each of which was given the name of a cherished person: there were hollows for his wife and son, for Arp, Gabo, van Doesburg, Lissitzky and Malevich, as well as Mies and Richter himself. Each contained personal details such as drawings or objects that once belonged to the person; some were shocking, such as locks of hair, a dental bridge or a bottle of urine. In 1928, during a second visit, Richter noted that the Merzbau had changed its appearance. The hollows had been walled up and the form was now more curvilinear and less angled. The memories were now “deep down inside”, like some inaccessible part of the unconscious.

Schwitters practiced all forms of art, from collage to poetry, from Ursonate to performance. He also ran a journal entitled Merz, a meaningless word borrowed from the word “Commerzbank”. Despite his eccentric appearance and habits, he possessed a highly disciplined mind, fascinated by daily events, that allowed him to anticipate decades ahead of time the theme of the aesthetic reuse of poor and residual materials. He was also a tireless promoter. In 1922 with Theo and Nelly van Doesburg, Hausmann, Arp and Tzara, he travelled across Germany to promote dada art, continuing in The Netherlands with the van Doesburgs.

More bizarre and poetic in his hallucinatory lucidity was Max Ernst. He painted what his unconscious suggested, creating oneiric collages influenced by the metaphysics of De Chirico.

After moving to Paris in 1921, he joined the artists of Dada. In the French capital, always receptive to experiments, they had organised a fearsome group that supported Tzara (in Paris from Zurich since 1919). They were: André Breton, Paul Eluard, Louis Aragon, Philippe Soupault, Jean Crotti, Picabia and Benjamin Péret. The group organised numerous initiatives, some ending in fisticuffs. Rivalries were not long in emerging between Tzara and Breton, exacerbated by the latter’s shadowy and jealous nature. Breton longed for leadership, and did not believe that Dadaist nihilism could be long-lived and claimed that the movement should be oriented toward more constructive artistic research, “systematising”, as we he would later say, “the confusion”, utilising also for this purpose the instruments
offered by psychoanalysis that helped to rationalise the otherwise confused drives of the unconscious.
The clash explored in 1922 in occasion of the Congrès international pour la détermination des directives et la défense de l’esprit moderne. Present, among others, was Léger, who was at work on an art influenced by the laws of mechanics – the essay “The Machine Aesthetic” is from 1923 – and the purist Ozenfant. Breton told the press that Tzara was merely an imposter seeking publicity. The resulting controversy broke the movement apart. Evenings were organised in support of both parties. Fists, hands and words were hurled. Beyond the harsh blow of the birth of Surrealism under Breton, the end of Dada was the unavoidable destiny of a movement that preached the contradiction and dissolution of art in life at a time of a desire for rationalisation and new rules. It was the event that, as we have seen, also caused a crisis for expressionism and marked a turning point and reconsideration for the avant-garde movements. It was now the moment of the classically-inspired compositions of Picasso, of the neo-academic works of Valori Plastici and Novecento and, finally, of the Neue Sachlichkeit (New Objectivity) in Germany.
In reality, the expression “Neue Sachlichkeit” was officially consecrated by the exhibition curated by Gustav Hartlaub in June of 1925. The movement was composed of two branches, one verist, orbiting around Berlin and Dresden, the other classicist and based in Munich. They were linked by four aspects: the descriptive and analytical character of painting; the predilection for the fixity of the model; an enigmatic dimension; the cold and metallic treatment of images. Neue Sachlichkeit would meet with immense fortune. It would be used not only by painters, but also by architects, critics and men of culture. Architects employed it to refer to an abandonment of formalism and an almost maniacal adherence to the principle of precision and functionality.

5.6 The Bauhaus: Act One
In April of 1919 Gropius was named director of the Staatliches Bauhaus, a school that absorbed the Kunstgewerberschule previously directed by van de Velde, channelled, together with the Academy of Fine Arts, into a single institution. The programme of the Bauhaus was aligned with the culture of the Werkbund, of which Gropius was one of the leading figures: training artists and craftsmen to construct the home of the future. This was in line with the programme of Arbeitsrat für Kunst mentioned earlier. Hence an openness toward new technologies, though without forgetting the aim of a society in which man found his purpose first in the act of making and only after in the use of what he produced. The new school featured a markedly expressionist tension, well
represented in the keen and sunny drawing by Lyonel Feininger that Gropius chose for the cover of the programme and in the choice of the first three professors he called: other than Feininger, the painter Johannes Itten and the sculptor Gerhard Marcks. In 1920 he would call on Georg Muche, Paul Klee and Oskar Schlemmer. Followed in 1921 by Lothar Schreyer and in 1922 by Wasiliy Kandinsky.

The most representative figure was Johannes Itten, a charismatic personality devoted to Mazdaznan, a mystical-philosophical discipline with a theosophical character that was rather common in Germany at the time. Itten dressed in the Oriental style, ate particular foods and prior to each lesson completed concentration and breathing exercises. His method consisted in an alternation between phases of intuition and reflection. During the first he stimulated his students to identify an artistic meaning and a logic for things: for example by composing leftovers, fragments and objects from everyday life. During the second phase he insisted on the study of contrasts (rough-smooth, light-dark, sharp-obtuse, tall-low, etc.), on the theory of form beginning with the primary geometries of the circle, the square and the triangle and the study of colour. He invented the six-month propaedeutic course, or Vorkurs, attended by all students, regardless of the their successive specialization in one of the school’s craft workshops. It offered them a common method consisting of an introduction to the science of form and colour.

Teachings were reinforced by lessons on the theory of musical harmony by Gertrud Grunow. As one witness wrote: “We closed our eyes, and it was time for a short pause of concentration followed by an invitation to imagine a precise coloured sphere into which to place our hands to touch and feel around. We were then asked to concentrate on a particular sound played on a piano. In a short time almost all of those present were moving, though each in his or her own way. [...] If we search for new forms, they must be reborn in us from the totality of our experiences, solely from the sense of nature and the spirit. This is the approach: from irrationality to a progressive rationality”.

While all of the craft workshops pursued an ideal construction, the Bauhaus only activated an institutional course in architecture in 1927. Prior to this time there were only a few initiatives, including, in May of 1920, an architecture section guided by Gropius’ partner Adolf Meyer. Though it would be short-lived.

In 1920 the industrialist Sommerfeld commissioned Gropius with the construction of a single-family home in wood. The design was developed with students from the school. Joost Schmidt realised the stair balustrade, Marcel Breuer a few pieces of furniture, Josef Albers was responsible for the windows. The result was barely satisfying. The Sommerfeld house recalls the Prairie homes, though it is charged with an expressionist tension and, together, inhibited by a desire for classical order clearly in the vein of Behrens’ work.
Besides, the school was a convergence of two souls that only with difficulty managed to find a point of mediation: “There prevailed”, as Schlemmer noted in 1929, “either the myth of India or that of Americanism”.

Precisely in 1921 the first winds of a break began to blow. The objective: redimensioning the flatness of the world of craft, to give birth to a modern industrial awareness, criticising the mystical aspects of Itten’s teachings and avoiding romantic drifts. The moment in history – as we have seen while speaking about new objectivity and the movements that, after the end of the war, pursued a greater rigour of figure – was ripe. The conflict was caused by van Doesburg who, after a visit in December 1920, decided to move to Weimar the following year, perhaps in the hopes of receiving a teaching position at the school. The clash, initially with Itten and later with Gropius, who sought to defend the institute from the overbearing even if generous interference of the Dutchman, was unavoidable. It would lead to the creation of a counter-course, in his studio: the Stijl-Kursus was divided into two parts, one theoretical and the other practical. It attracted about fifteen students. It was enough to divide the Bauhaus into two factions, who even came to blows.

Gropius accused van Doesburg of attacking the school’s integrity. The results of the objection would however prove beneficial. A more objective, less mystical approach in line with the spirit of the times gradually took hold in Weimar, provoking also a radical change in the research of individual professors. Breuer, for example, revolutionised his style, from the invention of his magnificent chairs, including the Vassily, impossible to conceive in the absence of the influence of neoplasticism.

The year 1922 was a turning point for the school. Gropius understood that the time had come to move more decisively toward the world of industry, abandoning the ideology of the one-off piece. He founded a company to exploit the patents and products of the Bauhaus, involving the school in commissions that could also be derived from his professional activities. When he commissioned the school to provide chairs for the municipal theatre in Jena, renovated and expanded by himself and Adolf Meyer, Itten protested and in April 1923 submitted his resignation. Gropius invited the twenty-eight year old constructivist László Moholy-Nagy to replace him.

The first large exhibition was held at the Bauhaus between August and September. It was also desired by the municipal government to verify the work completed. These were the years of a deep economic crisis and rampant inflation. Gropius managed in only a few months to develop a housing prototype known as Am Horn, designed based on an idea by Georg Muche, the result on an internal competition. It was a simple house though clumsy in its layout, forcibly based on a central
space. The lines spoke of a research oriented no longer toward expressionism, like the Sommerfeld, but toward rationalism. The critic Adolf Behne acutely noted: "The exhibition suffers, I believe, because it occurs at a time when the Bauhaus is changing. The new attitude of a relationship with technology, in other words standardisation, begins to appear though it has yet to assume a consistency. [...] The Am Horn house is faced to deal with all of these difficulties".

The celebrations also included the staging of the triadic ballet by Schlemmer, with costumes that recalled mechanical marionettes, a sort of constructivism applied to dance. Finally, an exhibition of works of contemporary art, with pieces by Walter Gropius, Le Corbusier, Robert Mallet-Stevens, Frank Lloyd Wright, Jacobus Johannes Oud, Willem Dudok, Jans Wils, Bruno Taut, Hans Scharoun, Adolf Rading, Erich Mendelsohn, Erwin Gutkind and Hugo Häring. Curated by Gropius, it was followed two years later by a book entitled Internationale Architektur. It was published by the Bauhaus-Verlag München-Berlin, a publishing house founded by Gropius in 1923 (the logo is the work of László Moholy-Nagy) with the objective of spreading new artistic ideas.

From October László Moholy-Nagy assumed responsibility for the preliminary course, extend to a full year, and directly involving Klee and Kandinsky in the teachings of the theory of form. Students were invited to realise constructivist sculptures using different materials. Moholy-Nagy taught his lessons in red coveralls, rather than the oriental shirt designed by Itten. It was an eloquent message to students: the Bauhaus had set a new course.

5.7 The Tower of Babel: Two Competitions for Two Skyscrapers

At the end of 1921 a competition was organised in Berlin for the design of a twenty-storey skyscraper between the Spree River and the central station along the Friedrichstrasse. It attracted 144 participants. They included Hans Poelzig, Hugo Häring, Mies and Scharoun. Poelzig’s building, a work of refined simplicity, was based on a triangular scheme with the volume of lifts at the centre. After studying a similar plan, Häring decided to realise a “V”-shaped configuration that, on the one side rendered the building convex and penetrating and, on the other, concave and wrapping. Both had trouble dealing with the vertical dimension of the skyscraper.

Mies, instead, without renouncing the central position of the service core and a rigorously symmetrical plan, broke up the surfaces of the triangle, managing to subdivide it into bands that projected it upward. The choice to wrap it in glass, perhaps an homage to Scheerbart or his friends from the Gläserne Kette, resulted in an ephemeral and light proposal. In a successive version, Mies explored a freer plan and the use of curving lines. Both projects would be published in the review
Frühlicht. “At first glance”, Mies wrote, “the curved outline of the plan seems arbitrary. These curves, however, were determined by three factors: sufficient illumination of the interior, the massing of the building viewed from the street, and lastly the play of reflections.”

This project for a glass skyscraper was followed by another proposal for a concrete office tower (1922-23) and another for a villa in brick (1923), clearly influenced by De Stijl. The three projects can be seen as an attempt to investigate the expressive characteristics of diverse materials with different functions and, together, as the definition of a unitary logical-formal strategy to be implemented in successive projects.

The second project worthy of interest presented for the 1921 competition was the work of Scharoun, who proposed a massive podium with a wrapping concave entrance split by an intelligently over-dimensioned triangular entrance. It supports two buildings, one of which is a slender and soaring tower. A nucleus of glass projects it light out toward the city.

Verticality and the poetic of light. These two themes, despite a few differences, would characterise the projects of Mies and Scharoun and pose the challenge faced by German architects throughout the 1920s. Mendelsohn, perhaps more than others, would learn their lesson, utilising artificial lighting – emitted from the glass elements that eroded the corners of his constructions, from signs and from large advertising billboards – as a material of architecture (we will look at this in detail in the paragraph entitled “Architecture of Light”).

A second design competition, that met with staggering success, was that for the new headquarters of the Chicago Tribune, on a strategic lot along North Michigan Avenue, in an area of expansion to the north of the centre of Chicago, the birthplace of skyscrapers. Announced in 1922 and widely publicised, the competition drew 263 groups. The objective was to realise the “most beautiful and important building in the world”. The tower could reach a height of more than 120 meters, far beyond the twenty storeys of the Berlin building. The Germans, informed by the journal Bauwelt and practically unemployed in the wake of the First World War, participated en masse. A number of Italians also registered, including Marcello Piacentini, at the time forty-one years old and beginning to make a name for himself in the world of Italian architecture.

The competition was awarded to the Americans Raymond Hood and John Mead Howells for their correct neo-gothic building characterised by a brilliant crown, perhaps for having interpreted the stylistic preferences of the owners of the Chicago Tribune, perhaps because they were destined to win thanks to their friendships and family connections.

Second place went to the Finnish Eliel Saarineen, author between 1910 and 1919 of the Helsinki railway station, a neo-romanic work of notable formal qualities
reminiscent of the best work of Berlage. With respect to the winning project, Saarinen’s tower was more unitary, with a greater verticality. It was favoured by Louis Sullivan, who defended it in public.

In the projects presented for the *Chicago Tribune* competition it is easy to note a clear difference in the research underway in Europe and in the United States on a theme so actual and yet unusual. It would be possible to divide them into categories, based on three groups.
The first is the category of the neo-gothics. The majority. They reconciled the development in height with the style that more than any other had to deal with verticality. They can be summarised in the opinion expressed by Louis Sullivan of the winning project: they work with an out-dated and dying idea.
The second is the category of the academics. They include the eclectic building designed by Piacentini and the pseudo-triumphal arch of Saverio Dioguardi. There was no shortage of works that recalled the bell tower of Giotto or elongated and deformed renaissance prototypes. There were also at least three designers who proposed the theme of the column-obelisk. One was Adolf Loos, evidently in the midst of a figurative crisis.
The third category is represented by modern projects. Stand outs include the tower by Duiker and Bijvoet who, to heighten the verticality of the proposal, did not hesitate to fragment the base atop which it was to rest. It was a promising start for two architects who, working together or separately, would produce some of the most successful works of the 1920s and 30s. also from the group of modern proposals is the sober skyscraper designed by Max Taut and the expressionist spire of Bruno Taut. The project by Gropius and Meyer, as demonstrated by the projecting slabs that timidly erode the corners, is suspended between an approach to composition by planes and volumes, between expressionist stimuli, allusions to the language of Wright and the desire to arrive at a more pared down and essential rationalism. Karl Lömberg-Holm presented a coloured and playful building that struck the critic Behne, who later published it in his book *Der moderne Zweckbau* from 1926 as an example of modern architecture by a Danish architect. The prism of Arturo Tricomi from Naples is, in its radical simplicity, more interesting than the works of his more appreciated and recognised compatriots.

5.8 ABC and Constructivism
In the autumn of 1921 El Lissitzky left for Berlin on a mission from Anatoly Lunacharsky, Soviet People’s Commissar of Education responsible for culture and education: spreading Russian art and architecture abroad to advertise the ideals of the Revolution in Europe.
The thirty-one year old El Lissitzky had studied architecture at the Darmstadt Polytechnic and was familiar with European art, having been in Paris and Italy in 1911. He was a disciple of Malevich and author of the Proun, which sought to reconcile the fourth dimension, constructivism and suprematism. He was active in the world of publishing and in contact with the architects of Asnova, linked to the Vkhutemas, the Moscow school of architecture described earlier.

In Berlin he met numerous artists, including the Dadaist Hans Richter, with whom he founded the journal *G* in 1923, and the Dutch functionalist Mart Stam, who served as the connection for initiating contacts with a group of young Swiss who in 1924 created the publication *ABC*, strongly influenced by the positions of the Russian constructivists.

In May of 1922 the First International Congress of Progressive Artists was held in Dusseldorf. It served to re-launch the world of avant-garde art in Europe. Participants included members of the Novembergruppe, the Darmstadt Secession, the Young Rhinean Group and De Stijl. El Lissitzky received unanimous praise. Many European avant-garde artists were sympathetic to the Bolshevik Revolution. What is more, Constructivism, as it was practiced at the time in Russia, resembled a trend based on the principles of renewal and structural sincerity at the base of many European avant-garde movements.

The result was the birth of the International Faction of Constructivists. It was supported by Theo van Doesburg, Hans Richter, Viking Eggeling and Fritz Baumann. The occasion also served to launch a network of experimental journals: *Veshch, Gegenstand, Object*, a trilingual publication in Russian, German and French, edited in Berlin by El Lissitzky, the Dutch *De Stijl*, directed by van Doesburg, the Prague-based *Stavba*, directed by Karel Teige – about which more will be said in the next paragraph – and *Disk*, the Polish *Block* and *Praesens*. The network expanded over the following years: in 1923 El Lissitzky established contacts with the American *Broom* and the German *Merz*, directed by Schwitters, and in 1924 *ABC* published a long list of friendly titles.

In October 1922, El Lissitzky organised the first exhibition of Russian art in Berlin. In 1923, however, he was forced to interrupt his activities and move to Locarno to cure a bout of tuberculosis. He took advantage of the situation to meet up with Mart Stam, at the time working in Zurich.

Stam was a friend of Werner Moser and Hans Schmidt. They had met in Rotterdam because the duo, at the suggestion of the first’s father, Karl Moser, a professor at the ETH in Zurich and an important figure in the renewal of Swiss architecture (he was elected president of the CIAM in 1928), had moved there to expand their cultural horizons. Working for Moser, through Hans Schmidt Stam came into contact with other young architects in Basel, unsatisfied with the academic climate in the nation: Paul Artaria, Hannes Meyer, Hans Wittwer and Emil Roth.
At the suggestion of El Lissitzky, the group decided to create a journal inspired by Russian Constructivism entitled *ABC Beiträge zum Bauen*. The first issue appeared in the spring of 1924.

It brought two different cultures together in one publication: the energetic and overflowing Russian side and the Calvinism and rigour of the Dutch. The first, influenced by the formalism of Asnova, of which El Lissitzky was a member, was oriented toward the exaltation of lightness and transparency, of the precarious equilibrium of masses, volumes, flows of communication and technological progress. The second was the ultra-functionalism of Stam, a fervent admirer of the works of Oud, Duiker and Bijvoet. It worked with the plan, the elimination of decoration, the pursuit of maximum result at minimum cost.

The two approaches may have been antagonistic. In reality, they proved complementary. The rhetoric of Constructivism vitalised the impeccable organisations of Dutch functionalism, and vice versa, the rigid and rational schemes of the latter guaranteed the concreteness and credibility of formally exuberant *partis* otherwise difficult to realise. Stam, Schmidt, Artaria, Wittwer and Meyer – director of Bauhaus from 1928 to 1930 substituting Gropius – produced some of the most interesting buildings of the 1920s. Stam’s houses at the Weissenhofsiedlung (1927); the Van Nelle Factory in Rotterdam, designed at least in part by Stam in the office of Brinkman and van der Vlugt between 1926-1930; the projects of Hannes Meyer and Hans Wittwer for the Petersschule in Basel (1926); the League of Nations in Geneva (1927) and the Trade Union School in Bernau, built between 1928 and 1930.

The works spoke of a dreamy functionalism, that was not flattened by standards and aspects of construction, but rather open to the future when the spirit would triumph over matter. The theory was developed by the Prague native Karel Teige, a constructivist, director of *Stavba* and friend of Stam, Meyer and El Lissitzky.

### 5.9 Poetism and Constructivism: Teige

Karel Teige was an art critic, journalist, artist, expert in typography and political militant. From Prague, where he was the leader of the Devetsil group, he moved toward Paris, Vienna, Weimar, Milan and Moscow, where he met with exponents of Cubism, Futurism, Neoplasticism and Constructivism. A tireless activist, he organised exhibitions, conferences and events. For Teige, like Flaubert, whom he cited often, the art of the future could not but be impersonal and scientific. In the journals *Stavba* and *Red*, which he directed, he published the works of the avant-garde movements. He wrote a great deal: daily events, historic and theoretical pieces and controversial manifestos. They all followed a rigorous logic that
unfolded along two lines: a controversial attitude toward passatist interpretations and an attack on the expressionist and classical drifts of the avant-garde. In 1922 Teige was in Paris, where he spent one month. Familiar with painting and poetry, he discovered a particular interest for architecture, photography and film. His passion for the former was most likely transmitted by Le Corbusier, and for the second by Man Ray. He was struck by the rigorous attitude of the first, open to form though in the light of the mechanical logic introduced by industrial society, and fascinated by the capacity of the second to activate an original way of looking at reality through such an apparently objective tool as the camera.

It was during this same period that he discovered Constructivism. He appreciated the movement's desire for a *tabula rasa* of tradition in favour of a rational process of constructing an object founded on the needs of man and the laws imposed by load bearing structures, materials and finishes, and, in general, the industrialisation of the building process, in other words the machine, the force that for Teige was the guide of contemporary civilisation, our civilisation.

Thus, in 1923 when he was offered the direction of the journal *Stavba*, he oriented toward puristi and constructivist positions. In August of the same year he came into contact with Gropius. These were the months during which the Bauhaus was abounding the expressionist direction imposed by Itten, who had resigned in April, and began moving in a more openly constructivist direction, thanks to the contributions of László Moholy-Nagy, as we have seen, in October would become responsible for the propaedeutic course. The relations between Gropius and Teige were not easy: the first was prudent and a born mediator, the second passionate and steeped in ideology to the point of sectarianism.

How to reconcile aesthetic research and scientific objectivity? How to avoid reducing construction to the simple pursuit of functional standards? How to mediate between the autonomy of art and the heteronomy of extra-artistic events, in particular from politics? Teige attempted to respond to these questions when, in 1923, he invented the term “poetism”. He would dedicate numerous reflections to the subject and a text-manifesto entitled *Poetism*, published in *Host3* in July 1924. To use a term dear to the formalist from the Prague school, poetism was a function, a way of looking at things. The art of living and enjoying the world. As an attitude, it did not substitute the instrument, but finalised its use. The instrument is the construction that, rooted in contemporary science and technique, permits us to live reality for what it is, to discover the infinite possibilities of our senses, and the underlying rationality of nature.

Poetism – Teige stated – was not the opposite, but the necessary completion of constructivism. It was not difficult to in Teige’s aesthetic the recurring motifs of Russian formalism and the Prague school, in particular of Shklovsky and Mukařovský. From Shklovsky there was a sense of the new, of the capacity of art
to revitalise the spatial-temporal categories revealing the object in a different light. From Mukařovský there was an insistence on the concept of aesthetic function: art does not make recourse to extra-scientific instruments, as claimed by a certain mystic or romantic tradition, but looks at the reality of the world, which is unique, from an original point of view, in other words from a point of disinterested contemplation. Both thinkers insist on the unexpected, on the interruption of the new that generates the artistic process. Unlike academic art, which reinforces our preconceptions, because it accepts a system of rules that have been learned and passed down, the contemporary work produces relations once ignored and materialises worlds to be discovered. It speaks of a desire oriented toward a possible universe, that unfolds with the appearance of a sign through which the object presents itself as an epiphany of reality, a prophecy of liberation.

Too refined in his immanent formalism and anti-classical in his anxiety for revelation, through the art of new worlds, Teige could not help but be suspicious of the purism of Le Corbusier. Signs of a separation began to appear in the winter of 1923-24, when Stavba began printing criticising Vers une architecture. In 1925 Teige insisted on constructivism in the texts "Constructivism and the Liquidation of Art" and "Constructivism and the New Architecture in the USSR". In 1927, together with Le Corbusier's project of the Palace of the League of Nations, he supported that by Hannes Meyer, which he preferred. The rupture most likely came to a head in 1928, when le Corbusier travelled to Prague and gave lessons on what architecture should be. In 1929 Teige did not hesitate to attack him openly in relation to the competition for the Mundaneum.

Purism, he stated, concealed classical and perhaps academic nostalgias behind its machinist rigour. A desire for a discourse with the past, rather than an opening toward the future. A need to identify the known, rather than open up toward the unexpected.

It was instead the work of Mart Stam, Hans Wittwer, El Lissitzky and Hannes Meyer that he looked at with growing attention. Teige developed a dense exchange of ideas with the latter. Meyer, who had replaced Gropius at the Bauhaus, would seek to involve his friend from Prague in the school however, after his firing in 1930 meant that he did not have sufficient time to find him a stable position.

5.10 The Lesson of De Stijl

Blessed with a tireless energy and curiosity, Theo van Doesburg was present in May 1922 at the International Congress of Artists in Dusseldorff, organised by El Lissitzky, the event that launched the International Faction of Constructivists. He as one of the promoters of the successive convention, held in Weimar in the fall. It
was during this event that the clash broke out between constructivists and Dadaists. Rather than supporting the cause of the former, as would be imagined from an exponent of De Stijl, he stood up for Dada.

Also in 1922 he founded the review *Mécano*. It was directed by I.K. Bonset, with graphic design by Theo van Doesburg. Four issues were published. Later, with Schwitters, Hausmann, Harp and Tzara he organised a Dada campaign in Germany, that visited the cities of Weimar, Jena, Dresden and Hanover. Theo van Doesburg, his wife and Schwitters continued the tour in Holland (this has already been mentioned in a previous paragraph). In 1923 five issues of the review *De Stijl* were published: the majority of the texts were written by van Doesburg, Bonset and Aldo Camini (the latter, we recall, was a futurist pseudonym).

In 1923 he wrote a pamphlet entitled *Wat is Dada???,* in which he affirmed that Dadaism was a way of looking at life, of constantly questioning oneself, and not a style. He collaborated with the reviews *G: Material zur elementaren Gestaltung*, (G: Material for Elementary Construction), edited by his friends Werner Gräff, Hans Richter and El Lissitzky and financed by Mies van der Rohe.

In 1922 he met Cornelis van Eesteren who, at the suggestion of Behne, came to visit him in Weimar. The two met again in March of 1923. Theo van Doesburg, offered the occasion to hold an exhibition in Paris by Léonce Rosemberg, decided to present the work of architects close to the poetic of De Stijl, including Oud, Mies, Kiesler, Rietveld, Huszár and Zwart. He also wished to present his own projects, and felt he could develop them with van Eesteren, who could guarantee the professionalism and technical know-how that, as a critic and painter, he was lacking.

The exhibition was held at the gallery L’Effort Moderne from 15 October to 15 November. The three works presented by the duo were the project for the home of Léonce Rosemberg, for a *maison particulière* and a house for an artist. Despite the superficial stylistic resemblance, they were three conceptually different constructions, demonstrating that the credo of De Stijl could not be reduced to a formula. The first is a dynamic sequence of volumes in space, a structure played out through the rhythmic concatenation of large openings that exalt values of chiaroscuro. The *maison particulière* is a spatial construction resulting from the free assembly of coloured planes. The house for an artist is generated from the assembly of volumes subdivided into coloured planes, though held together by crowning elements. To summarise: the Rosemberg house dealt with volume, the *maison* with the transformation of the plane into volume and the house for an artist with the inverse transformation of the volume into plane.

Giovanni Fanelli, in a monograph on De Stijl, retraces the sources that most likely inspired van Doesburg and van Eesteren: the projects of Rietveld, in particular the GZC jewellery store; the work of van Doesburg in Weimar; the Prouns of Malevich.
and El Lissitzky; the projects of van Leusden and the brick and reinforced concrete homes designed by Mies van der Rohe. The results were, however, original. Theo van Doesburg wrote in 1927 in the issue of *De Stijl* celebrating its tenth anniversary: “For that which concerns architecture it is possible to speak of an architecture up to and after 1923”. Visitors to the exhibition in Paris, who remained impressed, included Le Corbusier, Léger, Mallet-Stevens and numerous young architects. The show must also have provided no shortage of indications for Rietveld who, in 1924 completed a construction on the Prins-Hendriklaan in Utrecht: the Schröder House, the masterpiece of neoplastic architecture.

On the exterior the Schröder House resembles a composition broken down into planes that, unlike the previous works of van Doesburg, were effective surfaces, two-dimensional slabs and not simple fields of colour overlapped on the masonry behind them (there are exceptions, such as the left corner for those looking at the main elevation, which is the resolved by a trick of colour). Of note here are the corner window that dematerialises the volume and the fact that the composition is supported by asymmetrical equilibrium between the canopies, projected horizontally, and the vertical planes such as the closed parapet of the balcony. The interiors are articulated by moveable and coloured planes. On the upper level they allow for different uses during the day, when the space can be fully opened, and at night when it can be subdivided into bedrooms for the different members of the family.

The year 1924 saw the birth of the periodical *Het Bouwbedrift*. Its editors included Wils. Theo van Doesburg was a frequent collaborator, contributing some fifty articles between 1924 and 1931. They constitute – as some have noted – a draft of the history of contemporary architecture in Europe.

Beginning in 1924, he established 16 points, later expanded to 17, the principles of new architecture: form conceived *a posteriori* and not as a given *a priori*; a love for elementary principles such as light, function, volume, time, space and colour; the economy of means and a distaste for waste; functionality; the acceptance of the informal into which to transfer functional spaces; the refusal of the monumental in favour of lightness and transparency; overcoming the idea of the window as a hole in the wall; the open plan and an end to the dualism between interior and exterior; openness rather than closure, which subdivisions made possible by non-Euclidean mathematics and the fourth dimension; the integration between space and time, in other words animated space; the plasticity of the spatial-temporal dimension; an anti-gravitational component, or a propensity for all that is aerial and floating; the suppression of the repetitive monotony of symmetry and the balanced relationship between different parts that does not allow for the distinction between up and down, left and right; the multifaceted
plasticity of space-time; the organic assumption of colour inside a building; anti-decoration; the convergence of all of the plastic arts.

5.11 Toward a New Architecture

Since 1919 Le Corbusier, Ozenfant and the Dada poet and journalist Paul Dermée were at work on the publication of the journal *L’Esprit Nouveau*. The first issue was released on 15 October 1920. Others followed each month until July 1921 (the nickname Le Corbusier, like others including Paul Boulard, Saugnier, De Fayet, were originally used to give the impression that the journal boasted a discrete number of collaborators). November saw the release of a double issue, followed by a return to normality for a few months, and an interruption after issue n. 17 in June 1922. Issue number 18 was published in November 1923. The journal was highly unsuccessful, many were returned, and publication was scarce. There were also growing signs of a contrast between Ozenfant and Le Corbusier. Yet in 1922 Le Corbusier realised his friend’s studio in the periphery of Paris: a small construction with shed roofs, where the austerity of the exterior was redeemed by the spiral stair and a large corner window that, continuing inside in the skylight, identified the three sides of a transparent ideal cube.

Also in 1922, Le Corbusier designed the Maison Citrohan, a multi-storey single-family housing prototype. William J.R. Curtis acutely noted that the Citrohan is a compendium of its author’s previous interests: the Maison Domino; the white plastered Mediterranean cubicles viewed during his travels; the transatlantic ships he so admired; long-standing debts to the undecorated forms of Loos; the homes illustrated in Garnier’s *Cité industrielle*; the ateliers and cafés of Paris found in the periphery at the turn of the century.

The Citrohan was conceived as a module that, clad and fitted with opportune devices, could become the typical cell of a new urbanisation. Le Corbusier proposed one – the City for Three Million Inhabitants – in occasion of the Salon d’Automne. The Plan was based on four concepts: the decongestion of the city centre, an elevation in urban density, improved vehicular circulation and a greater quantity of landscaped areas. It called for an urban centre of twenty-four skyscrapers, six hundred thousand inhabitants in block housing and open and closed *redents* and two million people living in a garden city.

In 1923 he re-published a number of articles from the journal under the title *Vers une architecture*. The book would meet with notable success, with translations in various languages (the English edition is from 1927).

The book examined a number of themes: the aesthetic of machines and engineering; the play of volumes in light; the design of the plan; the inheritances of classicism and the importance of geometry and proportions; morality in
architecture; the machine for living; and the final, emblematically titled chapter: “Architecture ou Révolution”.

He stated: “There reigns a great disagreement between the modern state of mind, which is an admonition to us, and the stifling accumulation of age long detritus. The problem is one of adaptation, in which the realties of our lives are in question. Society is filled with a violent desire for something which it may obtain or not. Everything lies in that: everything depends on the effort made and the attention paid to these alarming symptoms. Architecture or Revolution. Revolution can be avoided.”

The journal was published again in 1924, with eight issues. The final issue, number 28, was published the following year. Another issue was ready, but the clash with Ozenfant was now impossible to avoid and Le Corbusier was forced to publish it, in another form, under the title Almanach d’architecture moderne. For his work on the journal, Ozenfant paid him a ridiculously low sum. Le Corbusier would conserve the cheque in his wallet for the rest of his life, as a reminder of the slap in the face he had received.

In the meantime, Le Corbusier had acquired, on behalf of Raoul La Roche, a Geneva-based banker, cubist works by Braque, Picasso and Léger from the dealer Kahnweiler. La Roche, who possesses the spirit of a benefactor, was among the financial supporters of the L’Esprit Nouveau adventure. In 1923 he commissioned Le Corbusier with the design of a house in Paris, with a gallery space for showing his paintings. On the same lot Le Corbusier’s brother Albert Jeanneret, a musician and director of the rhythms course at the Rameau Conservatory, also decided to build a home. Completed in 1925, the two-family home is the work of a now mature architect. It is characterised by long strip windows and a pavilion with circular walls served by a triple height atrium.

The same year also brought the experience in Pessac, a less successful example in which Le Corbusier sought to apply the methods of standardised construction, though which demonstrates how the principles of new purist architecture were easy to apply to the new homes of the modern and wealthy bourgeoisie, and less applicable to economic workers’ housing.

5.12 The Exposition Internationale in Paris

For Le Corbusier 1925 was also the year of the Exhibition Internationale des Arts Décoratifs et Industriels Modernes in Paris. He designed an exhibition building, the Esprit Nouveau pavilion, with an annexed diorama depicting his urban proposals for a new city, under development since 1922, and a plan for the historic centre of Paris, in which he proposed to demolish the old city to make way for parks filled with slender Cartesian skyscrapers.
The pavilion, initially excluded with the pretext of a lack of available space, was constructed at the last minute in a peripheral area of the Exhibition. Designed in the purist style, it was judged a monstrosity by the organisers and surrounded by a six meter high fence to conceal it from the public. It took the intervention of the National Minister of Education, introduced by Gertrude Stein, to finally ensure that the pavilion could be seen by all.

Yet, as we will see, the Exhibition was not without other contemporary works of architecture deemed offensive to common sense, such as the Russian pavilion designed by Konstantin Melnikov, the *City in Space* exhibition by Frederick Kiesler or the Danish pavilion by Kay Fisker. While the first two can be seen as bizarre choices by foreign artists and the third as a variation on modernist classicism, the construction by Le Corbusier was taken as a direct affront to the host nation, and an explicit refusal of Art Deco, whose triumph was celebrated by the Exhibition.

Deco was a taste rather than a style, that often ends with the superficial acceptance of a few modern values – Cubist geometry, Futurist dynamism, Expressionist symbolism – tempered by a voracious eclecticism that does not hesitate to contaminate everything with Egyptian, African or Babylonian motifs, luxurious products and impeccable craftsmanship. Art Deco was the art that during the roaring twenties allowed the rising middle-class to accept the new lines of the machine age and, together, a moment of reaction that juxtaposed classicism and the archaeological relic.

The taste for all things Deco also influenced such exceptionally talented architects as Frank Lloyd Wright – this reading can be applied to the houses in California –, superficial though able modernists such as Robert Mallet-Stevens, the author of elegant constructions in Paris, or innovators in the field of furnishing such as Francis Jourdain, René Herbst and Pierre Chareau, the latter, as we shall see when we look at the Maison de Verre, undoubtedly the most talented of the three.

The climate that produced this new taste was the result of a cosmopolitan society that read Francis Scott Fitzgerald and moved to the rhythm of the Charleston and jazz imported from America toward the end of the Great War. It was the generation that discovered black music and dance through the carefree and wild Josephine Baker, who danced almost naked and fascinated Loos and Le Corbusier, as Man Ray clamoured to photograph her.

The tailor Paul Poiret, already before the war, proposed extravagant models of beauty and a dissipate lifestyle of slender and elegant figures. He prefigured the cult of the anorexic female figure: when the stock market collapsed they became known as the “ladies of the crisis”. Gabrielle Chanel, known as Coco, dressed them in tailleurs and skirts that were well above the ankles. Hats were *à la garçonne* and stockings in red silk. Mannequins stood in stylised shop windows. The masculine role model was the Hollywood actor Rudolph Valentino, whose death in
1926 drove thousands of fans into a crisis of collective hysteria that led to numerous suicides.

The Paris Exhibition, programmed in 1912 for 1915 and moved to 1925 due to the outbreak of the First World War, was the showcase for this taste, exasperated and taken to the extreme. Twenty-one nations were present. The Italian Pavilion, designed by Armando Brasini, was without a doubt one of the ugliest. Also deluding were the pavilions designed by Horta, whose production was slipping toward an empty and pompous academism, and by Josef Hoffmann, elegant as always, though unnerved by an aestheticism of oversized mouldings defined by critics at the time as a conversion to Italian Baroque.

Acceptable works included the Danish Pavilion by Kay Fisker, whose rhythm was set by rows of red brick separated by bands of concrete, the Polish Pavilion, striking more for its dreamy eccentricity than its architectural value, and the sober neoclassical pavilion by Richard-Ginori, designed by a promising thirty-four year old: Gio Ponti.

There was an abundance of small temples and masuoluems. The Dutch Pavilion, designed by Jan Frederik Staal, was reminiscent of Eastern religious structures: it is one of the least convincing examples of the production of the Amsterdam School; it drew the wrath and criticism of van Doesburg, justly embittered for the exclusion of De Stijl.

The Soviets, with the pavilion designed by Konstantin Melnikov, were the only ones to pursue a decidedly contemporary architecture.

Melnikov was selected after a competition to which eleven architects were invited, almost all from the group of progressive artists, such as the Vesnin brothers, Ladovsky, Ginsburg and Golosov. His project, unabashedly modern and yet showy and not without a certain rhetoric, saw him selected despite his young age and inexperience; his only work of any note at the time of the competition was his shaped glass coffin for Lenin's body.

The final pavilion was the resulting of a nerve-racking process of revision, to respect the budget and schedule, that resulted in a notable simplification of the original design, based on generating curves. The revisions, all the same, did not harm the architecture. The definitive version of the pavilion was a prismatic construction cut diagonally by a stair. The roofs of the two triangles sloped in opposing directions and were connected by sloping and overlapping panels covering the stair. A truss tower, set to the side of the stair, served as a landmark. For reasons of economy, the construction was realised entirely in wood. It was painted bright red. Both Perret and Mallet-Stevens were interested by the project. Le Corbusier appreciated it enough to get to know Melnikov, driving him around Paris. Obviously there was no shortage of negative criticism from traditionalists.
The Grand Palais hosted a presentation of the *City in Space* exhibition by the thirty-five year old Frederick Kiesler, an artist living in Vienna who had worked with Adolf Loos in 1920, coming into contact with De Stijl in 1923 when van Doesburg, impressed by a moving stage set Kiesler had designed in Berlin, sought him out and presented him to Richter, Moholy-Nagy, El Lissitzky and Gräff (the same evening, he recounts, they met with Mies and spoke about architecture into the early hours of the morning).

*City in Space* was a utopian project that fluctuated in space. A lofty and weightless city, governed by the static principle of ‘tensionism’ versus bending moments, abolishing walls that suffocated its human inhabitants. However, it must be said that no one had any real idea what ‘tensionism’ was. In fact, when Le Corbusier, who knew Kiesler through Léger, asked how his city could be supported, adding: “Do you imagine hanging the houses from Zeppelins?”, Kiesler answered, avoiding going into any detail: “No, I imagine suspending it using tension”. (A utopian by nature, Kiesler would spend the rest of his life pursuing themes at the limits of the impossible. Beginning with the Endless Theatre, prefigured in 1923 and developed in America, where Kiesler moved in 1926. The work was shown at the International Theatre Exhibition the same year. The model was so innovative that it made the Total Theatre of moveable sets designed in 1927 by Gropius for Erwin Piscator seem conventional. The project was followed by Space House, the Endless House and other projects that prefigured a move creative and radically alternative lifestyle. A friend of Duchamp and the entire American avant-garde – more will be said later – he designed the gallery of Peggy Guggenheim).

A few more words about the pavilion designed by Le Corbusier. It would be reductive to see it as a complete work of architecture, alienating it from the urban proposal illustrated in the adjacent diorama. In fact, the pavilion was a dwelling module who raison d’être was to be found solely in an urban context. Not an isolated single-family dwelling, but a block to be inserted – 64 per floor, 340 per block – in the Immeubles villas surrounding the city centre given over to the Cartesian skyscrapers. It was an expedient for contemplating dwelling density and, at the same time – we can look at the “L”-shaped plan embracing a generous terrace – to offer each inhabitant a home with a large outdoor space, overlooking a landscaped courtyard; a condition of living typical of a villa, also in a banal apartment situated on the upper floors of a dense housing block.

### 5.13 Behne and the Synthesis between Expressionism and Rationalism

Adolf Behne was an architecture critic. His most interesting text, *Der moderne Zweckbau* (The Modern Functional Building), is from 1923, the year he came into
contact with Gropius in relation to the exhibition at the Bauhaus dedicated to international architecture (as an aside: it was Behne who presented Moholy-Nagy to Gropius). Behne hoped for his work to be published by the Bauhaus that, as we can recall, created its own publishing house the same year. However, Gropius failed to come through, to avoid ruining his own *Internationale Arciktektur*. Gropius’ book was published in 1925, and Behne’s the following year. With a certain ostentation, Behne added below the dedication to his wife: “Written in November 1923”. As proof, between 1924 and 1925 he published a number of articles that anticipated the texts found in the book.

Why such stubbornness? There are probably two reasons. The first is that 1923 marked a turning point for contemporary architecture. Other than the exhibition at the Bauhaus, it was the year of the publication of Le Corbusier’s *Vers une architecture* and a time of maturity for new languages: Constructivism and De Stijl to name only two. The second reason is that up until this point there had been no texts of any great importance dedicated to new architecture and Behne wished to get there before anyone else, and in a hurry (*Internationale neue Baukunst* by Hilberseimer and *Der Sieg des neuen Baustils* by Behrendt would be released in 1927 and *Die neue Baukunst in Europa und Amerika* by Bruno Taut appeared in 1929).

The book is structured by oppositions, in the style of the writings of Wolfflin and Simmel, Behne’s masters. It is the clash between two ideal types, two opposing aspects of reality, that gives birth to a third solution that brings unexpected results.

The first opposition is the contrast between function and aesthetics. The architecture of the nineteenth century, according to Behne, exaggerated in this second aspect, constructing buildings that were progressively more extraneous to their purpose, to simple functionality, limiting themselves to the realisation of façades or masks that did not correspond with any organism.

It was Berlage, Wagner and Messel who brought about a liberating action against this excessive aestheticism, pursuing structural sincerity and the correct use of materials.

Their contribution is however relevant more for what they teach than for having created an original architecture. The first to speak of a new language was Wright, an American who, unlike the other three architects just mentioned, showed how to reorganise a plan, how to bring space to life, how to recapture horizontality and an asymmetry founded on the movement of a building’s users.

This brings us to the second chapter: designed space. It was not begun by an architect, but by Henry Ford, the famous American captain of industry. It was Ford who, in his factories, reimagined space on the basis of the exact dimensions of the human body, hygiene and practical issues of assembly line production. Behne
presented lengthy passages from Ford’s autobiography that, as mentioned, was released precisely in 1923 in Germany where it met with vast public success. Ford’s European counterpart was the German Peter Behrens who, however, as an architect, what is more with the soul of a classicist, tended toward stylization, unlike the Americans who sought a pure functional object. Furthermore, Behrens, over time, has lost the freshness and originality of his debut works, tending toward an out-dated aesthetic of spheres, cones and cylinders. His successor was Gropius, with the Fagus Factory and Deutscher Werkbund Exhibition in Cologne. The situation delineated a triad of innovators in building, through industry – Ford, Behrens and Gropius – though with a tendency to produce rigid and geometric forms. In opposition to this group, Behne presented van de Velde, who managed to overcome the abstract standard using soft lines, movement and vitality. Behne recalled the controversy that set van de Velde against Muthesius at the 1914 Werkbund conference in Cologne, emphasising how, against the typization requested by the German, the Belgian laid claim to the individuality and originality of the artist.

Two German architects, Finsterlin and Mendelsohn, came forward to promote a spatial conformation even more adherent to the needs of the user. They were the true functionalists. Those who, against the monumental abstract approach, invented the dynamic of movement, which marked the passage toward the humanisation of the machine. Finsterlin demonstrated how, to operate at the human scale, the architecture must become organic and thus renounce form, preferring instead the crystalline amorph. Mendelsohn injected energy. Though Behne criticised the excessive amorphism of the Einstein Tower, he found in the Herrmann & Ca Luckenwalde factory an example of perfect efficiency and a magnificent flow of life.

The third chapter overcomes the problem of space to arrive at the design of reality. It was precisely the Expressionist – or, as Behne refers to them, the men from the East – who pursue function at all costs and, to reach this objective, do not hesitate to destroy any residue of form. In fact, if Häring imagines a home for each person and models each room in a diverse way to host a specific activity, he does so because his ideal is anti-formalist and consists in the reduction of architecture to a pure and absolute instrument. The same can be said of Scharoun and his complicated organisms. Their ideal is the body, nature, all that escapes from any standard.

To the men from the East he opposed the men from the West; figures like Le Corbusier, who prefigure the obtainment of standards, classification in types, the observance of rules, the achievement of universal ideas. Their technique is based on abstraction, on mathematics, on rigid discipline. Theory are the true formalists.
The functionalism of the Expressionists runs the risks of becoming grotesque, of losing itself in hyper-individualist romanticism, while rationalist formalism slips into the schematic nature and the immobilism of the concept. Only the synthesis between the sprit of the East, that Behne linked other than to the Germans to the radical Russian movements and Italian Futurism, and that of the West, which he tied to the classicists of the French school, could produce a living form. Behne appeared to glimpse this in some of the experiments of Dutch architecture. He hinted at the open forms of De Stijl and the closed forms privileged by Oud. Perhaps, he continued, there was a need to move in the direction indicated by Mondrian, perhaps – and here he introduces a German – in that of Mies van der Rohe.

The final part of the essay is the least clear. However, it makes recourse to two enlightened terms that – given the awareness offered today – were also precursors: “relations” and “landscape”. To Behne relations were what allowed us to overcome the dictatorship of form as geometry, in order to project ourselves toward an increasingly more qualified universe of immaterial qualities, impossible to define in the traditional terms of drawing. The landscape as a context in which to exercise the new relations between the objectivity of the social and individual side of nature, in which to mediate between form and informal.

Behne was less culturally refined than Teige, educated in the formalist climate of Prague. Der moderne Zweckbau remains, however, a fundamental text for at least four reasons.

Firstly because is offers the first serious and organised genealogy of the Modern Movement. From Berlage to Perret (cited in relation to the origins of Le Corbusier’s ideas, and consciously not found in the first chapter dedicated to the great precursors), from Gropius to Oud and De Stijl. Leaving aside a few omissions, due also to a certain Teutonic demonstrative rigidity, the structure is convincing and offers a base, very mature and informed, for its having been written in 1923, atop which to construct the successive vicissitudes of contemporary architecture.

Secondly, Behne avoids the error of dismissing expressionism, reducing it to a simple historic incident, a position adopted by much of successive historiography. He identifies in this current the roots of a coherent functionalism, focused on the individualisation of the product of architecture and suspicious of standardisation and typization. He justly appreciates the important inheritance of van de Velde. He emphasised the value of Mendelsohn, Finsterlin, Häring and Scharoun.

What is more, Behne avoids over-evaluating Behrens and Perret, and refuses to exalt, though without ignoring his merits, such figures from the new generation as Gropius who – he correctly points out – in five projects uses five different styles of representation, and Le Corbusier, who seeks to pawn off his own ideological integralism as science.
Finally, Behne shows sings of an unexpected openness toward a new figurative culture that seeks to free itself from the shoals of geometry, of composition, of the golden section, moving toward the Dutch, the Constructivists, the school of the Vkhutemas. He thus demonstrated how the Modern Movement is more than a simple stylistic label and a complex historic phenomena, characterised by a plurality of ways of feeling and a host of curiosities.

Part One Chapter 6: Maturation and the Crisis of Languages: 1925-1933

6.1 Loos-Dada

In 1923 Loos awoke from a period of creative and personal crisis, marked by blocked, symmetrical and monumental architectural compositions, such as the project for the Monument to the Glory of Emperor Franz-Josef (1917), the Palace Bronner in Vienna (1921), the Mausoleum for Max Dvořák(1921), Villa Stross (1922) and the column for the Chicago Tribune (1922). His creative turnaround, prefigured by the ambiguous Villa Rufer, marked by an old-fashioned cornice, though with openings freely arranged on the elevations, occurred in 1923 with the project on the Venice Lido for the actor Alessandro Moissi. A multi-storey building block, measurably Mediterranean, articulated and vaguely picturesque, in contrast with the frigid neoclassicism of previous drawings. His personal turnaround came the same year with the decision to move to Paris. This allowed him to end a negative period, culminating in the deluding relationship with the City of Vienna where he served for one year as head architect. The City, heedless of his proposals for siedlung and a self-buildable home using an American system, decided to realise its vast programme for public housing in the form of large blocks opposed by Loos (the most famous including the Karl Marx-Hof, designed by Karl Ehn in 1927). In Paris Loos was welcomed with much regard by exponents of the avant-garde movements. Le Corbusier considered him a precursor to functionalism, publishing the French translation of Ornament and Crime in the November 1920 issue of L’Esprit Nouveau. His time spent with Tristan Tzara led to the commission to build a house on the hills of Montmartre. Completed in 1925, the building showed Loos at his best. Along the street a closed block rests on a stone podium. Two central voids – one in the podium and the other in the upper block – articulate the volume and contain the various openings.
While the external façade is austere and closed to the view of passers-by, the courtyard elevation is articulated by a play of volumes whose rules are dictated by functional requirements. The interior of the house unfolds on numerous levels in response to the terrain, characterised by a steep slope, and specific requirements such as the possibility for the dining area, raised above the living room, to serve as a stage for small theatre performances.

The house for Josephine Baker, designed in 1927 though never built, is characterised on the exterior by a podium dotted with small openings and a Deco-flavoured upper volume in black and white bands. The house was to have featured an indoor pool where guests could watch the diva swim. The volume was simple, and the openings serve to introduce asymmetry. A projecting cylindrical volume draws attention to the elevation and creates a canopy over the entrance; the upper levels featured a café and dining room.

Many of pointed out the accurate design of interior sightlines, the pleasure of the voyeur guaranteed by the sheets of glass running the length of the walls of the pool, the extravagant entry hall culminating in the perspective of a semi-circular stair and the play of double height spaces. Baker, as Le Corbusier was quick in finding out – she was a fellow traveller in 1929 in the Julius Caesar sailing back from South America – possessed the ability to distract even the most rigorous of classicists.

In 1927 Loos was at work on the Villa Moller in Vienna, and in 1928 on the Villa Müller in Prague. The two homes can be read also as a response to the architecture of Le Corbusier, toward whom he maintained a sense of rivalry. The two villas, with austere and no longer classical forms, showed that it was possible to articulate the theme of paths in space without respecting the strategies of the promenade architecturale. They deal also with the theme of the relationship between interior and exterior. However, while Le Corbusier imagined the home as a device for framing exterior space, through ad hoc openings, the homes designed by Loos closed in on themselves to respect a typically Viennese philosophy of introspection, reserve and privacy.

In 1928 Loos retired to Czechoslovakia, where in 1930 he was awarded a lifelong pension that alleviated the economic issues that had plagued him his entire life. He died in 1933.

6.2 The Birth and Death of Der Ring

Häring and Mies van der Rohe shared the same studio in Berlin. It is difficult to imagine to more different figures: Mies was rigid, rigorous, slow, taciturn and substantially a classicist; Häring was exuberant, sanguine and fundamentally a romantic. All the same, both shared a single objective: snatching architecture from
the domain of art and the arbitrary, to found, in rigorously spatial terms, a science of building tied to certain principles. Mies, thanks to his collaboration with the magazine G, published from 1923 to 1926, definitively abandoned any expressionist tendencies, dating back to his belonging to the Novembergruppe, and defined a substantially constructivist conception, focused, through a rigorous use of modern techniques and materials, on expressing the spirit of the times through space. Häring, in a number of articles that appeared in diverse publications, maintained his distance from mechanism and the obsession for the standard and geometry, in favour of a search for the organic, founded on a respect for the universal laws and principles of nature.

Beginning in 1923, both promoted periodic meetings between architects in their studio. All were concerned by the current economic situation and the affirmation in the world of culture of the more reactionary and traditionalist faction, headed by Paul Bonatz, Paul Schmitthenner and Paul Schultze-Naumburg.

They created the Zehner-Ring, the Ring of Ten, comprised, other than of Häring and Mies, of Otto Bartning, Peter Behrens, Erich Mendelsohn, Hans Poelzig, Walter Schilbach, Bruno Taut, Max Taut and Ludwig Hilberseimer. Formed – as the name indicates – on the basis of equality, the group worked to promote new ideas, break down bureaucratic resistances and favour collaborations.

In 1925 Mies, a member of the directorate of the Werkbund, was nominated responsible for the exhibition on the Weissenhofsiedlung in Stuttgart. The project called for some two dozen buildings to be assigned to internationally recognised architects. At the end of September 1925, the director of the Stuttgart Werkbund presented Mies with a list of names. They included: Peter Behrens, Paul Bonatz, Adolf Loos, Theo van Doesburg, Le Corbusier, Walter Gropius and Hugo Häring. Mies eliminated a few names, including those of Loos, Frank and Bonatz, adding others, such as van de Velde, Berlage, Bartning and Scharoun.

To develop the plan together, Mies called on his colleague Häring, with whom he drew up a very interesting massing plan that exploited the topography of the assigned site.

On 5 May 1926, Paul Bonatz, the leading figure of the conservatives and academics at the University of Stuttgart, undoubtedly angered for having been excluded from the list of invitees, launched an attack of rare violence in the pages of the Schwäbischer Merkur, base anti-semitic allusions, against the project for the siedlung: “a bunch of piled flat cubes [...] resembling a suburb from Jerusalem than dwellings for Stuttgart”.

Of a similar opinion, even if less vulgar, Schmitthenner referred to the plan as formalist and romantic. It was probably in the wake of the attacks that Mies and Häring understood the need to strengthen their lobbying. In June of 1926 the Group of Ten was expanded to include new member: Der Ring was born. New
members included such important figures as: Walter Gropius, director of the Bauhaus in Dessau, Adolf Meyer, Otto Haesler, Adolf Rading, Curt Behrendt, Ernest May, Erich Mendelsohn, Martin Wagner and Hans Scharoun, for a total of twenty-seven members. Hugo Häring was named general secretary.

It proved to be a winning move. The influence of the members of Der Ring over the Werkbund grew, with Mies elected vice president in 1926: the same year Häring and Rading joined the board of directors followed in 1927 by Hilberseimer. Also in 1927, the members of Der Ring voted compactly to ensure that Gropius and Poelzig became members of the board of directors of the BDA (Bund Deutscher Architekten), the association of German architects. Curt Behrendt, director from October 1925 to December 1926 of Die Form, the Werkbund journal, published articles by Häring and Rading. In 1927 Häring and Hilberseimer dedicated a special pamphlet in Bauwelt to the work of the members of Der Ring. In 1927 Martin Wagner was named head architect of the city of Berlin, involving the other members of the group in projects promoted by City Government. Ernest May, for his part, was named building councillor of Frankfurt am Mein in 1925.

The collaboration between Häring and Mies proved a difficult one. Their respective aesthetic ideas were simply too distant. Häring was distrustful of geometric abstractions. This was born of a subjective spirit that wished to impose its forms, its rule on nature. While true architecture was universal and atemporal in its origins. It did not proceed from exterior toward the interior, through the imposition of abstract schemes, but from the interior toward the exterior, through a process of liberation and progressive unveiling. “We”, Häring claimed, “do not want to mechanise things, only to mechanise their production [...] to win life”. Häring’s main adversary was Le Corbusier, and his ideology of the machine for dwelling. He was the most fervent supporter of the Mediterranean conception of form that reduces the object to a mathematical demonstration, stripping it of movement and energy. To this Häring opposed the gothic vision that modelled space from its intrinsic and laws, only rarely mathematisable.

Not far from his vision of the world were the positions of the functionalists and the constructivists. For Häring function was not the adherence to a standard or pre-established rules, valid once and for all. It was a search for the living, an adhesion of form to the more profound needs of matter, a tension to produce organisms rather than mechanisms.

This was the difference from Mies, for which form was reduced to a geometric instance, whether fluid (it is very interesting to compare two images from the 1927 book by Walter Curt Behrendt, Der Sieg des neuen Baustils (The Victory of the New Building Styles). It shows two projects for housing in Berlin, side by side: one by Häring and the other by Mies. Both create dynamic spaces, though while
the first does not make use of a precise geometric scheme and makes ample use of curved lines, the second denounces the clear influence of De Stijl, organising its composition around the principles of the right angle).

In the end it was simply impossible, and thus the collaboration for Stuttgart inevitably ended in conflict. Mies decided to abandon the organic plan imagined together with Häring. He developed a simpler massing plan, structured by orthogonal lines, with buildings characterised as individual presences. Another reasons for the rupture is to be sought in the issue of professional fees. Häring, as secretary of Der Ring, asked the architects to apply a professional tariff, while Mies claimed that it was better to accept the reduced fees proposed by the clients in order not to compromise the realisation of the entire project. Häring came out on the wrong end.

Despite this situation, the list of the sixteen architects of the Weissenhof Siedlung is even more strongly influenced by Der Ring. Ten of the eleven Germans, selected during the final phase, belonged to the association. The only outsider is Adolf Schneck, an influential and well-positioned figure in Stuttgart. The rupture between Mies and Der Ring was not long in coming. In August of 1927, at the height of the exhibition, Mies resigned from the association. Der Ring had fulfilled its mission and the differences, also in character, in the opinion of Mies, were irreconcilable. This was the first step toward the liquidation of the German avant-grade. The definitive split came later, in occasion of the CIAM, with the departure of Gropius from Der Ring, at odds with Häring.

6.3 Dutch Rationalism

In 1925 Theo van Doesburg protested harshly against the choice of Staal, an exponent of the Amsterdam School, as the designer of the Dutch Pavilion at the 1925 Paris Exhibition. He laid claim to the role of De Stijl, though in reality, abandoned by Oud, Mondrian and numerous other leading figures from the movement, he was now a loose cannon. Brimming with resentment, he wrote: “For years I have been criticising the Dutch artistic gang [...] which has reserved all of its positions for the Wendingen group”. He had this to say about Oud: “He converted many years ago to the Liberty-Wendingen style (one need only look at the Oud-Mathenesse cottages in Rotterdam and the decorative architecture of the façade of the De Unie café). His confession ‘I am in favour of the right angle, but I don’t understand why the curve is not also acceptable’ [...] contains 30% fear, 33% bourgeois manners, 2% intelligence and 5% modernity. [...] The artists of De Stijl themselves haven’t considered Oud one of their colleagues for years.”

In reality, if we exclude the stylistic slip of the homes with sloping roofs in the Oud-Mathenesse (1922-23) district, Oud worked in a vein of realism that would
lead to the workers’ housing in Hoek van Holland, characterised by severe forms, rotating around the centre defined by two semi-cylindrical terminals of notable elegance, delimiting a semi-external courtyard with shops that serve to interrupt the monotony of the typology; to the sharp Kiefhoek district in Rotterdam arranged in concentric and parallel rows, a successful example of a rationalist district inserted within the city (1925-29); to the minimal experimental houses at the Weissenhof (1927), about which more will be said in the following paragraph. In September 1925, van Doesburg, via Arp, was involved in a project to renew the cabaret, cinema and café Aubette in Strasbourg. The two worked together, also involving Arp’s wife, Sofie Täuber. The result was convincing however, when it was completed in 1928 it was already dated: things at the time were moving, as demonstrated by the majority of contemporary research undertaken by the leading figures of the Modern Movement, in other directions, in which colour was subject to the logic of architecture, and not vice versa.

The year 1927 was a year of checks and balances for van Doesburg: he attempted to summarise them in an issue dedicated to the tenth anniversary of the movement. Oud, who presented a short note, emphasised the gap that separated them the first homes were a phase in the development of a clear, simple, severe and pure aesthetic, that had now become the beginning of “a Cubist adventure that has little to do with the cubism of architecture”. There were also texts by Kiesler, Rietveld, van Eesteren and numerous others, though as with all celebrations, the memories are more pleasant the more they refer to the end of the period celebrated. Proof is to be found in the fact that after the anniversary issue only two other issues of the magazine were published, in 1928.

Having decided to definitively move to Paris, van Doesburg built a home at Meudon-val-Fleury (1927-1931). Of a disarming simplicity, it was also disappointing. Like van Eesteren – who chose another path that lead him to become head of urban planning in Amsterdam and one of the leaders of the CIAM – he attempted to define the principles of De Stijl for urbanism. In 1930 he launched the latest in a string of manifestos: for Concrete Art. He wished to transform the house in Meudon into a centre for the arts. He went on a speaking tour in Spain. He suffered from asthma and died suddenly of a heart attack at Davos in 1931. The group, which would become known as Abstraction-Création, would release its first publication the following year. In January 1932, his wife Nelly printed the last issue of De Stijl dedicated of the tireless animator.

In 1927, in Amsterdam, the group De8 was formed by Benjamin Merkelbach, Johan Hendrik Groenewegen, Charles Karsten, H.E. Pauwert and P.J. Vershunyl. Pauwert and Vershunyl later left, substituted by Albert Boeken, Jan Gerk Wiebenga and Duiker, the latter undoubtedly the most talented of the group. De8, equally distant from De Stijl and the Amsterdam School, came together with the
functionalist group Opbouw from Rotterdam. In 1928, in occasion of the CIAM Prize, the two groups came together to form a single movement that, in 1932, published the review *De8 en Opbouw*, directed by Duiker until 1935.

Also in 1927 a rich group of artists, many belonging to De Stijl, rallied around the new-born journal of figurative arts, literature and politics entitled *10*. Its promoters included Mondrian and Oud, named editor of the architecture section. Other collaborators included Cornelis van Eesteren, Rietveld, Bart van der Leck, Vilmos Huszár, Georges Vantongerloo, Sybold Rayversten and Mart Stam. The first issue of the journal, released in January, contained an essay by Mondrian entitled “Neoplasticisme. Die Woning-De Straat-De Stad” (Neoplasticism. House-Street-City): it was a return to order, a call to pure plasticism. The fourth issue featured the manifesto of De8, which emphasised its distance from both expressionism and the mysticism of De Stijl.

In June 1928 Duiker inaugurated the sanatorium in Hilversum, which he had been working on since 1925, initially with his partner Bernard Bijvoet and, following their separation, with the engineer Jan Gerk Wiebenga. With respect to the research of Oud, focused on an increasingly more rigid classicism that soon led to the aridity of his own poetic, Duiker identified an approach toward a rationalism that was not insensitive toward the lesson of Wright, and which he filtered, adapting it to his own constructivist sensibilities, without inhibitions.

Ethereal and light, for its extensive use of glass and the slender exposed reinforced concrete structure, the parti is based on a symmetrical layout, with two wings represented by two pavilions opening toward its natural surroundings. Corresponding with this rigid geometry is the intelligent device of an asymmetrical entrance, that impedes an immediate reading of such a rigorous plan. Bridges, cantilevers and circular volumes give the building a metaphysical halo that stands out against within its luxurious natural context. The project is without a doubt the best work produced in the Netherlands during this period.

In 1930 Duiker repeated himself with the open air school in Cliostraat in Amsterdam. Disarmingly elegant, it is symmetrical along the diagonal to exalt the value of the right angle. The corner, perceived from the entrance to the complex, to avoid any form of monumentalism, is carved out by terraces and experienced as an overlapping of projecting planes.

Another leading figure of Dutch architecture was Willem Marinus Dudok. Highly impressed by Wright, influenced by Berlage, and to a certain degree, by the decomposition of De Stijl, he completed numerous buildings in Hilversum, where he was named municipal architect in 1927. His works include: the Nassau (1927-29) and Vondel (1927-29) schools. His best work is the Hilversum Town Hall (1923-1931). He demonstrated that it was possible to design an authentically modern architecture that lasts, with a monumental character and at the same time
that can be appreciated by democratic society, that dialogues with its surroundings and with historic constructions; an architecture characterised by ample spaces and fluid interconnections, that plays with details without slipping into decorativism. However, to be so rational and, at the same time, inside and outside its time, while receiving unanimous approval from everyone – Piacentini, for example, speaks highly of him in Architettura oggi from 1930 – in the end Dudok does not generate passion. He did not involve the traditionalists, who saw him as a modernist. He did not inflame the experimenters, who saw him as tied to a language from the early twentieth century. Contemporary architecture chose another path.

6.4 The Bauhaus: Act Two

The elections of the 10th of February 1924 saw the traditionalist and conservative right wing come to power in Thuringia. In March 1924 Gropius was informed of the possibility he would be fired by the Bauhaus. Soon after, funding to the school was cut in half.

On the 18th of May 1924, in occasion of the director’s fortieth birthday and the fifth anniversary of the school, the professors at the Bauhaus gifted Gropius a folder of drawings interpreting the theme of the gramophone playing to the masses from on high. It was a playful allusion to the role of the school’s director as the promoter of a new artistic credo, and also to the new mechanical devices invading the world. It was also a document of what and how many artistic positions reigned in Wiemar one year after Itten’s resignation. While László Moholy-Nagy interpreted the theme by applying a cold constructivist abstraction, Wasiliy Kandinsky adopted a musical approach, translating the sound of the gramophone into a symphony of lines and surfaces; George Muche transformed people into a joyous composition of coloured circles; Paul Klee used a hieroglyphic based on a modern symbology of the soul; Oscar Schlemmer designed a ballet of signs; Lyonel Feininger chose an allusive expressivity.

It is difficult to imagine a more qualified body of teachers. It would not be risky to state that the Bauhaus, together with the Vkhutemas in Moscow, was at the time the most advanced European school of applied arts. To save it, Gropius proposed that the government realise a limited liability company, rendering the school financially self-sufficient. To demonstrate the level of prestige achieved, he founded a committee of supporters, that included Albert Einstein. He gathered testimonials and positive comments from the press. His efforts proved futile. A move was inevitable.

Gropius and the council of teachers selected Dessau, also in the wake of the active interest expressed by its social democrat burgomaster Fritz Hesse, who began working to build a new home for the school and, at the same time, imagined
naming Gropius the designer of a district of low-cost residential buildings for local workers.

Gropius and his partner Adolf Meyer immediately committed themselves to the design of the school’s new home. It would be inaugurated on the 5th and 6th of December 1926, with a great party. The work, devoid of the stylistic hesitations observed in previous works, is characterised by the intelligent articulation of masses, a bare bones rationality, large windows allowed by a slender reinforced concrete structure, an abstract language, at the same time rigorously linked to the functions taking place inside the building (each volume features different openings, appropriate to the activities hosted). It marked, as Gropius himself noted, the end of the traditional typology of the palace: “The typical renaissance or baroque building presents a symmetrical façade and the path of entry leads toward its central axis. A building based on the spirit of today turns away from the prestigious appearance of the symmetrical façade. One has to walk around this building to grasp its corporeality and the function of its elements.” Sigfried Giedion, in his *Space, Time and Architecture* from 1941, highlights its innovation, without hesitating to compare it to the spatial sensibility of Cubism and the theme of the fourth dimension: “The glass curtain is simply folded about the corners of the building; in other words, the glass walls blend into each other at just the point where the human eye expects to encounter guaranteed support for the load of the building. Two major endeavours of modern architecture are fulfilled here. Picasso and not as unconscious outgrowths of advances in engineering but Gropius as the conscious realization of an artist’s intent; there is the hovering, vertical grouping of planes which satisfies our feeling for a relational space, and there is the extensive transparency that permits interior and exterior to be seen simultaneously, *en face* and *en profile*, like Picasso’s ‘*L’Arlesienne*’ of 1911-12: variety of levels of reference, or of points of reference, and simultaneity - the conception of space-time, in short.”

Doubtless, there is more than a little exaggeration in Giedion’s text. The appreciation of Rudolf Arnheim is more convincing. The great scholar of the psychology of form in 1927 observed the clarity and generosity of a work of architecture in which, he emphasised, it is possible to observe from the exterior people at work or enjoying a much deserved rest. A project in which each element reveals its inner structure, not a single screw is concealed from view, no chase, no matter how precious, hides the material for which it is made. “It is very tempting”, he concluded, “to see this architectural honesty as moral, too.”

Alongside the school were five homes for professors. They represent the advanced definition of new residential prototypes. For some they are the result of an objectivity typical of the machine for dwelling, cold and monotonous, characterised by a pleasant alternation of light and shadow. For others they were the sign of a
positive evolution of the hesitant model of dwelling proposed by the Am Horn presented at the exhibition hosted by the Bauhaus in 1923.

In 1297 Gropius instituted an architecture section. He wished to entrust it to Stam, who refused. For the inauguration of the Bauhaus the latter arrived with his friend Hannes Meyer, with whom he had shared the experience of ABC. Hannes Meyer was thus nominated coordinator of the new section, with the role of making it the driving force behind the school. Teaching was structured according to university standards, including a graduate diploma at the end of the course. The other curricula were also re-examined. A greater role was attributed to advertising techniques and the theatre section, managed by Oscar Schlemmer, the organiser and inventor of enchanting mechanical ballets, was expanded. Free courses in painting were announced, requested by Kandinsky and Klee for some time. Finally, optimum products were produced by workshops, including the tubular steel chairs designed by Breuer and objects by Marianne Brandt, and by the typography that also published the four-monthly review Bauhaus.

From the outset Hannes Meyer nurtured doubts about the structure of the Bauhaus. Despite having been purged of much of its mystical attitude, he found the school far from his own constructivist and functionalist ideal. Relations with Gropius grew difficult. For his part Gropius did not wish to reneg what had been achieved and began to look at Meyer as an adversary. Meyer saw Gropius as a formalist who, above all, utilised the Bauhaus to obtain personal benefits: “For approximately one year”, he wrote to Behne in December of 1927, “our architecture section is limited to theory and above all we must sit by while Gropius and his studio certainly have no shortage of professional commissions”. The school was in poor economic conditions and viewed with increasing distaste by authorities. Gropius, always quick to understand, averted that the die had been cast for the Bauhaus. Overloaded with professional work, between January and February 1928 he resigned, passing the baton to Hannes Meyer.

6.5 Neutra, Schindler, Wright and Mendelsohn

Between 1921 and 1922 Richard Neutra was at work in Mendelsohn’s office. Together they designed the rooftop addition to the headquarters of the Berliner Tageblatt in Berlin. The new construction, based on its own rhythms, was a violent overlap of the existing. In 1923 Neutra decided to try his hand in America, home for some time to his friend Schindler, with whom he kept in touch via mail. In July 1924, together with his wife Dione, he travelled to Taliesin to meet Wright. Impressed by the Austrian, Wright invited him to work in his office. Neutra returned in October and stayed until February.
In November Mendelsohn also found himself in Taliesin, travelling to write a book on America, commissioned by the owner of the *Berliner Tageblatt* (the book was released in 1926 under the title *Amerika, Bilderbuch eines Architekten*, and published by Mosse). The encounter with the master – now fifty-seven – left a profound mark. He would write: “No one even comes close to his genius”.

Back in Europe, Mendelsohn embarked on a new period of creativity. Stand outs include the Schocken department store in Stuttgart (1926-28), characterised by a glass cylinder that transformed the intersection of two streets into an urban landmark, and the Woga complex in Kufürstendamm, Berlin (1926-28), a residential district with integrated recreational and commercial activities and home to the Universum cinema whose entrance was marked by the encounter between a curve, a tall prism and a sign.

In March of 1925, Neutra left Wright to join Schindler in Los Angeles. Together with his wife and son they took up residence in Kings Road.

By this time Schindler had managed to construct a solid notoriety as a designer of single-family homes, such as the Packard House in Pasadena from 1924 and the La Jolla vacation house from 1923-25. In 1925 he was working on the house of doctor Philip M. Lovell, a renowned physician with whom he shared a love of outdoor living, sun, light, air and hygiene. The project would mark a definitive break from Wright’s formal exuberance, at the time oriented toward sculptural effects and a strong sense of material. As well as a renunciation of the volumetric simplification pursued by the rigorist faction of the Modern Movement. Schindler, instead, opted for a complex volumetric construction of trays, separated, horizontally, by bands of glass and, vertically, by shaped columns.

In 1926 Neutra and Schindler decided to open an office together. They participated in the competition for the new home of the League of Nations (1926). However, the partnership did not last long, what is more because in 1927 Neutra, exploiting some misunderstanding between Schindler and his clients, stole the commission for the design of a city home for the Lovells (there were other underhanded moves: in Europe Neutra presented the project for the League of Nations solely under his name).

The Lovell Health House, completed in 1929, marked Neutra’s debut in the American professional environment. It was constructed from a steel frame, finished in a syntehetic material. It summarised the themes of spatial freedom pursued by Wrigth and the formal rigour of Mies van der Rohe. It was the first of many such homes, all perfect, some enchanting – for example the Kauffmann Desert House from 1947 –, though all in the same style.

The period between 1924 and 1927 was not one of the best for Wright. Sullivan died in March of 1924. This was the second important death after that of his mother, the year before. The same year his marriage to Miriam Noel, celebrated
only twelve months earlier, was on the rocks. He began a passionate relationship with the Yugoslavian Olgivanna Lazovich, more than thirty years his junior. Also in 1924 fire destroyed Taliesin for the second time. Unbeaten, Wright set himself to rebuilding it, despite the fact that his earnings had been severely reduced by a lack of commissions. He recounts: “I saved many stones that had not been too badly damaged and with the fragments singed by the fire I rebuilt new walls”. In 1925 he filed for divorce from Miriam Noel. In December Olgivanna gave Wright a son. In August Wright was forced to hide away with his mistress and child and was even arrested, even if only for one day. To survive he put his collection of Japanese prints up for auction. In August he officially divorced Miriam Noel. In January of the following year Taliesin was officially seized and in July sold to the Bank of Wisconsin.

In 1928, a practically unemployed Wright wrote for a series of nine essays for The Architectural Record, in which he defined his working philosophy: he referred to the design of the plan, to the question of style, to the meaning of materials. Salvation came from San Marcos in the Desert, in Arizona, where he was asked to design a hotel. The relationship with the desert recharged him and gave him the strength to face up to adversity. He would say: “There could be nothing more inspiring to an architect on this earth than (this) spot. This desert resort I meant to embody all worthwhile I had learned about a natural architecture”. To design the project in 1929 he set up a camp of huts, recreating a wood frame Taliesin in Arizona. “Out here in these great spaces, obvious symmetry claims too much, I find, wearies the eye too soon and stultifies the imagination. [...] So for me I felt there could be no obvious symmetry in any building in this great desert, none especially in this new camp – we later named the place Ocatillo.”

With Olgivanna, who proved an energetic and resolute woman, they defined a strategy for starting over. It consisted in transforming the office into a limited company and starting a school with resident apprentices. It would serve to create the nucleus necessary to spread Wright’s works and ideas; to acquire financial support from tuition fees; to acquire labour to produce complex and otherwise costly projects, such as the plan for the ideal city of Broadacre (1932) and, thanks to the physical efforts of the apprentices, to rebuild Taliesin, given a new lease on life.

6.6 The Architectural Zoo: The Weissenhofsiedlung

The staggering public success of the Weissenhofsiedlung was almost immediate. The exhibition, which ran from July to October 1927, was visited by more than half a million people.
It consisted of 63 units in 21 buildings, designed by a total of 16 architects. Eleven Germans: Mies van der Rohe, Peter Behrens, Richard Döcker, Walter Gropius, Ludwig Hilberseimer, Hans Poelzig, Adolf Rading, Hans Scharoun, Adolf G. Schneck, Bruno Taut and Max Taut. Five foreigners: Le Corbusier (France-Switzerland), Mart Stam (The Netherlands), Josef Frank (Austria), Jacobus Johannes Oud (The Netherlands), Victor Bourgeois (Belgium).

Four people were missing, whose absence was raised with embarrassment by Werner Gräff in the introduction to *Bau und Wohnung*, one of the books printed by the Werkbund to celebrate the exhibition. They were: Adolf Loos, Hugo Häring, Heinrich Tessenow and Erich Mendelsohn.

I have already spoken of the controversy between Mies and Häring that saw the latter alienated from the experience of the Weissenhof and, almost immediately after, Mies’ departure from Der Ring. We have seen how Loos was excluded from the outset. Mendelsohn we know was not on great terms with Mies: van der Rohe saw in him an intolerable romantic sprit, while the former truly detested the arid frigidity of the latter’s compositions.

Another important figure missing was Theo van Doesburg, perhaps viewed with suspicion for his difficult and self-centred character, or perhaps for his tense relations with Gropius, in the wake of the competition he had organised a few years earlier at the Bauhaus. Despite being van Doesburg was in favour of the exhibition, applauding and defending it against numerous detractors, who understood that the Weissenhof was more than a simple project like so many others. It was an emblematic project, through with an entire movement, which had now assumed an international dimension, sought legitimate recognition. Criticism was aimed at its similarity to a Mediterranean village, to the frigidity of a composition resolved in a few simple geometric forms, to the impracticality of flat roofs, to the poverty of decoration and architectural detailing. For their part, its fans did not hesitate to speak of the Weissenhof in enthusiastic terms. Walter Behrendt, for example, declared the victory of the new style (*Der Sieg des neuen Baustils*) in a book on contemporary architecture published in 1927, with a cover photograph dedicated to the project in Stuttgart. There were even more articulated opinions: Muthesius, for example, positively evaluated the experience as an experiment, noting however that the proposed solutions revealed a new formalism to which any rational consideration was subordinated.

Truth be told, there was no shortage of shortcomings during the phase of construction and, with the exception of the truly disappointing project by Gropius, the Weissenhof adopted no new building techniques or prefabrication. There is a waste of space and the homes ended up costing some 30% more than these produced by normal residential construction. Rental fees were excessive and out of reach to the working class, in theory the intended target of the entire exercise.
Two rooms in a house by Mies van der Rohe cost 900 Deutschemarks, in the single-family dwelling by Le Corbusier 5,000, a townhouse by Oud 1,800, with an average of 3,000 Deutschemarks for the remaining single-family homes. Despite the problems, the Weissenhof demonstrates the existence within the Modern Movement of a plurality of lines of research. Five stand out among the rest.
The first is the of Mies van der Rohe. His townhouse, so essential on the exterior that it flirts with banality, is highly flexible on the inside, almost a neutral space that can be varied in relation to the tastes of its inhabitants and change functions throughout the day. It is not difficult to see the spatial research already pursued in the glass skyscraper from 1921 and the concrete office tower from 1923, which progressively and inevitably led Mies toward the philosophy of the almost nothing, the dematerialisation of space and toward fluidity, initially in the Tugendhat house (1928-1930) and the Barcelona Pavilion (1929), and later in the Farnsworth House (1945-1950).
The second line of research is that of Le Corbusier. The two buildings by the French-Swiss architect propose the five points for a new architecture already partially tested from the Maison Domino in 1914, to the L’Esprit Nouveau Pavilion at the Paris Exposition of 1925, and now explicitly applied and described for the first time. They are: pilotis, the roof garden, the free plan, the strip window and the free façade. They were born of a reflection on the possibilities offered by reinforced concrete, translated into a poetic. The attitude of Le Corbusier, despite being filtered through the hands of a true genius, remains one of rules and regulations.
The third approach can be found in the pragmatism of Oud. His townhouses are a masterpiece of intelligent space management, the elimination of any excess and the correct organisation of the plurality of functions that occur inside the home. The descriptive report presented by Oud is accurate to the point of nit-picking: forms, functions, activities and materials are all examined in-depth. Oud was too attentive toward the concreteness of building to venture off into four-dimensional decomposition. All the same, the influence of his time with De Stijl can be found in the anxiety over spatial articulation that becomes concrete in the slight shift in the position of the individual homes and the differentiation of the annexed volumes at the back, lower than the rest of the construction thanks to the lower ceiling heights inside. The impeccable design of the stair serving the various levels determines, in turn, and without additional costs, a spatial sequence as pleasurable as it is ingenious.
The fourth approach is the political-social stance adopted by Stam. This very young Dutch architect (in 1927 he was twenty-eight) felt it useless for architecture to pursue form. The house, instead, is an object that must change in relation to
new attitudes and new economic possibilities. Laundry basins disappeared in favour of less cumbersome appliances, cellars disappeared because knick-knacks were to be thrown away; domestic chores and their required spaces disappeared because they were to be mechanised or performed in common areas. Behind the research proposed by Stam it is not difficult to catch a glimpse of the studies of the common dwelling and collective living being tested in the Soviet Union at the time. Stam, fully coherent with his assumptions, travelled to Russia in 1930 with Ernst May’s “brigade”, however, after developing the plan for Magnitogorsk, was quickly deluded when he discovered that traditional lifestyles and the forms associated with them were much more resilient than Constructivist ideology would have it.

The fifth approach was expressive. It was realised by Scharoun in the form of a colourful house, articulated in its internal layout and external volumes. The house, he declared, was born of the pleasure in playing with new materials and new spatial requirements. Were are far from the laconic quality of Mies, the prescriptive formalism of Le Corbusier, the refined good sense of Oud and the political commitment of Stam. The objective was not repetitive standardisation, nor the creation of an artificial and machinist landscape, but the desire to favour a process of evolution in harmony with life. The observer, Scharoun added, will find nothing that has been overly typified. There is a search for the individual, for the union between interior and exterior, for the possibility to spend time with others or seek a private space the living room. Scharoun was close to the philosophy of Häring and, together with Mendelsohn, was one of the most talented architects and precisely for this reason unjustly forgotten, as his expressionist tendencies did not fit well with the story being told by contemporary architecture after the 1930s, in the wake of the International Style exhibition. Yet his home at the Weissenhof is without a doubt one of the most successful of the entire Siedlung, and the Schminke house he realised in Löbau in 1933 is an unparalleled synthesis of the lightness of rationalism and the sinuosity of organic architecture. Both prefigured an original and highly fecund line of research that would lead to the realisation of the Berlin Philharmonic, one of the most important buildings realised in Berlin at the end of the 1950s/beginning of the 1960s.

In addition to the five lines of research outlined above, there is a host of others, all very interesting. Including that of Behrens, stylistically out of date, who however presented a project for a house with terraces that responded to the new requirements of health and hygiene, and by Bruno Taut, as always problematic, concrete, intelligent though not very talented in figurative terms. The affectionate and simultaneously mocking definition of the Weissenhof as a “zoo of contemporary architecture” is in reality not unfounded. However, it ignores
another opposing truth: in Stuttgart a large group of architects of various nationalities produced diverse solutions within a unique programme of research. When in 1927 Walter Curt Behrendt, what is more in the wake of the success of the Weissenhof, in his book *Der Sieg des neuen Baustils* asked whether the spirit of the times was not generating a new style, responding in the affirmative, while admitting that there remained a notable plurality of points of view, he captured the heart of the question, but misinterpreted it. The richness of modernism is precisely this plurality, and attempting – as Behrendt himself to a certain degree hoped, and as would occur in the future under the pressure of such figures as Sigfried Giedion and Philip Johnson – to reduce it to a unique stylistic common denominator is poses a threat to the vitality of the movement itself.

### 6.7 The Italians at the Weissenhof

The year 1926 saw the constitution in Italy of the Gruppo 7. It was formed by: Ubaldo Castagnoli (replaced in 1927 by Adalberto Libera), Luigi Figini, Guido Frette, Sebastiano Larco, Gino Pollini, Carlo Enrico Rava and Giuseppe Terragni. They wrote a series of articles for *La Rassegna Italian*, published between December and May of 1927. They called for a new spirit, a renewal of the arts, an architecture adherent to logic, attentive toward functions and in harmony with the world of industry. The programmatic declarations of the Gruppo 7 were far from radical. More often than not they laid claim to the role of tradition, emphasising that they wished to move in continuity rather than opposition to the past, that the underlying values of composition are not to be called into question. They criticised artificial leanings, the destructive fury of Futurism, the recognition of a new tradition, from Gropius to Le Corbusier, the union between new architecture and the classical tradition of the Greeks and Romans, the proposition to maintain national characteristics.

This theoretical pastiche is to be attributed to the very young age of those proposing it, all in their early twenties (Terragni was twenty-two and had just graduated). Besides, as pointed out – justly though with an undoubtedly ungenerous mention of Ponti – by Carlo Belli: “It was the time when Piacentini was designing the *Tempio Votivo Internazionale per la Pace* in the style of Bramante; Muzio was triumphing with is frigid and entirely external neo-classicism; Gio Ponti began to invent his famous poor taste in furnishings; and Portaluppi erected power stations in the Val d’Ossola in the style of Birmanian temples. I do not even wish to mention here those architects who, strictly, are not part of the history of architecture, such as Bazzani, Brasini, Calza Bini, unless to remember that they wielded a great deal of power at the time. If not for those seven young men from Milan, surrounded and supported by a few friends who were painters, writers and
sculptors [...] Italian architecture would have joined the European movement of renewal with an even greater delay than it already suffered”.

Despite the weakness of the theoretical assumptions – stigmatized later also by Persico who, not without reason, spoke of a parlour room avant-garde – the seven participated in the third Biennale in Monza where they gained attention and, in the wake of the interest of Roberto Papini, at the exhibition held in occasion of the Weissenhofsiedlung.

In 1927 Adalberto Libera, returning from the exhibition Die Wohnung in Germany, joined the Gruppo 7, replacing Castagnoli. The same year he organised the first Italian Exhibition of Rational Architecture at the Palazzo delle Esposizioni in Rome. The show ran from the 15th March to the 30th April 1928. Approximately one hundred projects were presented, by forty-three exhibitors. In addition to the Gruppo 7 they included: Mario Ridolfi, Gino Capponi, Alberto Sartoris, Giuseppe Bottoni and Luciano Baldessarri. The list also included a number of architects it would be difficult to refer to as modern today, such as Alberto Calza Bini, head of the Sindacato Architetti.

With the 1928 exhibition Rome inaugurated the heroic era of modern architecture in Italy. Sartoris, close to the Gruppo 7, participated in the first CIAM. New magazines were born: La Casa Bella, directed by Guido Marangoni (later replaced by Giuseppe Pagano – from 1931 – and Edoardo Persico – co-director from 1933 – transforming it into the most important European architectural review) and Domus directed by Gio Ponti. The Novocomum was completed in 1928 by the most talented of the rationalist architects: Giuseppe Terragni.

6.8 Wittgenstein House

Margaret Stonborough Wittgenstein, who commissioned Loos’ disciple Paul Engelmann to design her house, decided in 1926 to involve her brother Ludwig in the construction, taking advantage of his inclination toward architecture.

In a short Wittgenstein had alienated Engelmann, taking over complete control of the project. He made very few modifications to his friend’s early project: the arrangement of the volumes remained almost unvaried, if we exclude the small volume added to the entrance; the elevations saw only minor adjustments to the dimensions of the windows and their positions; the interior layout was left as it was, with the exception of imperceptible shifts in interior partition walls.

Yet the young philosopher dedicated immense energy and enormous attention to the house, confessing that, after a day on site, he was tapped. Each question, even the most banal, required an extenuating level of attention. To a metal worker who questioned the importance of a millimetre, he responded in his frightening voice that even a half-millimetre was important. To decide on the height of a
railing he obliged a workman to hold the piece in position for hours in order that he could verify it was truly the correct position. The window profiles are so thin that only one of the many companies approached was capable of building them. Wittgenstein’s exasperated attention toward the most minute questions of detail is an important key to understanding the project. In a book entitled *Ludwig Wittgenstein, Architect*, Paul Wijdeveld, attributes this to the philosopher’s classical taste: “The house”, he claims, “must be associated with the classical tendencies recurring throughout the history of architecture. Common to them is the moderation of articulation and ornament, guided by the absolute rule of beauty, to which the system of proportions is of fundamental importance”. The thesis is not very convincing. In Wittgenstein’s work, contrary to what Wijdeveld himself honestly recognises, there is no application of any precise system of proportions. The proportions sought by commentators have approximations in the range of five or more percent; they are thus too imprecise to have been the work of someone eternally dissatisfied and who never for a moment hesitated when construction was almost complete, to demolish the living room floor and have it raised by three centimetres and on the day the windows and doors were installed forced the poor Marguerite Respinger, interested more in the architect than architecture, to spend hours opening and closing them to verify they were perfectly plumb. The thesis is also not convincing because Wittgenstein employed a great deal of his energies to rupturing symmetries (for example, by eliminating one of the two niches in the library), breaking up alignments (by offsetting the front door and the windows above it), differentiating and disarticulating the parts (he created different windows for each façade).

For Wittgenstein, as we have seen, each classical conception was to steeped in connotative values and metaphysical references. Though he appreciated his work of reduction, he was critical of Loos, who filled his architecture with eternal values, based on the intuition that the simplicity and nude proportions of modern architecture concealed an even more horrendous crime than that identified by Loos in ornament. These homes, he would state in opposition of the exhibition of the Wiener Werkbund in 1932, look at you and say “Look how graceful I am”. This led to the philosopher’s aversion to traditional space, charged with tactile, expressive and symbolic values, and a preference for the neutral, the transparent, and all that did not interfere with the single objects that structured it and the people that inhabited it. “My ideal is a certain degree of coldness. A temple to house passions without interfering with them.”

If we substitute the term “architectural object” with the word “fact” and the term “space” with the word “logic”, we end up with the philosophy of the *Tractatus*: facts, like architectural objects, must be stripped of any subjective connotation and reduced to their simple denotative value; while logic, like architectural space,
must become a transparent building that hosts these facts, composing them, though without altering or modifying them.

This rigorously scientific construction can be seen as the spatialisation of the mystic of the *Tractatus*, the point of arrival of an aesthetic vision; transparency is not only the maximum effort to conceptualise what can be spoken, but also the only window through which it is possible to glimpse the unspeakable: “I am not interested”, Wittgenstein stated, “in constructing a building, so much as in having a perspicuous view of the foundations of possible buildings”, in other words, the structure of the world (of my world). The house is thus a sort of model of the interior world.

In a study from 1973, Bernhard Leitner brilliantly captured the simultaneously mystic and anti-classical character of a work of architecture conceived in this manner: “In the end the building becomes de-personalised and anonymous, grand architecture. Clarity is not obscured by function. Austerity is not based on modular units. Simplicity is not the result of the mere renunciation of ornament. It is impossible to find dogmas or formal assumptions or details to be imitated. Instead we encounter a philosophy”. It is limited to “placing everything before us, it does not explain and it concludes nothing. From the moment that everything is placed in the light, there is nothing left to explain.”

Later, with is philosophical research, Wittgenstein became aware of just how much metaphysics is concealed behind this anorexic aesthetic of silence, of absence, of transparency. It was explained to him by the economist Sraffa, who instead demonstrated the linguistic richness of a typical gesture of the inhabitants of Naples. Wittgenstein then developed the theory of linguistic games and in his notes, published posthumously, he did not forget architecture, comparing the rediscovered complexity of language to the slow layering of the city.

### 6.9 The Bauhaus: Act Three

Hannes Meyer, the new director of the Bauhaus, was an energetic and generous figure, though sectarian to a fault, as it was possible to be such during a harsh period marked by idealism, wars, revolutions and dictatorships. His objective was to change the entire pedagogical foundation of the institution, to open a school up to the less fortunate, to render it productive, with the absolute priority of teaching based on sociology, economics and psychology.

A lover of sport for its social value, he abolished Saturday lessons to make room for physical activities. “Sport”, he wrote in article published in *ABC* in 1926, “is about to become the university of collective sentiment.”

He fought against any form of idealism to direct students toward what could be measured, seen and weighed. For Meyer architecture was attentive toward the organisation of ways of dwelling, and building was a social endeavour. He also
attempted to change the teaching staff. In November of 1929 he wrote to J.J. Oud, Willi Baumeister, Karel Teige and Piet Zwaart to invite them to teach in Dessau. He involved the school in a number of professional commissions. The most important was the school of the German Trade Union School in Bernau, a masterpiece of simplicity and functionality designed and built with Wittwer between 1928 and 1930, with students responsible for all of the furnishings. In 1928 the school was working on the extension of Törten. There were also the model kitchens for the Reichsforschungsgesellschaft, the German Society for Scientific Research, and the Volkswohnung, a public housing project that tested a sofa, designed by Albers, comprised of modules and realised in shaped plywood. Meyer introduced a photography section, added at the beginning of 1929, under the guidance of Walter Peterhans. He increased the workshops, whose activities were henceforth founded on criteria of maximum profit, administrative autonomy and productive pedagogy. He instituted relations with the world of industry: in 1928 some of the well-known light fixtures from the Bauhaus were fabricated by Körting and Matthiesen and agreements were signed with Rasch for the design of wallpaper. Numerous products, with characteristics of economy, simplicity and formal purity, were exhibited during the 1929 show Ten Years of the Bauhaus, that successfully travelled to Basel, Zurich, Dessau, Essen, Wroclaw and Mannheim. Architecture students were grouped together in cooperation cells for the design and realisation of their projects. They included vertical brigades composed of students from the first and final years. “My architecture students”, Meyer controversially proclaimed, “will never become architects. [...] Architecture is dead.” The Bauhaus grew political. The first communist cell was formed in 1927; it reached thirty-six member by 1930. Authorities grew increasingly suspicious of the school, now labelled a cove of subversives. Meyer was summoned by the mayor to provide explanations and clarifications, despite having dissolved the communist group to respect his commitments. It was futile. Meyer reiterated his own Marxist beliefs. Fanning the flames were the other professors, such as Kandinsky and Albers, who were suspicious of and concerned about the new curriculum. Gropius, who kept an eye on events from a distance, intervened against Meyer also for a sense of resentment about the less than flattering opinions of his time as director, and asusations that he was once inconclusively expressionist and later inconclusively formalist. On the 1 August 1930, the mayor of Hesse fired Meyer who, out of spite, submitted his resignation. Gropius, as Magdalena Droste pointed out, “even toward the end of his life was concerned with redimensioning and mystifying Meyer’s contribution to the story of the Bauhaus.”
6.10 Le Corbusier, Mies and the “Sprit of the Times”

In 1927, Le Corbusier was at work on a villa in Garches. The building, while not yet fully applying the five points theorized for the exhibition in Weissenhof, was based, as the studies of Colin Rowe have shown, on a grid of structural bays and a system of proportions that recalls the villas of Palladio. The objective, as Corbusier himself affirmed, was to realise “a constant scale, a rhythm, a cadence of pauses.” The exterior is a compact prism, with elegant long strip windows. The recesses and slightly projecting volumes attack the compactness of the planes of the elevation. They allude to a deep succession and linking of spaces and functions that, again according to Rowe, can be read in transparency, so long as one intends this term conceptually rather than physically. Inside, sculptural works, including a nude by Matisse, were placed in strategic points by the Steins to emphasise the continuity of circulation.

There was also the Ville Savoye, begun in 1929 and completed in 1931. A diagrammatic sketch by Le Corbusier summarises the method of composition: a pure volume carved out to the point that the articulation of the parts does not compromise the unity of the whole. This is the fourth phase in the evolutionary process that began with the Maison La Roche, whose volumes were simply placed alongside one another, clarified in the villa in Garches, dominated by the simplicity of the prism, further synthesized in the house in Weissenhof, where the unity of form and fragmentation of the parts coexist with the first prevailing over the second, ending, as mentioned, with the Ville Savoye, in the subordination of variety to unity.

The most striking thing about the construction, form a typological point of view a patio house on pilotis and in formal terms the concrete demonstration of the integral application of the five points, is its relationship with nature. This occurs through openings in the walls of the terrace-patio that frame the landscape and transform it into a simple panorama. Even the geometric forms of the villa have a limited dialogue, even metaphorical, with the site. The ideal to which Le Corbusier refers is the Greek temple – the UFO that drops from the sky – not the house of Wright, that extends into nature and embraces it.

If relations with the site are conceptually excluded, there is maximum aperture toward the sky and the sun. The solarium – the culmination of the promenade architecturale that unfolds along a continuous system of ramps and paths that leads from the entrance to the roof – is the plastic crowning that is differentiated from the solid prism of the intermediate level and the slender pilots of the ground floor. This progression from top to bottom can be summarised as: void space, solid volume, free form.
Mies shared with Le Corbusier the idea that architecture moves beyond pure functionalism, which represents the conditions of the spirit of the times. However, while the Swiss-French architect focused on the intelligent play of volumes, on excavations that exalt chiaroscuro effects, arriving at the final result through a substantially additive process, the German sought form through elimination, through a method of subtraction, precisely like a scientist, convinced of having achieved his objective the more he manages to invent shorter and more general formulas. In architecture, brevity corresponds with the lesser use of material, with lightness; generality corresponds with the capacity of a building to perform the greatest number of functions. The ideal of Mies was thus unlimited flexible space. If the ideal formula of a scientist tends toward zero brevity, silence that says all, the ideal formula pursued by Mies aspired to zero lightness, to a nothingness that embraces everything.

This gave us the proverbial slowness, the days upon days dedicated to studying the most minimal details, the intolerance toward those who each day wished to identify a new formula, the incapacity to teach, to give value to the creativity of students, a character that mixed bashfulness with arrogance.

Having concluded the Weissenhof experience in 1927, where he investigated the theme of the flexibility of the home, assigning others with the furnishing of the houses, Mies left Stuttgart to return working full time in Berlin. From July 1928 we was at work on the German pavilion for the Barcelona International Exposition. It was inaugurated by the Spanish Royal Family on the 26th of May 1929.

The Pavilion was anything but a simple object. It is the encounter of at least three diverse ways of intending architecture: the neoplasticism of De Stijl, the new objectivity seen through the eyes of Berlin, the neoclassicism of Schinkel oriented toward monumentality and Greek proportions. As often occurred when men of genius produce hybrids – and this almost never occurs for purer works of language and composition – the result is a masterpiece.

The neoplasticism of De Stijl can be found in the decomposition of the planes. There is however a greater fluidity of space, an almost theatrical sense of circulation that recalls the works of Wright. In fact, like the Prairie Houses, the Pavilion is not entered frontally; visitors are forced to follow a path made of sudden and sharp changes in direction: toward the water, toward the statue, toward the secondary volume. The planes are connected to one another according to a logic of connections that is without inspired by Wright. The latter greatly admired the pavilion, even if he could not stand the cruciform columns present together with the planes. “Some day”, he said, “let’s persuade Mies to get rid of those damned little steel posts that look so dangerous and interfering in his lovely designs.”
The “posts”, together with the glass sheets, with differing levels of transparency, belong to the second stylistic aspect, a constructivist aesthetic, though developed in a personal way, and tending toward the dematerialisation of the building. This game is exalted by the insertion of the reflecting pools, by the levity of the planes and the use of cold and honed materials. There is also a classical component, almost Loosian in its influences. As dynamic as it is on the interior, the exterior of the pavilion is presented as an object whose weights have been calibrated with extreme care, almost monumental in the tripartite division of the base, volume and roof. Robin Evans, in “Mies van der Rohe’s Paradoxical Symmetries”, perhaps the most acute and intelligent article ever written about this project, noted that there is an effect of symmetry, not in plan, but with respect to the horizontal plane, which renders its perception unsettling, as if within a homogenous and absolute condition of spatiality, devoid of concrete points of reference. If we then add the sense of eternity and perennial nature of stone, the effects of light, as in the spectacular idea to light the sculpture by Georg Kolbe from above, then this ephemeral object – that would only stand for a few months and whose materials would be sold what is more due to the economic crisis – it resembles a timeless monument (one of the reasons it was rebuilt in 1986).

Mies received the commission for the Tugendhat House toward the end of 1928, while he was working on the Barcelona Pavilion. The house completed in late 1930. The strategy was different. The use of planes was significantly redimensioned. They were limited to two: a curve defining the dining room and a straight line dividing the studio from the parlour. Outside the house presents two faces: closure toward the street, and an ideal openness toward the garden thanks to a twenty-four meter long glass wall, subdivided into sliding panels of approximately four and a half meters, alternating with fixed elements. Furnished in collaboration with Lilly Reich – who assisted him with interior design since Weissenhof – the Tugendhat house was designed down to the smallest detail: tubular steel chairs designed by Mies, white linoleum paving that mirrors the ceiling, natural wool carpets, raw silk curtains, ebony wood for the curved wall, onyx for the living room divider, steel for the small columns. There is no possibility to hang a painting, find space for any additional object, or alter the layout of the furnishings, whose position was calculated down to the millimetre. The house is cold, and stripped of any domestic value. Die Form dedicated an article to the house entitled “Is it possible to live in the Tugendhat House?”. The theory advanced by the author, Justus Bier, is that the construction is without a doubt a work of art, but lacks any space for dining, sleeping, or living a free life. Mrs Tugendhat came forward to defend Mies and to claim that the house was fine for her and her husband. The question, as it is easy to imagine, is of a more general nature: it approaches the growing tendency of the avant-garde to conceive
architecture in exclusively figurative terms – and thus photographic, cinematographic, but not existential.

6.11 Soviet Synthesis

In 1925 OSA, the Association of Contemporary Architects, was formed. Members included Moisei Ginzburg, the Vesnin brothers - Aleksandr, Viktor and Leonid – Nikolai Kolly, Ilya Golosov and Ivan Leonidov, without doubt the most talented. Leningrad members included: Beldovskij, Galperin, Oll; in Kharkiv: Malosëmov, Steijnberg; in Kiev: Holostenko. One of the first moves was the funding of the review *Sovremennaya Arkhitektura*, (Contemporary Architecture), directed by Aleksandr Vesnin and Moisei Ginzburg. The review, released until 1931, published essays and projects by Victor Bourgeois, Walter Gropius, Hannes Meyer, Mies van der Rohe, André Lurçat, Robert Mallet-Stevens and Hans Wittwer. A great deal of space was dedicated to Le Corbusier, in contact with Ginzburg, who was a known admirer.

Unlike the other avant-garde groups that preceded it, OSA was a cultural association rooted in professional practice. It united architects, technicians, intellectuals and critics, interested not in abstract discussion, but proposing the objective of defining and developing the general principles of architecture for a socialist society, explaining it to the public powers and contrasting those who longed for a return to tradition. *Sovremennaya Arkhitektura* did not hesitate to become involved in battles of principle, attacking wastes of public money used to build inconclusively celebratory constructions. The review also dealt with the technical issues faced by the world of form, including, for example, an investigation of flat roofs, with opinions by Taut, Behrens, Oud and Le Corbusier, or the appropriate form for new collective housing, the *domkommuna*, which served to launch the competition on this theme, of particular importance, given the scarcity of housing throughout the country.

In April 1928 Moscow hosted the first OSA conference. The final document stigmatized five evils: the ignorance of architecture, unprincipled eclecticism, the abstract search for new forms, naïve ingenuity, works that appeared modern but left the old logics of construction unaltered. The proposal was advanced to pursue three materialist and constructivist objectives: the creation of new typologies that satisfy social life, the quality of construction and the interrelation between parts. Ginzburg, in coherence with these premises, designed and constructed the Narkomfin building between 1928 and 1929, a linear building whose functional programme clearly expresses the new competition of the dwelling: small living cells based on the logic of existenz minimum, and an abundance of social spaces, such as a collective kitchen, laundry and reading rooms. A machine for living *a la*
Corbusier, it borrows from the Swiss-French master the composition of pure volumes, strip windows, the roof garden and the pilotis ground floor.

Ginzburg – unable to participate in the first CIAM congress in La Sarraz when Swiss authorities refused to issue a visa to him and El Lissitzky – was nominated together with Nikolai Kolly the CIAM delegate representing the Soviet Union at the second conference in Frankfurt that, as we will see, dealt precisely with the them of the existenz minimum. Kolly was involved by Le Corbusier in the realisation of the Tsentrosoyuz Building in Moscow, a commission obtained thanks to the support of OSA that, however, due to bureaucratic obstacles and difficulties during construction, was poorly built. (After an idyllic start, relations between Le Corbusier and Russia grew difficult. He clashed with Ginzburg in 1930 when he wrote *Comments on Urbanisation in Moscow and the Green City*, a test in which he attacked the theses of the Soviet disurbanists in the favour of a greater urban density and proposed, in alternative, the project for the Ville Radieuse. The following year he lost the competition for the Palace of the Soviet, for which he created a monumental composition notwithout constructivist overtones).

The most talented architect operating in Russia during this period was Ivan Leonidov. He studied at the Vkhutemas in the atelier run by Aleksandr Vesnin. He pursued an original poetic that refused to be enchanted by purist classicism or the frigid rigour of the rationalists. His graduate thesis for the Lenin Library from 1927 is a suprematist composition of elementary volumes: a miracle of balanced masses, rendered transparent and ephemeral by the use of new materials, attached to the ground or suspended in the air by slender cables. In 1930 for a sports complex in Moscow he proposed a dome of triangular steel and glass trusses and, for the playing fields, a pyramid made form the same materials. The project prefigured the geodetic domes of Buckminster Fuller, though transposed onto a canvas by Malevich. It also prefigured a new lifestyle in which education and recreation were part of a unified process. He was assailed by the violent criticisms of the pro-Stalin group Vopra, the pan-Russian association of proletarian architects, who accused him of inconclusive idealism. Also in 1930 is the project submitted to the competition for the new linear city of Magnitogorsk in the eastern Urals. The plan recalls the coeval canvases of Kandinsky and Klee. The project, together with that by Ginzburg and the architects of OSA, was judged unrealistic and rejected. The commission was awarded to the more trustworthy Ernst May, who had relocated to Russia together with his brigade of German architects.

Lost in a universe of pure spatial values, Leonidov built practically nothing for his entire career. He limited himself to designing enchanting projects in which the confine between art and architecture grew increasingly more tenuous and a legacy of forms and spatial inventions that to this day awaits further study.
6.12 The CIAM

The CIAM, Congrès Internationaux d'Architecture Moderne, were created to propagandize new ideas, to establish a unified cultural and aesthetic approach for the avant-garde movements, and to have an effect on the social and political context.

A need for propaganda: after the Weissenhof, the protagonists of the Modern Movement felt the existence of public interest, but that curiosity, in the absence of tools for its comprehension, could turn to hostility. A hostility whose flames were fanned above all by the academic world: this was demonstrated during the competition for the Palace of the League of Nations, when the project by Le Corbusier, a step away from victory, was disqualified with the pretext of a technical formality relative to the submission of the drawings. The Swiss-French architect, supported by the young historian and critic Sigfried Giedion, initiated an international protest campaign. They soon learned it was not enough: the Modern Movement needed to coagulate in the form of an international organisation that could function as a tool for spreading ideas and initiatives.

The cultural line: Mies, Giedion, Le Corbusier and Oud felt that the avant-garde presented too many deferent faces, running the risk of characterising the entire Movement as a confused jumble. Mies did not hesitate to propose excluding expressionist tendencies and undertake what he referred to as a “purification”, to arrive at a common style, and a more homogenous formal language. This is the backdrop to his resignation from Der Ring. Giedion, for his part, hoped for an ideal purist-constructivist architecture, embodied by Gropius, Mies, Le Corbusier, Oud, van Eesteren, Stam and Schmidt.

The political line: the common conviction of the architects of the Modern Movement was that the new architecture presupposed an entirely different city, constructed atop a rational foundation, that only an internationally structured movement could authoritatively propose to the politicians governing the world’s nations. However, this generated a clash between two different cultural lines. The reformists, including Le Corbusier, Gropius and Mies, believed that these changes descended to a certain degree from practical ideologies. At the time, Le Corbusier was collaborating with the Communist regime in the Soviet Union while at the same time entertaining relations with the reactionary and technocratic right-wing, to whom he showed sympathy. Mies attempted to work with the Nazis, in 1933 joining the Reichskulturkammer of Joseph Goebbels. For their part, the Communists – the Swiss of the ABC group and a number of Germans – strongly believed that the work of the architect could not be independent of the economic, capitalist or socialist structure in which he operated. They claimed that the new
city could not even be imagined without an end to capitalist production and the advent of a communist society. The two lines, up until the CIAM of 1930 – when the most fervent supporters of the Marxist line moved to the Soviet Union, following May’s brigade – confronted one another, harshly and with reciprocal incomprehensions.

The first meeting of the CIAM took place in Switzerland, in La Sarraz, from the 26 to the 28 June. Twenty-four different architects participated from eight different nations: Switzerland (Stam, Schmidt, Haefeli, Artaria, Steiger, Giedion and Meyer, who a few months later was named director of the Bauhaus, replacing Gropius), France (Chareau, Lurçat and, by adoption, Le Corbusier), Belgium (Bourgeois), the Netherlands (Stam, Rietveld and Berlage), Germany (Häring and May), Austria (Frank), Italy (the Swiss Sartoris representing Rava from the Gruppo 7) and Spain (Mercadal and de Zavala). Important absentee included Oud, Gropius and Mies, occupied elsewhere, and Garnier, Perret, Loos and van de Velde, from the old guard. El Lissitzky and Moisei Ginzburg, the representatives of the Soviet Union, were unable to attend when Swiss authorities refused them a visa.

During preparations for the congress, Häring clashed with Giedion, who managed the organisation. The reason was that only five members of Der Ring have been invited and Häring, as secretary of the organisation, could not accept this exclusion on principle (in the end Häring was the only member to participate). Furthermore, he was greatly disturbed by the fact that, despite being the secretary of the most important association of German avant-garde architects, he was not invited to speak. In fact, the programme had been carefully drawn up by Le Corbusier and Giedion to avoid offering too much space to anyone able to cast them in shadow, what is more moving along a different wavelength.

On the 26 June Bourgeois and Le Corbusier spoke about the architectural results of modern technologies, and May about standardisation. During the discussions that followed, Häring was the author of the most controversial interventions, above all against any affirmation made by Le Corbusier. In the field of prefabrication there emerged divergences between those who believed in the total industrialisation of the building envelope and those who, like Lurçat and Le Corbusier, claimed it should be limited to individual components. Furthermore, almost to continue the controversy of the 1914 Werkbund, there were those who supported, like the French, that it was necessary to focus on artistic quality and the reasons of architecture, and those who, like the Germans and the Swiss, on the simple act of building, on industrial rationality. The following day the talks focused on general economics and urbanism. On the 28 June Berlage concluded with a conference on the theme of relations between the State and modern architecture, during which he analysed the successful a-typicality of the Netherlands, asking how this model could be exported.
The CIRPAC was constituted: a sort of central committee responsible for preparing successive meetings. It consisted of two delegates from each nation. The list, read by Giedion on the final day of the congress, did not include Häring’s name. He proceeded to question whether this was due to an error, growing infuriated when told it was not, and that his presence was not appreciated. This gave rise to a conflict that was only resolved after the congress by the able Gropius. A final declaration was prepared that attempted to recompose the two diverse souls of the congress, using the expedient of two ad hoc translations, one in French and one in German, that tempered the points of view of the two factions regarding the *querelle* between architecture or construction. The problem, however, could not be resolved by a simple linguistic expedient. It would explode again, precisely the following year, over Le Corbusier’s project for the Mundaneum. We have already mentioned this issue: Teige, in a long and reasoned article in *Stavba* accused Le Corbusier of aestheticism. In substance, of wishing to reach the sublime heights of art using the obsolete instruments of proportion, composition and all of the armaments of the Beaux-Arts, even if adjusted and corrected in light of the new modernist sensibility. Le Corbusier responded quickly to his friend’s attack in a long letter, drawn up while travelling to South America, where he was to speak at a number of conferences: a sign that he considered the question strategic to the cultural leadership of the movement. Also published in *Stavba*, his easy is a lengthy treatise emblematically entitled “In defense of architecture”. Le Corbusier attacked rigid utilitarianism. He affirmed that function alone was not sufficient to create poetry. He used the example of a trash bin: when deformed it could contain more waste paper, in theory making it more useful and thus more beautiful, when in reality it was clumsy and ugly. Beauty is thus something more than function. A extra the architect must long for. Theorising a sort of split between form and function, Le Corbusier demonstrates that he did not comprehend the refined reasons of Prague-based formalism. For Teige the reduction of the object to pure function was possible precisely for the identification of the correct space of the aesthetic dimension that does not lie within the object, as the Frenchmen would have it, but in the opinion of the subject. The value of a work, in substance, is not born of the pursuit of an intrinsic and external truth – that which would not make sense in a materialist and antimetaphysical perspective – but from the recognition of being the product of a historically suitable formativeness. Teige wrote: “The Mundaneum illustrates the fiasco of aesthetic theories and traditional prejudices, of all of the damages of the slogan ‘house as palace’ and of utilitarian architecture with an addition of an artistic dominant. From here it is possible to move directly toward a complete academicism and classicism....”
The second CIAM congress was held in 1929: it dealt with the theme of housing and the Existenz minimum. The congress was held in Frankfurt, the German city that, thanks to the impulse of Ernst May, was in the midst of a programme to build public housing – more than fifteen thousand between 1926 and 1930, equal to the demand for housing for approximately ten percent of the population – grouped in residential districts, the Siedlung, situated in the periphery of the city. Particular attention and passion was dedicated in these districts to reducing construction costs; eliminating superfluous spaces; standardisation; territorial zoning with areas destined solely for residential use; the construction of housing in parallel rows; the prefabrication of components; the Taylorization of spaces and movements of the so-called “Frankfurt kitchen” designed by Grete Schütte-Lihotzky; the rationalization of interior layouts; the at cost sale of furnishings designed for specific spaces of the home by Frank Schuster and Ferdinand Kramer. The congress was preceded by a meeting of the CIRPAC on the 2 February in Basel, during which Le Corbusier and Häring squared off once again. Häring was cast aside. This time Gropius did not intervene to calm the waters. Instead, affirming that “Der Ring no longer existed as it was and that the congress was to host individual personalities”, he dismissed Der Ring, following Mies (who, as we have seen, did the same back in 1927) and removed any support for Häring, leaving him totally isolated. What is more, moving progressively toward the positions of Giedion and Le Corbusier, he contributed to building a new four-way alliance: Gropius, Le Corbusier, Mies, Giedion. The three architects would become the icons of modernism. The critic their cantor. The CIAM their tool.

The Frankfurt congress opened on the 24 October, the black Thursday of the collapse of the Wall Street Stock Market. 130 architects and 28 nations were present. There were four speeches: Gropius, Bourgeois, Le Corbusier and Schmidt. Gropius and Le Corbusier were absent. The latter because he was travelling in Latin America, as mentioned before. Gropius’ words were read by Giedion, and those of Le Corbusier by his cousin and partner Pierre Jeanneret. Also absent were El Lissitzky and Oud. Those present included the Spanish Louis Sert and the Finnish Alvar Aalto. On 26 October Karl Moser closed the congress and officially opened the exhibition on the minimum dwelling he had organised with May using material from across Europe. There were 207 plans for minimum dwelling units all drawn at the same scale to facilitate comparison. Floor areas varied from 29 square meters for single rooms to 91 square meters for large families. After the congress, the exhibition travelled around Europe, accompanied by an illustrated book, published by the CIAM: *Die Wohnung für das Existenzminimum*.

The third CIAM congress was held in Brussels from the 27 to 29 November 1930. The principal theme, introduced in a lecture by Gropius, was: low houses, medium
height houses, tall houses. While Häring participated in the congress and discussions, he no longer fulfilled any real role. He would protest against the preference for tall housing, but was an isolated voice. Important talks included though by the Austrian Richard Neutra, the American delegate together with Karl Lömberg-Holm. He presented examples built in the United States. The Italians were represented by Pollini and Bottoni.

Le Corbusier assumed a critical position toward the overly technical attitude assumed by the most intransigent group of the constructivists. He had just completed the project for the Ville Radieuse, a vaguely anthropomorphic city (with the business district at the head, the residences in the area of the chest and productive activities at the feet), which allowed for notable levels of density. It was the response, even formal, to the linear cities and schemes with lower density advanced, at the time, by Soviet avant-garde architects, such as Ginzburg.

In October May’s brigade left for the Soviet Union, inducing Schmidt and Stam; Meyer followed, ousted in August from the direction of the Bauhaus. They fled the economic crisis that was strangling America and Europe, to travel to the motherland of socialism and new architecture. They were greeted by a country in the grip of Stalin’s political culture. In 1931 the competition for the Palace of the Soviet, awarded to a grotesque wedding cake designed by Boris Iofan, sanctioned the definitive defeat of Russian Constructivism in favour of socialist realism. This definitive and predictable change in the direction of Russian political culture was the reason why the successive CIAM, to have been held in the Soviet Union, in Moscow, was postponed by authorities with an endless string of excuses (Giedion and van Eesteren actually sent a note of protest to Stalin, though in vane). Three years were lost until, in the wake of other refusals, in 1933 the decision was made to hold the congress on Patris, sailing form Marseille to Piraeus, the port of Athens (the Italians present were Pietro Maria Bardi, Gino Pollini and his wife, Piero Bottoni and Giuseppe Terragni). There could be no greater paradox than to debate the theme of the functional city and the future of urbanism (the Charter of Athens was created under these circumstances) among a small group of architects far from the urban centres and seats of decision-making that at the time had little or no interest in implementing any of their proposals.

6.13 The Architecture of Light

Reklame, publicity, is one of the recurring themes of 1920s Germany. It is founded on the concept that man is an animal who can be manipulated, to the same degree, as demonstrated by ergonomic studies, his vital spaces and social life can be organised based on scientific principles, such as Taylorism.
The change in the way things were sold changed the face of the city. The call came from multiple studies of the issue, the techniques developed by the ever increasing number of specialised businesses and the measures suggested in specialised reviews, such as *Die Auslage*, *Seidels Reklame* and *Die Reklame*. Contributions also came from technical progress: the production of large sheets of glass, which emptied out the bases of buildings to transform them into exhibition spaces, and the fast spreading use of electricity to light shop windows and advertising billboards. From 1924 to 1928 Germany doubled its energy consumption. Berlin was defined an “electrical paradise”, with more than three thousand glowing signs. In 1925 Osram discovered a technique for the realisation of coloured sings using neon tubes. In October 1928, for the weeklong event entitled *Berlin Im Licht*, Osram created a tower of pure light, and the trees along Unter den Linden were decorated with thousands of electric lights. Lufthansa organised night flights over Berlin and its glowing buildings. An event anticipated by the city of Frankfurt (1927), and later shred with Hamburg (1931) and Amsterdam (1929).

Not everyone saw electrification as a positive change. Ernst Bloch noted how this magnificent distraction, paradoxically, made things more obscure. Philosophers such as Heidegger (*Being and Time* is from 1927) saw a further manifestation of the technique that was invading the world, marking an inevitable, though dramatic destiny. Ernst Jünger, in his colourful style, noted how there existed no other city as frenetic as Berlin. Everything moved: streetlights, billboards, trams and even the restless jaguars in the zoo.

Architects, above all the expressionists, were enthusiastic. The dreams of Taut and Scheerbart that led in 1914 to *Glass Architektur* seemed to become reality, the same that inspired Moholy-Nagy to write the poem *Light Vision* in 1917. In his 1926 book *America*, written following a trip to the United States, Mendelsohn commented in ecstatic terms on the glowing circus that was New York, characterised by flaming texts and missiles of fire. These were the advertising billboards with moving images that dove and emerged, disappearing and exploding above thousands of automobiles and the crowds that chaotically filled the streets.

In his competition entry for the Friedrichstrasse from 1921, Scharoun prefigured a building whose façade featured space for advertising billboards; in 1928 for Potsdamer Platz the Luckhardt brothers planned a building with an enormous poster for Chlorodont; for the same public space Mendelsohn designed a building with spaces that could be occupied by gigantic illuminated texts. The architecture of light, or *Lichtarchitektur* was born. Light became a tool of architecture to be considered at the beginning of any project: for example, in Frankfurt Ernst May imposed the study of light for particular urban environments. However, it was Mendelsohn more than any other architect who interpreted the poetic of light, seeking to model it in the form of large windows, curves suggestive of the passage
of energy, grafts and overlaps that heightened the fluidity of the building mass. Designed to be viewed also at night, under artificial light, his buildings perfectly transmit the sense of this research common to so much of the architecture of his generation. The building for the large Petersdorff department store in Breslau (1928) and the large Schocken department store in Stuttgart (1928) are two of the most interesting examples.

Despite an adversity toward the research of the avant-garde, even the Nazis were fascinated by these new technologies. Speer used giant floodlights to build his cathedrals of light, the Lichtdom, during the mass rallies organised by the National Socialist Party. To celebrate Hitler’s triumph, he planned a highly suggestive event for the 1 May 1933 in Tempelhof. Tending toward the sublime, this new technology would soon reveal its utility as a tool of political propaganda.

6.14 Skyscrapers

The Manhattan Zoning Law was issued in 1916. It permitted the achievement of notable building heights along the street edge, and additional storeys set back from this line and, finally, an unlimited number of floors occupying one fourth the site area. A number of architects soon specialised in the new vertical typology. Stand outs included Raymond Hood and Harvey Willey Corbett. They understood just how little sense it made to apply traditional rules to such tall buildings. Structured by a logic of addition, the skyscraper is an overlapping of internally flexible planes, restricted solely by the presence of a core of mechanical lifts. A container – and not an organism – from which to expect only taller versions and a spectacular scenic effect.

A giant urban landmark, the skyscraper is an effective advertising instrument. In 1913 Woolworth, the supermarket king, erected a vaguely gothic building in New York whose most fascinating element was its height, at the time unsurpassed. The building was immediately successful and dubbed the “cathedral of commerce”. It was inaugurated by President Wilson who, rather than cutting a ribbon, pushed a button that activated some eighty thousand electric lights. The Chicago Tribune – about which we have already spoken – considered this typology such an effective tool of publicity that it invested one hundred thousand dollars in the international competition held in 1922. Between 1928 and 1930 the architect William van Alen erected the Chrysler Building, which soon earned him a place in the Guinness Book of World Records for the height and usual form of the building. The crown assumes a fan shape, in stainless steel, exploiting the reflective properties of this material. The corners of the fortieth floor are topped by immense radiator caps. Beneath the crown American eagles appear to take flight in the four cardinal directions. The allusion to Chrysler’s automobiles is evident and, faced with such an iconic
appearance, even the refinement of various elements, such as the visual erosion of the corners to favour the verticality of the tower, are pushed into the background. No greater attention to the precious qualities of architecture are to be found in two other coeval buildings: the Empire State Building, completed in 1931 and holder of the record as the tallest building for many years, and the Rockefeller Center, built between 1931 and 1940, even if its design began many years earlier, in 1928, if we wish to go as far back as the plan drawn up by Benjamin Wistar Morris. It is not that the solutions were poor in quality. On the contrary. The Rockefeller Center, for example, is the final result of a lengthy process that led Raymond Hood from the Tribune tower in Chicago (1922-25) and the Radiator Building (1924), both with gothic overtones, to the spectacular verticality of the Daily News Building (1930) and the McGraw-Hill Building (1928-1931), considered by Alfred Barr to be forerunners of the International Style. The Rockefeller Center, other than being one of the most successful urban spaces in New York, also stands out for the sobriety of its forms and finishes. However, as the history of these buildings testifies – clad and finished in dozens of different skins before the optimum solution for the developer was found – their fascination lies in the tension that rises upward, in the new system of relations imposed by these enormous masses, creating urban density on multiple levels. If the boulevards of Paris are the spatialisation of the great myths of the nineteenth century, the townscape of New York is the image of the twentieth century. Hugh Ferris was the architect and designer who better than any other depicted the myth of the skyscraper, emphasising also its unsettling aspect and representing it as a shadowy cathedral standing out proudly in the midst of infinite space. The author of the 1929 book The Metropolis of Tomorrow, he illustrated the city of today, the design trends, the imaginary cities whose arrival he hoped for. There is more. In 1923 Corbet had already designed a New York of skyscrapers with streets on different levels that clearly separated pedestrian and vehicular traffic. Imagining cars like the current of a raging river, he suggested a parallel with the city of Venice. In 1927 Raymond Hood wrote A City of Towers, and in 1931 he designed an ideal metropolis named A City under a Single Roof. The imperative for Hood – who imagined buildings even larger than those permitted by a single New York city block – was that of congestion.

6.15 Chareau and the Maison de Verre
Pierre Chareau was born in 1883. He was slightly older than le Corbusier and Mies and the same age as Gropius. He learned his trade in the field, working in the office of Warning & Gillow, a company specialised in interior decoration and furniture manufacturing, where he worked from 1889 to 1914. In 1918 he opened
his own practice: he was thirty-five, with a notable talent and a profound passion
for dance and music, which he also composed.
His character did not help his profession: he tended toward depression, was
closed, hyper-sensitive and a perfectionist. His client base was formed of a group
of selected friends, under Dalsace, who entrusted him with his first projects and
would later be the clients of his masterpiece: the Mason de Verre.
The furnishings designed by Chareau during the early 1920s testify to a taste
oriented toward the elegance, in some cases exaggerated, of Art Deco. With time,
his furnishings and spaces grew lighter. They tended to slide, rotate or move in
some manner. Consoles with fold down shelves could be converted into playing
tables, desks with sliding tops could open up to provide unexpected containers,
make-up tables followed the movements of the body and gaze, while low tables of
varying heights rotated around a central pin to offer numerous tops. Even spaces
were subject to metamorphoses. It was not uncommon for large curved panels
defining spaces to open or close toward other rooms. In their ‘at rest’ position
these panels folded up and when open suggested the rhythms of dance,
introducing a dreamy vitality within the domestic environment. In 1924 he opened
a small shop in Montparnasse, in Rue du Cherce-Midi, alongside the art gallery run
by his friend Bucher, a dealer and supporter of the avant-garde. In 1925 he
participated in the Art Deco exhibition in Paris. Here he encountered Bernard
Bijvoet, who had decided to end his partnership with Duiker, a rupture caused by
the latter’s wife, who he would later marry. Together they worked in 1926 on the
Beauvallon clubhouse. The constructivist influence of Bijvoet is evident.
In 1927 Chareau was commissioned by doctor Dalsace with the design of a house
with an annexed medical office in a courtyard off the very central Rue St.
Guillaume in Paris. The first drawings produced together with Bijvoet defined a
modern residence-studio, characterised by large windows facing the courtyard and
garden behind it, though substantially conventional in its interior layout. Beginning
in 1928, perhaps in the wake of the experience of the CIAM, where he was an
active participant and where he met numerous Constructivist architects, the house
gradually assumed an original physiognomy. Spaces became more fluid,
furnishings dynamic and in some cases transparent, and materials more modern.
In the end they were transformed, thanks to infinite improvements suggested by
an obsessive control during construction, into the most important architectural text
of the 1930s. A unique and unrepeatable work, for a host of reasons.
The first element that strikes the eye is Chareau’s use of glass block. This
material, other than giving the house a highly contemporary and almost industrial
appearance, permits the natural and diffuse illumination of the interiors, while
simultaneously guaranteeing privacy to the Dalsace family and the doctor’s
patients.
Metal windows with traditional glass, inserted at specific points, in addition to contributing to the design of the elevations, also guarantee natural ventilation and views from the interior outward. At night, light fixtures attached to the external walls illuminate the glass block elevations, substituting natural light with artificial light. The Maison de Verre thus transmits the sensation of being a gigantic lantern that captures light to create spaces in which to live.

The interiors, composed of double and triple height spaces, are divided by a series of diaphragms. Examples include bookshelves that function as parapets to the level overlooking the living room: wood panels, alternating with steel structures, delimit a wall whose rhythm is defined by a set of frames and, at the same time, allow a glimpse of what is beyond them. In some cases this game of multiplying the effect of depth is obtained using mobile furnishings that slide, turn or rotate to impose unexpected openings and views. In some cases lightweight walls, as in the toilets and children’s bedrooms, can be easily moved to expand or reduce these spaces as necessary. In the children's room a bookshelf conceals the bathtub, while a retractable stair connects the master bedrooms with the medical office. All of this follows the logic of movement, and space, as a rule, is an alternation of environments that can be enclosed or linked by curving lines. All the same, these latter do not overrun the orthogonality of the house, rather than expressionist tensions, they communicate a rigorous sense of rationality.

There are also sophisticated technical devices: a ventilation system that cools and heats the house, a mechanised rail that transports food from the kitchen to the dining room, steel furnishings that rotate and can be opened from two different spaces, padded doors concealing shoe storage. Chareau was one of the first contemporary architects who actually realised – and did not limit himself to simply representing it through the abstract language of forms – the machine for dwelling, without losing any of his own personal poetic in the process.

It is said that Le Corbusier often visited the construction site, and it is no accident that, after a period of relative oblivion, the house was rediscovered in the mid-1960s, precisely in 1966 by Rogers and Frampton, at a time of neo-avant-gardes and a renewed ideological fervour, marked by the reflections proposed by Archigram and later realised in the Centre Pompidou in Paris (1971-77).

For the Maison de Verre Chareau used industrial materials, rubber paving, exposed steel beams, hardware typical of factories, perforated metal and simple wood panels. The house, while complex in its spatial effects and technical devices, remains essential and communicates an idea of cleanliness, hygiene and active and sporting life typical of its era.

Little inclined toward self-promotion, Chareau wrote little, even if he was offered the opportunity when he was invited in 1930 by André Bloc – founder and director – to join the editorial board of *L’Architecture d’aujourd’hui*. 
In 1933 issue number 9 of the magazine published an article on the Maison de Verre, penned by Paul Nelson, a brilliant American architect interested in innovation and working between America and France. He was enthusiastic. He declared the house to be a construction designed in four dimensions. It was neither immobile nor photographic, but cinematographic.

Inspired by the Maison de Verre, between 1935 and 1937 Paul Nelson completed his masterpiece: a suspended house presented to a clamouring public in New York and Paris. It consisted of a cage structure whose interior, connected by a sinuous path, was occupied by free volumes of individual environments. A work of a disconcerting modernity, it continues to amaze for its architectural daring and intelligence.

Even more than Chareau, Paul Nelson remains underestimated by modern historiography. Yet, in addition to being a talented architect, thanks also to his insatiable curiosity he frequented the key circles of twentieth century architectural culture. He studied at the École des Beaux-Arts, was passionate about the work of Le Corbusier, from whom he sought advice. The latter sent him to apprentice in the office of Perret, where he met Berthold Lubektin, who would become one of the masters of the Modern Movement in the United Kingdom. In 1929, after returning to America, Nelson frequented the world of cinema. He is the art director of the film *What a widow!*, starring Gloria Swanson. Also in America, after publishing an article in the *Chicago Evening Post* in 1928, he received a letter from Buckminster Fuller, accompanied by an essay on a house in four dimensions. The two met. Fuller illustrated the principles of his Multiple Deck 4D and the Dymaxion House 4D he had designed in 1927. Nelson decided to promote them in France. There were projects for a hospital, appreciated by Le Corbusier for their intelligent typological research and rational construction.

Let us return briefly to Chareau. After the formidable exploit of the Maison de Verre, his poetic soon ran dry. As a Jew, when the Nazis invaded France in 1940 he emigrated to the United States, where he spent the rest of his life. Marked by the dramatic nature of past events, he abandoned the architectural profession. He built only one house in the countryside – impeccable though without any magic – for his friend, the painter Robert Motherwell. He died in 1950.

### 6.16 Fuller and the Dymaxion

Buckminster Fuller is another figure who, at least in Italy and up to a few years ago, entirely ignored. It is not difficult to understand why. Fuller was in fact the author of an unorthodox reflection that privileged the analysis of process over the study of form; he would even make recourse to the utopian dimension, only to later force it back into the real world through a confrontation with technology. The
fascination for Fuller as an architect is, paradoxically, for his not being one at all. By using lateral thinking, in other words the surprising leap of the horse suggested by Shklovsky, how presents problems and solutions in an entirely unexpected light, refusing specialised languages and disciplinary closures, practicing a relational approach that suggests solutions difficult to schematise in elementary forms, to illustrate which he does not hesitate to use charts and diagrams.

There is a second error in perspective that is relatively common. It consists in tying Fuller only to the movements of the 1960s and '70s, in other words the neo-avant-grades, who venerated him like a guru, forgetting to point out that some of his most important and pivotal works date back to the period between 1927 and 1937, the height of the development of the Modern Movement and the early avant-garde movements. The Multiple Deck 4D and the Dymaxion House are from 1927, the Omni-directional Transport from the same year, the Dymaxion Mobile Dormitory from 1931, the Dymaxion Car from 1933-1944 and the Dymaxion toilet from 1937.

Buckminster, though not in a pervasive way, was present in debate throughout the 1930s, publicising his inventions on numerous occasions and, as we have seen, entering into contact with Paul Nelson who helped spread them in Europe. What is more, as an inventor he had numerous fans in the world of architecture. The most famous being Frank Lloyd Wright.

Buckminster Fuller proposed a synergetic and ecological concept of the world, in which the individual is part of the general context he relates with. Designing means utilising energy, concretely developing principles. It makes no sense to limit oneself to a superficial imitation, as in the purism of Le Corbusier, of the laws of physics, reducing them to empty principles of proportion and harmony. A machine for dwelling is possible only when it operates in harmony, in consonance with the first machine, in other words, nature. If a construction is more intelligent the more it is lightweight, this is so because it must truly be lightweight and not only through some figurative artifice. What is more, it is necessary that materials be innovative, not simply tarred with the notion of modernism. Fuller himself stated: “The Bauhaus international school never went back of the wall surface to look at the plumbing. [...] In short, they only looked at problems of modification of the surface of end products, which end products were inherently sub-functions of a technically obsolete world”.

Buckminster Fuller was born in 1895, making him a decade younger than Mies and Le Corbusier. During the First World War he served with the navy. In 1917 he invented an antenna with a cable for recovering seaplanes and, later, during an advanced course at the naval academy, a vertical take-off airplane, some of whose principles were later applied to the design of the Dymaxion Car. He married Anna Hewlett, whose father was a well-known architect. In 1919 he worked in the world
of industry and in 1922 founded, together with his father-in-law, the Stockade Building System, a factory producing a new artificial fibre brick, for which he invented a machine that could rapidly produce this product. In 1927 the factory was seized, perhaps for an error in financial speculation. This event, coupled with the lasting suffering over the death of his daughter a few years earlier, drove him into a state of despair, and the fog of alcohol. He moved to Chicago. The birth of another daughter helped him recover his balance and begin new research. He returned to New York, where he met the sculptor Isamu Noguchi, a Japanese abstract artist who mixed Oriental traditions and Western experimentalism and, later, works of design and projects for outdoor spaces. The two became like brothers and together travelled to Yale, Chicago and Harvard to publicise their work.

The Multiple Deck 4 D is a tower with a central column supporting ten overlapping platforms, made from truss slabs. There was also an option with twelve floors and a pool, gymnasium and library. Complete with an air conditioning system and loop the vacuum the dust contained in the slabs, the entire Multiple Deck 4 D weighed some forty-five tonnes. It can be transported by a blimp and planted, like a tree, directly from the sky. All that was needed was to excavate a pit by dropping bombs on the selected site from the blimp. Buckminster compared the characteristics of the new construction to those of traditional buildings: construction time of one day versus six months, protection against fire in the one and totally absent in the other; installation costs comparable to one tenth of other hypotheses.

The Dymaxion House was also created in 1927; the name is a synthesis of the terms dynamism, maximum and ions. After an initial duplex version, in reality not very interesting in architectural terms, it was reviewed and improved. The new dwelling space was suspended, on tie bars, from a hollow central column. It had an octagonal form with services at the centre. At the upper level a terrace offered a view of the surrounding landscape, crowned by a ‘hat’ that served as a device of climatic protection. All of the technological services were prefabricated, the majority of the furnishings incorporated in the walls. Fully flexible, it suggested a new freedom of dwelling. It was without a doubt more advanced than the experiments underway in Europe during the same period.

In 1931 Buckminster designed a prefabricated dwelling module, easy to assemble and disassemble, that could serve as a mobile shelter for farmers from a Russian cooperative, and which took into account the migratory and seasonal nature of their activities.

In 1933 he created the Dymaxion Car, a three-wheeled car with a futuristic form. Realised in three versions, it could reach speeds of up to 150 km/h and, as
demonstrated by Leopold Stokowski, who acquired one example, could travel some three hundred thousand kilometres during its lifespan. In 1937 he turned his attentions to a fully prefabricated three-dimensional toilet, a mono-block measuring one and a half meters per side. It featured a self-cleaning vapour system. The project was exhibited the same year at the MoMA in New York.

6.17 Ten Years of the Fascist Revolution

With the Novocomum, an apartment block that obtained permission from the decoration committee only because it had been fooled by a project with traditional elevations that were to actually built, Giuseppe Terragni assumed the role of spiritual guide of the Italian renewal movement. He was the most talented architect. Attracted by the volumetric simplification of the Novecento – the artistic movement sponsored by Margherita Sarfatti, who commissioned him with a monument to the memory of her son Roberto - Terragni would investigate any available language. For the Novocomum it was the play of plastic masses, underlined by the erosion of the corner onto which the architect grafted the glass cylinder of the stairwell. It is similar – though there as far as anyone knows there was no contact between the two architects – a contemporary building by the Russian Ilya Golosov, the Zuev Club in Moscow. In other works, Terragni revealed metaphysical, constructivist and futurist influences, without ever forgetting the lessons of Le Corbusier. He also produced very different designs, such as the Casa del Fascio in Como (1932-36), a unitary prism with four different elevations oscillating between the heaviness of a metaphysical sculpture and the lightness of a rationalist building, and the design of the O room at the Mostra della Rivoluzione Fascista, the Exhibition of the Fascist Revolution, also from 1932, which recalled the images of the constructivists and futurists.

In 1930 contemporary architecture was a phenomenon that could not be ignored even by academics. It was examined for the magazine Dedalo, directed by the ultra-reactionary Ugo Ogetti, by Marcello Piacentini in an article entitled “Dov’è irragionevole l’architettura razionale”, followed by two essays, in April and June 1941, by Giuseppe Pagano in La Casa Bella. Also in 1930, Piacentini published a book entitled Architettura d’oggi, showing how little and how much hearsay such an influential figure possessed about the complex and important events that were shaking the foundations of architecture in Europe.

In 1930 Figini and Pollini, for the Esposizione di Monza, proposed a prototype electrical house. It was characterised at the ground floor by a large window and, on the upper floor, but a long and lightweight canopy that, closed on one end and open on the other, moved contrary to the visual weight of the lower level, perhaps with a vague allusion to the zigzag of a lightning bolt. On the inside a new system
of furnishings, designed by Libera and Frette, reflected the technological innovations and new lifestyles, above all in terms of electric utensils, imposed by contemporary society.

The year 1930 was also the year of the founding of the MIAR, the Movimento Italiano per l’Architettura Razionale (Italian Movement for Rational Architecture). Its national secretary was Adalberto Libera. The group obtained the support of Pietro Maria Bardi and Giuseppe Pagano, two of the regime’s highly influential figures. The first because he was a friend of Mussolini, the second for his proven dedication and war decorations.

In 1931, the Roman art gallery of Pietro Maria Bardi inaugurated the second Esposizione di architettura razionale italiana. It was an occasion to present the MIAR. The exhibition coincided with the publication of the book by Bardi *Rapporto sull’architettura* (*for Mussolini*). The exhibition presented the *Tavolo degli Orrori*, the Table of Horrors. The idea came from Bardi, who imposed it on Libera and other recalcitrant architects: a panel that poked fun at the work of academics, presented together with other knick knacks and images of poor taste from newspapers.

Bardi also prepared a text, "Petizione a Mussolini per l’Architettura" (*A Petition to Mussolini in Favour of Architecture*) which he presented to the Duce during his visit to the exhibition. The reaction to so many provocations proved to be positive. Mussolini was an attentive observer and, to the relief of everyone present, approved and authorised what he had seen.

While the reaction of the *Sindacato Architetti*, under its general secretary Calza Bini, was a few weeks in coming, it was harsh. In fact, Libera was forced to disband the MIAR. For his part, Mussolini avoided interfering in artistic issues and, when he did, he made contradictory choices that favoured one faction of the other with no apparent logic. Piacentini knew that he had to draw his strength precisely from this ambiguity, proposing himself as a referee: he allied with the younger generation, against the traditionalists and with the traditionalists against the younger generation. Faithful to this oscillating policy, he did not hesitate to involve in the design of the *Città Universitaria di Roma* (1932-1935) such figures as Giuseppe Pagano for the Institute of Physics, Gio Ponti for the School of Mathematics, Giovanni Michelucci for the Institute of Mineralogy and Giovanni Capponi for the Institute of Botany and Chemistry.

In 1932 the *Mostra della Rivoluzione Fascista* was inaugurated with a courageous façade by Adalberto Libera and Mario De Renzi, and the radical space of the O room by Giuseppe Terragni. It was an important recognition for the younger generation. All the same, the exhibition, fragmented into a host of small spaces, each different from the next, was evidence of the regime’s intention not to take sides and of the momentary calm between opposing factions.
At the same time, in Rome, three very modern post office buildings were being designed: one my Mario Ridolfi in Piazza Bologna (1932-35), another by Giuseppe Samonà in Via Taranto (1933-35) and, finally, that by Libera and De Renzi in Viale Aventino (1933-34). They express three different ways, all credible, of mediating between the monumental needs of the regime and the image of a modern society. Ridolfi’s building is more sensual, Samonà’s more austere, while that of Libera is more metaphysical. This latter – perhaps the Trentino native’s masterpiece – is composed of a marble prism housing an atrium surmounted by an elegant and lightweight skylight in glass block, preceded by a solid portico in dark marble reminiscent of the volumes depicted in canvases by Carrà and De Chirico.

In 1933, the group headed by Michelucci, scandalising the ultra-traditionalists, supported by Piacentini, was awarded the competition to design the new Florence railway station. Facing the apse of the church of Santa Maria Novella, the project was characterised by a long massive wall interrupted by a cascade of glass. There was also the project for the city of Sabaudia, realised after 1934 by the Gruppo Urbanisti Romani. The project marked the implementation of modern rules of urban planning. The two projects caused a great deal of scandal, provoking debates and protests, as high up as Parliament.

Mussolini stepped in, inviting the two design groups to the Palazzo Venezia on 10 June 1934. They were represented, respectively, by the architects Michelucci, Gamberini, Baroni, Lusanna and Cancellotti, Montuori and Piccinato. He defended the architects’ decisions: “I invited precisely you because you are the architects of Sabaudia and the Station of Florence to tell you not to fear being stoned or seeing the station demolished by the furore of the people, on the contrary. The station of Florence is beautiful and the Italian people will learn to love it... As for Sabaudia while some have told us they have had enough, I tell you that I have not had enough. Sabaudia is fine for me and it is beautiful”.

He continued, supporting the modern: “We cannot recreate antiquity nor can we copy it”. However, contradicting himself, he mentioned as a good example of this language the awful church of Cristo Re, designed by the omnipresent Piacentini, who – as demonstrated by the monumental Rectorate at the Città Universitaria in Rome, the Torre della Rivoluzione in Brescia, both completed in 1932, and the Palazzo di Giustizia in Milan, begun by Piacentini the same year – he was leading Italian architecture in wholly different directions than those hoped for by the rationalists. Mussolini himself, later, would openly deny, making highly questionable choices, the speech given at Palazzo Venezia.
6.18 The Bauhaus: Final Act

Gropius proposed Otto Haesler to the mayor of Dessau as Meyer’s possible successor at the helm of the Bauhaus. The mayor opted, instead, for Mies van der Rohe. The students, have learned of the ousting of Hannes Meyer, protested strongly and threatened to go on strike. Mies reacted harshly. He expelled five students. He called for the immediate closure of the school. He even abolished the old statute and imposed, for its reopening, a new enrolment. The new Bauhaus prohibited any political activity and the duration of the course was reduced to six semesters.

Mies focused on architecture. He abolished the propaedeutic course, with scarce consideration for the interdisciplinary approach that was once the school’s strength. He also abolished artisanal production to respond to requests advanced by local craftsmen who saw their work threatened by the production of the school’s workshops, re-launched precisely by Meyer. He confronted the diminishing funding by raising tuition, putting an end to the programme of social interaction pursued by his predecessor. Finally, he organised the school of architecture around his own person.

After a first semester dedicated to elementary notions of technique, students fell into the hands of Hilberseimer, a friend and admirer of Mies, who catechised them with a handbook of theoretical-systematic rules concerning exhibition, typological choices (tall or low housing) and rules of aggregation. The forth semester consisted of lessons by Mies. The fifth and sixth semesters saw students working beside him in the Bauseminar.

The result was a school of cones, fascinated by the architectural genius of an undoubtedly talented and innovative master, though in no way inclined to valorise the individual talents and personal attitude of his young pupils. Herbert Hirche, Wils Ebert, Eduart Ludwig, Gerhard Weber, Georg Neidenberger, Bertrand Goldberg, John Rodger and Munye Weinraub, as talented as they may have been, were among them.

Despite the efforts of Mies to keep the school far from any political involvement, events precipitated. Germany was in the midst of a political tempest, accentuated by the serious economic crisis of 1929. The ultra-national right wing grew stronger. Already in 1930, in Weimar, Otto Bartning had been fired and the pro-Nazi Paul Schultze-Naumburg, sent to replace him, removed the wall paintings in the old institute of the Bauhaus by Oscar Schlemmer. The Nazis, who obtained an optimum result in Dessau in the October 1931 elections, acquired more power. One of the firm points of their programme was the suppression of the school. Schultze-Naumburg visited the Bauhaus in 1932. In the wake of his report, mayor Hesse was forced to place the closure of the school on the day’s agenda. The motion passed with the votes of the Nazis and the abstention of the social
democrats, concerned about losing further public consensus among the population. The only votes against the motion came from Hesse and the communist members of city council. On 1 October 1932 the Bauhaus closed its doors. Magdeburg and Leipzig, still under the social democrats, offered new homes. Mies decided to continue in Berlin, privately. Hitler came to power in 1933. On 11 April 1933 the Gestapo burst into the school and ordered it closed. Mies and his students fought in vain to reopen it. The equation, which flees from the grasp of all those with good sense, though clear to the Nazis was: contemporary architecture = bolshevism.

6.19 The International Style

The year 1932 was one of checks and balances, with three exhibitions opening in the United States, Italy and Austria: The International Style at the Museum of Modern Art in New York, the Mostra della Rivoluzione Fascista at the Palazzo delle Esposizioni in Rome and the Siedlung model housing exhibition in Vienna organised by the Werkbund, in the wake of the famous exhibition in Stuttgart from 1927. We have already spoken about the Roman exhibition, noting how it met with partial success among the younger generation, officially and definitively recognised, while leaving the regime substantially undecided. In Vienna the results were so deluding that it is almost not wroth even mentioning them, if not for the Siedlung, whose master plan was the work of Josef Frank, with projects that produced very modest results, by such names as Loos, Häring and Rietveld, all excluded in Stuttgart.

The exhibition in New York – of the three initiatives undoubtedly the most well-known and with the most influence, above all in America, over the development of successive architectural research – was organised by a private institution, the MoMA, founded in 1929 and whose interests, up to this moment, were oriented primarily toward the visual arts. The show was curated by Philip Johnson and Henry-Russell Hitchcock, the author in 1929 of a book entitled Modern Architecture. The exhibition had been on the books since 1931, and was anticipated by contacts between the two curators and the European avant-garde, in particular Mies van der Rohe, whom Johnson admired.

The objective was to present new European architecture, a phenomenon unknown to the majority of the American public, and in the opinion of the curators, had created a new style – the International Style – finally suitable to representing the contemporary world.

The four leading artists of this linguistic revolution were Le Corbusier, Mies van der Rohe, Oud and Gropius, viewed respectively as the innovator, the poet, the rationaliser and the divulgator. They were accompanied by many others who, in
fifteen countries, were spreading this language through important works of architecture.

According to the curators, the International Style was founded on three principles: a preference for volumes over mass, regularity rather than symmetry, the elimination of applied decoration. The first principle derives from the observation that buildings had lost their heaviness and tended toward abstract and light, weightless forms that called to mind the Platonic solids. The second principle implied the loss of axiability, of monumentality, in favour of configurations which the balance between the composition is the result of a process, not a premise given a priori. The third principle expresses the need for economics, simplicity, and the abolition of any waste. Together the three principles express the need for a revolt against individualism, in favour of a unitary style that overcomes single geographic conditions.

The exhibition assumed two polemical references. On the one hand, expressionist, individualist and material architecture. On the other hand, the functionalists, who programmatically abolished the word “style” from their vocabulary. However, by annulling the trends at work in a non-existent plurality, with the International Style exhibition Hitchcock and Johnson ended up harming rather than helping modern architecture.

Where Hitchcock and Johnson ran into trouble was when they had to deal with Wright, a figure they could not exclude from the show because he was the only universally recognised American architect during the 1930s. However, Wright’s work contradicted at least two of the three principles of the International Style: he preferred mass to abstract geometric volume and was intimately and structurally decorative. What is more, Wright disdained symmetry: the best example being the Imperial Hotel.

Despite the incongruencies, the exhibition achieved its objectives: for the number of visitors, for having favoured the creation of the department of architecture at the MoMA, entrusted to Johnson, but above all for offering a clear, simple and banal reading of contemporary research and creating a new style – the International Style – that would first spread across America and later, after the fall of its totalitarian regimes, to Europe and the rest of the world.

Thus a successful stylistic recipe liquidated a relevant cultural legacy comprised of almost thirty years of research, clashes and tensions, excluding that of Mendelsohn, Rietveld, Schindler, van Doesburg, Häring, Scharoun, Fuller and Chareau, to mention only a few. Reducing forms to superficial images and bringing light to areas of shadow – doubt, creative tension, uncertainty – all differences disappeared in the blinding light of such a simple formula.

The spread of this disinformation was aided by the writing of critics and the history of architecture – including the nonetheless intelligent and acute texts of Giedion.
These are the negative aspects. As always occurs at the moment when we celebrate the apotheosis of an artistic phenomenon, however, at the same time we favour a crisis. The architects truly interested in research would move – according to a sort of unwritten law of creativity – in other directions, developing antagonistic hypotheses to those that dominated. Thus, during the 1930s, while some architects proclaimed the new international language of flat roofs and strip widows, others – including none other than Wright and Le Corbusier – were at work to unhinge them, to test new spatial configurations and identify more authentic forms of expression, between reconsiderations and new false steps.

6.20 Epilogue

In 1932 Stalin decreed the end of all architectural research in the Soviet Union. The Palace of the Soviet by Iofan from 1931, whose final version was approved in 1934, marked the incontrovertible beginning of five decades of obscurity. In Italy, as we have seen, the assurances made by Mussolini to the younger generation of architects led to distensions and the realisation of some works of excellent quality, though not without a substantial and in some cases dramatic ambiguity. Piacentini and his gang gradually seized power, demonstrating a tolerance for a modern language only under the condition of its banalising monumentalisation. After 1933, with Hitler’s rise to power, research in Germany came to a halt and the cultural climate began to regress under the weight of the regime’s intolerance of the avant-garde. An intolerance that became persecution when, as in the majority of cases, artists, authors and men of culture were also Jewish. On the 7 April 1933, the first “Aryan” race law was issued. It excluded Jews from any public function. University professors and academics lost their positions. On 15 September 1935 the Nuremberg Race Laws, striping Jews of German citizenship and prohibiting mixed marriages. On the 8 and 9 November 1938, Goebbels triggered the Kristallnacht: shops were looted, windows shattered and synagogues devastated. The same year the Jüdische Museum was closed and its collections confiscated.

Leading figures were forced into exile. The philosopher Ernest Cassirer, the only Jewish rector Germany had ever known, left in 1933, after being forced to resign from the University of Hamburg, initially for Oxford, Gothenburg and, finally, the United States. Albert Einstein, the most important physicist of the twentieth century fled to Princeton and in 1940 acquired American citizenship. Sigmund Freud, the father of psychoanalysis, left Vienna, annexed to Germany, in 1938. Edmund Husserl, the inventor of phenomenology was ostracised from the academic world of Freiburg University, though he refused to flee the country. His death in 1938 saved him from a worse fate.
As we have seen, in 1933 the Bauhaus was closed, despite the efforts of Mies to demonstrate it's a-political position. Also in 1933, Fritz Saxl decided to save the precious library that had once belonged to Aby Warburg by moving it from Hamburg to London: a collection of books and manuscripts studied by generations of art historians (including Erwin Panofsky, Ernst Gombrich, Rudolf Wittkover and Kurt Forster). In 1937 some 17,000 works of painting and sculpture by 1,000 artists were confiscated from German museums. They were labelled degenerative art, *Entartete Kunst*. In reality, they included some of the greatest masterpieces produced during the twentieth century, above all by the Germans. The books of Herman Hesse, one of the most important German language authors, were banned and he was impeded from returning from Switzerland, where he lived. Thomas Mann, winner of the Noble Prize for Literature in 1928, was seen as a dangerous subversive. In Italy, for his part, Ugo Ojetti wrote *Hitler e l’arte* (later inserted in U. Ojetti, *In Italia, l’arte ha da essere italiana?*, Mondadori, Milan, 1942), in which, after criticising demo-pluto-Jewish art, he stated: “The correction made by Hitler was thus opportune for Germany […] for the erratic and disconnected Europe it arrived just (everywhere?) in time as a hygienic more than an artistic warning”.

Between 1933 and 1938, it is estimated that 150,000 Jews and 60,000 Jewish and non-Jewish artists were forced to leave Germany. The situation was no better in other countries: racial laws were issued in Italy in 1938; the Soviet Union was in the throes of the no less ferocious and obtuse dictatorship of Stalin; at the outbreak of the War, Germany invaded numerous European nations, including France, threatening the lives of local intellectuals and those who had sought refuge in these countries. Some 6,000,000 Jews were murdered. The only salvation lay in emigration, in particular to the United States. From a nation at the forefront of European culture, Germany became a reactionary and ignorant nation, whose leading intellectuals included the mysticists Martin Heidegger and Carl Gustav Jung who, however, gradually moved aside, disassociating themselves from the horrors of the regime and, in any case, they represent the unreachable heights for such megalomaniacs as Adolf Hitler, Paul Joseph Goebbels and, in architecture, Albert Speer, Paul Ludwig Troots, Paul Bonatz and Paul Schultze-Naumburg.

As the Austrian author Stefan Zweig wrote in his book *The World of Yesterday*, published posthumously after he took his own life in Brazil in 1942, at the end of a pilgrimage that brought him in 1938 to Great Britain, France, Switzerland and America: “It was reserved for us, after centuries, again to see wars without declarations of war, concentration camps, persecution, mass robbery, bombing attacks on helpless cities, all bestialities unknown to the last fifty generations, and which future generations, it is hoped, will not allow to happen. But paradoxically, in the same era when our world fell back morally a thousand years, I have seen that same humankind lift itself, in technical and intellectual matters, to unheard-
of-deeds, surpassing the achievement of a million years with a single beat of its wings. It has accomplished the conquest of the air by the airplane, the transmission of the human word in a second around the globe, and with it the conquest of space, the splitting of the atom, the conquest of the most insidious diseases, the almost daily realisation of the impossible of yesterday”.

The United States, in the wake of the immigration of the leading representatives of European culture, progressively acquired a principal position in every field of knowledge. If the capitals of culture, during the golden age of Europe, were Paris, Munich, Vienna and Berlin, after the war they would be distilled to one: New York.

PART TWO: THE DECLINE AND REBIRTH OF MODERN ARCHITECTURE

Part Two, Chapter 1: Between Nature and Technology: 1933-1944

1.1 After Classicism

If there that after 1933 unified the old and new continents it is without a doubt classicist. It would exhaust itself in 1944, when the disasters provoked by the Second World War swept away any desire for rhetorical camouflage. For their celebrative buildings, Hitler and Stalin pretended, without alternative, the use of the classical language. The more tolerant and to some degrees more open and curious Mussolini was stimulated by the idea of Romanness that led him to prefer Piacentini and pompous figures of all manner to the Rationalists.

The passion for pediments, columns, cornices and symmetrical and axial compositions also invaded France, Great Britain and the United States, restoring a conservative attitude that, in truth, had never actually disappeared in previous decades. It also made inroads in the credo of some architects who had previously cast their lot with innovation and the avant-garde; they include Lurçat who, despite being the author between 1930 and 1930, of the functionalist masterpiece of the Villejuif school, in 1934 designed a rhetoric project for the Academy of Sciences in Moscow, and Oud who in 1938 realised a building for Shell that was so symmetrical and monumental that it outraged numerous colleagues, including Philip Johnson.

Making the situation even more worrisome was the exhaustion of a season of the Modern Movement that, after having produced, toward the end of the 1920s and the early 1930s, a vast range of masterpieces, appeared headed toward a progressively more formalist attitude that could be summarised in the banal
formulas of the International Style proposed by the exhibition at the MoMA in 1932. Yet if contemporary architecture, as Johnson and Hitchcock would have it, could be resolved in a style, based on what ethical premise could it imagine improving the world? What changed then – this was the question raised, not without reason, by the supporters and enemies of the Modern Movement alike – if a building, rather than flaunting post-cubist lines, adopted those of the Greeks or Romans?

As occurs during all periods when a great many questions have difficulty in finding answers or when the answers are incorrect, when the tension of society appears to be exhausted and the taste of public opinion regresses, we see the creation of alternative operative hypotheses and original lines of research, in some cases minor, though no less involving and sufficient to question tried and tested points of view.

There are two standouts: the organic and the technological.

The first, and more successful, boasts Wright and Aalto as its principal exponents. During the second half of the 1930s Wright was close to seventy years of age. His relationship with nature had been acquired some time ago, with the Prairie Houses, followed by two decades of experiments focused on the recovery of anti-classical Japanese and Meso-American cultures. Aalto was half Wright’s age. For this young exponent of the CIAM, the organic was born of a naturalist and psychological investigation of the functionalist credo, shared with many of his contemporaries who equally felt the post-Cubist mantle to be too restrictive. Besides, Le Corbusier himself, from a generation between Wright and Aalto, beginning in the 1930s and based on an original line of research, was questioning the Purist ideology and plastered planes-surfaces and moving toward natural materials and plastic forms borrowed from spontaneous architecture.

The second line of research was technological. It also featured two sides: the United States and France. In America, the points of reference were the review *Shelter* – with essays by Buckminster Fuller, Knud Lonberg-Holm and Theodore Larson – and the group known as Structural Study Associates, which included Frederick Kiesler. The review assumed a position contrary to the International Style, publishing a fiery piece by Wright on the exhibition at the MoMA. Works such as the Demountable House from 1932 by Alfred Clauss, the Crystal House realised in 1933 by George Fred Keck and Leland Atwood, the American Motor Home from 1934-35 designed by Robert McLaughlin and the North Pole kiosk from 1938 by Bertrand Goldberg continued the research begun with Buckminster Fuller’s Dymaxion and continue to amaze for their innovative experimental qualities. The year 1935 saw the publication of the *Time-Saver Standards*, a design manual focused on rationalising the building process. It consolidated the
results of a pragmatic and professional culture that, after the Second World War, would produce a new season of masterpieces.

Precedents of the technological line that developed in France include Charreau’s Maison de Verre and Perret’s research into the use of reinforced concrete. Despite the latter’s classical approach, he was seen by younger architects (including the now fifty year old Le Corbusier) as a fellow traveller. The influence of new technologies would affect the French-American architect Paul Nelson who realised the Maison Suspendue between 1935 and 1937, a masterpiece – described in the previous chapter – that questioned the traditional forms of dwelling in favour of a more dynamic and spatially involving approach based on functional modules. There were also the architects Eugené Beaudoin and Marcel Lods who in 1935 realised an open air school, characterised by a notable functional flexibility. As we will see in the following paragraph, the pair collaborated with another emerging figure in French architecture, Jean Prouvé, on the design of the Maison du Peuple in Clichy, the first multifunctional building in the history of twentieth century architecture.

1.2 Le Corbusier at the Crossroads

A few years prior to the International Style exhibition, Le Corbusier showed a gradual abandonment of the purist forms that had characterised his work and produced such masterpieces as the Ville Savoye. In 1930, after experiencing with his own eyes the dimension of the infinite landscapes of South America, in flight with Mermoz and Saint-Exupéry, after being fascinated by the heat and sensual beauty of the Mediterranean casbah and thunderstruck by his meeting with the beautiful and provocative Josephine Baker on his return voyage from Brazil, he proposed his plans for Rio de Janeiro and Algiers: two immense signs that have little to do with the zoning of space found in his two previous ideal cities. The Obus plan for Algiers, in particular, is a ribbon of highway running along the coast to which the architect attached six levels below and twelve above, distanced 5 meters from one another to allow those who wished to build a home between them to do so as they saw fit. Le Corbusier attained three objectives with this proposal: realising a linear city that observes the surrounding landscape, identifying a formula, that of the macrostructure, that permits users to manage choices on their own (anyone could build a home in the style of their choice within this system) and consenting the architect to control the final form of the entire construction. Beyond the captivating drawings used by Le Corbusier to illustrate his plan, it does not take much to understand that the apparent openness toward self-construction in reality conceals a notable technological ingenuity: the eighteen storey tall ribbon would have irremediably
ruined the coast and it is doubtable that a simple highway would suffice to connect such a dense settlement. The project, which remained on paper, would however meet with immediate success above all in the 1960s when, as we shall see, the approach to macrostructures appeared to be the magical solution that fused the need for order of central government with the freedom of individual users.

Together with the plans for Algiers and Rio, there was also the Ville Radieuse, the latest drawing of an ideal city proposed in 1931 in lieu of the Ville Contemporaine from 1922. The plan was subdivided into four bands – tertiary activities, residences, social services and industries – based on the rigid separation of functions theorised by the CIAM in 1933. The homes were *redent* blocks: ribbons differing from the *immeubles villas* of 1922 thanks to an increased articulation in plan and that, inside, contain apartments studied to guarantee each user a standard of 14 square meters. The project, inspired by the minimal standards of the sleeper car and dedicated to his friends at the CIAM – we can recall that the 1929 meeting was dedicated to the minimum dwelling – wished to demonstrate the possibility to obtain, by following the principles of the convertibility of daytime and nighttime spaces, comfortable dwellings at affordable costs. There was also a desire to refute the accusation of creating homes only for the wealthy that came in the wake of the Weissenhof housing that, we can recall, were among the costliest of the entire intervention.

While new directions in research were evident in projects at the urban scale, highly unsettling theories emerge from those at the scale of the building, with incursions into the monumentalism of the Beaux Arts, the vernacular of spontaneous languages, the surreal and metaphysical and, as well, investigations of new technologies.

The Beaux Arts approach can be found in the project for the Palace of the Soviet (1931), a gigantic building with an auditorium for 15,000 people, another for 6,000 and parking for 500 automobiles.

“Bolshevism – affirmed Le Corbusier – means: everything as big as possible”. His response would be consequent to this statement: a symmetrical parti, blocked, far from the refined project for the Palace of the League of Nations (1927) and the Tsentrosoyuz Building (1928-35). Despite the presence of a few elements of Constructivism, such as the large arch whose slender tie rods support the roof of the largest hall, what emerges is the classicist attitude borrowed from his masters Perret and Behrens. Thus architecture transforms into a machine that guarantees order, equilibriums and proportions, but loses the human scale; in short, designed to amaze and shock rather than involve, the same approach being tested by organic architects at the time.
Indeed, Le Corbusier, as much as he was discovering vernacular and spontaneous architecture at this time, also sought – at least in an initial phase – to rationalise it and recover its forms to match a modern and Cartesian image. This occurs for example in the Errazuriz House in Chile (1930), in the villa constructed for Madame Mandrot (1931) and the weekend house in the Paris suburbs (1935), where he uses sloping or vaulted roofs, wood beams and stone walls. At the same time, however, he was progressively tempted to experiment with highly evocative forms that he would refer to using the term “objects of poetic reaction”, drawing inspiration from Surrealism, an artistic style that was particularly present in France at the time, led by Breton and his numerous followers. They would suggest the discovery beyond visible reality of the world of the invisible, of pulsions, of dreams. Le Corbusier, whose rationalist mask of a Swiss watchmaker had always concealed a romantic and Nietzschean culture, would fall under its spell, identifying the formativeness deriving from the unconscious as the complement to a Cartesian logic that would otherwise risk suffocating it: the Dionysian opposite and Apollonian complement. In this light, I believe, it is necessary to observe the attic designed for Charles de Beistegui in 1930-31, along the Champs-Elysées in Paris, characterised by three large terraces and almost ignored by critics because it was not considered to be aligned with the architect’s rigorously intellectual image. It is a project to which, instead, Le Corbusier dedicated ample space in his Complete Works (Oeuvre Complete), with ad hoc photographs that well explain the play of surreal combinations such as that between the external fireplace and the Arc de Triomphe, the almost magical value of the golden section used to design the library and the mannerist analogy between the arbitrary geometric forms of the trees, hedges and architectural volumes.

Balancing these incursions into the irrational are, finally, some works that demonstrate an increasingly greater investigation of the more recent techniques of building, beginning with the double wall in steel and glass, which corresponds with the creation of an artificially air conditioned interior environment. These are the projects for the Immeuble Clarté in Geneva, for the Cité du Refuge, the Porte Molitor condominium and the Swiss Pavilion at the Paris university, all realised between 1930 and 1933.

The Immeuble Clarté in Geneva, also for the precision of its detailing and accuracy of construction demonstrated by Swiss trades, is the most successful: for some it prefigures the high-tech research that would follow in successive decades. Of no less interest is the Swiss Pavilion for its articulation in three volumes – hosting the rooms, the stairs and the collective spaces – separated from one another though part of a unique dialogue because, together with the large façade in steel and glass, there is also rustic stone and pilotis that begin to lose their geometric purity (they are no longer the slender cylinders of the Ville Savoye) to acquire a plastic
energy; all within a functional programme that appears to hold abstraction and matter together in a precarious equilibrium. Nothing could offer a clearer image of the ambivalence – between enthusiasm and disillusion – of Le Corbusier for the myth of the machine and, in particular, the machine for dwelling. Already from the early 1930s he seems to announce the coming of the new season of Brutalism, which would produce new masterpieces after the Second World War.

1.3 Wright and the Season of Masterpieces
The period from the end of the 1920s to the beginning of the early 1930s was one of the worst for Wright. His scarce professional opportunities, determined by a disordered life and the economic crisis of 1929, was added to the awareness of having been excluded from current debate, the suspicion of having been surpassed by the new currents of architecture in Europe: this led him toward the progressive abandonment of now out-dated styles and the vague Deco flavour that characterised his work in Los Angeles where he produced homes in blocks of reinforced concrete, in favour of a cautious move toward the more prevalent functionalism. This can be seen, for example, in the project for E. Nobel apartments in Los Angeles (1929) which shows a number of references to the more evolved language of his ex disciples Neutra and Schindler, developed in the project for Mr Lovell. Or also in the project for the house on the Mesa River, in Denver (1931), which he showed at the 1932 exhibition on the International Style organised at the MoMA by Henry-Russell Hitchcock and Philip Johnson. The same years Wright presented his notion of the ideal city: Broadacre City (1931-35). He imagined it as a city-territory, based on the model of Los Angeles, where each inhabitant has the right to a detached dwelling and a piece of land, his/her own space, avoiding the densification of millions of people in the metropolis-megalopolis, seen as the origin of so many of the evils plaguing contemporary society; with this in mind he sought to exploit the potentialities of new means of communication, such as boats, automobiles, but also futuristic helicopters imagined for individual use, to create small communities of approximately 1,400 families, spread across the territory, founded on self-government and, thus, extraneous to the bureaucracy contaminating modern industrial cities. His proposal was antithetical to those developed in Europe at the same time, and based instead on the concentrated and intensive use of land. Despite the fact that Broadacre City shared with Le Corbusier’s Ville Radieuse the idea that the city must disappear to make way for landscaping and nature, it is differentiated for its more radical nature. Broadacre, Wright claimed, “will be so greatly different from the ancient city or from any city of today that we will probably fail to recognise its coming as the city at all”.

An end to Wright’s financial difficulties during this period – described in a previous chapter – came in part from the idea to re-launch Taliesin as an educational centre open to young apprentices, and expanding it to host new residents (1932). One of them would prove extremely useful: the young Edgar Kauffmann. The son of a rich merchant from Pittsburgh, Kauffmann busied himself sponsoring Broadacre City to his father and to convince him to build a summer home in Bear Run, establishing the conditions for one of Wright’s greatest masterpieces: Fallingwater.

Constructed – not without difficulty – between 1936 and 1937, Fallingwater is simultaneously a response to the functionalism of the International Style and its surpassing. That it is a response to functionalism, perhaps to the slap in the face received by Wright by the curators of the show at the MoMA in 1932 (we can recall Johnson’s joking affirmation that, wishing to take him out of play by relegating him to the role of a simple precursor, he labelled him the greatest architect of the nineteenth century), is demonstrated by a radical simplification of architectural forms. Everything is clear, simple, clean and geometrically resolved in a play of planes, differing from Wright’s previous works dominated by an ornamental chiaroscuro, rapid passages from shadow to light, plays of decoration inspired by the Orient and Meso-America. We are beyond functionalism. With Fallingwater, as many have pointed out, there is a celebration of the union between nature and human formative; the first provides the architect with the pretext for his work, though it is only the second that, by giving value to and dramatizing empirical data – in this case: the small waterfall, like many others – transforms it into the demonstration of a possible relationship, a new way of intending the relationship between man and his environment, in other words, through organic architecture.

Sketched in only a few hours after a lengthy period of discussion spanning months – Wright drew beautifully though only with great difficulty before having the entire project worked out in his head – the entire composition is a play of contrasts between light cantilevered planes finished in stucco and the vertical structure in stone. The proposition is to occupy space in all directions, achieved, in this case, by the arrangement of the planes, some oriented in the long direction and others in depth, as well as the circulation. For example, we can observe the changes in points of view Wright imposes on those entering the house: the visitor first enjoys a panorama of the elevation embracing the waterfall, and then crosses a small bridge from which he/she views the construction from an oblique angle and the torrent from above, only to be conducted to the back where the entrance is located. After entering, there is a compressed space that ends at a blank brick wall; immediately after turning to the left – in other words, after another change in direction – the visitor is treated to a view of the living room whose windows open onto the landscape and which, finally, allows for a view of the natural setting.
surrounding the house. Finally, it is possible to observe the openings, conceived as diaphragms through with interior and exterior enter into an uninterrupted relationship of continuity: this can be seen in the way glass, when it meets a wall, is simply slipped into the stone without being framed or by the way corners are dematerialized and resolved through the simple connection of two panes of glass in order to avoid the visual impediment of a standard mullion. The view, nonetheless, is always filtered by an artificial element found beyond the window, for example the parapet of the terrace, with the aim of connecting architecture and the landscape, impeding the vision of only one or the other. It is thus a dynamic vision and a spatial-temporal continuum, but also a contiguity between building and nature that is part of a process that artificializes nature and naturalizes the artificial, consequently bringing an end to the International Style, which opposes the two terms, separating construction, viewed in idealised terms, from context.

Also in 1936 Wright was offered the possibility to complete another masterpiece the Johnson Wax complex in Racine (1936-39). The exterior of the building is characterised by plastic masses rendered dynamic by the rounding of corners and curved connections; inside, by dendriform columns supporting a transparent roof obtained by aligning tubes of Pyrex glass. The same type of glass was also adopted for the “long windows” at the top of the walls, the point of connection between wall and slab, “precisely – as Bruno Zevi pointed out – at the point where we traditionally find the heavy element of the cornice”.

As Fallingwater demonstrated to a stunned American public that it was possible to live in a different manner than that to which the metropolis had made them accustomed, the Johnson Wax building, some thirty years after the completion of the Larkin Building, demonstrated that it was also possible to work in a different way: in spaces separated from their surroundings, introverted for functional reasons but, at the same time, fascinating enough to produce an artificial landscape that was not without natural suggestions, in this case the columns reminiscent of trees in a forest flooded with overhead light.

Fallingwater and the Johnson Wax building, as the critic Frampton noted, “would have doubtless found their ideal location in Broadacre City”. All the same, during this period Wright was also busy trying to imagine how to realise affordable constructions that could become dwelling models for his ideal city. The pretext for dealing with this issue came with the commission to design the Jacobs House in Madison (1936-37). This led to the Usonian, a variation of the Prairie Houses: homes that, as we can recall, characterised Wright’s work at the end of the 1800s/beginning of the 1900s. The Usonian differed from the Prairie Houses for their heightened modernity. They generally present smaller spaces, a greater degree of integration between the kitchen and living room that takes into account the
reduction in domestic help; they are even more connected to the site, from with they are separated only by a garden; they feature flat instead of pitched roofs. Wright designed a great many of these homes during his career. Some would be imagined to be built by their clients, with minimum financial resources. Others would be costlier and others, such as that for Mr H.F. Johnson (1937), downright luxurious. Wright also used the Usonian to test a vast range of building materials: natural and artificial. In fact, building in the nature of materials did not mean utilising only natural materials such as wood, brick or stone, but using all materials, and each in the most appropriate manner. This led to the use of concrete in the Usonian – returning to the experiments with blocks from his time in Los Angeles – and later even plastic materials. There were also diverse and numerous formal matrixes. Founded on square, rectangular, rhomboid, hexagonal and circular modules, they demonstrate an unparalleled creativity.

In 1937, reborn and definitively out of financial trouble, thanks to an enormous notoriety that led to the publication of Fallingwater, the now seventy-one year old Wright decided to build a new Taliesin in Scottsdale (1937-38). The move served to institutionalise his movements from Wisconsin to spend the winter in Arizona. It would soon become a pretext for the realisation of yet another masterpiece: a complex of futuristic forms – one need only look at the treatment of the roofs – and archaic designs tied to the local stone and colours.

1.4 Asplund, Aalto and Organic Architecture in Europe

Erik Gunnar Asplund, together with other students such as Lewerentz, was part of a group that protested in 1910 against the teachings offered by the Royal Academy of Fine Arts in Stockholm, to found its own school of architecture. Though brief – it lasted only one year – the experience was fundamental to the development of a figure, substantially extraneous to any line, trend or style, who would have a very notable influence on the creation of a Nordic school.

Between 1920 and 1928 Asplund completed his most famous work, the Stockholm Public Library, a building with a classical parti that vindicates a certain rigidity of forms, and an interior space as solid as it is inviting. Between 1928 and 1933 he approached the poetic of functionalism, and in 1930 he completed his masterpiece, the Stockholm Exhibition, a complex of modern lines characterised by a creative and playful atmosphere. He denoted an attitude opposed to the rhetoric and magniloquence of the many international exhibitions organised by numerous European cities between the two World Wars. It was also far from the contemporary rationalist and cubist approach, characterised by blocked and elementary volumes that referred to the ideology of the machine. With the expansion of the Goteborg Law Courts (1934-1937), Asplund demonstrated that it
was possible to work in a very delicate historic context and speak a very modern language. With the crematorium at the Woodland Cemetery (1935-40) he returned to the classical, though without falling into the trap of classicism. Along the same line – pragmatic and empirical – between 1933 and 1935 we find one of the members of the CIAM, the Finnish Alvar Aalto. During this period he completed two projects received after winning two competitions, respectively from 1928 and 1927: the Tuberculosis Sanatorium in Paimio and the Library in Viipuri. Both can be ascribed to the internationalist style of the Modern Movement, though defined in accordance with the poetic of so-called New Objectivity: in particular, there are notable references to the pared down and elegant style of Duiker whose Zonnestral Sanatorium would have a notable influence on the young Aalto (in 1928 he was thirty years of age). Both of Aalto’s projects, exactly like those of Asplund, demonstrate a specific attention toward aspects of perception united with a sensitivity toward nature and materials. For example, both façades of the Sanatorium open up toward the landscape, while the building is characterised by colourful interiors, with rooms that employ a series of devices to render time spent at the institution less oppressive: coloured ceilings, heating at the feet of the beds, a system of ventilation that avoids currents, wash basins designed to reduce the sound of running water, furnishings in curved plywood. In the Library Aalto tested a space in which books – arranged along the perimeter of a double height space illuminated by generous skylights – are immediately available to users; he also invented, in a room for conference and debates, an undulating wood ceiling whose curves were studied to improve acoustics and, together, to suggest the forms of nature that refuses to be bridled by linear and orthogonal compositions. A versatile figure, and a talented professional, in 1932 for Artek, a furniture factory where he was involved directly, Aalto produced the laminated wood chair designed for the Sanatorium. Production began in 1933 and, together with other furnishings in curved wood manufactured successively, would come to represent a sort of manifest for the organic approach where, in lieu of thin chrome steel piping and rigid geometric forms – we need only look to the coeval furnishings designed by Le Corbusier or Mies – there was a prevalence of natural materials and curves borrowed from the Nordic landscape. In 1937, in occasion of the Paris Exposition, Aalto stunned his colleagues at the CIAM with a pavilion with a steel structure finished with wood walls and accessories supported by rough tree trunks bound together by natural cords. They were a concrete representation of the themes of the Exhibition – the use of Finnish wood as a structural element and cladding of a modern construction – with a work that, in its elegant simplicity, ridiculed the rhetorical, monumental and classicist pavilions erected by Nazi Germany, based on the project by Albert Speer, and that of Stalin’s USSR, designed by Boris Iofan.
Commissioned with the design of the Finnish pavilion for the 1939 World’s Fair in New York, Aalto cut a 16-meter high space along the diagonal with a majestic undulating wall subdivided into four overlapping horizontal bands, inclined and projecting over the visitor. The tallest element was partially finished with illustrations dedicated to Finland, the third to work and the second to local products. It was the mature work of European organic architecture of which Aalto presented himself as the leader (in the USA the movement was, obviously, under the guidance of Frank Lloyd Wright).

Also in 1939 Aalto completed the Villa Mairea in Noormarkku. The house features and L-shaped plan that, with the addition of a canopy and sauna, tends to form a U that frames three sides of an interior space hosting a curvilinear pool. The exterior of the villa is clad with diverse materials – brick, plaster, stone, wood, slate – each highlighting particular aspects of the volume of a construction that appears in an articulated form to ensure its proper insertion within the landscape, based on approach that recalls the poetic of the picturesque. This poetic is emphasised by the insertion of natural fragments, such as, for example, the slender trunks of birch wood supporting the canopy marking the main entrance. The interior is dominated by warm natural materials used in way that valorises their different colours. The unmissable birch trunks supporting the light wood stair connecting the ground and upper floors and, to avoid the exposure of the structures to the cold, the columns, in black ebony, are partially clad in wicker.

The house demonstrates an approach that differs from that of Wright who, instead, confronted nature in a more decisive manner, without concessions to mimesis and which, inside the home pursued a spatially more stringent and unitary logic, to which the single components of fixed furnishings were subordinated, to the point of becoming an integral part of the structure. Perhaps, precisely because Aalto’s strategy was softer, it met with enormous success. Giedion would updated his *Space, Time and Architecture* to make room for the new master and Aalto would soon be invited to America to teach at MIT and work on the project for the school’s new dormitories. More will be said in the next paragraph.

1.5 Prouvé: High-Tech Exercises

The Atelier Jean Prouvé date back to 1923. It was a factory specialised in steel products, producing gates, elevator cages and railings, as well as deigning homes and furnishings. These activities saw Prouvé collaborating with important architects and designers from his generation: including Le Corbusier and Charlotte Perriand. He produced a number of successful products, of his own design, such as chairs with adjustable seats and backs. In 1930, for example, together with
Beaudouin, Lods and André, he realised a set of school desks in bent steel and plywood, designed based on ergonomics and adjustable in height and, when necessary, easy to disassemble. In 1931 he founded the limited liability company Les Ateliers Jean Prouvé, that provided furnishings in steel and equipment to complete the Grange-Blanche Hospital designed by Garnier in Lyons. The work kept him busy for a long time, above all the impeccable design and realisation of the details that required hundreds of drawings. In the end, he found himself in financial straits. The 1930s were also the period of the design of a system of mobile partitions and experiments with prefabricated houses and structures, lightweight and easy to transport, such as the maison BLPS from 1935, a house measuring roughly 3 x 3 meters and designed as a minimum unit for vacations. Also from 1935 is the Aeroclub Roland-Garros in Buc (Paris), a steel structure clad in glass and prefabricated two-sided panels separated by a layer of insulation. The toilet blocks were also prefabricated, using a technique reminiscent of that employed for service spaces on ships and airplanes, and prefiguring the three-dimensional toilet cells designed by 1938 and 1940 by Buckminster Fuller for his Dymaxion. There are many similitudes between the two inventors: both worked primarily with steel and believed in prefabrication and factory production; both were fascinated by the image of technology; both focused on the optimisation of materials, economy, lightness, functionality and flexibility without falling into the trap of formalism, where representing modernity seemed more important that actually achieving it. “I do not have a style – Prouvé stated – I have never designed forms. I created constructions that have a form”.

Between 1936 and 1938 Prouvé was involved in the construction of the Maison du Peuple in Clichy (Paris). This 40 x 38 meter building was perfectly flexible and designed to host diverse functions that changed throughout the course of the day and week: from a market to a lecture hall. The result was an architectural machine whose roof, walls and slab were designed as mobile components. It prefigured the search for total flexibility attempted some thirty-five years later by the High-Tech movement and – at least in the intentions of its architects – from Piano to Rogers and Franchini with the Centre Pompidou in Paris from 1971-77 (fate would have it that one of the competition jurors for this project was none other than Prouvé).

Busy working for other architects, designing façades and sophisticated external panel systems (Frank Lloyd Wright, who visited the Maison du Peuple in 1938, considered him the inventor of the curtain wall), Prouvé would spend his entire life dedicated to industrialisation and prefabrication, as well as the production of refined objects of design, some of which met with widespread success. All the same, as it was for Buckminster Fuller, his success would always be half what it should be: his interlocutors recognised his talent and genius though few possessed
the courage to follow him into such unknown territories. This led to the failure of his large factory in Maxéville, where Prouvé, after 1947, at the height of the post-war period, placed so many of his expectations for the future: on the brink of economic disaster, his company was absorbed in 1954 by the Société de l’Alluminium Francoise, while Prouvé himself was confined to the projects office based on an agreement that still allowed him to operate, though seriously weakened and, as Le Corbusier would later define with an image as crude as it is effective, cutting off his hands.

1.6 Contradictions in Italian Architecture

The years between 1932 and 1935 in Italy were marked by the construction of the Città Universitaria in Rome (the University City) and by the large competitions organised by the fascist regime to build some of its most representative projects: Florence railway station, the post offices in the capital, the city of Sabaudia and – while it was never built – the Palazzo del Littorio. Thanks to the omnipresent Piacentini, in one way or another the deux ex macchina of these operations, there appeared to be a balance between the various factions once constantly battling one another. The “prince of architects”, with the widely recognised skill of a politician and mediator, managed to involve in his operations (Piacentini’s office realised a staggering quantity of projects and public works in Italy’s larger cities: from Naples to Ferrara, from Brescia to Turin and, above all, in Rome) even his potential antagonists, above all if they possessed the ability to orient the opinion of architects through publications or union initiatives. For the Città Universitaria in Rome, for example, he co-opted both Pagano and Ponti – the editors of Casabella and Domus – Foschini, whom he himself replaced as editor of Architettura (a position he held from 1932 to 1943) and various exponents of the disbanded Miar. His objective was to realise, with the maximum possible consensus, a fascist style, of which he was the custodian and guarantor, modern though extraneous to the canons of the International Movement. A style with its own “unitary physiognomy, organically coherent and stylistically defined ... in direct relation with national influences”. A style that in 1934 appeared to become the official style of the State at a moment when Mussolini – I spoke about this in the previous chapter – publicly applauded the station in Florence, the project for Sabaudia and the Church of Cristo Re, the latter by Piacentini.

Submitted in July 1933, the drawings for the competition to design the Palazzo del Littorio offer an exhaustive panorama of the state of Italian architecture in the 1930s. The object of the competition: a building that symbolised the regime, strategically situated in the Roman Forum along the Via dell’Impero, inaugurated in 1932 to celebrate the tenth anniversary of the fascist revolution. The jury
included: Piacentini, Bazzani and Brasini. The list of competitors included the “Milanese” Quadrante, the review born in May of 1933 and directed by Bardi and Bontempelli. Opposed to the axis Piacentini-Pagano that arose with the realisation of the Città Universitaria, the publication was characterised by a noted attention toward events outside Italy, in particular the work of Le Corbusier, encountered at the CIAM (for the CIAM IV in 1933 Bardi, Bottoni, Pollini, Terragni were aboard the Patris travelling to Athens). The group invited him to Italy in 1934 to present him to Mussolini with the hope he would receive a commission to design one of the new cities (Figini and Pollini, for their part, the same year, completed the villaggio dei Giornalisti in Milan, which recalls, perhaps a little too much, the Ville Savoye and the two houses in Weissenhof).

For this particular competition, the “Milanese” of Quadrante were divided into two groups, one consisting of Banfi, Belgiojoso, Peressutti, Rogers, Figini, Pollini and Danuso, and the other by Carminati, Lingeri, Saliva, Terragni, Vietti, in collaboration with Nizzoli and Sironi. There were also numerous “Romans”, including Ridolfi, Libera, Piccinato, Muratori, Moretti, De Renzi, Foschini, Morpurgo and Del Debbio. Other figures of note: Ponti and Samonà.

The results were disappointing: rhetoric and monumentalism triumphed. Only a few projects, among them the two (indicated with the letters A and B) by Terragni’s group had the courage to fully draw on a contemporary language. In particular, project A, with a surprising intuition, perhaps owing to Vietti, proposed an immense and gently curved backdrop, contradicted by a cut that broke it into two elements, and by a drawing of isostatic lines emerging on the surface: an unsettling sign that, more than celebrating the perennial qualities of power, alludes to the dramatic qualities of the unfolding of history in which the precarious stability of forms is possible but, at the same time, undermined by the forces at work. The thesis was made even more convincing by the ruins of the Forum surrounding the building: they offer a glimpse of what happens to forms when the forces that made them possible shift in direction and cause their decline. It is also wroth noting that, through this project, Terragni and his companions demonstrated that modern architecture can possesses a very high contextual value: more effective the more it avoids borrowing stylistic elements from the past to activate, instead, conceptual references and relations of a higher order.

A poet of rationalism and highly unsatisfied person, Terragni experimented with various directions during this period. In 1936 he completed the Casa del Fascio in Como, perhaps his most committed and most suffered project, in which he attempted to establish a coexistence between the innovative spirit of the Modern Movement and the ideal of perfection pursued by the Greeks. The result is a perfectly proportioned prism based on the canons of the golden section. While inspired by the lessons of Le Corbusier, with respect to the purist buildings of the
Swiss-French master, there is a feverish articulation designed to exalt the dialectic between the figure of the volume and the void of existential space. The carvings, shifts and play of projecting structural elements call to mind a mannerist attitude in which the separation from the sources does not occur through a rupture but, as with Michelangelo when compared to Brunelleschi, through plastic moves; in other words, by taking the method extracted from the model to its extreme spatial consequences (it is no accident that, in more recent times, the ultra-mannerist Peter Eisenman remained thunderstruck by the syntactic articulations of this project and assumed it as the object of continuous considerations and studies based on an attitude that could be referred to as mannerist to the third power).

With respect to the Casa del Fascio, the Sant’Elia kindergarten (1935-19837) represents a healthy reconsideration. Having abandoned an attitude that, in the long term, would have produced increasingly more extenuating works, Terragni completed his masterpiece: an open air school whose architecture is a composition of space and light rather than closed volumes and solid walls. Devoid of classically-inspired obsessions, Italy finally appeared to have been given a breath of European air.

An all too Italian air was breathed in Rome, with the Casa delle Armi, inaugurated in 1936. The architect, Luigi Moretti, was the most talented of those working in the capital: he possessed the talent to transform into an abstract and involving spatiality the polished surfaces of marble, the plays of light and the clumsy and elementary geometries of the *littorio* (fascist) style.

In May of 1936 the VI Triennale opened in Milan. Many considered it the swansong of Pagano and Persico, the latter of whom never managed to see it, after his death in a state of extreme destitution and under mysterious circumstances five months earlier. The two, who had worked side by side at *Casabella*, sharing numerous battles and transforming the magazine into a publication recognised across Europe, approached things differently. For Pagano new architecture could be born only from a renewed morality, from rude clarity, from the jealous administration of funding, above all public, and from an exemplary simplicity. Enamoured of spontaneous and rural constructions, in which he found these qualities, he exhibited them in his own collection of photographs, taken in the Italian countryside, with an all too explicit controversial intention toward the triumph of monumentalism sponsored by the regime and the aesthetic approach of the young rationalists, Terragni included. For Persico, the problem of new architecture was, instead, a question of style. Not in the sense of superficial formulas, as it was to some degree for Johnson, but of a truly assimilated idealism that translated into a formative energy, into the capacity for architecture to give substance, in other words form, to utopia. This style could be neither popular, as Pagano would have it, nor nationalist, as Piacentini wished, but European. This is perhaps the light
under which to read the room he organised together with Nizzoli and Palanti where, together with the sculpture of Nike by Fontana, he celebrated the goddess as the symbol of a pacified Europe.

The highlight of the Triennial was the exhibition of international architecture and a gallery of Italian architecture from 1933 to 1936, both curated by Agnoldomenico Pica. The intention was to demonstrate how new architecture, from the Città universitaria to the Florence railway station, from the Case del Fascio to the summer colonies had contributed to the creation of an original language that feared no comparison with what was occurring outside Italy.

In May of 1936, after conquering Addis Ababa Mussolini announced the foundation of the Italian Empire. In June the Bureau International des Expositions accepted Italy’s request to host an International Exposition in 1941. Mussolini did everything in his power to move the date to the following year, to properly celebrate, together with this event which would have attracted the attention of the entire world, the twenty year anniversary of the fascist regime. To host the exposition he imagined the creation of a new district, the E42 that, connected directly with the Via dell’Impero, would project Rome toward the coast: “it will tend to create – an official document reads – the definitive style of our era...It will obey criteria of grandiosity and monumentality”. The role of the designing the district was entrusted to Piacentini, who involved Pagano, Piccinato, Vietti and Rossi. Pagano was glowing: “the perfect fusion of intentions and enthusiasms”, he would state. All too soon, however, the chickens came home to roost. Mussolini’s imperial ambitions required a magniloquent and rhetorical architecture of arches and columns. Piacentini did not hesitate to provide him just that, exerting strong pressures on the architects commissioned with the design of individual buildings, selected either directly or via competition. What is more, he did not hesitate to transform the central axis, originally raised above the ground, into a representative boulevard that ignobly cut the district into two. Pagano decided to put an end to their collaboration. The same was not true of the many architects interested in the work, many of who accepted the compromise. Libera would state “in the EUR where it is still possible to see the cemetery of our defeats, each of us lost as we could”. In reality, Libera himself, in order to realise the Palazzo dei Ricevimenti e delle Feste (now Palazzo dei Congressi) was forced to make recourse to a pathetically academic competition entry and only after receiving the commission, arrive – after enraging Terragni who accused him of cheating – at a much better project though at the price of the heavy columns at the front entrance. This compromise was perhaps inevitable in order to allow one of the most talented architects of the regime to realise a work of great value that, returning to the successful intuition of the post office building on the Aventine, is a composition of pure volumes. However, if the C-shape of the post office’s main
building, the elliptical based prism of the main hall and the entry portico are characterised by different colours and materials, the podium and volume of the main hall of the *Palazzo dei Congressi* are both finished in marble, with the consequent loss of a certain almost metaphysical self-confidence, though with the acquisition of a more austere appearance, aligned with the imperial drives of the regime.

Another work by Libera, though doubtless with a determinant role played by the client and his master builder (to the point that the architect avoided calling the project his), is one of the most successful works of the twenty year fascist period: the villa of Curzio Malaparte in Capri (1938), where rationalist forms bend to local etymons and dialogue with the severe natural scenario of the site.

Another masterpiece from the same year is the Tuberculosis Clinic in Alessandria (1936-38) by Ignazio Gardella, a rationalist project in which the severity of the parti confronts the delicate play of chiaroscuro created by the wall of the façade. Stand-outs in the field of residential architecture, together with the housing by Terragni (Casa Rustici in Milan from 1933-36, Casa Giuliani-Frigerio 1939-40) are the two *palazzine* (small apartment blocks) in Via Nicotera in Rome (1937-38), designed by Luigi Piccinato: they are characterised by their unabashed elegance that contrasts greatly with the anachronistic eclecticism of the surrounding district built during the same period of the 1930s.

The year 1939 gave us the headquarters of the Società Ippica di Torino by Carlo Mollino. This work, already characterised by particular and unusual spaces and details, delineates the unmistakable traits of a figure who would become one of the most eccentric personalities of Italian post-war architectural culture, and the author of refined stylistic patchworks that would sound the depths of a vast range of themes: from the organic to the surreal. This is the latest in a long line of examples that beyond the traditionalist rhetoric of official culture, even during this dark period, Italy was home to divergent and creative drives and tensions that, for their sporadic and dispersive nature, were unable – and not only due to the regime – to reach a critical mass sufficient to consent a different, more brilliant and more creative future.

### 1.7 The World of Tomorrow

The 30 April 1939 marked the inauguration in New York of the World’s Fair, an event in the works since 1935, when the committee was created to propose the American city’s candidature. The title selected was: *Building the World of Tomorrow*. It summarises a series of reflections that involved leading exponents form the world of culture, including Lewis Mumford, the famous American sociologist. Mumford saw the exposition as an occasion to show the American
public the possibilities offered by an organic approach, focused on man in his
totality and freed of the shackles imposed by the society of machines. To this end
Mumford suggested ordering the Fair in nine thematic pavilions dedicated to the
themes of housing, food, health, education, work, leisure, art, political life and
religion. By illustrating the novelties foreseen or foreseeable in each of these nine
fields, he wished to present the general public with clear and convincing images, a
panorama of the opportunities offered by technological progress to improve the
quality of life for the population. He proposed entrusting the layout and design of
the World’s Fair to Frank Lloyd Wright, one of the few figures who could concretely
prefigure a model of habitat for the future able to dialogue with nature and, at the
same time, to respond to the challenges raised by the most advanced areas of
industry. Neither proposal ever saw the light.
As occurs in events involving numerous subjects and vast quantities of private
economic resources – the exposition attracted the nation’s most important
industries – the final programme was a summary of numerous themes that,
incoherently and to some degree or another, dealt with the theme of the future.
The fulcrum of the World’s Fair were two structures – the Trylon and the Perisphere
– designed by the architect Wallace Kirkman Harrison, one of the authors of the
Rockefeller Center and later in partnership – though it would be better to say in
opposition – with Le Corbusier as one of the co-authors of the Palace of the
League of Nations. The Trylon was an obelisk rising skyward, a symbol of the
vertical city, of the skyscrapers dotting the skyline of the American metropolis. The
Perisphere was a 200-foot diameter sphere, the exact width of a typical Manhattan
city block. Passing through the Trylon, the public was led by two escalators (one
120 feet in length: the longest ever built) inside the sphere with two rotating
balconies, each moving in a different direction, apparently lacking any form of
support. This offered the ideal position for an overhead view of the model of
Democracy, an ideal city of the future. It consisted of a green heart dominated by
a 100 storey skyscraper containing the city’s principal services. Nearby were
gardens, parks, sport fields and office buildings. Suburban districts lay further out.
The view of Democracy was part of a multimedia performance that offered a
number of avant-garde effects: including multiple projections onto the shell of the
sphere of images of the people who would soon populate the ideal city.
However, it was Futurama, the spectacle created by General Motors in its pavilion,
that captured the public’s interest. It consisted in a succession of automobilistic
landscapes of the future: streets without intersections, four-lane highways,
automatic pilot systems. The show terminated with a landing in a city, initially an
image and later a full-scale inhabitable model. From an elevated pedestrian path,
visitors could observe traffic below, naturally all models by General Motors.
Finally, there was the City of Light, the spectacle designed by Harrison and built by Edison. Spectators were placed in front of a large model of Manhattan, dominated by skyscrapers and rendered vibrant by a play of lights. Despite the diversity of the three exhibitions, together with countless others, they communicated a message of reassuring optimism: the contemporary city was not the disaster that so many architects and urbanists would have it, and technology possessed the resources to correct its errors and create a vital and pleasurable city of tomorrow.

The immediate perception of this enthusiasm for the future was emphasised by the style of streamlining, in vogue in the United States for some years. It consisted in designing objects with aerodynamic and vaguely futuristic forms. It was used to design high-speed transport vehicles and move passengers from one parts of the exhibition to the other, and the latest generation of trains, in the pavilion dedicated to railways, designed by Loewy, the most talented to the many designers who had adopted this style (as an aside: Wright shows that he was influenced to some degree by this style in the exteriors of the Johnson Wax building, and perhaps also his successive design of the Guggenheim).

Of lesser interest were the national pavilions, with the exception – as mentioned – of the Finnish Pavilion by Aalto, the Swedish Pavilion by Sven Markelius and the Pennsylvania Pavilion fitted out by Gropius and Breuer. The Soviet Pavilion was easily among the worst, together with that of Italy: besides, as the vicissitudes of the E42 so clearly demonstrate – had it not been for the war, the country was to have been the host of the next exposition – the Italians demonstrated an understanding of modernity in terms of nostalgia for the past and imperial rhetoric, rather than any notion of technological development.

Despite the forecasts of more than 60 million visitors, by the closing date of 31 October, little more than 26 million had arrived. To avoid bankruptcy, the exposition had to be prolonged, after a process of restyling that changed its content to it increase its mass appeal. The new exhibition was entitled “Peace and Freedom”, also in relation to the recent outbreak of the Second World War. There were a few scuffles in front of the national pavilions, but the most unsettling thing was the continuing presence, as sovereign states, of the pavilions of Poland, Czechoslovakia, Denmark, the Netherlands, Belgium and France, all invaded by the German army.

1.8 Kiesler and Correalism

In 1939 Frederick Kiesler wrote an article in the *Architectural Record* in which he launched Correalism. It was a theory he had defined, separate from functionalism and the cold visions of the International Style. It spoke of an approach that we
would now refer to as holistic, aimed more at the creation of a complex organism and the effective interrelation between its parts than the design of an abstract geometric composition. What is more, based on the lessons of Surrealism, the visible manifests the invisible which often escapes any rationality intended in the most reductive sense of the term. Kiesler came from a background as an avant-garde artist. Raised in Vienna, where he claimed to have been a disciple of Adolf Loos, he was influenced by neo-plasticism – we spoke about this in a previous chapter – and later by Marcel Duchamp, Breton and the artists of his circle, figures he spent time with in Europe and in America, where he moved in the later 1920s. Kiesler himself, more than a regular practicing architect, was a sculptor who also enjoyed designing, which he conceived, however, in a plastic sense (one of his most famous works, a table in two parts from 1925-38, is highly reminiscent of the work of Arp). In 1942, in New York, he designed the Art of this Century gallery showing works from the collection of Peggy Guggenheim. Faithful to the principles of correalism, according to which context and the work of art must be related, Kiesler created two different exhibition spaces: one for abstract works and one for the work of the Surrealists. In the first space the paintings, conceived as free-standing objects, we arranged freely, suspended from the ceiling on thin wires fixed to the floor. In the second room they were arranged along two curving walls in plywood, from which they were distanced by adjustable arms that avoided the otherwise inevitable interference between curves and planes. As much as each room reflected the theme of the works displayed (a more geometrically essential arrangement for abstract art and a more sensual approach for surrealist art), both room freed the works from the walls and frames, floating them in space to offer a freer perception. Specially designed seating ensured that visitors did not have to remain standing, as in other galleries; they could be adjusted to different positions to offer different points of view and, when necessary, also be used to support other works of art. Finally, there were also plans for a kinetic environment in which the vision of objects was mediated by mechanisms that could be used to observe the works of art as if they were in some aerial space, extraneous to the context of the gallery. Even the lights and sounds, based on the principle of involving all of the senses, contributed to the overall effect, to the joy of visitors and the desperation of Peggy Guggenheim who, in the end, unable to support so much perceptive stimulus, decided to go forgo this part of the show.

Part Two, Chapter 2: Reawakenings: 1945-1955
2.1 A New Monumentality

In 1943, in the midst of the Second World War, the painter Fernand Léger, the architect José Luis Sert and the critic Siegfried Giedion were invited by the American Abstract Artists to collaborate on one of its publications. The theme – a new monumentality – which the three decided to explore, together and each from his own point of view, was more many reasons a taboo, at least among the supporters of the Modern Movement. The fact that it was being dealt with by three of the leading figures of avant-garde research made the operation even more problematic and, at the same time, efficacious. Léger, a painter greatly appreciated by Le Corbusier, was one of the most internationally recognised post-Cubist artists; Sert was the promoter of the GATEPAC (Grup d’Aritistes i Tècnics Catalano al Progrés de l’Arquitectura Contemporánea), author of the Spanish Pavilion at the 1937 Exposition Internationale, which showed Picasso’s Guernica and, after his flight to the United States in 1939, one of the leading figures at Harvard University; Giedion, finally, was the principal theoretician of the Modern Movement and secretary of the CIAM, the International Congresses of Modern Architecture.

The planned publication, perhaps for reasons tied to the war, never saw the light. The following year Giedion’s observations were presented in New Architecture and City Planning. They generated numerous reactions, including the ruthless criticism of Lewis Mumford in the New Yorker. The idea of a new monumentality, above all in the wake of the tragic experience of the 1930s, plagued by the magniloquent of fascist regimes and with the no less disastrous reign of Stalin still underway, was seen if not as out of place, at the very least as hazardous. Little good came of Giedion’s reassurances that a new monumentality, if correctly intended, could not be celebrative nor return to the clichés of the past, but must embody, using original forms, the symbols of a new democratic community, completing at the urban level a revolution of contents and significances that the Modern Movement had begun in 1920s with the design of new buildings, continued in the 1930s with the creation of new districts.

After the war, the theme was picked up in 1946 at a conference organised by the Royal Institute of British Architects and in September of 1948 by the Architectural Review in an issue featuring numerous contributions. One of the most noteworthy was that by Walter Gropius and the Brazilian Lucio Costa. In April 1949, again in the Architectural Review, it was the turn of Lewis Mumford who, in an article entitled “Monumentalism, Symbolism and Style” claimed that the contemporary era could not produce monuments because these symbols had ceased to exist: “an age that has deflated its values and lost sight of its purposes will not produce convincing monuments”.
The theme of new monumentality presupposes another no less demanding one: the realisation of a city that exceeds the simple sum of elementary functions, such as the home, spaces for sport and entertainment and for work; in other words, an organism that, on par with the best examples of the past, has a centre where inhabitants can recognise a sense of belonging and where they can meet. Sert insisted on this theme in his 1944 essay “The Human Scale in City Planning”, in which he supported the principle that contemporary cities must be founded on neighbourhood units where inhabitants have easy access, even without an automobile, to key services. At the same time he spoke of the need to contrast the increasingly more diffuse suburban situations that did not employ the human scale as a “unit of measurement”. Elected president of the CIAM in 1947, Sert opened the seventh congress, hosted in Bergamo, by comparing the human scale of the Lombard city with that of modern cities, “the victims of urban chaos resulting from their disorderly development and lack of planning”. In 1950 he convinced Le Corbusier to dedicated the eighth CIAM congress dedicated to the theme of the “Heart of the City”. What would later be referred to as Urban Design gradually began to take shape: an approach to the problems of the city that was not limited to the enforcement of abstract standards but was instead focused on realistic design and its effective functioning. Giedion would attempt to define the terms of the debate by proposing, for example in his 1951 book *A Decade of New Architecture*, an approach that was based more on “spatial imagination”.

### 2.2 Le Corbusier and Brutalism

Between 1944 and 1945 Le Corbusier elaborated his theory of the three human settlements. It was the latest attempt to establish the canons of an ideal city, rendered even more necessary by the state of the majority of Europe’s cities, either partially or totally destroyed by bombing raids. In coherence with the assumptions of the Charter of Athens, Le Corbusier hypothesised a rigid separation of functions: an agricultural city, an industrial city based on a linear plan and a city of exchanges with a radiocentric form.

The tiles of this ideal city were the *Unité d’Habitation*, an example of which he had the opportunity to build in Marseille during this period (1945-1950): a gigantic eighteen-storey building of 337 apartments of 23 types, for diverse types of families: from the bachelor to the childless couple to families of 3 to 8 children. The interior of the building – imagined as a partially self-sufficient: a village or, if we wish, a modern Phalanstery – included a number of services for residents: small ships for food products and primary necessities and a hotel on levels 7 and 8 and sports facilities, including a small pool and a 300 meter running track on the roof garden level. The idea was to obtain a compact city but, at the same time,
immersed in nature, achieved by assembling a number of different modules. It was the obvious enemy of the urban sprawl and single-family dwellings destroying the territory by breaking it up into a myriad of tiny lots. Constructed in *béton brut* – exposed reinforced concrete – the Unité in Marseille was also a theoretical manifesto of new architecture, an update to the 5 points defined by le Corbusier in the early 1920s. The building was erected atop pilotis, with a free façade, and completely perforated. It thus returned to and updated the idea of the strip window. It also featured a free plan and roof garden. However, with respect to the era of Purism, there was also a novelty in the choice of such a strong material, treated what is more in a decisively plastic manner. One need only observe the robust columns at the ground level and the profiles connecting the soffit to the upper volume, the sculptural chimneys on the roof and the strong chiaroscuro treatment of the façade volume obtained by a sequence of voids/loggias serving the apartments.

To attenuate the impact of such a highly material approach, Le Corbusier used two expedients: a rigid system of proportions founded on the golden section and the measurements of the idea man – the so-called *Modulor* – and the use of primary colours inside the loggias. Finally, he did not hesitate – this is particularly evident on the roof – to use intriguing forms, almost poetic objects, to temper the two sides of his nature: the rational, focused on standardisation, method and the demonstration of the Cartesian method and the irrational, open to the values of art and the ineffable.

It was with the church of Notre Dame-du-Haut, in Ronchamp, realised between 1950 and 1955 that Le Corbusier appeared to abandon the need for a rigid rationality and project himself toward a poetic dimension. Having abandoned the five points, he realised a building that appears to be dominated by white walls and a highly plastic concrete roof. The interior of the church is a play of contrasts – shadow and coloured light erupting through splayed openings – the so-called *canons à lumière* – strategically placed along an unusually thick wall. The result is a highly scenographic effect reinforced by a refined structure: in fact, the building despite the appearance of being a load bearing masonry structure is in reality based on columns concealed in the walls. These are the elements that support the roof, as Le Corbusier reveals where he separates the two elements to create yet another cut through which light penetrates the interior space.

Difficult to catalogue based on the usual architectural categories, the church in Ronchamp is in reality a rather simple organism, sculpted using three gestures that can be clearly seen in plan. The first is the straightforward and decisive sign, almost a sword stroke, of the wall hosting the *canons à lumière*. The second is the broken line linking the wall of the altar with the side wall, the latter closed by cure that defines the space of the confessional on the interior. Its angular form
delimits the static space juxtaposed against the more dynamic space that embraces the altar. The third is the curve that terminates at one end, enclosing the baptismal font and, at the other end, another confessional: it completes the church with the dynamic precariousness of a taught elastic band. The energy of these three gestures passes from interior to exterior and vice versa while, thanks to the curvature imposed of the walls, these latter assume a geometric consistency, and become plastic surfaces. However, entrusting oneself to the poetic of the gesture, as many have observed, is to assume an arbitrary attitude in which vital energy dominates method; this generated many criticisms and the accusation of many colleagues of betraying the values of the Modern Movement. Indeed, Ronchamp wrote the beginnings of a new chapter: this was understood by the protagonists of Team 10 who, as we will see, would orient their research toward new horizons.

Also in 1950, Le Corbusier received the commission to design the city of Chandigarh, the new capital of the state of Punjab, in the wake of the Indian independence and the consequent division between India and Pakistan, which saw the former capital of Lahore assigned to the latter. Le Corbusier established an immediate harmony with the Indian Prime Minister Jawaharlal Nehru, regarding the idea of new nation able to untie the positive aspects of the Western city with the sprit of Eastern settlements; a city that differed from that which Gandhi would have wished for, less monumental and more adherent to the agricultural sprit and traditional aspects of India’s agricultural society. In fact, the project for the new city, with a forecast population of 500,000 inhabitants, appears, in many ways, to have been borrowed from the scheme of the Ville Radieuse. It is characterised by the orthogonality of the area of the Capitol Complex, set at the vertex of the settlement and with an orthogonal grid of 1200x800 meter blocks structured by a minutely organised system of streets based on seven typologies of axes ranging from the highway to pedestrian paths arriving near the homes. The blocks were separated by screens of trees that offer visitors the sensation of being in an immense natural setting rather than a modern urban condition.

Attentive toward the monumental and celebrative dimension, Le Corbusier dedicated a great deal of attention toward the design of the Capitol Complex: the High Court (1951-1955), the Palace of Assembly (1953-1961) and the Secretariat (1951-58). Constructed in exposed concrete these buildings continue the research begun with the Unité d’Habitation: a search for plastic effects, the poetic of chiaroscuro, elementary geometric objects and objects of poetic reaction. There is also a search for forms suitable to the torrid local climate. The High Court consists of two buildings: that containing the halls and a gigantic portal that wraps it and protects it against the sun’s direct rays; the Palace of Assembly is marked by a cylindrical volume that surmounts the hall of assembly to create a cooling tower;
all of the buildings feature generous brise-soleil that block direct sunlight. It is also worth noting that these devices are resolved as formal pretexts, as occasions for honing a conception of architecture defined as an intelligent play of volumes under light, while their functional benefits are less important. This is demonstrated by the very choice of reinforced concrete, a material not exactly suitable to the local climate. What is more, little remains of the complex symbology – in part borrowed from Indian tradition, in part from the architect’s pantheist imagination – upon which Corbusier based the urban and building programme. What remains, however, is the fact that Chandigarh, despite its evident shortcomings, typical what is more of any newly founded city, has satisfactorily absorbed an increase in the number of inhabitants and, among India’s many cities, often reduced to a mass assembly of shacks, continues to represent a possible model of settlement.

2.3 Eames House

In 1945 John Entenza, director of the review Arts & Architecture decided to launch the “Case Study Houses” programme. It consisted in the construction of homes across Los Angeles by experimental architects such as Rudolph Schindler, Richard Neutra, William Wilson Wurstel, Raphael Soriano, Craig Ellwood, Pierre Koenig and Quincy Jones. The aim was to provide a concrete demonstration of the advantages of a more contemporary way of intending the home. The programme would last until the 1960s and see the realisation of 27 single-family homes and two apartment blocks. House number 8 was designed by Charles e Ray Eames, and number 9 by Charles Eames and Eero Saarinen. Both homes, one for the couple of designers and the other for Entenza, were completed in 1949, though design began in 1945, soon after the war. The first is undoubtedly the most interesting, while the other is evidence of the friendship between Charles and Eero. The two met in 1938 at the Cranbrook Academy, the university designed by Eero’s father Eliel, the architect who earned second place in the competition to the design the new home of the Chicago Tribune, a proposal that drew the admiration of Louis Sullivan. Eliel Saarinen was also the designer of the brilliant Helsinki Central Railway Station, realised in a neo-romanic style reminiscent of both Richardson and Berlage. From 1939 to 1940, Charles Eames worked with both Eero and Eliel, associates since 1937. In 1940, in Cranbrook, Charles met Ray Kaiser, an artist involved in the formation of the American Abstract Artist Group: her help and artistic talent would offer a precious contribution to the “Organic Design in Home Furnishing” competition organised by the MoMA. Charles and Eero submitted a proposal for seating made from curved wood and a pleasant system of tables and chests of drawers: they served to modernise Charles’ ideas, shed his academic background and introduce, within Saarinen’s still blocked lexicon – he had trained
with Gropius and Bel Geddes – a taste for gesture typical of abstract expressionism. Charles and Ray were married in 1941 and moved to Los Angeles where they met Entenza, who invited them to participate in the Case Study Houses programme. The first of the two homes, number 8 – as mentioned – was for the couple themselves. To build it at minimum cost, was imagined with a structure made from off the shelf steel components, painted wood panels and industrial windows. All of these components, due to a last minute change, when the materials had already arrived on site, were assembled in a different configuration than that originally imagined, demonstrating to some degree that even prefabricated projects could produce different results.

Concretely pragmatic in its construction, Case Study #8 represents the antithesis of the overly refined method of construction proposed by Mies van der Rohe, that would soon capture the attention of many American architects. Almost a contemporary of the Farnsworth House (1945-50), the Eames House stands out for its concreteness and its more popular lexicon: it is, as some have pointed out, the manifestation, even if in a spectacular form, of everyday life and not the hypostatization of a concept of beauty implemented, in the name of absolute principles, though a reduction to the pure essence of the elements involved. Defined by a square plan measuring 42x42 feet (approx. 13 x 13 meters) Case Study #9, unlike #8, avoids exposing the structure, which is concealed by wood panels, to focus on the interior space, subdivided into three zones – the living room, the bedrooms, the service spaces (garage and storage) – rotating around a study, set at the centre of the composition, and without windows, creating a completely introverted space that avoids any visual distractions.

2.4 Wright: Late Works

Following the exploit of Fallingwater and his other masterpieces from the 1930s, Wright once in the shadows of exile in Taliesin, was rediscovered and re-evaluated. In 1939 the Royal Institute of British Architects awarded him the Gold Medal. In 1940 the MoMA organised a retrospective exhibition of his work. Between 1941 an 1943 an updated version of his biography appeared, together with a collection of his writings and a monograph edited by Henry-Russell Hitchcock. In 1949 he received the Golden Medal from the American Institute of Architects, the same professional association that once ignored him. In 1951 an important retrospective opened in Florence, where Wright received yet another Gold Medal, while soon after he was awarded a laurea honoris causa (honorary degree) in Venice. Wright’s professional activities were also in full swing. From the 1940s to his death in 1959, at the age of ninety-two, he had difficulty keeping up with his many commissions, above all for single-family homes constantly requested by a public
with a growing passion for his work. His clients included wealthy businessman and figures from the world of entertainment – in 1957 the very famous couple Marilyn Monroe and Henry Miller – as well as families with more limited economic means, often making recourse to the expedient of self-construction, or construction in phases. Helping to spread the myth of Wright as a creative genius ready to take on the entire world to conserve the integrity of his art with the author Ayn Rand who published *The Fountainhead* in 1943. The book was successfully adapted for the big screen in a film starring Gary Cooper and Patricia Neal.

Of his projects realised after the war, the Guggenheim Museum (1943-1959) is undoubtedly the most familiar.

With its two spirals (one larger and one smaller, linked by a band that, borrowing an idea from the Johnson Wax building, functions as an idealised transmission belt) that open toward the top, the building is both an organism that proposes a new way of observing art, a challenge to the laws of gravity and a critique of the orthogonal grid of Manhattan. Visitors, unlike traditional museums where they find themselves in front of a more or less articulated sequence of rooms, are taken by lifts to the top of the building, and descend along a ramp flanked by works of art. The idea, fascinating for its dynamic character and the possibility to enjoy the entire museum in all of its parts, nonetheless presents a number of inconveniences that caused an endless conflict between the architect and the director of the museum, James Johnson Sweeney. The most relevant was that the floor to floor heights were too low for the growing dimensions of contemporary art (Wright responded to this criticism by stating that if it were up to him artists should be forced to cut their canvases if they were too large). Light arrives from horizontal cuts that, on the exterior, trace the spiral – the same wall supporting the paintings – and not only from above, as one would have hoped – leading to possible situations of glare. Furthermore, the sloping walls were less than suitable to hanging paintings without using special metal spacers that Wright had imagined. Finally, Sweeney had a preference for white walls, while Wright did not consider white a colour, but the result of an inability to choose a real colour. Seriously though not substantially modified after Wright’s death, when it was inaugurated the Guggenheim was in any case such a fascinating object that it soon became a landmark in the city of New York. It prefigured an increasingly more marked trend, toward objects with a highly iconic character that would gradually populate American and European cities: from Utzon’s Sydney Opera House to the Guggenheim in Bilbao by Frank O. Gehry.

The year 1949 saw the realisation of the Unitarian Church in Madison, Wisconsin, a work in which Wright appeared to confront the season of the Prairie Houses. The building runs the length of the roof, whose eave line runs just above the ground, establishing a relationship with the soft terrain of the surrounding landscape, only
to rise up in correspondence with the large window that floods the main hall with light.

In 1950 and 1951, with the houses for David Wright and the Friedman family, Wright explored the geometries of curves, demonstrating that even with such difficult to organise forms it was possible to produce unitary organisms characterised by an engaging spatial dynamic. This demonstration would be impeccably managed in the Marin County complex (1957-62), a project imagined at the scale of the territory, whose rhythm is established by variations on the theme of the arch.

Between 1952 and 1956, with the Price Tower in Bartlesville, Oklahoma, Wright tested a strategy for realising a twenty-storey tower building without the simplifications that characterised other tall buildings from this period: banal prisms with anonymous sequences of openings or mirrored surfaces.

In 1956, with the project for the mile-high skyscraper, Wright demonstrated that within the city-territory, the only dimension to be avoided was the intermediate scale, because it had neither the capacity to tie life to the ground – as in the horizontal city of Broadacre – nor to project it toward the sky, as in this building rising up for one and a half kilometres and designed for 120,000 inhabitants.

Finally, the Beth Sholom Synagogue in Elkins Park (1959) returns to the theme of the central plan, illuminated by light filtered through a transparent skin.

2.5 Mies in America

In 1947, the Museum of Modern Art, at the suggestion of Philip Johnson, decided to pay homage to Mies van der Rohe, organising a solo show and publishing a monograph. The exhibition offered a vast panorama of the architect’s work: from the Kröller House (1912) to the Barcelona Pavilion (1929) to his more recent works, currently under construction. The event generated a significant echo, not only among architects in New York. The many visitors to the show included Charles Eames, who wrote an article for Arts and Architecture, and Frank Lloyd Wright, who publicly paid tribute to the German architect, even if, always the exhibitionist, during the inauguration he let a few comments slip about Mies’ “almost nothing”, converted into “much ado about next to nothing”. The result was a cooling of relations between the two (it should be remembered that Mies was fascinated by Wright, to the point of travelling to Taliesin soon after arriving in the United States and that Mies was the only contemporary European architect for whom Wright ever showed admiration).

Capturing the imagination of the American public was the poetic use of steel and glass, two materials that, for how they were employed by Mies, managed to give his constructions a monumentality far form the rhetoric of the public buildings of
the terrible 1930s of totalitarian regimes and, at the same time, a lightness and transparency that exalted the technology of a nation that had come out of the Second World War in a position of power and with a modern and efficient industrial sector.

Mies’ more recent projects presented at the exhibition included the Farnsworth House (1945-1951) and the buildings for the Illinois Institute of Technology, directed by Mies since 1937, the year he moved to the United States. The first is a glass house, a building characterised by glass walls that would be completed in 1951: it would influence, among others, the Eames, Raphael Soriano, Craig Ellwood and other West Coast architects who, however, as we have seen, would define constructions in steel and glass in more pragmatic and less lyrical terms, and Philip Johnson, who would use it to design his own home in New Canaan, completed in 1949.

Suspended from two rows of four wide-flange steel columns, the Farnsworth House floats one meter above the ground. It is accessed from a stair of two steps, separated by an offset platform, situated between the house and the ground. Despite the use of industrial materials, which confer a decisively contemporary appearance, the house calls to mind traditional Japanese homes and the dialogue they establish with their natural surroundings. In reality, the Farnsworth House presents a fluid spatiality and an obsessive search for detail and formal perfection reminiscent of Oriental culture: beginning with the desire to eliminate any imperfections in the steel elements, initially sandblasted and later painted white, to the care for the construction of the centrally positioned service block finished in wood and crafted by a German carpenter trusted by Mies.

On a similar wavelength, though imagined for an urban context, are the buildings designed for the IIT campus. The first to be realised were the Metallurgical and Chemical Engineering Building (now Perlstein Hall), the Chemistry Building (now Wishnick Hall) and Memorial Hall (1945). They feature an exposed, black steel structure with sand-coloured brick parapets in and steel windows. The impression is one of maximum lightness and transparency, as well as a rigorous minimalist formalism that avoids decorative effects, and privileges details as simple as they are elegant. Crown Hall and the School of Architecture and Design (1950-56) are undoubtedly eye-catching, thanks to the upturned beams crowning it, and the expedient of the access platform already used at the Farnsworth House.

In 1946 Mies met Herbert Greenwald, a businessman of Jewish origins, who commissioned him with the design, initially of the Promontory Apartments (1946-49), a twenty-two-storey building with a concrete structure and brick parapet infill and, later, the 860-880 Lake Shore Drive towers, rising twenty-six storeys and built of steel and glass (1948-1951). Their transparency was a novelty for Chicago and, in the end, they also proved to be an advantageous financial
operation: at a cost 112 US dollars per square foot, far less than that requested by other building systems, and so convincing in formal terms that they would inspire numerous buildings from the 1950s, including the Lever House in New York, built in 1952 by Gordon Bunshaft of Skidmore, Owings & Merrill.

Between 1953 and 1956, Mies continued to experiment. Other projects in Chicago include the Commonwealth Preomenade Apartments (1953-56), where he hid the structure behind a curtain wall and his now classic T-shaped beams. However, the most important opportunity came with the commission – acquired by Philip Johnson – to erect a skyscraper: the Seagram Building on Park Avenue, in the heart of Manhattan (1954-58). Despite the existence of an impossible building code that, to maximise buildable area imposed a stepping profile, Mies designed a perfect prism set back from the street face. The lesser volume was compensated by a more essential construction and the creation of a plaza in front of the building form which the better appreciate the building’s austere curtain wall in bronze and dark glass. No more essential or elegant solution could be imagined. With the Seagram, “less” effectively became “more” and Mies offered a concrete example of the ideal of classical perfection he had been pursuing during the course of thirty years of activity, rooted in his European projects from the 1920s and ’30s. The price to be paid, however, was an excessive rigidity, and a cold monumentality that did not hesitate to sacrifice the fluid and wrapping spaces characteristic of his earlier work: from glass skyscrapers to the Tugendhat House to the Barcelona Pavilion. After the Seagram there was only silence.

2.6 Endless House

While Mies was proposing increasingly more abstract and minimal designs, the sculptor-architect Frederick Kiesler, faithful to the principles of correalism – briefly illustrated in the previous chapter, when looking at the project for the Art of This Century gallery for Peggy Guggenheim – was at work on the Endless House, imagined as a shell inside which spaces succeeded one another in a continuum. The right angle and the functionalist grid were banned. Kiesler had already expressed his distaste for them in a 1949 essay entitled “Pseudo-Functionalism in Modern Architecture”. Indeed, as the choice to use forms reminiscent of caves and ancestral shelters demonstrates, beyond the seductive through arid horizon of the intellect, it was the reasons of the heart that imposed infinite space, dense with symbolic and archetypal references.

An atypical figure, Kiesler was substantially isolated from official culture. Philip Johnson, curator at the MoMA and at the time totally under Mies’ spell of the almost nothing, under-evaluated the project, as he would later admit: “we saw him as an enemy (also because) the Art of this Century gallery for Peggy
Guggenheim (1942)… was an attack on what we then believed to be modern architecture”. Even if, with his usual intelligence and prescience, in 1951 he had already acquired the clay model of the Endless House from 1953 and commissioned Kiesler with the realisation of a wood sculpture for his own house in New Canaan. The importance of the work of Kiesler was however apparent to artists and heretics. The composer John Cage immediately grasped the relevance of architectural and sculptural works that exalted the void, the nothing-in-between. The choreographer Martha Graham commissioned him with the design of stage sets for her experimental ballets. Sympathy for his work was also expressed by Louis Kahn, who appreciated his anti-functionalist symbolic anxiety, and Buckminster Fuller, with whom he showed at the MoMA in 1952 as part of the exhibition *Two Houses. New Ways to Build*, which exhibited the clay model of the Endless House alongside a geodetic dome. Between 1959 and 1960, Kiesler proposed another, more articulated vision of the Endless House, presented during the exhibition *Visionary Architecture*, presented at the MoMA in 1960. In 1961 the principles of the Endless House flowed into the project for the Universal Theatre, an imposing structure of two halls of 1,600 and 600 seats, which could be transformed as necessary. From 1957 (completed in 1964) he worked in the Shrine of the Book in Jerusalem, the only large work he ever managed to realise. The result, as fascinating as it is for its succession of open and closed spaces and the use of forms unusual for western architecture, testifies, however, to the gap between the lyrical aspects of his more captivating theoretical projects and the more prosaic reality of construction that, perhaps due to a lack of experience, he never managed to fully harness.

### 2.7 Niemeyer

Oscar Niemeyer was responsible for introducing Brazil to the rationalist language of Le Corbusier. Back in 1936, together with Lúcio Costa, Jorge Machado Moreira and Alfonso Edoardo Reyde, he had invited the French-Swiss master to act as a consultant for the Ministry of Education building in Rio de Janeiro (completed in 1945), a construction characterised by a podium and a fourteen-storey tower resting on columns and oriented in the north-south direction, with the northern face screened by concrete brise-soleil and adjustable asbestos panels. The terrace, treated in accordance with the principles of the roof garden, features a restaurant flanked by the elevator cores and water reservoirs, constructed as if they were sculptural objects and finished in bright blue tiles.
In 1940, with the Church of Saint Francis of Assisi in Pampulha, Niemeyer defined his own personal language, characterised by the use of exposed concrete, humanised by the use of curving forms and the insertion of blocks of colour, again using ceramic tiles. “I am not attracted to straight angles or to the straight line, hard and inflexible, created by man”. At the Casino in Pampulha (1940-42) the curving volumes of the dance hall are integrated with the square lines of the gaming halls, in turn supported by columns of differing heights to model the building to the complex topography and connected to one another by ramps.

A successful architect, after the war Niemeyer completed numerous projects, some unabashedly speculative, including a gigantic hotel, in any case humanised by sinuous lines and a majestic control of the overall design, reduced to a few though plastically important elements. Between 1947 and 1952, as a evidence of his international success, he was involved with Le Corbusier and others in the complex design of the United Nations Headquarters in New York.

However, his masterpiece is a simple home, his own, built in 1953 near Rio de Janeiro. The model is that of the Farnsworth House, completed a few years earlier by Mies: a glass house inserted in the landscape. However, while the house in Plano, as impeccable as it may be in every detail, is a box, almost an ascetic platonic notion, Niemeyer’s house does not have a single right angle and was imagined as a succession of sensual curves that recall the biomorphs of Hans Arp and Alexander Calder or, if we wish to stay with Mies, his project for the more expressionist Glass Skyscraper from 1922 (while the extremities wrapping the living and dining room, resolved with curved wood partitions recall the famous ebony walls of the Tugendhat House). There are also a few references to Wright, for example the rock that enters the house and keeps it suspended between the artificial and the natural.

It is said that Mies was rather shocked by the image of such a powerfully hedonistic and baroque work of architecture: “this is a small construction, very beautiful, but impossible to repeat”, he stated, not without a hint of dismay. In truth, Niemeyer’s dynamic and fluctuating forms demonstrate that the modern language could exist without any problem outside of the ethical moralism typical of the work of the Masters; it could be transformed into a pleasurable, sensual and highly communicative language: in short, popular.

This aspect was not missed by Juscelino Kubitschek, the newly elected president of the republic who, while walking in the garden of the house, asked Niemeyer to design the new capital of Brazil, Brasilia, together with Lúcio Costa.
2.8 The Organic Architecture of Scharoun

Forced by the rise of the Nazi Party to abandon his professional activity, and limited to the design of a few single-family homes, after the war Hans Scharoun found work as the director of the Department of Building and Municipal Housing of Greater Berlin. In 1946 he organised an exhibition with Planungskollektiv group illustrating an innovative hypothesis for the reconstruction of Berlin. Fired by the city after a change in political direction, in 1947 he was hired by the Technische Universität of Berlin, where taught until 1958. This allowed him to dedicate his time, with the necessary financial tranquillity, to competitions, an activity that saw him receive a number of important recognitions, but few commissions.

In 1951, in the city of Darmstadt, Scharoun lectured on the theme of “Mensch und Raum”, Man and Space. He had been invited together with other German architects, including Otto Bartning, Rudolph Schwarz and Egon Eiermann, such internationally recognised sociologists as Max Weber and philosophers of the calibre of José Ortega y Gasset and Martin Heidegger. For the occasion, the latter spoke on the theme of “Bauen Wohnen Denken”, Building Dwelling Thinking. Despite his past affiliations with the Nazis, Heidegger would be seen as one of the most profound critics of functionalism, in favour of a concept of dwelling that rediscovered the more authentic sense of the values of tradition and the attachment to the earth. In Heidegger’s words Scharoun found themes that had always been dear to his expressionist and organic research and carefully annotated his text. Like all of the architects invited to the conference, Scharoun presented a project, in his case for a school. The project was the object of extraordinary interest for the criteria that had informed its development. It featured a new concept of classrooms as clusters of environments related to common spaces and a natural setting. It also presented a new composition that abandoned hierarchical nineteenth century models to propose informal and dynamic spaces. Also new was the overall appearance, reminiscent of a community, almost a medieval village or, better yet, an organic organism born of its natural setting, based on the suggestions made by his friend and master Hugo Häring, with whom Scharoun had remained in contact.

Involved in the post-war reconstruction, Scharoun built numerous housing complexes. They stand out for their attention, almost obsessive, to the plan and the search for better solutions, both technological and in terms of layout. For the Romeo and Juliet Complex in Stuttgart (1954-1959), he investigated two different partis: with the dwelling units gathered around a central corridor and with a semi-circular balcony. In both cases the objective was to realise apartments, each different from the next if possible, all well illuminated and with a view. It is almost impossible to imagine a research that differs so radically from that of Le Corbusier or Mies van der Rohe. In fact, in Stuttgart there is no fixation...
with the standardisation and unification found in the Unité d’Habitation in Marseille or the obsession with rigour and formal simplification of the two glass towers in Chicago (some have pointed out that while Mies’ Lakeshore Drive buildings are identified by simple numbers, the two towers by Scharoun are baptised with a poetic name that alludes to their form, semi-circular and welcoming for Juliet and prismatic for Romeo). What is more, Scharoun demonstrates that it is possible to create architecture without an abundance of formalist fixations: in fact, complexity is not born of the reduction of problems to a rigid aesthetic conceptions but from the search, without preconceptions, for the best solution within an organism in which the individual parts are interrelated. Of the numerous competitions in which Scharoun participated during this period, many were for structures for theatre and music. Of interest is that for the theatre in Mannheim, also because one of the other competitors was none other than Mies. The latter proposed a very elegant prism with a rhythm of upturned steel trusses, so prefect that in the images presenting the project Mies did all he could to conceal the cumbersome fly tower. Scharoun’s project, instead, approached the urban context and the technical issues of a theatre: the rustling proposal featured an articulated and innovative form for the foyer and stage. It was another piece of the search for an organic form for this type of structure that marked a prelude to the Berlin Philharmonic, realised between 1956 and 1963. More will be said in the next chapter.

2.9 A New Life for Louis Kahn

Louis Kahn developed a notable professional experience with two important figures: George Howe and, after 1941, Oscar Storonov. The first was responsible for one of America’s first modern buildings, the Philadelphia Saving Fund Building (1929-32); the second was a follower of the Modern Movement, with notable organisational skills, and the editor of the first volume of the complete works of Le Corbusier.

With Howe, Kahn realised numerous buildings, including 500 housing units in Pine Ford Acres in Middletown and a further 1,000 in Pennypack Woods, Philadelphia. With Storonov he participated in programmes for the construction of standardised homes built by the American Government during the war. These projects were appreciated by contemporary critics and earned him an invitation in 1942, from the magazine Architectural Forum to the initiative New Buildings for 194X and the exhibition Built in USA 1932-1944 at the MoMA.

In 1947 Kahn decided to open his own practice and begin his academic career at Yale University as a visiting critic. This educational experience offered him the chance to define and clarify his own ideas and to meet, on campus, numerous leading figures from the world of architecture: Pietro Belluschi, Eero Saarinen,
Philip Johnson, the historian Vincent Scully, who would play an anything but secondary role in promoting Kahn as an architect, the painter Josef Alberts, ex-Bauhaus and with whom he would establish a profitable exchange of ideas about the construction of form. To reach Yale, Kahn was forced to commute from Philadelphia, the city in which he lived. During his frequent train trips he met Buckminster Fuller, one of contemporary architecture’s leading figures, and to many degrees his antithesis – for his search for a technologically avant-garde architecture, characterised by lightness – though with whom he shared a passion for the structural side of construction. Also teaching at Yale was his former partner Howe who, together with Philip Johnson, would play a determinant role in assigning him the commission to realise the Yale Art Gallery. The year 1950 was for Kahn a watershed year: he was named full professor and, as a guest of the American Academy, he travelled to Rome, a voyage that would prove particularly important to his education. Fascinated by the Roman Forum, Hadrian’s Villa and the ruins of the imperial city, Kahn was able to question the functionalist conceptions of the Modern Movement, adopting an approach that was more attentive toward history and monumentality. The change, truth be told, was not rapid. Already in 1944, perhaps under the influence of Siegfried Giedion – he wrote *A New Monumentality* in 1943 – Kahn had published an essay entitled “Monumentality”, which he defined as the quality of buildings that, pursuing an ideal of perfection, exist outside of time and are characterised by the perfection of their structures and an inherent grandeur, akin to that of Roman architecture. All the same, unlike his successive projects, in 1944 he still saw monumentality through the eyes of an architect educated in his contemporary environment. Hence the suggestion of slender steel structures that would later be abandoned in favour of a more powerfully material architecture made primarily of concrete and brick. Whatever the situation, by 1950 Kahn was already a mature professional, past the age of forty-five (he was born in 1901 in Saaremaa, Estonia), and already able to boast a lengthy career. The Yale University Art Gallery, completed in 1953, marks a sharp break with the canons of the International Style. For the use, above all else, of its particular materials: the exterior is dominated by brick and the glass walls – as large as they are – are treated more like windows than a curtain wall: in fact, they are separated vertically by masonry pilasters and horizontally by floor markers. However, the clearest departure occurs inside, which presents a rigid geometry of the plan and ceiling in coffered concrete tetrahedrons reminiscent of the work of Buckminster Fuller, though with a sense of Roman *gravitas* typical of Kahn’s work. This *gravitas* is further emphasised by the separation between served and servant spaces (a defining characteristic of successive works) and sculptural inserts with a powerful plastic effect. A noteworthy element is the stairwell, made from a system of triangular ramps contained inside a concrete cylinder illuminated
from above: an exercise in style that prefigures his successive work, made by combining elementary geometries and the scenographic use of natural light. In 1954 Kahn was at work on the Jewish Community Center in Trenton. His work was now strongly marked by a tectonic approach, even if in the plan for the centre of Philadelphia (1956) he continued to draw elegant zigzagging buildings with triangular steel structures – clearly inspired by Fuller and the architects of Team 10, with whom Kahn was also in contact – alongside robust pure volumes in brick. A great deal of influence over this historicist shift, which would prove definitive, is to be ascribed to the essay written in 1952 by Emil Kaufmann entitled “Three Revolutionary Architects, Boullee, Ledoux e Lequeu”, which gave Kahn the means to return to the Beaux-Arts education received during his university studies, thanks to the influence of professor Paul Philippe Cret, oriented toward combinations of the classicist forms of Durand and the exercises in structural logic derived from Viollet-le-Duc.

The Jewish Community Centre is characterised by two square modules, measuring 3.05 x 3.05 meters and 6.10 x 6.10 meters, and a rectangle measuring 3.05 x 6.10 meters. Each module, marked by sharp corners, supports a tent roof whose repetition gives the building an appearance midway between a toy (it resembles a construction made from LEGO®) and the archaic (the plan resembles a project by Boullee or Durand).

2.10 Aalto. Two Masterpieces

After the war, Alvar Aalto was invited to serve as visiting professor at the Massachusetts Institute of Technology (MIT). Fascinated by American technological culture, he simultaneously understood its limits: excessive industrialisation, standardisation, the dehumanisation of production. Instead, in the figure of Frank Lloyd Wright he saw a clear synthesis, the indication of a direction in which to move. He was perhaps inspired by Wright when he designed the Baker House (1946-1949), a student dormitory at MIT. Realised prevalently I exposed brick, the building has a double front: undulated with a double curve on the side toward the river, in order to guarantee a view from almost all of the rooms; segmented along the other side facing the campus, featuring the entrance and with cantilevered stair blocks. Set in a sequence along the diagonal, they break up the main elevation into two parts, using a solution that would have been even more brilliant if the upper portion, rather than being plastered for reasons of budget, had been finished in tiles, as originally planned. It is interesting to note that, again for students at MIT, Gropius, together with his office Collaborative Architects, completed another dormitory, Harkness Commons, the same year (1948-1950). The difference between the two approaches could not be greater. The buildings of
Gropius denounced an approach that remains tied to the Bauhaus style, while Baker House already speaks of a new direction, not only organic: there are hints of a certain taste for brutalism that would become a characteristic of much architecture from the 1950s in Europe and the United States.

After returning to Finland, Aalto was involved in numerous commissions, many obtained from competitions. His most important work from this period is the Säynätsalo Town Hall (1948-1952). It is characterised for the simplicity of its C-shaped plan, enclosed by a linear volume that delimits a sort of open courtyard that communicates a sense of intimacy typical of a cloistered building, and sense of openness desirable for a public building. This latter sensation is emphasised by a scale finished in granite and another covered in grass, set between the two buildings – C-shaped and linear – managing the level change between the surrounding terrain, at a lower level, and the courtyard, on an higher level. Contrasting the horizontality of the project is the council chamber, set on a third level (one above the courtyard). It gives the entire composition, thanks also to the decision to create two asymmetrical and inward facing roof slopes, a decidedly picturesque and almost neo-medieval appearance; in terms of circulation, it is the end of a promenade architecturale that winds from the exterior space to the courtyard and, later, via an internal stair, to the council chamber. Designed by a free and happy hand, the Säynätsalo Town Hall stands out for the use of three materials – brick, wood and glass – and for a series of enchanting details, such as the fan-shaped trusses of the council chamber ceiling. They communicate the idea of a non-institutional government, in no way bureaucratic and close to its citizens. Exactly the contrary of what was occurring, for example, in Europe and above all in Italy, where the image of government was still entrusted to monumental forms and materials, such as marble, what is more employed rhetorically.

2.11 Italy, between Organicism, Neorealism and a Nostalgia for History

On its knees after the war, Italy was forced to confront the reconstruction with a backward building industry and a political-economic system unsuited to imposing a reasonable programme and industrialisation, to contrast speculative land deals and the exploitation of an abundant and cheap labour force. Architects themselves, many ideologically compromised by past ties with the Fascist regime, were immune to technology and rationalisation and tended toward a celebrative and monumental, or intimate and vernacular architecture: this resulted in anachronistic constructions that did not hesitate to employ out-dated techniques, with a consequent waste of labour and primary materials and, in the worst cases,
indulged in decorations and demonstrated an allergy to any hypothesis of normalisation and standardisation.

Given this situation, even the efforts of the Centro Nazionale delle Ricerche, the National Research Centre, and the USIS to publish the Manuale dell’Architetto (Architect’s Handbook) in 1949, edited by Cino Calcaprina, Aldo Cardelli, Mario Fiorentino, Mario Ridolfi and Bruno Zevi, appeared almost titanic: despite its pragmatic anything but revolutionary approach and attention toward the country’s craft-based economy, it resembled a courageous attempt to introduce a systemic approach “developed by Italians based on an American model”.

Bruno Zevi pushed hard to strip Italy’s cultural climate of its provincial mantle. He returned to Italy with the Allies, having fled to the United States to avoid racial persecution. It was there that he earned a degree from Harvard University studying with Gropius. In 1945 Zevi published the essay “Towards an Organic Architecture”, which re-launched Frank Lloyd Wright and Alvar Aalto in Italy. The same year, together with Eugenio Gentili, Luigi Piccinato, Enrico Tedeschi, Cino Calcaprina and Silvio Radiconcini he sat on the editorial board of Metron, a review that re-launched contemporary architecture by presenting some of the best architecture being built in Europe, the United States (Lewis Mumford was a collaborator) and Italy, for example the QT8 experimental housing estate in Milan designed by Piero Bottoni.

In July of 1945, at the insistence of Zevi, the APAO - Associazione per l’Architettura Organica (Association for Organic Architecture) was founded. It brought together the best architects in the country and lasted until 1950. The Association pursued three principles enunciated in their declaration published in issue n. 2 of Metron: the refusal of classicist and stylistic rigour in order to embrace functional architecture in its latest evolution, in other words, organic architecture; the awareness that organic architecture is a social, technical and artistic activity directed toward creating an environment for a new democratic society and thus directed at man and modelled at the human scale and in antithesis to the monumentalism bowing to the myths of the state; faith in architectural freedom, though within the limits outlined by urban planning.

Created to function as an element of aggregation and unification within a highly diversified panorama, the APAO managed to mediate between different local traditions and characteristics and, above all, between the two principal schools: the Milanese, closer to rationalism, and the Roman, more attentive toward material and plastic effects. A difference that emerged also in the most important works realised after the war: the Fosse Ardeatine Monument, completed in Rome by Nello Aprile, Cino Calcaprina, Aldo Cardelli, Mario Fiorentino and Giuseppe Perugini (1944-47) and the Memorial to the Victims of Concentration Camps in Germany, completed in 1946 to the design by BBPR (Ludovico Beliojoso, Enrico
Peressutti and Ernesto Nathan Rogers). The first is characterised by a heavy monolith that, almost abolishing the laws of gravity, floats and covers an open space containing the tombs of the fallen, while the second is an aerial virtual volume ideally delimited by lightweight steel rods and thin panels, freely borrowed from the exhibition designs of Persico.

Among the Romans, it was above all Mario Ridolfi and Ludovico Quaroni who pushed for constructions rooted in Italy’s historic and artisanal traditions. Both proposed, for the competition for the Termini Railway Station (1947), an atrium marked by pairs of columns supporting vaults reminiscent of the grand monumental complexes of Ancient Rome.

Both were involved (together with numerous other promising young architects: Carlo Aymonino, Carlo Chiarini, Mario Fiorentino, Maurizio Lanza, Federico Gorio, Sergio Lenci, Piero Maria Lugli, Carlo Melograni, Giancarlo Menichetti, Giulio Rinaldi and Michele Valori) in the project for the INA-Casa housing estate along the Via Tiburtina in Rome (1949-1954). The project borrows the forms of traditional constructions, villages and the strapaese [a literary and cultural movement characterised by partriotism and nationalism associated with Fascism – TN]. The estate, later renamed by Quaroni himself “the village of the baroques”, represents a definitive step away from rationalism and organic architecture and, together, the acceptance of Italy’s technological shortcomings. This is evident in the obsessively mannerist – if not outright baroque – building details in brick or wrought iron realised with the care of the finest craftsmen, the clay tiles, and the aesthetic of the fragmentary and the picturesque. They are the manifestation of the same populist attitude enacted in contemporary neorealist cinema: hence the term neorealist architecture.

The best examples of this trend, for which the return to popular etymons represents a stance in contrast to the more sophisticated though decadent figurative values of the upper middles class, include the project for the La Martella district in Matera, developed in 1951 by Quaroni, Luigi Agati, Federico Gorio, Piero Maria Lugli and Michele Valori: a small village centred around a selected number of public buildings and open toward the countryside. Adopting a rural and anti-urban strategy, the project uses the reassuring image of a traditional village in an attempt to compensate its inhabitants – evicted from the Sassi – for this violent uprooting. Mention must also be made of the INA-Casa district in Terni (1949) and the INA-Casa Plan for Cerignola, both the work of Mario Ridolfi who, in an attempt to better understand the needs of its future inhabitants, moved to the region of Apulia to activate a method of working in loco that produced an architectural syntax as exquisite in its recovery of craft-based techniques as it was foreign to its era. Ridolfi is also the author of the apartment towers in Viale Etiopia in Rome (1950-54). They stand out from their neighbours for the organisation of their
common spaces, rendered more enjoyable also by the rotation of the buildings
with respect to the street and by the different colours of the plaster of each tower,
reinforced by the use of colourful mosaic tiles on the parapets below the windows.
Also falling under the umbrella of the aesthetic of neorealism are numerous other
plans created in the wake of the first seven-year period of the INA-Casa
programme. When the Fanfani Plan became law in 1949 it was entrusted to
Arnaldo Foschini, an architect compromised by his ties with fascism. He was
intelligent enough to invite Adalberto Libera to manage the technical office, and to
commission Mario De Renzi, Cesare Ligini and Mario Ridolfi with the development
of prototype projects and to entrust other projects to the most interesting
architects of the new generation. Examples include the San Basilio district by Mario
Fiorentino (1951) and the Falchera district in Turin by Astengo, Molli, Boffa,
Renacco and Rizzotti (1950-51).
While the axis Quaroni-Ridolfi projected post-war Roman architecture toward
neorealism, there was no shortage of figures moving in other directions. The most
talented was Luigi Moretti, the author of three hotel residences in Milan
(1948-1950), the Girasole apartment building in Rome (1947-1950) and the Villa
Saracena in Santa Marinella (1954). The first two return to the etymons of
rationalism, though with the intent of calling them into question, through a refined
formalism that does not hesitate to work with the juxtaposition between plans and
volumes, between flat surfaces and deep cuts, with orthogonal and sloping lines,
with smooth and the rough surfaces. The third is a play of curves that projected
Moretti into the field of spatial research, a theme that, as demonstrated by the
name of the review he founded in 1950 – Spazio – was increasingly more of
interest to him. An author who operated under his own rules, what is more
compromised by his past relations with the fascists – he was arrested between
1945 and 1946 for pro-fascist activities – he did not receive positive press at the
time. He was not appreciated by Bruno Zevi who, despite recognising his talent,
kept him at a distance, and by the Milanese whose centre of gravity was Rogers,
and who accused him of modernistic formalism. He was instead highly appreciated
by the English critic Reyner Banham, who applauded his decidedly contemporary
approach.
There are also the works of the great Roman structural engineers: Pier Luigi Nervi
and Riccardo Morandi. Between 1948 and 1950, the first completed the Palazzo
delle Esposizioni in Turin, with its characteristic rectangular hall covered by a thin
undulating vault made from prefabricated elements, supported, by three fan-
shaped connections, to aerodynamically shaped columns. After the hangars in
Orbetello from 1935, it is the demonstration that engineering can produce
excellent works of architecture when it is forced to deal with the large scale.
During this same period, Morandi was patenting systems of pretensioning for
reinforced concrete that allowed for a drastic reduction in load bearing sections. These systems would be used to build bridges, industrial constructions, technologically daring hydroelectric power stations and cinemas, such as the Maestoso in Rome, with seating for 2,600 people, connected at grade to a residential building (other important cinemas - the Augustus and Giulio Cesare – were realised by Morandi during the 1930s). Spokesmen for the great tradition of Italian engineering, Nervi and Morandi also showed that even in a technologically backward country like Italy, it was possible to pursue innovation without falling into the trap of craft and the *strapaese*. Proof is to be found in the fact that both were invited to develop important projects outside of Italy, where they enjoyed greater fame than at home: for example, in 1953 Nervi was involved in the design of the UNESCO Headquarters in Paris.

If the climate in Rome, with the exceptions mentioned, was split between the organic and the popular neorealist, Milan was characterised by a formally more serve approach, though no less marked by historicist anxieties; substantially, the problem lay in overcoming the cold abstraction of the International Style to produce buildings that able to dialogue with the built city, with all of its composite layers, both stylistic and temporal. The undisputed leader of this line of thinking was Ernesto Nathan Rogers, a member of the CIAM, with BBPR the author of one of the most important projects from the period, director of *Domus* from 1946 to 1947 and from 1954 director of the reborn *Casabella*, renamed *Casabella Continuità* to recall the ties between the new publication and its predecessor, directed by Pagano and Persico. His works of architecture include the Torre Velasca (1950-58) in Milan, about which more will be said in the following chapter.

One of the most talented architects in the Milanese area was Franco Albini, the author in 1949-51 of the hotel-refuge in Cervino, which freely borrows the forms of alpine architecture to create a building that is perfectly established within its natural setting; the excellent example of urban infill represented by the INA building in Parma from 1950, which demonstrates how even a building in concrete can be inserted within a delicate context, under the condition of transforming a structural rhythm into a visual rhythm; the elegant restoration of the Palazzo Bianco in Genoa, characterised by a sensitivity that the architect managed to valorise the objects o display through the design of the shop windows; a magnificent intervention in the Cathedral of San Lorenzo in Genoa (1952- 1956), where the underground spaces assume a magical quality thanks to the circular environments evoking ancient spaces of worship.

No less talented, though often mortified by an excessive historicist anxiety, is the work of Ignazio Gardella. He is the author of the elegant Modern Art Gallery of Milan (1954), an exhibition pavilion characterised by the lightness of its structure and continuity of its spaces. Also celebrated is his building for employees of
Borsalino (1950-52), a blade of brick characterised by a slender segmented volume that culminates in a generous cornice. Many, and with just cause, interpret it as a criticism of modernism in favour of a recovery of a language able to dialogue with tradition. Exactly like the still famous Case alle Zattere along the Grand Canal in Venice (1954-58), which will be examined in in-depth in the following chapter.

Impossible to classify under either the Roman or Milanese, umbrella is the Florentine architect Giovanni Michelucci, author of the Florence Railway Station that had caused such an uproar during the period of fascism. After the war he was involved in the design of the bank and commodities exchange in Pistoia (1950), the building in Via Guicciardini (1955-57) and the INA Building (1955-57), both in Florence. Situated in very delicate historic context, they manage to easily settle in thanks to the use of traditional materials and simple and pared down volumes that, without copying them, recall those of historic renaissance palaces.

Finally, mention must be made of the Venetian Giuseppe Samonà. Elected director of the Istituto Universitario di Venezia in 1943, he invited the most representative figures from the world of Italian architecture, transforming the school into the most important centre of development in the entire Peninsula. Professors in Venice included Giovanni Astengo, Franco Albini, Giancarlo De Carlo, Ludovico Barbiano di Belgiojoso, Ignazio Gardella, Luigi Piccinato, Carlo Scarpa and Bruno Zevi. A militant architect, Samonà was also the author, together with Egle Renata Tricanato, of the INAIL Building in San Simeone Venice (1950-56). Together with Gardella’s Casa alle Zattere, the Torre Velasca by BBPR and the Bottega di Erasmo by Gabetti and Isola, it would be the manifesto of an Italian approach to contemporary architecture that would generate no shortage of controversy.

### 2.12 Urban Design, Team 10, New Brutalism

As we have already been able to observe, Urban Design, the new approach that placed the form of the city at the heart of architectural research, was born in the 1950s at Harvard with the theories advanced by Siegfried Giedion and Luis Sert. However, it was only in 1953 that Sert, now dean of the faculty, explicitly used the term in a series of seminars entitled *The Architect and Urban Design and Urban Redevelopment*. He criticised the latest generation of urbanists for having turned their backs on the city, with the result that the inhuman scale, traffic congestion, air pollution and overcrowding has produced “much more suburbanism than urbanism”.

Meanwhile, a number of architects, including Pietro Belluschi, Morris Ketchum, Victor Gruen and I.M. Pei, were producing new schemes for urban and commercial centres that foresaw a more accurate design, above all of vast areas for
pedestrians. The work of Pei, in particular, were a source of enthusiasm for Sert, who invited the Chinese-American architect to teach at Harvard. Pei was unable to accept due to his excessive professional workload.

Even within the CIAM the interest in urban phenomena was driving research, above all among the younger members who still considered insufficient the efforts at renewal in this direction attempted by the old guard, represented by Sert himself (also president of the CIAM after 1947), Giedion, Gropius and Le Corbusier. As far back as 1951, Alison and Peter Smithson, present at the congress in Hoddesdon, were discussing these themes with Georges Candilis, Jaap Bakema and Aldo van Eyck. At the 1953 CIAM, held in Aix-en-Provence, they formed a collective that was later joined by Shradach Woods and John Volker, with Giancarlo De Carlo joining in 1955. The following year, in occasion of the tenth CIAM in Dubrovnik, saw the birth of a rather particular group known as Team 10 comprised of those just mentioned, followed by such figures of the calibre of José Coderch, Ralph Erskine, Amancio Guedes, Rolf Gutmann, Geir Grung, Oskar Hansen, Charles Polonyi, Brian Richards, Jerzy Soltan, Oswald Matia Ungers, John Voelcker and Stefan Wawerka.

The objective of Team 10 was to overcome the stasis of official research, inducing that of the CIAM – whose disbanding they proposed, and which would occur in 1959 in Otterlo – to assume new points of view founded on less universal principles that were more attentive toward local realities. This led to the production of projects, many of which never made it off the page, that were discussed, analysed and commented on during meetings that continued until 1981.

Diverse in character and temperament, at the beginning of the 1950s the protagonists of Team 10 were setting out on their professional careers. Bakema, after apprenticing with van Eesteren and van Tijen, opened his own practice in 1948, in partnership with Johannes Hendrik van den Broek. De Carlo graduated in 1949 and began working on his own in 1950. Van Eyck, after apprenticing with van Eesteren, opened his own office in 1951. The Smithsons worked with the London County Council until 1950, a public body dealing with issues of post-war reconstruction.

It was above all these last two figures who, at least during an initial period, stood out most. From 1952 to 1955 Alison and Peter Smithson were, in fact, among those behind the Institute of Contemporary Art (ICA) in London where, in 1953 they contributed to the creation of the exhibition Parallel of Life and Art. In 1952 they developed a project for their own home in Soho that was appreciated by the critic Reyner Banham for its use of common and almost banal materials, based on a neo-Dadaist aesthetic that tended to transpose the reality of the everyday into something poetic. However, it was above all the school in Hunstanton, completed between 1950 and 1955, that drew positive comments and the enthusiastic
support of Banham. In an article in *The Architectural Review* he indicated it as the paradigmatic example of a new architectural current or, as he himself stated, a new *mood*: New Brutalism. The term was borrowed from the parallel artistic experiences of the *art brut* of Dubuffet and Pollock, and the technique of *beton brut* used during this period by Le Corbusier. It speaks of an approach, far from the sentimentalism of New Empiricism, adopted by many British architects during this period. It was based on four principles, exposed by Banham: the legibility of the plan, the clear presentation of structure, the use of materials for their inherent qualities and the exposure of services.

While for some aspects the school in Hunstanton recalls the minimalism of Mies and, in particular, the IT campus in Chicago, though with a harshness that would not be appreciated by the German, other projects by the Smithsons refer to the work of Le Corbusier. The housing estate in Golden Lane, realised between 1951 and 1952, recalls the recently completed *Unitè d'Habitation* in Marseille. The differences lie in the more articulated U-shaped plan that better encloses the open space an the system of raised streets, conceived as elements of urban aggregation. In fact, for the Smithsons a building only functioned if it became a catalyst of urban energies, if it managed to create the encounters and informal life that constitute one of the principal strengths of European cities and which, instead, are absent in the overly abstract constructions of the International Style. Profoundly moral in its social assumptions and in aligned with the scarce financial resources of a nation that had suffered much during the war, New Brutalism was an immediate with among British architects. Undoubtedly influenced by this movement were Archigram – we will see them in the next chapter – and James Stirling, a rising star of British architecture. Together with his partner James Gowan, in 1955 he completed the neo-brutalist Han Common Flats. Stirling was also busy with Team 10. The Smithsons, however, did everything in their power to exclude him and, when reviewing the work of the group, avoided any mention of his name.

Another figure like the Smithsons, with a very difficult character coupled with an extraordinary talent, was Aldo van Eyck. Author, since 1947, of a number of spectacular children's playgrounds, he was noted by Sigfried Giedion. Between 1947 and 1954 he designed a number of schools for Nagele. They are characterised by an articulated plan in which the classrooms, conceived as modular units, are arranged on an orthogonal grid. The offsetting of the modules creates generous spaces for collective activities, linked by diagonal paths that serve to enliven an otherwise static parti. The objective was that same found in the Golden Lane project: using paths and collective spaces to favour encounters and relations and, in the end, social life. Between 1955 and 1960, van Eyck completed a municipal orphanage in Amsterdam. His building is both centralised,
in the sense that it is organised around a central nucleus of services, and
dcentred, in the sense that it is composed of a collection of residential units
arranged along a diagonal. Each unit consists of a common space and a dormitory,
in other words a group of bedrooms, each with an outdoor space, based on an
organisation that is simultaneously hierarchical and democratic, with spaces for
individuals, for groups and for the entire community, organised such that none
prevails over the other. This defines the less than institutional quality of the
project, is horizontal development, composite articulation and, finally, the choice of
a modular grid composed of square pavilion designed at the human scale and, in
particular, the scale of the children who will inhabit them: exactly like a village,
with the universal values of socialisation that a technological society tends to
ignore. Realised in prefabricated concrete elements, it is clearly influenced by the
neo-brutalist climate, though with a classical quality of forms that call to mind the
work of Louis Kahn, at the time working on the pavilions of the Jewish Community
Centre.

PART THREE: FROM MODERN TO CONTEMPORARY

Part Three Chapter 1: A New Era 1956-65

1.1 A New Era
Let’s try to imagine this century divided into two eras. The first is marked by
modernisation and mechanisation. It begins in the early twentieth century with the
explosion of industry, the advent of the automobile, the discovery of relativity, the
foundation of psychoanalysis, the construction of the Bauhaus, the birth of the
avant-garde movements, from Cubism to abstract art, to Surrealism,
Expressionism and Dada. This period begins paying homage to the regenerative
powers of technique and reason, deemed able to introject even the subjective and
the irrational, and concludes with the disaster of the two World Wars that followed
one another in less than twenty years. The chapel of Ronchamp and the dense
brush strokes of the informel – which we can read as the highest expressions of
dissillusionment – marked its end.
The second era is that of mass media, of consumerism, of the economic boom. It
is marked by the television, the satellite, the computer, video conferences and
cellular telephones. It has yet to come to an end, though it experienced a moment
of particular intensity between the 1960s and 1970s, with American Beat
literature, the theories of Marshall McLuhan, philosophical deconstruction, the new philosophies of science, student protests, the fight against discrimination and the sexual revolution.

The first era was poetically marked by a slogan by Le Corbusier: *architecture or revolution*. In other words: without the economic and formal rationalisation of the space of the home, the district and the city, there was no salvation for the mass society of the twentieth century.

The second turned all of this on its head, transforming opposition into affirmation: *architecture and revolution*. Without taking anything away from political or social action, it is also by destructuring and restructuring the way in which the mind conceives of space and thus the way it sees and organises the world, that we find even the most feeble chance: that of breaking up the slavish mental laziness required by institutions and the flattening conformism pretended by power, generating new values and laying out new fields of knowledge. Orienting the one toward changing processes – producing objects or generating meaning – and the other toward changes in the behaviour or languages through which the subject relates to reality, the two were eras were distinct from one another, almost geologically diverse. We can still recognise today how current a song is from the 1960s or ‘70s, while we smile, as if observing a historic relic, when we listen to a song from the 1940s or ‘50s. We consider Joseph Kosuth or Robert Smithson to be our contemporaries, though we sense an infinite distance when we stand in front of the paintings of by the pre- or post-Cubists. We are still fascinated by Warhol’s 16 Jackie’s, though no longer by Picasso’s Gertrude Stein. What is the date that separates the two eras? Surely not 1945, even if it marks the end of the Second World War. Brutalism, the *informel* or the action painting of Pollock are affected – even if they invert mechanist optimism into a dense and disillusioned subjectivism – by the constructivist problems faced before the war. Something new was born, instead, in 1956, in concomitance with three historic events, also marked by the search for the redefinition of the concept of freedom: racial protests in the United States, the denunciation of Stalin’s crimes in the Soviet Union and the anti-Soviet revolution in Hungary. They are:

In America the contacts between Jasper Johns and Robert Rauschenberg and the gallery owner Leo Castelli, which launched the first generation of Pop artists.

In Great Britain the works presented during the exhibition *This is Tomorrow*. In particular, the pavilion of Group 2, curated largely by Richard Hamilton.

In Dubrovnik the definitive rupture of the CIAM, the International Congresses of Modern Architecture, the last bastion of modernism, at the hands of Team 10. These three events are accompanied by a fourth, with a highly symbolic impact. The death, in 1956 while driving under the influence, of Jackson Pollock. His pass marked the end of the creative season of abstract expressionism.
1.2 This is Tomorrow

The 8 August 1956 marked the inauguration of the exhibition *This is Tomorrow* at the Whitechapel Art Gallery in London. The exhibition was divided into twelve sections, each autonomously managed by a group of artists. There were essentially two trends. The first was represented by the so-called neo-constructivists. They were tied to Paule Vézelay, the English representative of the Group Espace of André Bloc, and their primary objective was the reinsertion of art, purified of any individualist tensions, within urban space. The second trend was more attentive toward popular culture, to the close ties linking life and art and new technologies. It was formed of people who spent time together within the narrow circle of the Independent Group, already the organisers of various successful initiatives, including: the 1953 exhibition *Parallel of Life and Art* and 1955’s *Man, Machine and Motion*. The group was comprised, among others, of the critics Lawrence Alloway and Reyner Banham, the designer and critic Tony del Renzo, the artists Eduardo Paolozzi, William Turnbull and Richard Hamilton, the architects Alison and Peter Smithson, James Stirling and Colin St. John Wilson. This latter group also included the technical director of *Architectural Design* magazine, Theo Crosby who, in addition to exhibiting, also coordinated the entire event.

To accompany the exhibition of Group 2, Hamilton prepared a manifesto entitled: *Just what is it that makes today’s homes so different, so appealing?*, a collage representing a domestic interior. To one side is the man of the house, a semi-nude body builder holding a gigantic lollypop, while the lady of the house, also semi-naked and sporting an exotic hat resembling lampshade. They are surrounded by home appliances (television, recorder, vacuum cleaner), a gigantic tin of canned meat, a comic book poster, a lamp stamped the Ford automobile logo. Outside the window: the city with its glowing theatre marquee. The work may appear to be a light hearted criticism of consumer society, whose use of kitsch would be analysed by Susan Sontag in her articles on *camp* and *kitsch* and whose behaviour would soon be the preferred target of student protests. In reality, with a benevolent and indifferent eye, Hamilton limits himself to predicting the future domestic and urban environment of affluent society and, together, new Pop Art, whose characteristics he would sum up, the following year, using the following eleven keywords:

*Popular (designed for the masses)*
*Transient (solutions for the short term)*
*Expendable (easily forgettable)*
*Low-Cost*
*Mass-Produced*
Young (aimed at young people)
Witty
Sexy
Gimmicky
Glamorous
and Big Business

On the opposite side of the field was Group 6 (Nigel Henderson, Eduardo Paolozzi, Alison and Peter Smithson).

For the exhibition the architects Alison and Peter Smithson created an installation, composed of a small pavilion surrounded by a patio. It was characterised by the use of particularly poor materials: second rate wood and a corrugated transparent plastic roof. Wrapped in reflective panels, the pavilion forced visitors to observe their image inside this artificially delimited environment. The artist Paolozzi and the photographer Henderson were entrusted with the role of filling this virtual architectural space – the result above all of images reflected in the panels – with objects alluding to human activity: a wheel expressing movement, a sculpture to stimulate contemplation, a photo collage of a head representing man, detritus alluding to a precarious post-war, and perhaps post-atomic situation. The Smithsons wished to present three concepts: space, shelter and privacy. Perhaps a laconic position, clear in its intentions to recover an existential dimension and denounce the optimism of the Modern Movement and the void formalism of those who – like the disciples of the International Style – continued to create buildings based on abstract geometric principles.

The Smithsons – who only a few months earlier have presented the all too eloquent prototype of a home of the future to the Daily Mail Ideal Home Exhibition, made from three-dimensional prefabricated elements realised using new materials, including plastic, strongly influenced by the work of Buckminster Fuller – opted, in short, for an understated though controversial attitude that would accompany them when they departed for the 10th CIAM in Dubrovnik, prior to completing the assembly of the installation of the pavilion for This is Tomorrow. The Yugoslavian city was where the CIAM came to an end, in the absence of Le Corbusier, van Eesteren and Gropius. It was replaced officially by Team 10, a group of forty year olds created during the preparation of the congress, that would re-centre architectural research toward themes of participation, an attention toward the user and open form. New frontiers were visible; after returning to London, the Smithsons wrote, not without a hint of satisfaction: “the most positive result of the Tenth Congress is that the CIAM as a whole began doubting the reason for its continuing existence ...” And, in fact, the Eleventh CIAM Congress in Otterlo, held in 1959, would be the last, while the periodic meetings of Team 10 continued until 1981.
1.3 Situations

1957. The Situationist International was founded in Cosio di Arroscia, in Northern Italy. The organisation was a convergence of the International Movement for an Imaginist Bauhaus (IMIB) founded by Asger Jorn in 1953 and the Letterist International, founded by Guy Debord and composed of artists, poets and film directors working in Paris since 1952.

The programme of the Situationist International was summed up in just two words: *dérive e détournement*, more often than not used as synonyms. *Dérive* refers to the notion of becoming lost, of an unplanned journey as a “form of spatial and conceptual investigation”.

*Détournement* means moving away from an objective to work in a labyrinth of casual correspondences. It is about not wishing to reach a destination. It is the mechanism of fantasy and dreams.

Applying the strategies of *dérive* and *détournement* it is possible to look at the city and urban contexts through new eyes (in 1957 the group would begin developing situationist maps for getting lost in the city). Imagining a world in which each event assumes a unique and original value, it becomes a situation.

The sworn enemies of consumer society and standardisation, the Situationists opposed the market values that hindered or deflected artistic research. Pinot Galizio, one of the group’s most active members, for example, decided to hole up in his own laboratory in Alba, a sort of comune and monastery, together with Asger Jorn, to produce rolls of canvas to be sold at a fixed cost per meter to inflate its market value.

However, the controversy assumed harsher tones in the fields of urbanism and architecture. Functional urbanism, made of zones, standards and abstract principles, was deemed a dangerous discipline. Raoul Vaneigem claimed, “it is the concrete realisation of a nightmare”, adding “if the Nazis had known contemporary urbanists, they would have transformed their concentration camps into low-income housing”. A similar judgment was reserved for the architecture of the Modern Movement, dominated by the needs to compress spaces and costs, rationalising movements and reducing forms and furnishings to types: “it annihilates fantasy and mortifies the body”. Debord stigmatised the question: “an excessively retrograde notion of life and its scope is smuggled into the imperfect yet temporarily beneficial contributions of the first Bauhaus or the school of Le Corbusier”. What disturbed the architecture of rationalism was the incapacity to change with the times, the extraneousness of the user, aestheticisation, etc.

Instead, as Debord affirmed: “our central idea is the construction of situations, that is to say, the concrete construction of momentary ambiences of life and their
transformation into a superior passional quality”. In short, an architecture in which
time prevails over space; action over representation; the existence of art. These
principles were rendered concrete by the Dutch painter and architect Constant
who, in 1958, developed a project for a gypsy camp and in 1959 a project for New
Babylon, a multi-directional urban settlement founded on play, nomadism and
disorientation, in which homo ludens is free to wander, create and modify his
space of dwelling as he sees fit.

1.4 Gutai and Metabolism
Gutai was an association of artists founded in Osaka in 1954 by Jiro Yoshihara. It
was characterised by the theatrical presentation of its work, often in the form of
happenings; a scarce appreciation for the brush and traditional techniques; the
use of common materials; an attention, in some cases excessive, toward the body,
intended as a tool of aesthetic expression.
It was about action, about movement, about the contrast between the body in
space, the solid, the void, and material that had value. It was a return to the
origins of civilisation, to sacred theatre.
Gutai rituals were followed by performances by western artists. In 1959 Allan
Kaprow presented 18 Happenings in 6 Parts. The following year Arman dumped 30
tonnes of garbage inside the Iris Clert Gallery in Paris. In 1961 Yves Klein
presented Antropométrie de l’époque bleue, a canvas across which two paint
covered models had rolled, while a chamber music orchestra played in front of a
live public. Finally, Fluxus was formed and word began to spread in Germany about
an artist named Joseph Beuys and in Italy the terrible Piero Manzoni nominated
Marcel Broodthaers a living work of art and in the United States of America
Halprin, Rainer and Schneemann gravitated around the workshop of the Judson
Dance Theater.
The contamination with theatre brought the world of art outside the closed
environment of the academies; it attracted young people who were drawn to free
practices and public readings by underground poets such as Allen Ginsberg and
Gregory Corso, representations by the Living Theatre, the raunchy concerts of Bob
Dylan. There was a growing awareness that any unusual relationship between man
and object stimulated an organic existential attitude, becoming a source of
reflection and tool for the transmission of aesthetic values. All under the condition
of interacting with the space containing these objects, that material defining them
and the body perceiving them.
The importance of any distinction between the arts waned. The artistic object was
pushed aside to make way for the space of life, once again central. While artistic
performances took place in an ersatz theatrical environment – often in the street
or public squares – the objective was concrete space, everyday existence and the reality of the metropolis.

The Metabolist movement, formed in 1960 in occasion of the World Design Conference in Tokyo, transformed the legacy of Gutai into a reflection on architecture.

The group was driven by the citric Noborou Kawazoe, Kisho Kurokawa and Kiynori Kikutake. Their point of reference: the already affirmed Kenzo Tange. Other members and interested parties included Masato Otaka, Fumihiko Maki, Takashi Asada and Arata Isozaki.

The group’s ideas were outlined in the document Metabolism 1960: Proposals for a New Urbanism. It stated that: cities were poorly suitable to modern life; fixed and non-modifiable structures were unable to interact with a fluid, dynamic and changing reality, made of situations, functional relations and communicative flows; the search for order and harmony stripped the urban context of its most authentic values. Kawazoe stated: “our idea for the city of the future is that it must include disorder, to carve out a new order in its midst”.

The Metabolist aesthetic founds its natural outlet in the megastructure, immense compositions at the scale of a district or city, absorbing infrastructural systems. Streets, networks and canals, robbed from the world of engineering, were transformed into objects of architecture, while the attempt was made to bury urbanism together with its uniform zones and its abstract quantitative standards.

In the end, it was the idea, borrowed and updated, of the Obus Plan for Algiers proposed by Le Corbusier in 1930 or the Unité d’Habitation in Marseille from 1946: a double building system consisting in a primary system (the street-ribbon or building skeleton) and a secondary system (the dwelling units that could be freely inserted within a pre-established structural grid). There was also something extra, arriving from a consideration of the concept of structure investigated during this period by the exact sciences and social and human sciences (Lévi-Strauss published Structural Anthropology in 1958).

The structure is an organisation, almost an organism, which admits levels of freedom and can evolve over time, without losing coherence or recognisability. The result is a living city – metabolic to be precise – that guarantees identity and permanence and, at the same time, easily adapts to the rapid changes of habits and customs.

Metabolised, and in the end consumed, were the products of an affluent society: making Metabolism a variation of Pop Art. However, it added the warning that chaos at the human scale of goods is opposed by an order at the extra-human scale of the macrostructure, exactly as the disorder of manufacturers is opposed by the unitary logic of the market and the State. This element links it to the social democratic ideology of Team 10, with whom the Japanese were in close contact: in
1959 Tange represented Japan at the last CIAM Congress in Otterlo; Maki as present in 1960 at the Team 10 meeting in Europe and Kurokawa attended the meetings in 1962 and 1966, respectively in Royaumont (France) and Urbino (Italy). Alison and Peter Smithson, Louis Kahn and Jan Prouvé were invited to the World Design Conference held in Tokyo in 1960.

Moreover, Tange was also in contact with goings-on in America. Between September 1959 and February 1960, the Japanese architect was invited by Pietro Belluschi to teach at the Architecture and Planning School at the Massachusetts Institute of Technology. Tange invited his students to work on a residential nucleus for 25,000 residents in Boston Harbour. Divided into seven teams, the students responded with seven projects. The most convincing proposed a primary structure composed of triangular sections supporting numerous platforms. Some of the platforms, on the interior, hosted the infrastructural system for the entire district. Others, on the exterior, supporting dwelling nuclei made form prefabricated three-dimensional cells. At the lower level of the portal, a subway line, highway and monorail fan on three different levels.

Tange’s time teaching in the United States afforded him the opportunity to define his ideas for his plan for Tokyo Bay (1960), a work that would have an enormous influence on the research of the Metabolists and a notable echo in the international press. It was a floating city linking the two extremes of the bay. It was founded on the concept of the network, in other words a group of relations, both direct (roads, highways, subways...) and indirect (telephones, telegraphs...) that served to integrate otherwise automated functions. This led to the choice of a linear system – in lieu of the traditional radial or checkerboard schemes – that consented the organisation of an axis supporting modular elements; the clear division of the organism into structuring elements, each guaranteed a certain permanence in time, and for completion, subject instead to a greater level of use and obsolescence; the interaction between diverse and complementary activities, freely placed one beside the other.

Viewed after many years, the projects for Boston and Tokyo can be read as risky projections toward a hyper-technological future; as the architect’s monstrous and recurring dream to dominate the growth of the metropolis at all costs, a growth slipping form his grasp. However, during the 1960s – marked by the explosion of motorisation, the spread of highways, the myth of wellbeing at all costs – the response was convincing: it identified a new urban dimension for architecture; it provided solutions to the problem of communications and networks; it guaranteed the prefabrication of standardised components a role within a more complex urban strategy; it rationalised chaos and change by planning for them within a grid of reference; it redesigned a new social role for the architect, liberating him from the marginal role to which he had been relegated by the aesthetics of the gesture and
the beautiful sign. However, the Metabolists produced their best results when interpreting the poetic side of this theme. 

*Tower City* (1959) by Kiyonori Kikutake has an intense landscape dimension in the form of a skyline of towers rising up from gigantic circular platforms, each designed to host 3,000 inhabitants. *Marine City* (1959) and *Ocean City* (1960) are vibrant signs at the scale of the territory. *Agricultural City* (1960) by Kisho Kurokawa is striking for its contrast between rigidly orthogonal structuring elements and lightweight tent-like roofs. *Helix Structure* (1961), also by Kurokawa, is fascinating for its spiral structure, which poetically alludes to the DNA strand and the growing organism. *Space City* (1962) by Arata Isozaki communicates an unsettling and vaguely Piranesian tension, aided by the choice of cylindrical structuring elements whose shafts allude to immense ruins of Doric columns.

### 1.5 Saarinen: Between History and Technology

Following the success of his General Motors campus, completed in 1956, Eero Saarinen received a number of new commissions from such giants as IBM, Bell and Deere & Company. They offered occasions for furthering his research into materials and components and experimenting with new forms. For the IBM building in Rochester (1956-1958), for example, he developed a panel that was even thinner than that used for the General Motors buildings. He also tested panels with alternating light and dark blue lines, the use of colour. Their use as pure decoration led to the objection of a number of critics, still tied to the myth of functionalism that held to the Loosian notion of ornament as crime.

Also for IBM, at the Thomas J. Watson Research Center (1956-1961), he introduced a curvilinear form and alternated the cold panels of the curtain wall with warm stone walls. Finally, for the splendid building designed for Deere & Company, he invented a system of brise-soleil in cor-ten steel that gives depth to the façade and, with a measured play of chiaroscuro, helps its insertion within the site, landscaped by Sasaki & Walker.

These works brought him numerous awards and contributed to his growing fame: for example, the anthropologist Edward Hall wrote an essay entitled “The Fourth Dimension in Architecture: The Impact of Building on Man’s Behaviour” about the Deere & Company building, in which he sought to demonstrate how this building celebrated an equilibrium between man and his environment, not found in other buildings by other famous architects.

All the same, four works that had little to do with industrial design would make Saarinen a controversial figure, loved by innovators and opposed by the purists of
the International Style who accused him of playing with ostentatious and largely unmotivated and thus arbitrary forms.

The first project is the auditorium and MIT (now Kresge Auditorium), flanked by a chapel for religious functions (1950-1955). For the auditorium Saarinen designed a concrete sail rising form the ground and spanning 50 meters, with a height of 15 meters. The interior space features a theatre on the lower level and a 1,238-seat concert hall on the upper level. The chapel is instead housed in a cylindrical brick building, slightly sunken into the ground. The exterior features a series of arches, while the interior contains a vibrant steel sculpture, designed by Harry Bertoia. It would be difficult to imagine a more effective contrast of forms: one futuristic, open to light and constructed in concrete; the other a simple almost archaic volume in an ancient material. In an article published in *l’Architettura*, Bruno Zevi summarised the shock of the profession in the face of these two unusual buildings, borrowing a phrase from Eugenio Montuori: “there was already some confusion between functionalism and the organic approach, between Le Corbusier and Wright. Now we are faced with Saarinen who preaches the mots total irrationalism”. Zevi considered the project an error, even if an interesting one as the work, however mistaken, of one of the most talented architects of his generation.

In reality, more than an error, the sail and the cylinder at MIT explicate a new condition. That of the architect of the 1950s suspended between two alternatives: a recovery of the relationship with the past, with history, and the continuation of a line of research focused above all else on technological innovation. Unlike Louis Kahn who, as we will see, opted without hesitation for history, Saarinen refused to make a unilateral decision and sought an approach that would satisfy both alternatives.

Beginning with the Hockey Arena at Yale, from 1956-59 (it is interesting coincidence that Saarinen, swamped with work, was unable to accept the commission to expand the Yale Art Gallery, and thus suggested Louis Kahn: more will be said in the next paragraph).

The Arena has an unusual form. It almost resembles a whale; or a pagoda, above all where the roof almost opens to make room for the entrance. The presence of something oriental can also be seen in the projects, from a few years later, by Kenzo Tange for the hockey arenas designed for the 1964 Tokyo Olympics. The Hockey Arena in fact shows the signs of a new plastic approach, far from the formal stereotypes characteristic of his earlier work: the same that influenced Niemeyer’s buildings at Brasilia (1958-60), Wright’s Beth Solomon Synagogue in Elkins Park (1959) and Utzon’s Sydney Opera House. This latter was famlar to Saarinen who sat on the competition jury in 1957 and sponsored its selection as the winning submission.
The third controversial project by Saarinen in the design of the Morse and Stiles Colleges (1958-62), also at Yale. The complex confronts its surroundings: a exedra reminiscent of classical traditions and two courts that serve to connect the new construction with existing buildings. The choice of material is also interesting: concrete with rubble aggregate – an expedient borrowed from Wright who had used it at Taliesin – making it appear more natural than artificial. The plastic impact of the design is exalted by the play of powerful masonry elements that project and recede to define a composition that some have referred to as neo-gothic. Despite being saturated with historic references, the complex has a decidedly modern feeling. Reyner Banham, as he would later recognise, made a mistake when he expressed his disgust with the following criticism: “it is difficult to imagine a more glaring, cheap and malicious way of stylising reinforced concrete to make it appear romantic”.

No less controversial, though many did not hesitate to define it one of the most successful masterpieces of the post-war period, is the Trans World Flight Center for TWA in New York (1956-62). Here Saarinen avoided any overly explicit citations of the architecture of the past to suggest the very idea of flight. Yet he did it by creating a structure whose interiors vaguely recall the powerful architecture of the ancient Romans: “TWA – he would state in 1961 before falling ill – is beginning to look marvellous. If anything happened and they had to stop work right now and just leave it in this state, I think it would make a beautiful ruin, like the Baths of Caracalla”. This reference would not suffice to calm the rage of such critics as Vincent Scully or Alan Colquhoun, who considered the Terminal to be a mere operation of marketing, a calling card for TWA and good simply for satisfying a public hungry for something new. Yet, as Kauffmann claimed, it is one of the few constructions with an extraordinarily fascinating and complex interior, an orchestration of curving forms that is immediately comprehensible to the observer thanks to their bilateral correspondence with a central space penetrated by light from all directions. In short, a masterpiece that demonstrates how to renew the tradition of the Modern Movement without succumbing to the nostalgia for history or monumentalism, two themes that, beginning in the 1960s, would dominate the greater part of architectural debate. A debate in which Saarinen, the most talented architect of his generation, would unfortunately not participate. He died in 1961 at the age of fifty-one.

1.6 Utzon and the Sydney Opera House

When the Danish architect Jørn Utzon submitted his proposal for the Sydney Opera House he was thirty-eight years of age and the author of few, though interesting, buildings. They included his Usonian style home (Utzon appreciated the work of
Wright and was a guest for a short time at Taliesin) and a complex of patio houses finished in brick and intelligently immersed in a natural setting, near Elsinore. There was nothing to let on that he would soon be proclaimed the winner of one of the most important international design competitions of the post-war period. What is more, his proposal was so notably different than the others: rather than a building, Utzon proposed a sign at the scale of the landscape, consisting of a vast stone platform surmounted by a series of shells, some with the form of a fan, others akin to sails. This choice offered a twofold advantage: for those observing the building from the water, it resembles an ancient ceremonial space conturcted atop a promontory and, thanks to the base-platform, imagined in osmosis with it, for those who observe the project from the city it appears as a plastic three-dimensional structure that, thanks to the curvature of the shells, does not require a privigled point of view, and is equally interesting from one side or the other. There were numerous rumours, from the outset, about why such an unusual decision to privilege an outsider had been made. Almost all attributed the victory of the young Danish architect to the strong support of Eero Saarinen, one of the most authoritative members of the jury. It is said that he did everything in his power – removing the drawings from a pile of excluded projects – to award the design of such a courageous building whose forms recalled those of his TWA Terminal in New York, also vigorously sensual and not without its reference to the poetics of organic architecture. However, it was an organic poetic that avoided any excessive involvement of nature – it is not accident that Wright, when asked about the project by the press, slammed Utzon’s project by speaking of circus tents – and oriented instead toward images charged with energy, and highly gestural. Forms that would instead be appreciated by the Situationist artists and in particular by the Danish artist Asger Jorn, one of the founders of COBRA. He saw the project as the valid antidote to the functionalist Taylorism and the naturalistic excesses of the followers of pure organic architecture. Accompanying Utzon during this delicate commission was the engineering company Arup. Together they reviewed the project an infinite number of times to identify the mathematical and conceptual model that would allow for the construction of such unusual forms. In the end, and based on an intuition by Utzon, the choice fell on the use of vaults made from cuts through a sphere: this simplified the structural calculations and the prefabrication of the shells. Despite all the hard work by Utzon and his team, works were slow and cost soared. In 1966, ten years after the competition, Utzon was brusquely fired and the project was completed by others. Though reworked and redesigned, once completed the building become the symbol of Sydney. Evidence that it is possible, even in contemporary times, to create works of architecture with a strong ability to capture the imagination of the local population, but above all that the International
Style was now dead and buried. In its place was an architecture that dialogued with the territorial dimension, whose values – this is exactly what happened with the works of his mentor Saarinen – would be fully investigated only decades later.

1.7 Scharoun: Two Masterpieces

Despite the success of the innovative school project presented in 1951 in Darmstadt – we spoke about this in the previous chapter – the first concrete opportunity to build a scholastic building was offered to Scharoun only in 1955, with the commission for the Geschwister-Scholl girl’s school in Lünen, in Westphalia, completed in 1962. It returns to the idea of an alternative scholastic model founded on the relationship between the classrooms, conceived as familiar microcosms, and common spaces intended as points of encounter and exchange. The first are characterised by a hexagonal plan, and close ties with the surrounding space – a courtyard or a terrace for outdoor lessons. They emerge as volumes and are illuminated from above on all sides. The common spaces rotate around a one hundred meter long atrium that links the nuclei of classrooms and faces onto a courtyard with an approximately semi-circular form. At the extremities of this latter element are the hexagonal main hall and the circular music hall (the latter was never built). Notwithstanding an apparent complexity, it revels a control of forms and a clarity of relations and functions as an organism. The minimal unit, the classroom, resembles a cell with its own nucleus around which gravitate other minimal functional elements. This latter is in turn the element that constructs a fabric served by a higher level of services. Finally, the fabrics compose an organic system that is enlivened by the more important common facilities.

The logic of composition defined by Scharoun recalls the relational system being tested at the time by the architects of Team 10: ultimately there are more analogies than differences between this school and van Eyck’s orphanage. Analogies that can also be found in the work of Louis Kahn, also inclined toward the structuring of organisms.

In 1956 Scharoun was designing the Berlin Philharmonic. He was thus finally able, after so many delusions tied to competitions won but never built, to construct a building of notable importance. Completed in 1963, the Philharmonic is based on an extremely simple principle: arranging the audience in a circle around the musicians, avoiding any frontal arrangement. Scharoun made this possible by designing a pleasant system of terraces and playing with a geometry that, other than satisfying functional requirements (the elegant curved elements that design the ceiling and optimise acoustics) contributes to the creation of a strong sensation of centrality. Counter-balancing this condition, as in the other projects
addressing the same theme, is the fluid space of the foyer, articulated on different levels, linked to one another by an involving spatial dialectic. We spoke earlier of aspects linking Scharoun’s organic research with that of Team 10. One of its leading exponents Jaap Bakema, made the following enthusiastic comments about the foyer: “the circulation and exiting routes, the stairs, the galleries and the lifts...appear to teach a lesson in urbanism, whose design principles I can only hope will be extended to the city”. The fact that we are dealing with a building at the urban scale is also testified to by the exterior of the Philharmonic, resolved with a striking image that recalls a fortress and an arc and which, thanks to its golden cladding, transforms the Philharmonic into an urban landmark that predates the shimmering titanium scales of the Bilbao Guggenheim by some forty years.

1.8 Aalto and His Late Works

In 1957 Aalto completed the Social Insurance Institute in Helsinki, a project begun in 1952 after winning the competition held in 1948. The building well reflects the architect’s urban strategy: a unitary organism characterised by the use of the same material – brick – and the same strip window and, at the same time, articulated in volumes in order to resemble an assembly of different buildings. While they orderly follow road alignments, they are arranged with a sufficient spatial freedom along the perimeter of the lot to avoid the effect of a street-corridor typical of the nineteenth century city and to consent pleasant perspectives and transform what would otherwise be an interior space of a courtyard, into a park-garden facing one of the city’s streets. The main hall of the building is a four-storey space, illuminated from above by diffuse light from skylights. It is designed as a covered urban space parallel to the street, considering the city’s particularly rigid climate.

The Helsinki University of Technology in Otaniemi is the result of a 1949 competition. It was built between 1953 and 1966. Here Aalto adopted a strategy that is only apparently opposed to that used at the Social Insurance Institute because it begins with separate buildings, and not a single block. However, it achieves the same result as a parti characterised by both a unitary design and the articulation of its parts.

The distinctive element in Otaniemi is the large landscaped space crowned by the semi-circular main building, similar to a large apse that becomes the focal point of the entire composition.

Aalto’s many other projects include the Church of the Three Crosses in Imatra (1955-58) characterised by the three curves of the main hall: they contain an
ingenious system of sliding walls that serve to subdivide the space when necessary.
The three curves of the church preannounce a method of composing “fan-shaped” forms that would become a trademark of Aalto’s architecture. He would test it at the Cultural Centre in Wolfsburg (1958-62), in the Neue Vahr apartment towers in Brema (1959-62), the Student Dormitory in Otaniemi (1964-66), and the libraries in Seinäjoki (1963-65) and Rovaniemi (1965/68). The idea was borrowed from nature: from shells and the fragmented lines of the fjords. However, the almost obsessive repetition of these geometric motifs, together with a search for rhetoric and monumental effects that with the passing of time gained the upper hand (this is also evident in the choice of cladding materials, with a clear preference for marble), tended to dry up the Finnish architect’s poetic, who began repeating himself in each project, all of the highest quality, but far from the masterpieces of his earlier period.

1.9 Kahn and Nostalgia
In 1959 Louis Kahn was invited to the CIAM in Otterlo by his friends in Team 10. During his travels, he visited the church in Ronchamp and the city of Carcassonne, remaining impressed by the latter: this is evident in the many drawings in his sketchbook (33 versus 2 from Ronchamp). In fact, Kahn was more attracted by the gravitas of the stone walls of the medieval village than the highly gestural, though structurally ambiguous language of Le Corbusier’s masterpiece. He also visited van Eyck’s orphanage (1955-1960), a building with more than one point of contact with Kahn’s project for the Jewish Community Center. They share an articulation of space in the form of small pavilions aggregated to form larger spaces, the abandonment of the orthodoxy of the International Style, the search for powerful effects of light and shadow and the desire to recover a timeless dimension of architecture, not which hints of the archaic. In Otterlo Kahn was invited to hold a conference during which he declared that contemporary space was not much different from renaissance space. He presented the Jewish Community Center in Trenton, his studies of the city of Philadelphia – particularly appreciated and published in the Team 10 Primer – and the Medical Research Building for the University of Pennsylvania.

Begun in 1957, the Medical Research Building reflects Kahn’s brutalist aesthetic and geometric approach, that did not hesitate to expose the structure of the floor slabs supported by vierendeel trusses and, framed in brick-clad concrete volumes, the conduits carrying the piping and those of the stairwells. The complex of the plan is an arrangement of square plan towers, based on the principle of the whole as a “society” of equal or modular spaces. Fragmented into long blocks
emphasised in the vertical by the exposed piping, they recall the medieval towers of Wright’s Larkin Building though certain structural details, for example the solution of the corner of the floor slabs and the entrance set on the diagonal, call to mind the Open Air School by Jan Duiker. Deemed a masterpiece of contemporary architecture, it was presented at the MoMA in 1961, before it was completed, thanks to the interest shown by Philip Johnson. All the same, for Kahn it was a work of transition, not on the same level as the Jewish Community Center, even if only a small part of the latter was completed. "If the world discovered me – he stated – after I designed the Richards towers building, I discovered myself after designing that little concrete block bathhouse in Trenton".

The First Unitarian Church and School in Rochester was built between 1959 and 1969. Here the influence of early Wright is even more evident. From the Unity Temple Kahn borrows the parti composed of two buildings, one large and one small, connected by a short wing containing the entrance. The masses of the larger building recall the square plan organisms of the renaissance and pre-renaissance: a crowning of low ceileded spaces surrounds the square plan hall that, thanks to four tall skylights at the four extremities, soars upward. Having abolished the windows, which would have broken up the elevations, the building is marked by a rhythm of masonry recesses, creating a strong play of chiaroscuro and a closed and introverted volume: exactly the opposite effect of lightness and transparency pursued by the geometrically abstract buildings of the International Style. Also notable in this work is the treatment of the roofs. The roof of the large hall, in exposed concrete, is a powerful plastic organism cut by the four skylights to introduce oblique lighting that gives the space a particularly sacred quality. Finally, the individual spaces, designed as if they were separate organisms, in accordance with the principle of the “society” of spaces mentioned above. In their impeccable proportioning, Kahn must have been inspired by Wittkower’s book *Architectural Principles in the Age of Humanism*, a fundamental text that reveals the complex geometric principles of buildings from the 1400s, published in 1956 and donated to Kahn by the author himself.

By 1959 (the work would be completed in 1965) Kahn was also involved in the design of the Salk Institute in La Jolla, California. The project was commissioned by Jonas Salk, responsible for the discovery of the polio vaccine. It was his intention to “create a [multidisciplinary] facility worthy of a visit by Picasso”. After numerous hypotheses, the selected scheme consisted of two parallel buildings flanking a central plaza open at one end toward the ocean. The two volumes house studies for scientists, whose elevations are angled to look toward the water. Behind them are the open space laboratories separated horizontally, based on the principle of served and servant spaces, by technical floors containing the necessary plant systems. The building materials include: maniacally detailed
exposed concrete (Kahn actually developed drawings for diverse pours in order to design the lines separating them) and wood infill panels for the studies. The result is a calculated contrast between natural and artificial, aligned with the juxtaposition between the rigidly geometric parti of the construction and the informal nature of the site. Heightening the scenographic qualities of the plaza, conceived as a void, silent and almost monastic space, is a thin line of water that cuts the space in two before it is transformed at one end into a fountain that ideally flows into the ocean. Considered by many critics to be Kahn’s masterpiece, the Salk Institute is an anti-modern building in antithesis to the open experimentalism of Team 10, toward whom, in the end, Kahn gradually had less and less in common. The project shows an even more open contrast with the buildings that tend to resemble the creative chaos of the metropolis, designed during the same period by a number of avant-garde groups, including the Metabolists, Archigram and the radicals. Kahn’s lesson would influence, though not without a few wayward actions, misrepresentations and simplifications, the historicist and nostalgic currents that repopulated the architectural scene after the war.

1.10 Restless Italy
The second half of the 1950s saw the completion of the Bottega di Erasmo by Gabetti and Isola in Turin, the INAIL Headquarters by Samonà and the Casa alle Zattere by Ignazio Gardella, both in Venice, and the Torre Velasca by BBPR in Milan. Each of these projects is moved by historicist, if not nostalgic intentions. They marked the definitive break between Italian architecture and the much more interesting research, both expressionist and brutalist, underway in the United States and parts of Europe.
La Bottega di Erasmo (1953-1956), built in Turin by Gabetti and Isola, is situated in an urban area near the Mole Antonelliana. It flaunts a decorative vocation at the limits of kitsch for its self-pleasing play of details, plurality of materials and the presence of obsolete elements such as the bow window. There are also allusions to the giant order in bands of brick, alternating with sharp-edged balconies decorated by wrought iron parapets of pairs of concrete slabs symmetrically arranged though offset, to create a further vibration of chiaroscuro. The entire composition adopts a flirtatious and complaisant language, with undeniably medieval references.
The INAIL Headquarters by Giuseppe Samonà in Venice (1950-1956), though it avoids the pitfalls of excessive decoration that ensnared Gabetti and Isola, uses variations in colour and effects of chiaroscuro to insert itself within the difficult context of the lagoon city. hence the alternation of concrete and stone, the use of such colours as red, blue, white and grey, and the delicate succession of
projections and recesses, in some cases with a minute rhythm, though in any case managed within the overall composition.

For the Casa alle Zattere, also in Venice (1954-1958), Gardella presents a studied pictorial composition characterised by the elegant, and only apparently casual, arrangement of openings on the elevations. The work is contextualized by balconies with parapets whose designs – in truth a bit hard to digest – recall the crenellations of historic Venetian buildings. Composed, like so many other works from this period, by a podium (in this case punctuated by a double row of rhomboid windows), a main volume and a pitched roof, the Casa alle Zattere “vibrates in unison with the fronts of Venetian buildings fronting the canal”. All the same, it is evidence of creative inabilities dictated by an attitude that proved suicidal. An attitude that, rather than reinterpreting history and tradition, as for example in Wright’s Masieri Memorial designed in 1953 for the Grand Canal though never realised due to the obtuse nature of bureaucracy, limits itself to mimicking it.

For many commentators, the Torre Velasca (1950-1958), by BBPR, represents one of the maximum expressions of Italian architecture from this period. With its vaguely neo-medieval appearance, almost that of an ancient municipal tower, emphasised by a structure reminiscent of a gothic building, it is one of the city’s landmarks. Compared to the coeval Seagram Building by Mies van der Rohe (1954-1958), it testifies to the chasm that now separated Italian research from its American and European counterparts.

The issue of Casabella Continuità from April-May 1957 promoted this new approach, publishing an evaluation of the Tiburtino housing estate in Rome by Quaroni and Ridolfi, together with Ridolfi’s other works, including the apartment towers in Viale Etiopia, the Bottega di Erasmo and the Stock Exchange building by Gabetti and Isola, a review of the book Sources of Art Noveau by Stephan Tschudi-Madsen on the Liberty Style and an essay on the Amsterdam School. This issue, in fact, sanctions the birth of a movement that would attract numerous architects, above all from the area of Piedmont and Lombardy that would be baptised with the name Neoliberty, a term coined by Paolo Portoghesi the following year.

Opposing the Neoliberty style, in an article published in April of 1959 in The Architectural Review, was Reyner Banham. He accused Italy of a retreat from the Modern Movement. According to the citric, the work of Gabetti and Isola, together with that of the other young architects drawn to Casabella Continuità, such as Gae Aulenti, Gregotti, Meneghetti and Stoppino, and the articles in their defense penned by Aldo Rossi, represented a fatal step backward. Banham’s accusation, as severe as it was, was circumstantial. He avoided mixing the good with the bad: his criticism excluded Quaroni and his la Martella village, Moretti and his Casa del Girasole and avoided the magazine’s director Ernesto Nathan Rogers. In fact, he
makes no mention of the Torre Velasca (which would instead by the object of harsh criticism at successive meetings of the CIAM). This was not enough to ward off the prompt and offended reaction of Rogers, who felt he had been personally attacked as the key reference of this new historicist ferment: he responded in an article in the June 1959 issue of *Casabella Continuità*. He accused Banham of being the custodian of Frigidaires. He laid claim to the importance of Italian research and “all those who attempt to avoid...conformism and formalism”: Gardelilla, Ridolfi, Michelucci, Albini and Samonà. He claimed that if the term Neoliberty could be applied to the Bottega di Erasmo by Gabetti and Isola, that it was necessary to use other terms to refer to the work of the other young architects: for example, Dutch neo-expressionism for Aulenti and Boitian and Berlaghian eclecticism for Gregotti. Finally, he admitted a few excesses. Though he claimed that changes, no less relevant, could also be found in the architecture of the masters: “Le Corbusier has created Chandigarh that echoes all of India, Gropius the Embassy in Athens, immersed in Greek history, Mies a *monument* with the Park Avenue skyscraper in New York and Wright, prior to his death, had designed works that while coherent in their spirit, could not be held to the letter of his many previous declarations”.

1.11 Other Trends in Italy

Not all Italian architecture from the late 1950s was rife with historicist anxieties. In Milan, Vittoriano Vigano designed the Istituto Marchiondi Spagliardi (1953-57): its vigorous rhythm of exposed concrete piers show the clear influence of the brutalist poetic of Le Corbusier and the exponents of Team 10. Le Corbusier’s Obus Plan for Algiers was clearly an inspiration to Carlo Daneri as he designed the Forte Quezzi district (1956-58). This sign expressed at the scale of the territory mirrors the contour lines of the articulated landscape of Genoa. In 1959, Quaroni presented his project for the CEP district at the Barene di San Giuliano in Venice-Mestre. He proposed a number of large courtyard buildings, with a circular form, open toward the lagoon: it is a decisive self-criticism of his previous neo-realist positions, of the intimate poetic of the village and the neighbourhood unit through the recovery of the large scale. There is also a decisive position in favour of an approach oriented toward the landscape, aligned with the strategy tested by Kenzo Tange in his projects for Tokyo Bay and by American designers open to the theories of Urban Design. This was also a time of grandiose feats of engineering: the elegant viaducts designed by Morandi and the lean reinforced concrete structures of Pier Luigi Nervi, including the Flaminio Stadium (1958-59) in Rome built for the 1960 Olympics. Between 1955 and 1958, working with Arturo Danusso, Nervi designed
the structures for a project by Gio Ponti that in many ways represents the antithesis to the Velasca Tower: the Pirelli skyscraper. Modern and technologically impeccable, thanks to its silver coloured aluminium curtain wall, Ponti’s skyscraper avoids all of the pitfalls of sentimentalism and historicism. At the same time, it pulls away from the dry International Style, avoiding the banality of boxy glass prisms. The positioning of the two triangular fire stairs at the ends of the plan, together with an efficient system for evacuating the building in the event of an emergency is reflected in the elevation by two solid bands, whose tapered lines seem to slip away from view. They are given the delicate role of framing the curtain wall, eliminating the glass box effect, and dissolving the end elevations by reducing them to a simple and narrow cut, a void in shadow that makes the slender building soar into the sky.

1.12 Two Poets: Scarpa and Michelucci
The Venetian Carlo Scarpa is a unique figure. With Ridolfi he shared a similar passion for traditional craftsmanship, and with Rogers an attention toward the past. Scarpa surpassed both in poetic and expressive force and for the intensity of the dialogue with his contemporary era that was able to metabolise the lesson of the great masters. With the Romanelli House in Udine (1950-55), Scarpa appeared to take a decisive step toward organic architecture, all too openly borrowing the language of Wright to the point, as he himself would later admit, of flirting with “the limits of adulation”. Also Wrightian are the project in the Venice Biennale Gardens (1952), the temporary book pavilion (1950), the Ticket Office and the New Entrance (1952), the Corte Giardino of the Italy Pavilion (1952) and the more mature Venezuela Pavilion (1954-56). The latter was created by offsetting two prisms, each dematerialized in its upper part by a window-skylight comprised of an alternation of glazed and opaque bands.
For the National Gallery at Palazzo Abatellis in Palermo (1953-54) Scarpa found himself dealing with a pre-existing structure, a building by Matteo Carnalivari, and, at the same time, with the works of art it housed. He approached them by conceiving of his project as a medium that harmoniously linked the two. An approach that required the artistic sensitivity of a designer that could only organise a path of poetic reaction, giving value to each vista and the secret play of correspondences between the objects, and between these latter and light. With this in mind, he applied and extraordinary talent for craftsmanship that allowed him to avoid stereotyped solutions, and to create, case-by-case, a series of scenographic apparatuses – from the backdrop to the support – that alone could reduce the experience of art to an unrepeatable experience. The result is a unicum, impossible to modify, and which fuses architecture and art. Hence the
immense fascination but also the scarce functionality of Scarpa’s exhibition designs, wholly intolerant of even the smallest adjustment or the most minimal substitution, which would cause the loss of the aura that the architect-artist was able to create through such a rich play of correspondences and relations.

For the Veritti House, also in Udine (1955-61), Scarpa returned to the lexicon of Wright, above all in the decorative elements, though with the intention of making a definitive break. In fact, the result, rather than recalling the expansive design of the Prairie or Usonian houses, resembles more a collage of fragments, an elegant though extenuated assemblage of forms. It is an exercise in writing, mannerist in its flavour, in which diverse geometries and materials are made to interact, and in some cases to clash, in order to explore their compatibility.

For the Olivetti Showroom in Venice (1957-58), Scarpa found himself working in a tight and deep space, in which he majestically introduced a second level accessed from a stair whose steps, made from thick slabs of stone, almost float, recalling the decomposition of planes of De Stijl. The walls are designed by a rhythm of light coloured panels and bands of wood, or by the voids of windows, all aligned at the same height thanks to the introduction of a base in grey stone that serves to protect the walls during period of high water. Scarpa invented a new type of terrazzo flooring, using rectangular inserts of coloured marble. He designed the shop windows as if they were trays atop which to display the precious products made by Olivetti. He also plays with chiaroscuro, created by the pattern of light and shadow padding through grates made from steel and wood. By creating a sense of enchantment, almost of magic, Scarpa managed, at the same time, to celebrate the uniqueness of the showroom’s location – Piazza San Marco – and the design of one of post-war Italy's most important companies, with the courage – thanks to the enlightened entrepreneur Adriano Olivetti – to pursue innovation.

For the Castelvecchio Museum in Verona (1958-64), Scarpa repeated the miracle of Palazzo Abatellis. The design of the interiors displays an unparalleled virtuosity. However, the invention lies in the choice to leave the exterior of the building incomplete, placing the equestrian sculpture by Cangrande della Scala in a strategic position. The statute reacquires the fascination of its past grandeur, while the relationship with the unfinished elements of the building romantically suggests the tragic volatility of history.

Extenuated in a play of precious details is the Querini-Stampalia Foundation (1961-63), in Venice, where Scarpa managed to transform even the inconvenience of the periods of high water into an exceptional spectacle, channelling it through the building itself. The counterpoint here is the no less spectacular pool I the internal courtyard, with its references to Japanese culture.

Giovanni Michelucci was gifted with an inexhaustible creative temperament. In the previous chapter we spoke of his involvement in the reconstruction of the historic
centre of Florence. During the same period he designed the Cassa di Risparmio di Firenze (1952-57). This building rotates around a main hall, designed as if it were a public plaza overlooked by other interior spaces. Designed in section, the rhythm of space is marked, as in the best traditions of Tuscan construction, by an ordered sequence of columns. They acquire an expressive value by the sloping roof, whose rhythm is defined by triangular beams alternating with vaults that create decisive effects of chiaroscuro, and by the play of direct light arriving from the sides, creating an effect reminiscent of the nave of a church.

Interested in the dialectic of spaces, the dynamic nature of circulation and the informality of the creative gesture that allows architecture to establish an original dialogue with nature, Michelucci designed a number of churches: in Collina di Pontelungo (1952-54), for the workers’ village in Larderello (1954-57), the Belvedere village in Pistoia (1960-63) and alongside the Autostrada del Sole in Campi Bisenzio (1961-64).

The latter is undoubtedly his masterpiece. Conceived like a tent, a moment of transitory rest alongside the highway, the church is imposing for its engaging expressivity, emphasised to the extreme by twisting curves and the powerful materiality of stone, copper and reinforced concrete. Inside, visitors are enthralled by a wrapping space that – thanks to the organic forms of the structure, sculpted like the bones of some giant animal – winds along a route that leads toward the altar in a sort of architectural pilgrimage. A clear predecessor can be found in the promenade architecturale of Le Corbusier, though here it is filtered through the expressionism of Scharoun, Kiesler, or, if we wish, an artist of the Informel.

1.13 Brasilia

The master plan for the new city of Brasilia was developed by Lucio Costa. Its layout recalls a bird with outspread wings, a sign rich with cosmic value that serves to define the margins of a symbolic site. Operating on the same wavelength are the main buildings of the new capital, designed under the watchful eye of Oscar Niemeyer.

The centre of the new city is the Praça dos Três Poderes, the Plaza of the Three Powers, home to the striking National Congress building (1958), anchored to the ground by a podium from which emerge the domed roofs of two assembly halls: the closed dome of the Federal Senate and the inverted form over the Chamber of Deputies, open toward the sky. Between the two chambers are two twin office towers, separated by the minimum distance to create the sensation that one is the mirror image of the other. It is impossible not to see in this reflection and juxtaposing of pure volumes the desire to ideally grasp space in all of its multiple directions – above, below, closed, open, the line, the curve – and not to perceive a
metaphoric intentionality that becomes more evocative in direct relation to the degree to which the complex opens up toward the infinite horizons of the surrounding landscape. Through such a marked recovery of symbolism in a contemporary key, the National Congress building, together with the Parliament in Chandigarh (1953-63) by Le Corbusier and in Dacca (1962-73) by Kahn, appears to demonstrate the applicability of Giedion’s theories on new monumentality, at least in relation to newly founded cities. However, achieving a similar intensity did not always prove an easy task. Niemeyer’s other public buildings for Brasilia suffer from a drop in tension, due also to a tiredness deriving from the repetition of a few formal clichés, such as the “building in the building”, obtained using a box in reinforced concrete screened by columns that create a highly plastic effect, in turn containing the actual building, in the form of a squarish volume wrapped by a curtain wall. These include the Residence of the President of the Republic (1957), perhaps the freshest and most successful work, in all likelihood thanks also to its openness toward its surroundings, so unusual for a structure that, for reasons of security, is generally resolved in closed and introverted forms. Also brilliant, even if resolved by a structural invention that makes it more akin to a brilliant object of design, is the cathedral of Our Lady of Fatima (1959-70). It is the latest demonstration of how the original Calvinist forms of the Modern Movement can be designed also using more sensual and barque scenographic devices.

1.14 Le Corbusier: Toward a New Architecture

To everyone’s surprise, with two works of architecture completed between 1958 and 1962, Le Corbusier, now in his late seventies, abandoned the brutalism he himself had invented, and demonstrated an extraordinary vitality and an unexpected ability to prefigure something new. We are speaking of the Philips Pavilion and the project for the Exhibition Pavilion in Stockholm. For the first, to be erected at the World’s Fair in Brussels in 1958, he entrusted the design to Iannis Xenakis, who invented a courageous hyperbolic paraboloid, in order to dedicate himself to a multi-sensory and highly existential film-message, that greeted visitors to the Pavilion.

He thus spent a great deal of time in museums and collections, selecting and assembling images for the film. He chose everything personally: from the most harmonious to the most terrifying, included the images of monsters and concentration camps. Music, broadcast using special effects, was arranged by Edgar Varése, an avant-garde musician that Le Corbusier called on for this project.
Le Corbusier demonstrated a perfect understanding of the potentialities of electronic communication devices: the power of the image substitutes the clarity of form; different disciplines are integrated in one unique medium; truth prevails over beauty; visitors are involved in a multi-sensory experience. He did not follow up on this experiment, with remained a unique and isolated episode in his career.

The second project is from 1962: a permanent exhibition space for works by Matisse, Picasso and Le Corbusier, to be constructed in Stockholm, though realised successively, with some changes, in Zurich, as the Maison de l'Homme (1963). With respect to the Philips Pavilion, the Maison de l'Homme marks a step backward for its return to an exclusively architectural dimension. However, what is new is the way Le Corbusier deconstructs form. For example, by dividing the building into two parts – a highly plastic roof and a modular construction below it – juxtaposed against one another. Or in the contrast between the monochrome roof and the brightly coloured panels of the Pavilion. Or for the brutalism of a few figures opposed to the purism of others. Finally, the in-between space of the terrace, though it returns to the theme of the Palace of Justice in Chandigarh, it nonetheless prefigures other themes that would be approached in the 1990s.

1.15 Fun Palace

In 1961 the theatre director Joan Littlewood commissioned Cedric Price with the design of a highly flexible theatre for a wide range of performances. Cedric Price was assisted by Frank Newby, who calculated the structures, and Gordon Pask, who handled all other engineering aspects. The result was the Fun Palace, a multipurpose building that offered users an active interface with the structure, an active part of the realisation of the spaces it offered. As Price stated: “The activities designed for the site should be experimental, the place itself expendable and changeable. The organisation of space and the objects occupying it should, on the one hand, challenge the participants’ mental and physical dexterity and, on the other, allow for a flow of space and time, in which passive and active pleasure is provoked”.

The construction was very simple: a rectangular building (approx. 260x110 meters) with five rows of fifteen steel towers supporting secondary structures and containing the service elements (from the toilets to cabling). The towers were surmounted by cranes that served to move materials used to reconfigure the interior spaces from part of the stucture to another. Banham noted: “the play of variations proposed by the team that designed the Fun Palace, spectacularly exceeds what Constant planned for his New Babylon, where the floors, at least, are fixed, and the rest is can be removed. The Fun Palace is conceived as a flexible
Despite the intense efforts to promote the project, it remained unfinanced and was never realised. However, it became a mandatory reference for the work of avant-garde groups and, in particular, Archigram. It would later be assumed as a model, in 1971, by the group comprised of the very young Renzo Piano, Richard Rogers and Gianfranco Franchini in their submission to the competition for the Plateau Beaubourg Centre Paris, later renamed the Centre Pompidou.

1.16 Johansen and the Informel

John Johansen studied at the faculty at Harvard, under the direction of Walter Gropius, graduating in 1939. His classmates included Ieoh Ming Pei, Paul Rudolph and Bruno Zevi. He successively apprenticed in the offices of Skidmore, Owings & Merrill and Wallace Harrison, at the time involved together – though it would be more correct to state against – Le Corbusier in the realisation of the United Nations Headquarters in New York. Between 1955 and 1960 he taught at Yale, at a magical time that brought together a number of different personalities, all inclined to question the dogmas of the International Style: Louis Kahn, Philip Johnson, Eero Saarinen and Paul Rudolph, the critic Vincent Scully (also at Yale was the young Englishman James Stirling: more will be said about his projects later). In 1955 Johansen wrote an article for the *Architectural Record* entitled “Space-Time-Palladian”, in which he denounced the inclination to move toward neoclassicism. An inclination that became concrete in the realisation of a number of homes based on the premises of the principles of order, rhythm and symmetry. Examples include the Villa Ponte, or Warner House (1957), suspended – like a bridge [*ponte* is the Italian word for bridge - TN] – above a watercourse. Struck by the church at Ronchamp, designed by Le Corbusier, by Saarinen’s Ice Hockey arena at Yale, by Kiesler’s experiments with the *Endless House*, by the echoes of the split of Team 10 and the artistic sensibility that lead toward *informel* painting, Johansen accompanied neo-Palladian research with an intense production of biomorphic homes, both organic and informal, made from shells obtained using the technique of spray-applied concrete, which he himself had tested for the American Concrete Association, and described in the *Sprayed Concrete Construction* handbook (1955).

The Spray House Project #2 from 1955 resembles a flower wrapped and protected by petals that filter sunlight. The floors, walls and ceilings are a succession of voluptuous and uninterrupted forms that, when necessary, also become masonry supports for beds, divans and other furnishings.
In 1956 Johansen realised a simplified version for the World’s Fair in Zagreb. However, in the absence of the proper concrete he was forced to use a supporting armature that compromised the structural premise of the self-supporting shell, studied together with the engineer Mario Salvatori. Also from 1956 is the Sprayform Weekend House, a simplified shell whose plan recalls the Dymaxion House by Buckminster Fuller, the ingenious inventor who also gravitated around the world of Yale University.

Johansen’s biomorphic homes would influence the more experimental architects of the younger generation. They included the English group Archigram, whose work we will look at in the next paragraph. One of the group’s members, Michael Webb, wrote in 1957: “Johansen was our genuine American hero: each successive project a radical departure not only from conventional practice, but even from his own previous oeuvre. What a risk taker! What a gambler!”

A versatile architect, Johansen also created less futuristic works, though always of the highest quality, including the American Embassy in Dublin (1964), the Clowes Memorial Hall and Opera House (1964-66) and the Florence Virtue Housing (1965). Others followed: for example, the Goddard Library in 1968, articulated with a majestic play of neo-expressionistic volumes that recalls the parallel and no less brilliant work of Paul Rudolph, including the Art and Architecture Building at Yale (1958-64).

Johansen was fascinated above all else by experiments with innovative forms. In 1960 he designed a kinetic house, composed of a fixed central nucleus onto which he grafted volumes moving along rails. In 1965 (it would be completed in 1970) he was at work on his masterpiece: the Mummers Theater in Oklahoma. The idea was borrowed from electronic devices whose components are inserted in a chassis and connected by wires. For the Mummers Theater the components are the theatre halls and the wires the circulation. The result is a fragmented and highly vital assemblage, a pleasurable chaos of served and servant volumes, emphasised by the use of materials – concrete and coloured steel panels – employed according to a neo-brutalist logic of risky and often strident combinations. The appearance was unusual: it prefigured High-Tech and, at the same time, Deconstructivism. Besides, for his entire life, Johansen would be a precursor and an innovator with a continuous activity of research that would lead, in our present day, to the imagination of truly organic homes that, similar to biological organisms, are able to learn from human behaviour and modify themselves as a consequence.

1.17 Archigram: The Beginning (1961-1964)

May 1961. Five years after the exhibition *This is Tomorrow*, and the same year the tireless Buckminster Fuller proposed covering all of New York with an immense geodetic dome that would manage its microclimate, six young architects – Warren
Chalk, Peter Cook, Dennis Crompton, David Greene, Ron Herron and Mike Webb – published a folio entitled *Archigram*. The term Archigram, Peter Cook would explain some time later, connotes an intransigent, laconic and dynamic attitude. Almost a telegram or an aerogram, announcing the birth of a new event.

The second issue of *Archigram* was published the following year. It featured a more consistent graphic layout and presented three emblematic projects: a construction in Fiberglass (author: Greene) that used the organic forms of the digestive apparatus; a housing complex in Lillington Street, London (authors: Chalk, Crompton, Herron) where a collection of dwelling capsules form clusters surrounding a large landscaped space dotted with residential services: a *Shopping Viaduct* in Nottingham (authors: Cook, Greene) whose dwelling units are assembled inside a macrostructure.

Archigram’s admirers included Theo Crosby – the organiser of *This is Tomorrow* – who decided to show their work in 1963 at the Institute of Contemporary Arts. The exhibition, entitled *Living City*, was divided into seven sections: man, survival, folly, movement, communication, place, situation. The choice of issues denounced a clear homage to the neo-brutalist aesthetic, the Smithsons, Pop Art and perhaps even the new mass phenomena whose most glaring examples were rebellious youth and the music of the Beatles. There was more: the beginning of a research that annulled the old architectural categories of Le Corbusian brutalism, Miesian purism, to which the Smithsons were in some way still connected, in an attempt to prefigure a new future.

From the outset, Archigram was a *sui generis* group. The six architects came from diverse backgrounds, were of different ages and, as a rule, did not work together. The theoretical and propagandistic heart of the group was Peter Cook. The poet was Ron Herron, who investigated new techniques with a maniacal obsession, in order to develop them formally and discover unexpected interactions between them, man and the built environment.

Peter Cook is the author of *Plug-in City* (1964), a reference to the act of connecting to an electrical outlet, of drawing power. In this case it signified a macrostructure composed of a primary skeleton supporting infrastructural systems and urbanisation works, and to which it was possible to attach industrially prefabricated three-dimensional cells that could be homes, commercial spaces or recreational facilities. The building cells, similar to automobiles and other mechanical components, were made form plastic and metallic materials and assembled offsite, in accordance with the teachings of Buckminster Fuller (his fully industrialised toilet block for the Dymaxion House was from 1937). Similar to a light bulb, a television or toaster, the house could be substituted periodically, with a new and technologically more advanced model. Emphasising and investigating the formal analogy between an electrical system and the city, *Plug-in City* focused
the architect’s attention on the flows of information, images and products that the metropolis must continually manage and process (a theme examined by another project: Computer City by Dennis Crompton).

Warren Chalk’s Capsule project (1964) is a central service structure to diverse models of dwelling capsules are attached. It demonstrates the possibility – and effectively, as we will see in the next chapter, a number of prototypes were realised near the end of the 1960s – of imagining a new way of constructing buildings and, in particular, skyscrapers. Walking City (1964) by Ron Herron consists of a series of 400-meter long and 220-meter high dwelling structures on eight legs that could actually move from one place to another. Herron’s images caused an uproar. The enormous mobile machines of the Walking City that arrived on the shores of Manhattan, stood in the desert or rose out of the sea in front of Algiers – in its version defined by Le Corbusier’s Obus Plan – demonstrated that architectural research could not stand still, limiting itself to the management of the ordinary and the feasible; they also anticipated the hopefulness, typical of the students of 1968, that the profession could finally project itself toward a utopia.

Archigram disbanded in 1964. Greene and Webb left to teach in the United States, Chalk and Herron attempted private practice, Crompton became involved in a government project. They continued, all the same, to work together on numerous administrative projects and to administer and develop the legacy of ideas they presented.

1.18 The Archaic-Ecological Line

In 1963, two young Austrian architects – Hans Hollein and Walter Pichler – wrote a manifesto entitled Absolute Architecture. The thesis: there is nothing functional in true architecture.

Between 1962 and 1964, Hollein proposed a selection of projects with a highly expressive impact. Brutal, sensual and terrible signs, in which architecture dominates space, flying upward, digging into the earth, extending in all directions. City Communication Interchange (1962) is a concrete monument that celebrates communications, while Stadt (1962) is a city of stone. Aircraft Carrier in the Landscape (1964) is an image of an aircraft carrier in the midst of an agricultural landscape.

More evanescent, though no less powerful signs, were proposed by Pichler, for example in the project Unterirdische Stadt (1963), the delineation of an almost Piranesian urban environment, made of paths and elements of interconnection. There was also a third Austrian, Raimund Abraham, who, between 1962 and 1967,
produced drawings of imaginary cities that recovered natural aspects and archaic qualities, theorized in 1963 in the text “Elementare Architektur” – which would have a notable influence in the years to come.

The technological-Metabolist line was gradually opposed by an archaic-ecological line that criticised the excessive optimism and naïve faith in the self-regenerative capacities of a system. Salvation, if there was any, lay in other values: in metaphysics, in self-research, in the return to nature, in freedom and brotherhood.

Besides, by 1963 a new conscience was developing: through student protests (the revolt at Berkley occurred in 1964); the search for new forms of expression (in 1963 the Beatles exploded at the Palladium, the mini dress was launched in 1964, the same year the Rolling Stones released *Satisfaction*); antimilitarism (in 1964 the Americans intensified their presence in Vietnam and, at the same time, the anti-war movement began to take hold), the fight against racism (Martin Luther King’s Great March took place in 1963, the same period that the former African colonies acquired independence one after the other); the refined mysticism of eastern philosophies and the use of hallucinatory drugs (the hippy phenomena began in 1965, though it arose atop the beatnik rebellion of the 1950s).

Of the two lines, the archaic-ecological would undoubtedly be the most successful in the coming years. However, it would be an error to see the other on the losing end, as it represented an opposition and an alternative. The works and problems faced by the architects of the technological-Metabolist line, at least in its most playful and anti-systemic definition (Pop, Archigram, Situationist), would be a wellspring for numerous avant-garde groups, even the most radically alternative. Thus it occurred the Paul Soleri would create his own community in a megastructure; that hippy communes would adopt the geodetic domes of Buckminster Fuller; that the cities-playgrounds of Archigram and the Situationists would be adopted by Archizoom, Superstudio and the dozens of avant-garde groups created between 1966 and 1970; that space frame structures would be used in the theses of the most politicised students.

Despite the diversities, in fact, both lines – the technological-Metabolist and the archaic-ecological – shared numerous premises, based on which it is possible to develop mixtures and integrations. They shared the same awareness of the end of any stylistic formalism; the common fascination with the future and the same sense of the centrality of the human being and his/her physical qualities. This brought an end to an aesthetic founded on the mass of the wall. It would be the human subject and not the architectural object that would make architecture by moving through space.
1.19 Tange between East and West

Having consolidated his professional success with the futuristic plan for the Bay of Tokyo, in the 1960s the Japanese architect Kenzo Tange began producing an impressive number of projects characterised by a brutalist approach descended from Le Corbusier (in 1951 while travelling to the CIAM Congress he undertook a pilgrimage to Marseille to visit the *Unité d’Habitation*, under construction), to without its Metabolist hybridisations, though in any case softened by the use of curvilinear geometries that referred to eastern images. He also experimented with the use of complex geometries and hyperbolic paraboloid roofs, borrowed from the Philips Pavilion, another project by Le Corbusier (though in reality a work by Iannis Xenakis), as well as the experiments with the line of demarcation between architecture and engineering being realised during this period by such figures as the American Eero Saarinen, with his hockey arena at Yale University (1956-58) and the TWA Terminal in New York (1956-62), the Italian Pier Luigi Nervi with the Palazzo dello Sport in Turin (1960-61), the French architect Bernard Zehfuss, author of the Centre of New Industries and Technologies (CNIT) in Paris (1952-58) and Spain’s Felix Candela, who designed the “open” chapel in Palmira (1958).

Between 1961 and 1964, Tange completed St. Mary’s Cathedral in Tokyo, based on a cross-shaped roof that appears to grow out of paraboloid walls rising up from a rhomboid plan. The form of the exterior of the church is pelasantly complex, even if iconographically unusual (for its cross shape), while the interior offers a wrapping space, projected upward and rendered vibrant by cuts of light filtering in from above and from the sides.

From the same period is Tange’s design for two stadiums in Tokyo, inaugurated in occasion of the 1964 Olympics. Both feature futuristic roofs supported by tesostructures. The largest – with a capacity to seat 17,000 people for judo matches and 13,000 for aquatic competitions – features a plan born from the offsett of two identical though inverted half curves. This unusual morphology creates an almost circular plan, ideal for positioning the raked public seating, and a dynamic exterior whose extremities terminate in an acute angle. This aspect is reinforced in the elevations by the aerodynamic profile of the roof and the almost Mendelsohnian design of the elements in reinforced concrete. The smaller stadium, whose structures is supported by a single central pier, transmits an equal tension thanks to its roof that wraps around the pier in a spiral. Also designed for the Olympics is the more modest Sporting Hall in Takamasu (1962-64), whose arched form appears to conceal symbolic intentions. Intentions that were undoubtedly present in the monument to the students killed during the Second World War (1962-64), which culminates in a path that terminates in front of a highly sculptural semi-conical structure. Tange also realised public buildings, universities, urban reconstruction plans and embassy buildings. They offer evidence of an
intense and frenetic activity that demonstrates a skill for combining a rational professional policy with moments of cutting edge research. Besides – as his more talented disciples - Kurokawa, Maki and Isozaki – would demonstrate, Japanese architects were culturally immune to the myth of the suffering artist who sought refuge in the world of paper dreams. For them it was essential to build, even if this attitude – as occurred for Tange from the 1970s onward – would in the end almost drown the sense of their work in commercial pursuits.

1.20 Kahn’s Last Works

In 1962 Louis Kahn received two particularly important commissions: the Indian Institute of Management in Ahmadabad, India and the National Assembly Building of Bangladesh in Dacca.

The first arrived from the Sarabhai family, the same that had previously entrusted Le Corbusier with the design of their home, at the suggestion of the architect Balkrishna Doshi.

The project, which would keep him occupied until his death in 1974 (Doshi, the associate architect for the project, would see it through to completion) is divided into three parts: the school, the dormitory and the teacher’s residences. The school is a unitary structure, organised around an open air amphitheatre. The dormitories and residences are designed as modules arranged along the two sides of the school, based on a rigorous geometric pattern. All of the buildings are delimited by massive brick walls perforated by long arched openings (full or flat arches), by large circular openings or rows of windows. In this manner – without the need for additional brise soleil, adopted instead by Le Corbusier at Chandigarh – Kahn managed to guarantee the passage of light and, at the same time, to produce areas of shadow. Situated at strategic points, the openings also serve generate currents of air that provide natural cooling.

Obtained from the obsessive repetition of geometric elements – squares, triangles, semicircles and circles – the composition of the entire project recalls, at least in plan, Piranesi’s fantastic reconstructions of the Campo Marzio in Rome. At the same time, the elevations, made from volumes with decisive forms emphasised by buttresses, overlaps and shadows, recall the symbolic-religious architecture of the Indian continent: the result is an intentional ambiguity of references from history and myth, from East and West, from classical Rome and the anti-classical nature of local cultures.

A similar line of research can be found in the new home of the National Assembly in Dacca, a citadel composed of the Parliament Building, the Secretariat and a hospital. The commission arrived from the Pakistani Government (the city would become part of Bangladesh only in the 1970s), though it had originally been
offered to – and refused by – both Le Corbusier and Alvar Aalto. The Parliament building, realised over the course of fourteen years (1962-76), is without a doubt Kahn’s masterpiece. It is a confluence and integration of all of his previous research. The heavily emphasised monumentality of the symmetrical parti recalls the complexes of Imperial Rome and central plan Christian churches. The articulation of the spaces resulting from the combination of volumes with elementary geometries. Light that models interiors and exteriors, thanks to the plastic play of volumes and the courageous cuts in the walls – in the form of circles, triangles and squares. The poetry of materials obtained from the neo-brutalist use of concrete is juxtaposed against the elegant inserts of slender bands of marble.

Many architects would remain fascinated by this work and, more in general, by the power of Kahn’s language, and many would also attempt to carry forth his lesson. However, this operation would prove impossible because while it is possible to recover forms borrowed from a certain classical tradition that inspired the American architect, it was in no way possible to reproduce the intense romantic spirit and dramatic tension with History that represented the most characteristic aspect of his research.

1.21 Restless Englishmen: Stirling and Lasdun
Throughout the 1950s, James Stirling designed the expansion of Sheffield University (1953) with a clearly neo-brutalist intention. He clearly referred to the parti of the Unité d’Habitation in Marseille, recently completed and, implementing a logic, applied with programmatic rigidity, of correspondence between the external form of a building and the functions that took place inside of it. The Ham Common apartments in Richmond (1955-58) and, above all, the housing estate in Preston (1957-59), are characterised by an essential language of brick and concrete, which recalls Le Corbusier’s Maison Jaoul di Le Corbusier (1952), but also presupposes an attention toward neighbourhood and neighbourly life (for example the suspended street at Preston), a theme particularly dear to British architects during this period.
Similar to Kahn and the Italian historicists, anxious to restore the dialogue with history, Stirling was also close to Pop culture, fascinated by the technique of citation and the readymade: a culture that permeated London but which was also assimilated during his brief time with Team 10, prior to his clash with the Smithsons, most likely more a question of character than ideology (Alison would be as peremptory as she was hard to believe when she negated any contribution by Stirling to Team 10).
It was however in 1963 that James Stirling stunned the world of architects with his Engineering Building at Leicester University. The building is the product of the assembly of forms borrowed from the tradition of the Modern Movement, in some cases literal citations. There are elements of Russian Constructivism, the buildings of new objectivity, the industrial warehouses in steel from the late nineteenth/early twentieth century and even a series of nods to the masters: for example the allusion to the theme of the transatlantic ship so dear to Le Corbusier. However, exactly like the mannerist buildings of the later 1500s, the pieces, combined together, establish a synthesis. They remain the sum of risky and equally fantastic contaminations of languages that reveal a profound crisis of content.

In 1964 Stirling began working on his design for the Faculty of History at Cambridge (completed in 1967), another masterpiece obtained by assembling fragments of different types of architecture: an L-shaped building with a variable section, the lift towers, a sort of podium and pagoda roofs. Even in this case, each piece has its own all too evident justification in terms of function, but each alludes at the same time to a specific formal universe, even exotic, in this case the pagoda roofs that, however, may recall his time at the Johnson House, completed by Wright during the second half of the 1930s.

In terms of image, the final result, as with the Engineering Building at Leicester, resembles a toy obtained by assembling a kit of forms that, if not fascinating, are at least soothing because they belong to the world of our imagination. This was the birth of Postmodernism, at least in its most playful version. A more serious and sadder version would be provided by the Italians when, with Aldo Rossi and the Tendenza, the neo-liberty style was darkened to assimilate the worst aspects of Kahn's work (for the love of truth, it is necessary to recall that, in addition to Kahn, Stirling would also find notable success in Italy).

The buildings in Cambridge and Leicester were followed by other noteworthy projects, including Melville Hall at St. Andrews University (1964-68), which returns to the theme of the ocean liner, Queen’s College at Oxford (1966-71), whose plan and section opens up to the surrounding landscape, and the Olivetti Training Centre in Haslemere (1969-72), a reflection on prefabrication that uses new materials and the latest and most brilliant exercise on the theme of the Corbusian promenade architecturale. With the passing of time – perhaps due to the influence of Leon Krier, also the author of the delightful perspectives that would become the trademark of his office – his projects became nauseating and involuted, with the exception of the Stuttgart Museum (1977-83) whose vastly historicist sentimentalism, including fake ruins, redeems, with a brilliant and effective path-route crossing the museum and passing through a sequence of wrapping spaces, bridges the level change between the site above and below the building.
Denys Lasdun was extraneous to this logic of mannerism. His Royal College of Physicians (1959-61) dialogues with the nearby buildings by Nash, without giving into the pulsions of historicism. With the project for the University of East Anglia (1962-68) he tested an architecture open to its surroundings, using a path to connect and aggregate a series of stepping terraces serving student dormitories. The same environmental strategy was employed, in the urban context of London, for the construction of the National Theatre (1967-68), characterised by a series of plates that project the building toward the Thames River. They are proof that an international language can be reformed, to experiment with a new relationship between a natural context and the metropolis, without backing away from the ideals of the contemporary era. The recipe would however prove unappealing, and Lasdun’s approach a losing one: the 1970s, highly ideologised, would be a time of other tensions with respect to the more pragmatic and enlightened aspects of his architecture.


2.1 Against Interpretation

1966. The author, feminist and art critic Susan Sontag published a collection of essays, the most important of which, “Against Interpretation”, was also the title of the book. Against Interpretation launched an attack on the schools of structuralist thinking that, since the end of the 1950s, had obsessively explored the problem of interpretation. To do this they did not hesitate to question linguistics, semiology and anthropology in studies undoubtedly of some interest. However, for Sontag, the problem was not the definition of new hermeneutic tools that permitted a more correct exegis of the poetic text or a deeper understanding – psychoanalytical, sociological of Marxist – but the motivations underlying the work of art. In fact, the value of a work of art lies in what cannot be interpreted or translated. She went on: in an abstract canvas there is not content, or is so feeble that it is not worth losing time over. In a work of Pop art, the content is so explicit that it ends up disappearing by excess visualisation. It was thus useless to attach oneself to a text that was an enigma, nor to seek in the work of art the maximum possible quantity of information, squeezing it to the last drop. She claimed that “transparence is the highest, most liberating value in art - and in criticism – today”, concluding “in place of a hermeneutics we need an erotics of art”.

The consequence was not only the reacquisition of dignity for genres still considered minor arts, such as cinema d’evasione and science fiction, but above all
the preeminent role of all those forms of art to which the problem of the
relationship between objects, the body and space was central. For example, the
excessive and sacrilegious happenings of Kaprow, Red Grooms, Jim Dine and Claes
Oldenburg.
Sontag’s theses brilliantly summarise three lines of thinking.

The first is represented by a dense array of critics who, dissatisfied with the
content-obsessed reading of art, focused on the form of art independent of any
content it transmitted. From the Russian formalists to the Italians Cesare Brandi
and Sergio Bettini to the semiotician Roland Barthes who focused his very
sophisticated research on the pure pleasure of the text.
The second line is represented by scholars who oriented their research toward the
close ties between art and erotics, both intended as intercommunicating faculties
though which, by means of the liberating value of pleasure, the removed is
manifest, our most authentic feeling. From Georges Bataille to Jacques Lacan, and
Wilhelm Reich to Erich Fromm.
The third line of research was involved in the criticism of consumer society,
intended not as the degeneration of a society founded on rationality and science,
but, precisely as its perfect realisation. This led to an absolute mistrust in the
myths of efficiency and technicisms and the need to balance the deaf and value-
free positivity of scientific reasoning with the concrete value of art that alone, with
its unsettling and upsetting dialectic power, could negate all that threatened to
negate liberty. This group included the scholars from the Frankfurt School of
Critical Theory, in particular Herbert Marcuse whose famous book *One-Dimensional
Man* met with notable success among American student during the years of
protest.

### 2.2 Contradictions and Complexity

Susan Sontag’s book also had a notable impact as her frequent contacts with Paris
made her an important reference for both American and European culture. A
similarly important "bridging" role was played in the field of architectural research
by another woman, Denise Scott Brown. In 1952 she enrolled at the Architectural
Association (the AA) in London. In 1953 she met Peter Smithson, who would have
a notable influence on her. She would state. "The New Brutalism suggested to me
that social objectives might be achieved with beauty, if we could only learn to
broaden our definition of beauty – and that so doing could make us better artists".
After defending her thesis in 1954, Scott Brown, at the suggestion of Peter
Smithson, travelled to Philadelphia to meet with Louis Kahn. In the United States
she met Robert Venturi, with whom she began a lasting sentimental and professional relationship.

Between 1959 and 1964 Venturi was at work on the “Mother’s House”, the Vanna Venturi House, for which he was defining a new type of approach, strongly inclusive and in which citations and elements, even decorative, borrowed from the past coexisted in a sophisticated patchwork that was not afraid to push toward the limits of kitsch. The façade of the Vanna Venturi House, for example, features three types of windows (a traditional door, a square window and a strip window), while the entrance is highlighted by a semi-circular moulding and a cut in the wall above it. Finally, there is a clearly emphasis on declaring the presence of the pitched roof, which is then contradicted by a cut that appears to divide into two halves. During the same period Venturi was also theorising his approach in an essay (begun in 1962) that would be published in 1966 under the title *Complexity and Contradiction in Architecture*. It would have an enormous echo, and the critic Vincent Scully would define it the most important architectural book to have been written since 1923, the year Le Corbusier published *Toward a New Architecture*.

*Complexity and Contradiction* took aim at two of the leading figures in American architectural debate, Mies van der Rohe and Philip Johnson, at the time working together on the construction of the Seagram Building (1954-58).

To the first, who claimed that *less is more*, Venturi responded that *more is more* and, a few pages later, that *less is a bore*. Of the second he criticised the famous Glass House and the Wiley House, an undeniably Miesian design for a house for wealthy clients. Venturi cited Kahn – he was a pupil – and the protagonists of Team 10, with whom he shared a taste for the banality of events and the refusal of novelties at all costs: “I [...] reject the obsession of Modern architects who, to quote Aldo van Eyck, ‘have been harping continually on what is different in our time to such an extent that they have lost touch with what is not different, with what is essentially the same’”.

However, with respect to Kahn, who pursued an architecture of integral formal values, Venturi adopted a more posibilist attitude. He stated: “Louis Kahn has referred to ‘what a thing wants to be’, but implicit in this statement is its opposite: what the architect want the thing to be”. He concluded: “I prefer 'both-and' to 'either-or,' black and white, and sometimes gray, to black or white”.

The phrase would become famous; and Venturi and his many followers would soon be labelled the ‘Grays’.

Venturian possibilism – also taken up by Scott Brown – soon collided with the ethical integralism of the Smithsons.

The controversy between Venturi and the Smithsons marked a moment of rupture but also a time of awareness, revealing a diversity of positions between Pop Art
and the Brutalism that, in reality, was already latent in the exhibition *This is Tomorrow*.

For the Brutalists, reality was information to be processed. For the Pop artists reality was information to be received, but above all as a source of codes of communication, that permit the artist to express himself in a modern language. If the problem for the Smithsons was ethical – and from this point of view still under the influence of the Modern Movement – for Pop Art it was principally a question of language.

### 2.3 Archigram 1966: The New Line

Closer to the Smithsons – with whom they shared a passion for the neotechnological texts written by Banham – than to Venturi, Archigram continued their common research in Great Britain and the United States, where a few members of the group had relocated.

In December 1966, issue n. 7 of the magazine hinted at a change in direction, and an abandonment of the theme of the macro-structure. In their place the group proposed dwelling units that were “autarchic, highly flexible, mobile and non-monumental”, that could function independently of any support or structure. Peter Cook stated: “there may be no buildings at all in Archigram 8”.

Four projects, released in 1966, represented this new line of research: *Free Time Node* by Ron Herron, *Living-Pod* by David Greene, *Cushicle* by Mike Webb and *Blow-Out Village* by Peter Cook.

*Free Time Node* is a camp ground for campers, caravans and tents. As the title suggested, it was a structure for free time, in a camp ground that prefigured a possible city of the future, in which nomadism was a necessity, both productive and recreational.

*Living-Pod* was a capsule in two parts: the shell and the equipment. The shell, in fibreglass, features two levels, a door and four openings, occupying a total of 255 of the surface, all of which cold be hermetically sealed. Climate control is guaranteed by insulated sandwich panels. The equipment included: two toilets with a completely automated cleaning system for the body; distributors of objects for personal hygiene and single-use clothing; two rotating wardrobes-silos for clothing than can be reused; a mobile distributor for pre-packaged food with the possibility to prepare quick meals; a machine for learning and work; an air conditioning system.

The reduced size and weight of the *Living-Pod* capsule (approx. 8x5x4 metres and roughly 100 kg) made it easy to move.

The *Cushicle* was an invention of Michael Webb. It was a complete unit divided into two parts, that could be transported on the shoulders and assembled and disassembled with ease. A source of food and water made it fully self-sufficient.
Blow-Out Village is a mobile housing unit designed by Peter Cook, that could be used when camping or on vacation, at musical events, but also as an emergency response unit in the event of an earthquake. It consisted of a structure that, thanks to the use of hydraulic jacks, could be expanded to create a skeleton that could support cabins for guests. This main support also features a number of rods that support a waterproof cover in transparent plastic. When not in use, the entire apparatus could be disassembled and folded away, with a 75% reduction in space and volume, that could easily be moved from place to place.

2.4 The Avant-Garde and a Time of Protest

While the Metabolists in Japan, Archigram in England, Hollein and Pichler in Austria and the Pop Artists in America we laying the foundations of a new aesthetic, Andrea Branzi was studying in Florence, in an environment influenced by the magnetic neo-expressionism of Giovanni Michelucci, the brutalist research of Leonardo Ricci and Leonardo Savioli and the sacrilegious and controversial activities of the critic Giovanni K. Koening.

In a climate such as that of the 1960s in Italy, still heavily marked by the legacy of neo-Liberty and neo-historicism, the tension toward something new expressed by these figures represented a breath of fresh air. Above all they were a stimulus to push ahead, toward a terrain that had been prepared by at least three events: Umberto Eco’s reflections on the avant-garde and the theory of information – he published Opera Aperta in 1962 and taught at the Florence School of Architecture in 1966; the 1964 Venice Biennale where the American Pop artists showed their work under the able direction of Leo Castelli; the fascination with English Beat culture, the music of the Beatles and, finally, the work of Archigram.

After graduating in 1966 with a thesis design for a permanent fun park, composed of a supermarket located inside an immense disco, Branzi founded the group Archizoom and, together with Superstudio – created the same year by Adolfo Natalini – organised an exhibition entitled Superarchitettura. As the flyer stated, it was “the architecture of superproduction, superconsumption, superinduction to consume, the supermarket, the superman, super gas. Superarchitecture accepts the logic of production and consumption, and works for its demystification”.

In 1967 Archizoom designed the Superonda, the Superwave, a sofa made from four modular elements created by skilfully cutting a block of plastic. The diverse possible combinations of the four subsystems stimulated new ways of using space. Affordable, at least in its intentions and materials, Superonda suggested a concrete alternative to the functional and representative tyranny of traditional furniture.

However, the brilliant idea behind Superonda was followed by a phase of tired creativity, almost a refusal to seriously confront the world of design. Between 1967
and 1968 Archizoom designed an endless sequence of Afro-Tyrolean furnishings designed to fool the functionalist, productive and exclusivist logic of rationalism. The crisis affected not only Archizoom, but was common to the entire avant-garde and the academic world. One need only flip through the magazines from this period to have proof: few published works, too many abstract discussions, often approached using a language full of clichés and one-liners typical of revolutionaries.

Manfredo Tafuri’s Progetto e Utopia (Laterza 1973), released in 1969 as an essay entitled "Per una critica dell’ideologia architettonica" (Toward a Critique of Architectural Ideology) in the first issue of the review Contropiano (1/1969) summarised this impasse with a ruthless lucidity.

Almost balancing the lost of creative energies, there was an explosion of design collectives. Archizoom and Superstudio were followed by UFO (1967), Ziggurat (1969) Strum (1971) and Anonima Design. Groups popped up everywhere. In the United States we find Ant Farm (1968), followed by ONIX and SITE (1970). Austria gave us Haus-Rucker-Co (1967), Coop Himmelb(l)au (1968) and, later, Missing Link. In England there was Street Farmer.

An emblematic episode occurred on 30 May 1968. During the press conference to present the XIV Triennale di Milano, the Palazzo dell’Arte that hosted the exhibition Il grande numero (The Large Number) was occupied by students and professors from the Faculty of Architecture and artists and intellectuals from Milan. The exhibition was inaccessible: trash, graffiti and posters were haphazardly overlapped on the spaces designed by Archigram, Aldo van Eyck, Arata Isozaki, Saul Bass, Gyorgy Kepes, Georges Candilis, Shad Woods and George Nelson, the most advanced examples of architectural research at the time. More virtual than real, the XIV Triennale testified to the now irreparable gap between those who proposed a global opposition to capitalist society and the reformists, who believed in the self-regenerative possibilities of the system. This latter group included those who designed the Italian room (Michele Platania, Antonio Barrese, Sandra Delfino, Alfonso Grasso, Gianfranco Lanimarca, Alberto Marangoni, Settimo Reconditi) and the majority of the foreign participants selected from the leading figures of Team 10 (the Smithsons, van Eyck, Candilis...), the representatives of radical English and American research (Archigram, Nelson...), an the Japanese Metabolists (Isozaki).

The project by Platania’s group won the competition to design the Italian section, after a difficult head-to-head with the group led by Fabio Mauri. The theme was unusual – the desalination of seawater – born of the research of a number of groups financed during the same period by the Consiglio Nazionale delle Ricerche, the Italian National Research Council. Though it was developed poetically. In fact, the project called for the flooding of the exhibition galleries with ten centimetres of
coloured water, the covering of the walls with a continuous tarp, and the insertion of a system of raised circular platforms. These latter were occupied by rotating and titling seating on which visitors could observe numerous transparent prisms onto which images of the future were projected. These cylinders, what is more, also functioned as display cases, hosting emblematic objects. For example, a section of hydroponic greenhouses and a floating model home-caravan. The exhibition hall, finally, featured an alternation of two phases of lighting of differing intensities: dark and suffuse. “The first phase illustrates the moment that corresponds with a vision of the future and presents the entire room (walls, ceiling, flooded floor, transparent cylinders, platforms, public) totally covered by brightly coloured projections representing the consequences of desalination applied to different uses. The second phase illustrates the moment corresponding with the denunciation of the current state and presents the entire room covered by projections that are partially faded and which present the known conditions of immense poverty in areas without water”.

Arriving second – and thus excluded from participating in the Triennale – the project by Fabio Mauri, Piero Sartogo, Gino Marotta, Antonio Malvasi and Furio Colombo was no less interesting. It represented an imaginary museum of the Earth, as it could be approximately be organised, inside a spaceship, by extra-terrestrial observers who land for the first time on our planet and, without a precise key to its reading, gather and classify heterogeneous objects. A tooth brush was thus placed alongside an atomic bomb, a skyscraper beside a tank, an interview with an intellectual beside that with a singer or cleaning lady. The result is an unusual and fascinating canvas that helps to understand the paradoxes and dangers of our model of development founded on the large number. It also drew a smile for the liberating proposal made by the astronauts, consisting in a capsule – of solitude, self-critique and silence – that serves as a space of psychological recharging.

Equally ironic and critical are the projects presented by Archizoom and the group consisting of Marco Dezzi Bardeschi, Gianfranco Censini and Riccardo Foresi. The first consists of a series of totems representing the image of the super-monopolies that control production on the planet and only allow for the alternation of trends and inhibit any form of structural change; the second is a simulator of mental processes that operates at variable acceleration, in other words a complex machine in translucent and opaque pvc made from two mammalian containers and a peristaltic tube that visitors could use to test the system of perception and sensation that places it in a condition to live a non-alienated life. Revisited years later, the choice made by the jury was the best one possible: it strongly proposed the ecological theme to which it alludes through the layout of the exhibition space, transformed into a work of Land Art (it should be remembered that in 1968 Christo
wrapped the Kunsthalle in Berne and in 1969 Robert Smithson began his *Spiral Jetty* in Great Salt Lake, while in Italy *arte povera* was born in 1967 and Gianni Pettena in 1968 made his first experiments with urban and landscape performances. It also imposed itself for the use of volatile images from projectors that, together with the reflections on the water and transparent display cases, rendered the entire space evanescent and ephemeral.

Working with a metaphorical and allusive register were the installations by the foreign groups. The most impressive were the proposals made by the Smithsons, Archigram and Saul Bass, while the events held in parallel—freely treated by individual countries—featured a notable work by the Austrian Hollein.

The Smithsons, who were to have presented the theme of the *decoration of the modern city*, proposed a model of historic Florence, its festivals, its marriage customs in historical costumes. Yet, as Bruno Zevi pointed out in the weekly magazine *L’Espresso*, “after arriving from London with this project, they responded to scandalised objections and promised to think on it. In the end they did not alter even a single detail, forcing the organisers of the Triennale to officially declare their opposition”. In reality, the work by the Smithsons, judging from the photographs of the installation, was more ambitious. This is because it launched a warning cry against the effects provoked by the city of large numbers when it examined the historic city and cities of medium dimensions such as Florence, and avoided any comment on the decoration of Las Vegas, Chicago, Manhattan, Tokyo or London. What is more, because it proposed a reflection that was both anthropological and ecological. In fact, the installation featured a large model of Florence in which buildings were eliminated to make room for an immense lawn. Only the most significant monuments were left standing: the Cathedral, Ponte Vecchio, the Baptistery, Santa Croce, etc. The urban fabric was instead represented on a photograph affixed to the ceiling, almost as if it had taken flight. Between the lawn below, dotted with monuments, and the urban fabric above were a number of suspended shopping bags and a selection of reproductions; the walls were covered with images of books, cars/machines and depictions of the city. The installation, more than ancient festivals, most likely alluded to slogan of youth protests (remember “beneath the pavement, the beach”?), as well as Le Corbusier’s plan for Paris (1930), with which the Swiss master proposed razing the city’s old districts to the ground, with the exception of its most important monuments, to make room for parkland and Cartesian skyscrapers. However, more than thirty years after the Charter of Athens (1933) and after the passionate warnings issued by Jane Jacobs (*The Death and Life of Great American Cities* was published in 1961) against the deluding results of the pseudo-rationalist urbanism of the Modern Movement, it no longer made sense to propose an ideal city. It was necessary to confront the real city: where the need for natural spaces clashed with
the needs for socialisation, and motorisation and commerce with the need for order and harmony. The installation by Archigram was structured around three poles: a vending machine, the prototype of Michael Webb’s Cuschicle and Big Bag. This latter – with all of its possible linguistic analogies with the Big Bang and conceptual affinities with Duchamp’s La Boîte-en-valise (Box in a Suitcase)- was an inflatable and mobile tube of transparent plastic, 18 meters in length and 2.9 meters in diameter, suspended above visitors’ heads. Inside the tube, a series of rigid planes braced the tube and supported models of projects and projection screens for films and slides. The recipe that Archigram proposed for the Il grande numero was in line with their research: flexible cities, state-of-the-art technologies, mobility and nomadism and interaction with users. Once again there is a increasingly more pressing attention toward the use of ephemeral images projected on large screens and the artificial lights of the metropolis that would return in the successive projects Instant City (1968), Soft Scene Monitor (1968) and the proposal for the Casino in Monte Carlo (1971).

The installation by Saul Bass was a labyrinth of 6,000 boxes, piled one atop the other “with six thousand handles, six thousand numbers, six thousand codes” symbolising total cataloguing “soulless, directionless; an innumerable world, obtusely recorded and stored away in sections as anonymous as they are useless”. For the same exhibition, the Austrian Hans Hollein created a distressing path of corridors and doorways along which visitors were bombarded by sensory stimulus made by sounds (for example, the noise of a storm) and by spatial situations (overcrowding and disorientation). Hollein stated ”the exhibition represents not only the Large Number, but also the single individual. The exhibition is for the individual but it is offered to the general public. One the one it is precise in its use of technology, on the other hand it is improvised; it is clear and direct, but there is also something of Kafka and Freud. It is ambivalent, filled with contradictions, like life, and as such, it is totally Austrian”.

2.5 Mega-Structures: between Habitat 67 and Osaka

October of 1966 was the release of a monographic issue of L’architecture d’aujourd’hui dedicated to architectural research. It began with remembrance of the inexhaustible creativity of the recently deceased André Bloc. This was followed by projects by two architects that, while oriented toward a professional dimension, pursued avant-garde research: Paul Rudolph and John Johansen. The first, despite being present with three brutalist inspired projects, was orienting his research toward increasingly more plastically expressive forms and experiments with macro-structures made from industrialised three-dimensional components: “the mobile home – he stated – is the twentieth century brick”. John Johansen, a rebel
and experimenter, was orienting his work toward a polyphonic, mobile and spatially explosive architecture, baptised *Action Architecture*. One page was dedicated to Maurizio Sacripanti who, with his *Teatro Totale* (Total Theatre), proposed a theatrical machine composed of small mobile blocks that could be used to produce an almost unlimited number of spatial configurations. “I cannot believe – the architect stated – that such exhilarating performances as the ballets of John Cage can be mortified by squalid traditional stage sets”.

The edition also presented images of the macrostructures by Alfred Neumann and Zvi Hecker for a civic centre and a synagogue. This was followed by a summary of the exercises completed by Leonardo Ricci’s students at the Faculty of Architecture in Florence, organised around the principles of Situationism, Metabolism and macrostructures.

Toward the end of the issue is the plan for a largely vertical satellite city by Arnold Kircher, the project for a city-megastructure founded on enormous couples of triangular plates by Stanley Tigerman and a proposal by Japan’s Kiyoshi Kawasaki for the organisation of the Expo in Osaka (1970), using slender structural steel trusses. The issue concluded with a summary of tensile structures and truss constructions, emblematically entitled: “Architectes, ingénieurs”. Projects included studies and proposals by Makowski, by the young Renzo Piano, Frei Otto, Roger Tallibert and Serge Kétoff.

The issue of *L’architecture d’aujourd’hui* – a publication attentive toward the new, though prudent in its defense of the now consolidated values of the Modern Movement – recorded and sanctioned a specific condition: the research of Buckminster Fuller, the Metabolists and Archigram had, as the mid-1960s approached, begun to circulate. So much so that these issues were investigated by the magazine on many occasions and, in particular, in the issue dedicated to Habitat (n.130 from 1967) and structures (n.141 from 1969). Other magazines, such as *Domus, Forum, Casabella* and *The Architectural Review*, more and more frequently examined the theme of macrostructures, truss structures and three-dimensional prefabrication. Despite the growing interest of the specialised press, the realisation of prototypes were still a thing of the future.

The occasion for creating one came with the World’s Fair in Montréal, in 1967, when the very young Moshe Safdie was commissioned with the design of an experimental housing project.

Safdie was a prodigious student at McGill University with a year of experience working in the Montréal office of the Dutch architect Sandy van Ginkels, who introduced him to the problems faced by the CIAM, the theories of Team 10 and, later in Louis Kahn’s office in Philadelphia. He admired Kahn’s Richards Laboratory and the Office Tower, two projects that were still based on the brutalist aesthetic and open to macro-structural ideas. However, he was disappointed by his
successive work. When he was invited in 1963 by van Ginkels to return to Montréal to work on the Expo project, he accepted.
In 1964 Safdie proposed two experimental organisms, one twelve storeys and the other twenty-two, with a pyramidal form, composed of prefabricated three-dimensional cells, for a total of 1,200 apartments, a 350-room hotel, two schools and a shopping centre. After countless vicissitudes, which appeared to threaten the entire project, he was allowed to build only one tenth of what he had proposed: 158 apartments, and an absolutely insufficient budget.
Safdie, only 25 when he began his Expo adventure in 1963, assembled 365 prefabricated three-dimensional units. He planned 15 different types of apartments ranging from 57 square meter suites to four bedroom homes occupying 160 square meters. He used normalised plastic windows by the Geon company. He designed a three-dimensional toilet block in polished fibreglass. He contracted a kitchen block with Frigidaire.
Constructed over time, the building had an enormous impact. Critics took pot shots at the fragmented and unusual form of the complex, while enthusiasts pointed out that, thanks to the strange overlaps foreseen by the architect, each apartment enjoyed an optimum view, with its own terrace or garden. The project soon became an ideal reference for architects working in the field of macrostructures. Together with the geodetic dome of the American Pavilion designed by Buckminster Fuller and the tensile structure of the German Pavilion by Frei Otto, it would be the object of the most intense attention by hordes of Japanese who flocked to Montréal in search of inspiration for the exhibition scheduled to take place in Osaka in three years, offering the second important testing ground for the world of macrostructures.
The master plan for the Osaka exhibition was the work of the talented Kenzo Tange, who designed 33 hectares based on an infrastructural system and a futuristic transportation network (monorail, moving walkways, funicular, electric taxis, etc.) though sufficiently elastic to leave the maximum spatial and compositional freedom to the 53 foreign pavilions and 32 national pavilions. The focal centre of the Expo ’70, based on the theme “Progress and Harmony for Mankind”, was a large public square, designed by Tange, assisted by the structural engineer Yoshikatsu, and characterised by a large roof spanning 108x291 meters and supported by six lightweight pylons and made from a three-dimensional system of truss beams to create a simple and very elegant structure despite its gigantic dimensions. Suspended from the structure were building systems of a minor scale – capsules, walkways, stairs, steps – that mediated the superhuman scale of the construction with the human scale of its users and allowed for numerous attractions to unfold in the square. They also allowed the public to visit the roof structure and enjoy an aerial view of the Expo public, also a source of
interest and curiosity. Slightly offset with respect to the centre of the square was a colossal statue-totem – the Tower of the Sun – that rose upward and broke through the roof. Accessible from the interior, it allowed visitors to undertake a symbolic walk, from the past, beneath the ground, to the present, at the level of the plaza, into the future, at the top of the tower.

Judged by critics the masterpiece of Expo '70, Tange’s square was the point of confluence of the research of the avant-garde Metabolist and Neo-Futurist groups, some of whom were directly involved in the construction and set up of the project. The Metabolist Kurokawa, for example, installed a number of dwelling capsules on the roof, made from modular three-dimensional elements that could be substituted or integrated. Archigram were present with the exhibition *Dissolving city*, an investigation of the habitat of the future, characterised by new systems of protection against the elements, such as the geodetic domes of Buckminster Fuller or Tange’s square itself, which clearly surpassed the need for traditional architecture.

Noteworthy pavilions include the American Pavilion by Davis, Brody, Chermayeff, Geismar and de Harak: a 150-meter long oval structure, almost entirely below ground and characterised, on the interior, by the continuous flowing of water and images projected on the walls and, on the exterior, by a translucent vinyl and fibre roof partially supported by internal air pressure.

The Scandinavian Pavilion was dedicated to ecology, while images were the theme of the Netherlands Pavilion.

The structures of private exhibitors included a number of hyper-futurist pavilions, often so superficial that they flirted with kitsch. Exceptions include that by the Fuji Group: a pneumatic structure composed of long tubes arranged side by side, each 4 meters in diameter and 85 meters in length.

The Metabolist were present in full force.

Yoshisazaka Ryusei was present in the Japanese national pavilion with a project for the city of tomorrow composed of vertical service towers and large horizontal surfaces for living and dwelling (however, the project met with such scarce success that the Japanese themselves gave it the nickname, in lieu of the *City of Tomorrow*, the *City of Sorrow*).

Kurokawa proposed three emblematic works: the dwelling capsules mentioned above, the Takara Beautillion and the Toshiba Ihi Pavilion.

The Takara Beautillion was an entirely prefabricated building with a steel structure and concrete floor slabs. It could be assembled in a few days and hosted prefabricated stainless steel capsules whose surfaces were used to project images from the world of Pop. Inside they featured exhibition stands.
Il Toshiba Ihi Pavilion was a structure of 1,444 tetrahedrons that, once assembled, contained a theatre for 500 spectators. Mountable and demountable in only a few days, it was fascinating for its unusual, lightweight and vibrant form. The Italian Pavilion was a source of controversy. After the late organisation of a competition the choice fell on the project by Tommaso and Gilberto Valle, whose futuristic structure was designed by Brusa Pasquè supported by the technical consultancy of Sergio Musmeci. The motivation was equivocal: “the awarding commission, while identifying a superior quality of an aesthetic and functional order in the project by the architects Monaco and Ligini, and in the project presented by the architects Sacripanti and Nonis notable characteristics of inventive originality, has deliberated to assign the prize to the project presented by the architect Tommaso Valle and the engineer Gilberto Valle who, given the particular circumstances of place and time, with respect to the previous projects offers instead greater assurances of being buildable in Japan within the limits of time and budget foreseen”.

We can ignore the project by Monaco and Ligini; what is important here is the latest in a long line of defeats of one of the most ingenious protagonists of the Italian avant-garde: Maurizio Sacripanti. Proposing a system of rotating disks and cylinders, Sacripanti overcame the discourse of macrostructures and projected his architectural research toward extremely refined spatial and technological reflections – intersections of complex spaces, moving parts and the fluidity of images – whose like would not be seen again until the 1980s and ‘90s.

Alongside the project by the Valle brothers was an exhibition space of more modest dimensions, noted by an attentive critic at The Architectural Review: an elegant prefabricated structure in steel with polyester fabric walls designed by Renzo Piano. This was the most representative construction to have been designed by the young Italian architect, prior to the Centre Pompidou, which he unexpectedly won during the competition held the following year (1970), together with Richard Rogers and Gianfranco Franchini.

The Osaka Expo was an immense public success: visitor estimates are in the range of 60 million people from around the globe. For Japan, at the height of its economic boom and seeking new markets in which to affirm its international image, the Expo was a notable success. For the Metabolists and the international of macrostructures it was a pretext for demonstrating their products and obtaining credit from public opinion, sanctioned by the successive construction of numerous experimental buildings, including: in 1971 the Sky Building by Youji Watanabe, in 1972 the Nakagin Capsule Tower by Kurokawa, in 1973 the Kibogaoka Youth Caste by Tatsuhiro Nakajima and Gaus.

Macrostructures popped up everywhere. Italy was home to three exceptional interpreters: Manfredi Nicoletti, Aldo Loris Rossi and Luigi Pellegrin.
In 1966 Manfredi Nicoletti had already proposed elegant macrostructure for the Principality of Monaco followed in 1968 by a fascinating, 500-meter high heliocoidal skyscraper whose structural calculations were masterfully executed by Sergio Musmeci.

In 1967 Aldo Loris Rossi designed a futuristic apartment and office building in Naples; later, in 1970, at the age of thirty-seven, together with Donatella Mazzoleni, only twenty-seven, he won the prestigious international competition “for a new city” organised by the magazine *Construction et Humanisme*. He proposed a fortress building with 300 storeys, 800 meters in height and one kilometre in length and an average of 48 meters wide. It was designed for 250,000 inhabitants living a total of 207 floors. The other 97 floors were divided as follows: an open first floor; a second floor of markets and shops; a third administrative level of civic and political functions; a fourth level of cultural activities; from the fifth floor upward were recreational facilities, including a public park and zoological garden.

Luigi Pellegrin proposed a city that rose up on slender piers. They included a floating linear city, crossing uncontaminated fields and digging into mountains in order to avoid altering the territory, except for the purity of the sign, and offering a new relationship between man and landscape made from new vertiginous viewpoints.

Pellegrin’s attempt to unite ecology and macrostructures was, however, destined to failure. It required a too elevated sensitivity toward architecture and landscape that only a few architects managed to master and a control of economic and land division processes that were unfeasible in societies that was not rigidly organised and planned.

There was also the fear, without a doubt motivated, that, beyond the forecasts made by architects, such regimented structures could actually lead to the construction of inhumane megalopolises, similar to enormous and anonymous beehives. Macrostructures thus became the object of a group of forces that progressively marginalised this field of architectural research in the years to come. They included all those who opposed the inhumane dimensions of the new, and fought for the balanced and human scale of the historic city: we have already mentioned Jane Jacobs’ famous *The Death and Life of Great American Cities*, published in 1961; other works include *The Architecture of the City* by Aldo Rossi from 1966.

Another group that moved away from macrostructures was that of their users. Instead of these cumbersome buildings in steel and glass, they preferred single family homes in brick. There were also the young hippies whose ideal was a knapsack and a tent to be erected in an open field.
If we had to choose a date to mark the beginning of the decline of macrostructural research, we could choose 1973, the year the Lehigh University in Pennsylvania hosted a convention against tall buildings. The accusations included: alterations to the physiognomy of place, compromised landscapes, growing alienation, fire traps, problems in the event of earthquakes, urban chaos, encouragement of criminal activity and the need for too much energy to function. Obviously, not all of these accusations were unfounded. Yet this is how they were perceived by the public and academic research that, after so many “futuristic” openings, felt the need to return to the more calming folds of historicism and the recovery of tradition.

2.6 Ecology and the Refusal of Urban Values

In 1957 the Soviets launched the *Sputnik*; in 1959 the American *Explorer IV* took pictures of the Earth from an altitude of 27,200 km; in 1961 Major Gagarin orbited Planet Earth 17 times; in 1962 Colonel Glenn piloted *Friendship III*; in 1963 the first woman, Tereskova, was sent into space; in 1965 Leonov floated in space for 10 minutes; in 1969 Armstrong took the first giant steps on the Moon. This new vantage point on the Earth, until this moment viewed as a boundless supplier of spaces and energy, revealed a system with a shifting and precarious balance. This marked the birth of an ecological consciousness.

In architecture the first signs of this new sensibility were already demonstrated in the work of Archigram who in 1966 abandoned their research into macro-systems at the metropolitan scale to explore lightweight, mobile organisms, closely interrelated with the natural context. However, it was the Montréal Expo that, with Frei Otto’s tent and Buckminster Fuller’s dome, that defined the two primary branches of research pursuing a new relationship between architecture and the natural environment. The first, explored by the German, referred to the idea of mimesis borrowed from romanticism: tensile structures that replicated the forms of the landscape, creating human habitats with the soft, fluid and undulating lines negated by traditional constructions. The second branch, supported by the American, proposed forms such as geodetic cupolas based on imposing mathematical calculations. “My dome – Fuller stated – is no recreational toy. It is a highly sophisticated environmental control system, obtained with a savings of material and a fatigue superior to that which can be obtained using other alternative engineering strategies”. Proposed to American industry, who looked at them with scepticism, geodetic domes had difficulty catching on. They were however welcomed enthusiastically by young people fascinated by the endless lectures (some over ten hours long) given by the inexhaustible Fuller around the country.
In 1966, in Trinidad City, Colorado, ten boys and ten girls utilised these structures to create a comune emblematically named Drop City. They used simple and economic materials: wood planks for the structure, pieces of steel from old cars for the skin, panels of polystyrene for insulation. Its appearance was enlivened by the use of bright colours: light green, black and red, blue and silver. Drop City soon became a model for the generation of young people who preferred friendship, free love, music and drugs to Vietnam and a career.

Another architect who became a point of reference for young American hippies was the landscape architect Lawrence Halprin. Together with his wife Anna, between 1966 and 1968 he organised the Experiments in Environment, one-month seminars exploring the interactions between the body and nature. There was an overt reference to the body art and performances of Allan Kaprow, Yoko Ono, Yayoi Kusama and Bruce Naumann, above all for the explorations of the body, disinhibited behaviour, the search for liberating and even sexual attitudes. However, with respect to this artistic research, there was also an original and interesting approach to a symbiotic relationship with nature.

In 1967 Halprin designed the Sea Ranch: a 2,000 hectare residential complex in an uncontaminated territory 160 km north of San Francisco. A total of 3,000 homes were designed by Esherick, Moore, Lyndon, Turnbull and Whitaker. The programme imposed by Halprin was founded on environmental values, investigated through an attentive analysis that led to the preparation of specific eco-tables: no home was to block the view of the sea; native vegetation was to be favoured; a total ban on extraneous plants; building materials had to be compatible with the context, hence, in practical terms, local wood for walls, roofs, terraces, covered spaces and patios. Together with projects at the urban scale, Halprin realised numerous naturalistic projects for urban spaces: including Ghirardelli Square in San Francisco, Freeway Park in Seattle and the system of open spaces in Portland. It was a new way of imagining urban space: saturated with landscape elements and, at the same time, welcoming toward even the most informal activities of users, to the point that it would not be risky to speak of an American version of situationist ecologism.

Another prophet of young American hippies was Paolo Soleri, a Turinese architect born in 1919 who spent a brief period in Taliesin, fascinated by Wright’s organic approach. He abandoned this world in 1947 because he was unable to tolerate Wright’s aggressive personality and disagreed about the extensive development of Broadacre City.

Soleri was fascinated by self-sufficient communities, founded on natural, spiritual and rational principles, dense enough to favour an intense activity of meeting and exchanges. He proposed a host of them in his visionary drawings. He named them arcologies, emphasising the unitariness of the notion of architecture and ecology.
Novanoah B, for example, is a marine city that develops in concentric rings spreading out from an initial nucleus. The structure was a three-dimensional tubular construction with storage and production spaces at lower levels, in order to permit the positioning of homes and social spaces above the water of the canals and trees. Asteromo is an asteroid for 70,000 inhabitants. It was a cylinder containing another cylinder of smaller dimensions. The space between the two volumes was used to host technical equipment. The internal wall of the inscribed cylinder was covered with vegetation fed by a cycle of carbon monoxide and oxygen. The inhabitants, driven by centrifugal force, could walk and build on these surfaces. Impossible proposals? Perhaps. However, the fact remains that in 1970 Soleri built the first nucleus of a community in Arizona. It attracted hippies, alternative intellectuals and students, who, year after year, built this new city with their own hands: Arcosanti.

2.7 Between Land Art and Conceptual Art: Architecture as a Mental Exercise

The awareness of the aesthetic value of the natural environment led artists to abandon closed galleries and confront the territorial dimension. Land Art was born. A number of names came to international attention: Christo, Michael Heizer, Robert Smithson, Richard Long and Dennis Oppenheim. They realised complex installations, often of titanic dimensions, whose completion required months of works, the efforts of hundreds of people, feasibility studies, bureaucratic permits and complex equipment to transport and move earth. They proposed excavations that – Heizer’s Double Negative is one example – required the movement of 240,000 tonnes of earth or – in the work of Christo – wrapped one hundred thousand square meters of the Australian coast or closed all of the exits from an American highway for five miles with walls of glass between 11 and 13 meters in height.

What was the aim of Land Art? Firstly to express a new ecological consciousness. But also to break free of the spaces deputised as sites for the production of culture in order to interact with the spaces of existence. Finally, the realisation of works with no apparent practical use to emphasise in a macroscopic manner the primary significance of an operative activity, in relation to the secondary meaning of the product.

There were countless points of intersection between the research of the radical architects and the artists of Land Art; also because the first tended, in their research, to move further and further away from professional practice to explore the paths of an environmental utopia and self-referential artistic research; while the second proposed themselves as the inventors and organisers of complex
territorial operations. Thus numerous architects – for example the Americans Ant Farm and SITE, the Italians Pettena and UFO, the Austrians Hollein and Coop Himmelb(l)au – worked along the delicate line separating architectural research from Land Art. Vice versa, figures such as Christo, Heizer, Long and Oppenheim – assumed the roles and functions of landscape architects.

Finally, there was Robert Smithson, who merits a specific, albeit brief, mention. Other than the most acute and interesting exponent of Land Art, during his brief though intense and generous life (1938/1973) he showed a particular openness toward architectural research that he managed to short-circuit within his own personal aesthetic experience.

Robert Smithson gained attention for an article published in *Artforum*, entitled “Entropy and the New Monuments”. It presented the work of the minimalists: Donald Judd, Frank Stella, Ronald Bladen, Dan Flavin, Robert Grosvenor, John Chamberlain, Paul Thek, Lymann Lipp, Robert Morris, Peter Hutchinson and Sol LeWitt. Their new sculptural objects, cumbersome and laconic, avoided, according to Smithson, expressing the irrelevant subjectivity of a personal emotion and finally marked the abandonment of the romantic tradition of Abstract Expressionism. Smithson, passionate about geology, measured time in millennia and not in years. His was a present though detached gaze that soared above the eras of time, and allowed him to represent, in accordance with the laws of thermodynamics, the universe as an energy that tended toward a state of entropy and annulled the very life that produced it, to the point of petrifying it in the deaf presence of mass. The truth of the world was not to be found in its becoming, but in reality stripped of its values, when the chaos of life becomes rigid and absolute order.

For Smithson Land Art could not coincide with the romantic ecologist vitality of alternative movements, nor with the guilt of contemporary society that, at a certain time in its history, became aware of the environmental impracticality of its own industrial model of development. It must instead be a hole, a rent through which to read the world as a structure and a text.

This generated the non-sites: little more than three-dimensional models made by the artist, which could not physically coincide with the site, the empirical reality of place, but offer an abstract restitution of logic. What is more, as they represent it logically, they are an effective metaphor for it; in short, they express the structure.

Smithson thus established a close dialogue between the artist and nature through the multiplication of the models representing it. Hence the importance of space, the material field in which to develop this reasoning and the space of greatest entropy, where energy self-destructs. Indeed, this is where we find the clearest
representations, crystallisations and structures. This is where, for a moment, it is possible to capture the line where chaos meets absolute order.

Smithson’s discourse presents at least four tangents with architecture. Firstly because the phenomenon of entropy, as it manifests itself in the geology of nature, can also be found in degraded urban realities, in peripheries, in waste dumps, in *cheapscapes*. This is where disorder, crystallised, acquires the value of form and becomes the privileged text that reveals the geological layering of the world. This is undoubtedly a more tragic vision than the playful world of Pop, which looks at the abandoned periphery as an inexhaustible material of formativeness, though no less interesting for its epistemological upsides.

There is also the discovery of art as pure space. for Smithson it made no sense to speak of painting, sculpture or architecture. There was only space: that of objects, and that of the mind.

Smithson’s poetic also included an exasperated attention toward objects, context and relationships. This was a precious lesson for architecture: the value of a work was no longer to be found in the iconic value of signs overlapping on a façade or in internal space, but in the system of relations it could affect. Smithson moved along the lines of the purist conceptualism of Eisenman and the contextual conceptualism of SITE (the group dedicated issue number 04 of the magazione *On SITE* to the artist after his death).

Finally, there was a refusal of the tragic side of expressionism and the inclusivism of Pop. Art was seen as a technique that stripped reality of its accidental aspects, emptied the brain of the overload of consumerism, the vitality of cheap images and the verbosity of a media-driven society. Smithson was seeking to realise – and this would have consequences on architectural research – a zero degree of the mind that overlapped the zero degree of matter. Minimal Art, Land Art and Conceptual Art coincided.

Smithson’s research was not isolated. Joseph Kosuth and Sol LeWitt, for example, operated on a similar wavelength. We need only recall Kosuth’s *One and Three Chairs* (1965): a composition consisting of a real chair, its photographic image blown up to full scale and a dictionary definition of the word “chair”. By choosing a banal object and multiplying it by three, Kosuth stripped it of any iconic value, with the consequence that its meaning no longer lay in the object itself, rendered immediately perceptible, but in the correlation between signs; more or less that which occurred in the relationship between *site* and *non-site*.

In the midst of this intense climate of research, in June of 1969 the Museum of Modern Art in Philadelphia inaugurated a show of the last work by Marcel Duchamp, entitled: *Etant donnés: 1. la chute d’ eau/2. le gaz d'ecclairage*. Duchamp had been at work in great secrecy on *Etant donnés* since at least 1947, with the desire to show it only after his death, which occurred in 1968. Conceived
from the outset as a posthumous piece, it completes a cycle of life, representing an enigma to be interpreted in light of all recent production. *Etant donnés* is a violent and simultaneously hermetic piece, at the limits of decipherability. Violent because it forces the observer to look, through two holes in an old door, at a wall rent by a large hole beyond which it is possible to see a nude woman, perhaps dead. With splayed legs she lays atop the undergrowth, with a gas lamp in her hand emitting a dim light. Hermetic because, for as many meanings as can be attributed to the objects and their links, none are fully convincing. For some the main sense of the installation consists in explicated the voyeuristic attitude typical of art, which scrutinises reality in order to attribute it with meaning. For others, the piece is nothing other than the three-dimensional representation of *The Large Glass*: in this latter the feminine figure, abstracted, ascends into the sky, while in the former it lays heavily on the ground. What makes the parallel between *The Large Glass* and *Etant donnés* so fitting is the choice to represent in both the vital elements of gas and water. For others, instead, the work looked to a painting by Courbet, *The Origin of the World*, representing, so crudely as to be almost pornographic, the spread legs of a young woman. For others still it was the latest symbolic construction by an artist devoted to alchemic philosophy. For others still, *Etant donnés*, like all of Duchamp’s work, has no predetermined meaning: it is an open work of art that suggests multiple interpretations and has no one privileged meaning. In other words, the symbolisms and citations of elements borrowed from Duchamp’s other works, the references to other authors and periods, the use of already codified elements, serves to stimulate a semantic game in which the interpretations of all critics and observers play an equal role. As Duchamp affirmed during one of his public discourses (Houston, April 1957): “the creative act is not performed by the artist alone; the spectator brings the work in contact with the external world by deciphering and interpreting its inner qualifications and thus adds his contribution to the creative act”.

The impression provoked by *Etant donnés* among the avant-garde artists was striking. It was the rebuttal that it no longer made sense to speak of painting, sculpture and architecture, but only of art that penetrated reality to the point of almost annulling itself. It demonstrated that the relevance of poetic discourse lay less in form of what was said (which could be so indifferent as to coincide with one or more banal objects) than in what is actually said. Finally, it was proof of the communicative potentialities of a new creative period that, despite the theses advanced by Sontag against interpretation, had overcome the hurdles of abstraction and Pop, to push powerfully toward the fascination of the enigma, of intelligence and critical reasoning. In short, a formal research – that would later be successfully summarised by Filiberto Menna in *La linea analítica dell’arte moderna*
The Analytical Line of Modern Art) (1975) – managed to be simultaneously a discourse and metadiscourse – making art and, at the same time, speaking about it.

Part Three Chapter 3: The Obsession with Language: 1970-1975

3.1 Five Architects, NY

1970. The Institute for Architecture and Urban Studies (IAUS) published Peter Eisenman’s Notes on Conceptual Architecture. Four white pages occupied by fifteen dots, accompanied by a progressive number, each referring to a footnote. The notes referred in turn to writings on language, structuralism, conceptualism and minimalism, developed throughout the 1960s. The text by Eisenman, extremely sophisticated but also provocative in its laconic snobbery, is perhaps the most significant episode in a series of skilful moves made by the young architect between 1967, the year of the foundation of the IAUS, and 1975, the year he completed the famous House VI, to gain the attention of international media. We can look at a few of the others. In 1969 Eisenman participated in the symposium Five Architects NY, organised at the MoMA by Kenneth Frampton. Between 1967 and 1968 he completed House I. It was followed by House II (1969-70), House III (1969-71), House IV (1971), House V and House VI (1972-75), for the Frank family.

His projects and built works were published in 1972 in the miscellaneous volume Five Architects. His articles appeared in leading reviews, including the Italian Casabella in 1970: “From Object to Relationship: Giuseppe Terragni”; 1971: “Notes on Conceptual Architecture”; 1971: “Cardboard Architecture”. In 1973 Eisenman was one of the founders and directors, together with Kenneth Frampton, Mario Gandelsonas and Antony Vidler, of the review Oppositions, a point of reference for international debate until 1984.

Undoubtedly, with a talent for playing on the weaknesses of his supporters – enraptured by his sibylline prose, fascinated by his constantly up to date cultural references and drawn in by his elegant formalism – Eisenman was a central figure in architectural culture during the 1970s. Obsessed by language, he conceived architecture as if it were a text, in other words, a collection of relations between simple elements linked to one another by a system, a syntax. With this purpose, he arbitrarily isolated the constituent elements of construction – walls, floors, voids, punctiform elements – to rotate, translate, duplicate and recompose them based on a pervasive though absolutely arbitrary logic (the same arbitrariness as any syntactic system or any logical construction once a certain number of initial
axioms have been selected). He had this to say about one of his projects. "It is not rationality that has shaped these spaces; they are determined by a formal system that has been chosen and manipulated arbitrarily". Words that could just as easily have been pronounced by conceptual artists like Kosuth or LeWitt who, during the same period, were working with comparisons between banal objects using a similarly analytical approach that served to strip the work of art of its iconic value and highlight, by rendering them explicit, the subtle logical interactions that could be used to organise form and structure meaning. However, there was an anything but secondary difference. While Kosuth or LeWitt applied their linguistic permutations to sculptural objects, by definition without a use if not in aesthetic terms, Eisenman was dealing with the more prosaic reality of actual constructions. We can look, for example, at House VI, perhaps the most famous. The entire construction is inscribed within a cube and articulated by sub-modules, also cubic in form. The dominant formal motif is the manipulation of squares to generate plans and elevations. There is also a play of offsets, advancements and large transversal plans that cut the home into four pieces. There are correspondences between solids and voids, between voids and voids, between solids and solids. The logic is so binding that the stair connecting the two levels of the home corresponds with a symmetry that, inverted, runs along the ceiling, creating an element that is obviously impossible to use and thus completely useless in functional terms. Finally, there is the use of colour to highlight the different planes. The result: the house is fascinating for its abstract play of forms, though it is barely inhabitable and the clients were forced to accept a number of diktats on their way of life imposed by the rigidity of the compositional syntax. As Eisenman stated, in a paradoxical reasoning: habitability and comfort are to space as representation is to a picture. They dissuade the observer from the search for underlying formal values; they prompt the observer to take immediate possession of space, to seize its perceptive and symbolic values, but impede the ability to capture the relations between objects in a rational and pondered manner. In other words, the syntax that, in the end, structures the poetic language.

In an essay published for an exhibition of the work of the New York Five in Naples (1976), Manfredo Tafuri noted how Eisenman, after Kahn - who sought to give voice to history and institutions - and after Venturi - for whom the only institution was reality - was, at the end of the '60s/beginning of the '70s, the architect who raised the issue of communication in the most rigidity theoretical manner. However, he did so by robbing it of any content, paralysing the semantic dimension and attributing an unusual importance to syntax. In other words, Eisenman holed up behind a mannerist attitude. He rendered it absolute by scrupulously avoiding the issue of creating new icons or new words. His objective? An attempt to re-found a disciplinary tradition without increasing
the confusion of languages - brutalism, neo-brutalism, Pop, metabolism, etc. – that spread like wildfire during the 1960s. If architecture is language, it is a language of itself. All the same, one may object, there are many languages of architecture. Which is to be chosen? And, based on what principle, if one wishes to avoid being labelled an eclectic?

The answer provided by Eisenman was so sophisticated that it actually seemed convincing. The disciplinary tradition to which he referred was the purism of Le Corbusier and the historicism of Giuseppe Terragni. Both spoke the language of the times, but both incessantly confronted classical tradition: Greek for Le Corbusier and Roman for Terragni.

Returning to their lexicon meant reappropriating a certain type of architecture, that which placed geometry, formal relations, the logic of numbers and proportion at the centre of their interests. It was necessary to be both extremely modern and extremely antique. Respectful of tradition and theoreticians of the avant-garde. Eisenman knew that the choice of existing in an eternal present, balanced between history and the future, in reality forced him to move like a tightrope walker between two precipices.

The first was a claim to the absolute autonomy of the discipline. He was tempted above all by the Italians, and the movement known as La Tendenza (The Trend). If architecture was a self-referential language, its measure, its reference, was only to history. This is what Giorgio Grassi proposed in his book La costruzione logica dell’architettura (The Logical Construction of Architecture) (1967), in which he attempted to analytically organise the recovery of disciplinary tradition, or what was hypothesised, with more formative anxiety though no less logical rigour, by Paolo Portoghesi with his revival of the traditions of the Baroque and Liberty.

The second precipice is the negation of the discipline: if everything has been said and if words are empty and, moreover, have a relational-syntactic value one might as well simply declare the death of architecture. In its place we would find anarchitecture, disarchitecture, counter-architecture; in shortly, a new discipline to be discovered and invented. An attempt was made by Archizoom with No-Stop City, or Superstudio with the imaginary cities, or by SITE who proposed playful neo-conceptual and Pop assemblages, or by the artists-architects, such as Gordon Matta-Clark and Gianni Pettena who, fascinated by the theme, proposed interesting mixtures between the space of life and the space of artistic reflection.

Together with Eisenman, the other four architects who showed as part of Five Architects NY were: John Hejduk, Michael Graves, Charles Gwathmey & Robert Siegel and Richard Meier.

Trained in the offices of Pei and later Kinney, Hejduk left because he had little interest in the profession. He eventually abandoned it entirely and opted to teach
at Cooper Union in New York, where he was Dean from 1975 to 2000, the year of his death. Different from Eisenman, whose work was focused on the interior of the object and the relations between its constituent elements, Hejduk focused on the assembly of elementary purist volumes. Activating a procedure born from the assemblage of their diverse geometric matrixes, he appeared to return to Kahn’s method of composition. However, while the latter integrated the parts into a unitary structure, Hejduk separated the parts and coloured them differently to achieve compositions in which formal structures remain suspended with respect to the components from which they are made, exactly like a child’s set of building blocks. This generated the playful appearance of his work, which appears to interpret almost to the letter Le Corbusier’s indications that architecture was the magnificent play of masses brought together in light. There is also a conceptual interest given by the almost analytical clarity employed to present a repertory of diverse spatial solutions (the path, the circular, triangular or square room, etc.) connected by a promenade architecturale.

A more commercial direction was pursued by Michael Graves, Charles Gwathmey & Robert Siegel and Richard Meier. The spatial articulation of their compositions in fact does not respond to rigid intellectual criteria, but rather to a logic of varietas, pleasure and the refinement of a repertory of citations. The work presented by Michael Graves during the exhibition of the “Five” already hinted at a certain eclectic taste that went far beyond purism, and soon moved toward a commercial and nonchalant eclecticism that saw him become one of the leading figures of Postmodernism. Charles Gwathmey and Robert Siegel began their professional careers with works of varying quality, many for New York’s rich upper middle class. International success was achieved, thanks to a frenetic professional activity that saw him complete important works around the globe by Richard Meier. Despite a certain repetition, consisting in the exasperated reproposal of the assembly and disassembly of pure forms, derived from Le Corbusier, all in an immaculate white, alternating with large glazed surfaces, the work of his office are all of the highest quality. They also offer evidence that a decidedly mannerist approach can contribute to the spread among the general public of an appreciation for modern architecture that, at the turn of the century, was instead viewed as an unacceptable break from tradition destined to be appreciated by few.

### 3.2 Learning from Las Vegas

Floored by the conceptual purism of Eisenman and the “Five”, in 1972 Robert Venturi re-launched his project for an inclusivist and anti-academic architecture. He published Learning from Las Vegas, written in collaboration with Denise Scott Brown and Steven Izenour.
The title and contents mirrored those of the article “Learning from Lutyens”, written in 1969 against the brutalist purism of the Smithsons. But there was much more. For Venturi, the recovery of a language for modern architecture could by now no longer occur only by absorbing and recycling history in all of its complexity and contradiction. It was instead necessary to recover an efficacious language, grammatically incorrect, energetic and uncontaminated by its audience. In other words by those users that Eisenman and the Whites – as they were baptised – in opposition to Venturi’s Grays – wished, with their abstract cardboard houses, to exclude from the process of building form.

*Learning from Las Vegas* was an immense success with a gigantic echo of comments by enthusiastic supports, passionate debates, erudite remarks and harsh hatchet jobs.

The book proposed two very simple theses.

*One*. The architecture of Las Vegas, created by professionals to respond to the taste of the common people, is much more interesting than the hundreds of planned settlements, designed and built by the most renowned architects.

*Two*. In the pursuit of the ideal of pure form, the architecture of the Modern Movement ignored the iconic component of decorations, façades and texts whose chaotic overlapping is what makes Las Vegas attractive. From now on, if a change were to come about, instead of pursuing the *duck* (a building that when it wishes to express the concept of a duck, in order to respond to the ideal of unity between form, function and message, must be built exactly in the form of a duck), it is necessary to work with the *decorated shed*, with the system of signs that makes a simple utilitarian construction a fascinating and significant object (to maintain the example: to speak about a duck all that is required is a billboard or a decoration representing this animal).

The dualism of Venturi – which distinguishes and separates the system of decorative elements from construction, intended as a pure object of engineering, devoid of any formal values – reintroduced the common sense of correct construction, undoubtedly book-ended by the conceptualism of Eisenman and sought to fill the gap between the expectations of users and architectural research, ridiculing the language of the new neo-purist academics. However, in its own turn, this dualism was not immune to danger. Firstly because, if poorly interpreted, it in fact delegated the engineer or the ‘developer’ with construction, leaving the architect only the façades or a few elements of linguistic representation. Secondly, by reducing the problem of language to the comprehension of this part of the public, it redimensioned the role of the architect as the creator of language, transforming him into an interpreter and, in the worst cases, a sounding board for the tastes of the masses, trends, and the techniques of advertising and entertainment.
This hinted, through an opposing though in the end converging approach with that adopted by Eisenman, the danger of an eclectic historicism, this time conveyed by the desire to utilise familiar codes, for example through the citation of elements borrowed from the lexicon of classical architecture, for example pediments, columns and fake façades.

No more successful in practical terms were the countless theoretical research that, from the late '60s/early '70s, in the wake of the theories of Eisenman and Venturi, succeeded one another in an attempt to investigate the relationship between architectural language and form from a philosophical, semiological or critical point of view. In fact, there is a sensation that the texts by Renato De Fusco, Umberto Eco, Emilio Garroni and Giovanni K. Koening – to mention only the Italians – are in the end disorienting, hiding behind the use of technical terms unfamiliar to the discipline of architecture – morphemes, phonemes, choremes, lexemes – very few real prospects for interpretation and operation. This was clear to Bruno Zevi who, in 1973, wrote a book for Einaudi Publishers with the provocative title *The Modern Language of Architecture*. “Dozens of books and hundreds of essays – the critic wrote – debate whether architecture can be compared to a language, whether non-verbal languages do or do not have a double articulation, whether the proposal to codify modern architecture is not destined to end up arresting development. The semiologic investigation is fundamental, but we cannot pretend, outside of architecture, that it disentangles the problems of architecture. For better or worse, architects communicate; they speak architecture, whether it is a language or not”. The problem, Zevi continued, is not one of form. It is ethical. If we wish to speak modern, we must be modern. If rules must exist, they must affect the architect’s attitude toward the world and only secondly the technique of discourse. This generated seven invariants: list, asymmetry, four-dimensional decomposition, projecting structure, the temporality of space, the reintegration of the building-city-territory. The list expresses the open attitude of the experimenter who does not accept the mental schemes imposed by others and each time re-examines and numbers the terms of the problem. Asymmetry renders obsolete the simple and consoling notions of order offered by bilateral symmetry. Four-dimensional decomposition implies the desire to break free of the box, to acquire new spatial dimensions. Projecting structures express the need to use more sophisticated techniques. The temporality of space is the acceptance of the finite nature of human existence and its historic dimension. The reintegration of the building-city-territory expresses the public and ecological character of the act of designing.
3.3 SITE

Despite Zevi’s call for an ethics of content, architects continued to be fascinated by the physical and metaphysical sides of language. And above all by conceptual investigations, according to which there could be communication even beyond form, beyond the very physical nature of the object with meaning.

SITE, one of the avant-garde groups most committed to this branch of research, in 1971, for the restyling of a residential area, proposed fusing the brick bases of the buildings with the surrounding landscape, almost as if the homes were on the point of liquefaction (Peeksilk Melt). In 1972 the group completed a warehouse for the Best Products group. The project consisted in overlapping the existing structure with a brick façade that appeared to be peeling away (hence the name: Peeling Project). This project was followed by others characterised by walls that appeared to collapse (Courtyard Project, 1973), corners that pulled away (Indeterminate Façade Showroom, 1975) and shifting planes (Tilt Showroom, 1976).

Undoubtedly mannerist, SITE were influenced by Venturi, whom they supported. They shared his taste for complexity, his clear messages and strong iconic content, the division of the building into structure and decoration, and an attention toward context.

Evidence can be found in numerous reviews, entitled On SITE, published annually by the group. Issue number four (1973), for example, presented an essay on invisible architecture by Juan Downey; the illustration architecture by Giorgini who used a computer to transpose the vibrations of the earth into form; an article on entropy made visible; the image of a lightweight dome by Buckminster Fuller; photograms of ice architecture by Kaprow that melted in the light; the ecological diagrams of the Ant Farm group and by Robert Smithson. There was also the influence of Duchamp. James Wines, SITE’s theoretician, confronted this theme in the editorial whose title - "NOT SEEN and/or LESS SEEN of..." – was borrowed from a work by the French master. He stated: Duchamp had an enormous influence not only on painters and sculptors, but also on architects. He taught them that any object, beyond its materiality, could be a concept, a stoplight that changed the attitudes of the spectator with respect to context.

Art could be created using a urinal or a snow shovel, and if a realistic looking mannequin could become a medium for highly sophisticated artistic reflections, there was no need for architects to spend public time and money to create forms that pursued the originality of self-expression at all costs. It was instead necessary to attribute meaning to the objects we produce by playing with the historic and geographic context in which we insert them. Transformed into “a mental object” architecture could no longer be the play of volumes under light, but a symphony of ideas in the environment. The very materiality of the architectural object was the
origin of dis-architecture, in other words, a lightweight, evanescent and highly conceptual architecture

3.4 The New Domestic Landscape: 1972

Italy was also witness to the formation of two currents: one exclusivist and the other inclusivist, though with different shades that, while often disenchanted and even ironic, differed from those of the Whites and the Grays. They were *La Tendenza* (The Trend) and the Radicals. The first laid claim to the self-closure of language through the nostalgic rediscovery of historic tradition and, in particular, classicism, viewed though an atemporal and metaphysical lens. Their poet was Aldo Rossi, who guided his research through a fascinating and dreamy recovery of memory. The critic Manfredo Tafuri who, while declaring himself outside of any game and trend, in reality proposed himself as the most attentive interpreter of Rossi and his companions, in the end becoming their *promoter*, while he demonstrated a certain closure toward the research of the avant-garde, labelled adventurist and unrealistic.

The Radicals, for their part, moved along the line of plurality and experimentation with language, an openness toward the social sciences, ecology, the body and the figurative arts.

The point of reference for the radical architects was the review *Casabella*, directed since 1970 by Alessandro Mendini, who changed the graphics and hosted texts by leading exponents in the field of research, dedicating less and less space to professional production. It contained lengthy and often illegible essays on the destiny of humanity, the avant-garde and the world of art.

In 1972 many of the artists rotating around Mendini’s *Casabella* participated in an event that would leave an important mark. The exhibition *Italy: The New Domestic Landscape*. The show opened on the 26th May at the Museum of Modern Art in New York (MoMA). It was curated by Emilio Ambasz who, to organise the show temporarily abandoned his work at the Institute for Architecture and Urban Studies (IAUS), with whom the group at *Casabella* was in contact.

In the introduction to the catalogue, Ambasz explained his point of view. In Italy, he wrote, there were three trends, each important in its own right: one, refined and conformist, that moved within a tired and tested market; another, reformist, that redesigned conventional objects with irony and new cultural intentions; another still that questioned the very concept of design in the search for absolute freedom of use whose necessary correlation is the dissolution of the object.

The exhibition was divided into two sections. The first was dedicated to objects. Leading works, according to Ambasz’s classification, can be attributed to the
conformist trend: for example the *Pila* chair by Piretti (1970), the *Gaudi armchair* by Magistretti (1968), the chair in ABS by Joe Colombo (1968), the *M1* table by Angelo Mangiarotti (1969), the *Gifo* plastic shelving unit by Enzo Mari (1969), the *Splügen* lamp by Achille and Pier Giacomo Castiglioni (1961), the *T502* portable radio by Marco Zanuso and Richard Sapper (1965), the *Valentine* typewriter by Ettore Sottsass Jr. (1969), the *Utopia* table by Nanda Vigo (1971).

There were others that belonged to the reformist trend. They were pieces of Pop furniture and accessories oriented toward the recovery of symbolic, lucid and perceptive values, or unexpected ecological values. They were exhibited in the subsection entitled “objects selected for their socio-cultural implications”. They included, among others: the *Joe sofa* (1971), designed by Lomazzi, D’Urbino, De Pas in the form of an immense baseball glove; the *Moloch floor lamp* (1972) by Gaetano Pesce, a floor lamp obtained by exploding the dimensions of an ordinary table lamp; the *Sassi* (1967) by Pietro Girardi, seating elements in the form of stones; the *Cirro* (1970) by Giuseppe Raimondi, a set of lamps that recalls clouds; *Pratone* (1971) by the Strum group, a seat in polyurethane that alludes to the grassy surface of an immense lawn; the *Mies armchair* (1969) by Archizoom, a chair with excessive triangular forms; the wardrobes (1966) by Ettore Sottsass Jr. in the form of sculptural containers decorated with stripes and dots; the *Passiflora* lamp (1968) by Superstudio, a hybrid of neo-liberty and the ecological.

Other objects that can be ascribed to the reformist trend are characterised by the economy, flexibility and ingenuity. They included, for example, the *Sacco* (1969) by Gatti, Paolini and Teodoro that the world of film would make famous as the chair of the Fantozzi [a hapless Italian accountant portrayed by the actor Paolo Villaggio – TN]; the *Multichair* (1970) by Joe Colombo, an ingenious transformable seating system made from polyurethane elements that could become a pouf, a chair, a chaise lounge or a bed; the *Abitacolo* system (1971) by Enzo Mari, a Meccano set made from thin metal elements that could be used to create domestic environments and, above all, highly creative children's rooms; *Tavoletto* (1969) by Salvati and Tresoldi, a low table that, when necessary, could be transformed into a bed.

The second section of the exhibition was dedicated to environments. The role of the designers – each was given a separate space in which to create an ideal room – was “to explore the domestic landscape with a sense for its 'places,' and to propose the spaces and artefacts that give them form, the ceremonies and behaviours that assign them meaning”.

This section – again using Ambasz’s classification – included the work of reformists and protestors.

The reformists were split along two lines of research. The first proposed a reflection on the new symbols and rites of contemporary man: this was the case of
Sottsass Jr. and Gae Aulenti who, each in their own way confronted the theme of post-functionalist language – playfully and ironically the first, rhetorically and plethorically the second. The second group, in the majority, travelled the routes of technological research of the Metabolists and Archigram: compact dwelling capsules, with strong infrastructures, expandable and easy to transport. A leading work – accurately reconstructed using his drawings - by the talented Joe Colombo, whose premature death occurred the previous summer: a group of modular blocks that could be used to create highly flexible environments even in particularly tight spaces. Also interesting was the project by Mario Bellini who, instead of a domestic environment, exhibited a vehicle for new nomads: it could be used to travel, to eat, to chat, to sleep and, when necessary, transport a piano. The protesters were all in agreement about the need for a tabula rasa: architecture would disappear to make room for the body, nature and human needs. Ugo La Pietra, in a naïve and less than convincing manner, proposed a lightweight city that creatively used flows of information to redefine the confines between private and public space. Archizoom designed an empty room in which it was possible only to listen to sounds. It was an idea that the Florentine group had been pursuing for at least two years, with the proposal No-Stop City (1970): a building blown out of all proportions, so large that it became a city of invisible boundaries. Inside it was a cabled void, air conditioned and protected against the elements, a vast anthropic space in which to move, in which it was possible to carve out a personal environment, a place to rest during one’s nomadic wanderings. The precedents for No-Stop City were the supermarket and the warehouse of indistinct spaces in which staff and goods moved freely, changing their reciprocal positions and configurations over time. However, it was precisely the dilated dimensions of No-Stop City that annulled the difference between architecture and urbanism, demonstrating that, in a society made of flows and relations, there is only one problem: the management of the unique space of communication; they opposed the logic of the existenz minimum, made of walls and barriers that delimit tight spaces inspired by the principles of Taylorism, the freedom of the body and objects in unlimited space; through an attention to the immaterial, the ephemeral, the shifting, they decreed the end of traditional architecture intended as the composition of objects, forms and styles. Liquidated with a few harsh words by Manfredo Tafuri (a “monstrous marriage between populist anarchism and liberating events influenced by [...] the events of 1968”) No-Stop City would have an influence on the most advanced contemporary architectural research: from the infinitely flexible – at least in its intentions – Pompidou Centre by Piano, Rogers and Franchini, to the research of Koolhaas on
Bigness, the Generic City and transparency. Superstudio moved along the same line of research. Natalini and his companions also proposed a world in which every point offered the same opportunities as every other, where there was no need for homes, where man could wander undisturbed.

A different approach was adopted by the Turinese group Strum; they refused to wander into a territory of ironic and utopian prefiguration and declared that the problem of dwelling was not formal, but political. They used their space for publicity, in the form of a photographic novel that denounced the contradictions of the system and, in order to raise awareness among professionals, they attached to an issue of Casabella.

Finally, the project by the group 9999 was awarded the prize for the best young designer (the other prize was awarded to the functionalist project by Gianantorio Mari, a young architect associated with Joe Colombo). It was a small ecological oasis, at whose centre was a well with a compressed air fountain. It served to lift up users who, once suspended, could isolate themselves in the world, cradled in a fragment of nature. The project was simultaneously ironic and poetic, denouncing the arrival of new needs that could not be satisfied by economics and the desire for new and radical answers.

Italy: The New Domestic Landscape had a notable influence on young American architects, though it was perhaps the swan song for the Italian radicals. In fact, in Italy the Rossians and post-modernists were gaining the upper hand, conquering the universities where even the limited innovative characteristics of their research were tempered and frozen by a mortifying academicism. The same was true across Europe, where the new protagonists were the nostalgic Krier and Ungers, while Stirling and Hollein appeared to abandon their commitment to figurative research and flee behind the walls of an eclectic recovery of the forms of the past. Defections were also observed in the United States. Not only for the spread of Postmodernism, but also for the attention that figures of the calibre of Eisenman gave to the research of Rossi and the theories of Tafuri (given ample space in Oppositions, which soon became the most influential review in international architectural debate).

In 1973 Mendini gathered the radical intelligentsia to found Global Tools, an interdisciplinary mega-group devoted to research and experimentation. Participants included Archizoom associati, Remo Buti, the editorial board at Casabella (Mendini, Guenzi, Bona, Raggi, Boschini), Riccardo Dalisi, Ugo la Pietra, 9999, Gaetano Pesce, Gianni Pettena, Rassegna, Ettore Sottsass, Superstudio and Ziggurat. The Global Tools experience was, however, short lived and did not exceed a few sporadic design seminars.
In 1976 *Casabella* changed hands. Mendini was brusquely cast aside to be replaced by Maldonado who made a decisive change in the magazine’s direction toward the profession and more common social issues.

### 3.5 Anarchitecture

Gordon Matta-Clark, son of the Surrealist artist Roberto Sebastian Matta, studied architecture at Cornell University, graduating in 1968. At Cornell, thanks to the exhibition *Earth Art* (1969), he met Robert Smithson. The two would work together on the *Mirror Displacement* project. From Smithson he learned to refuse traditional artistic supports, to insert fragments of nature in his works of art and to recover the materials and atmospheres of the abandoned urban environment. The animator of art circles in New York, in October of 1970 Gordon was a constant presence at the 112 Green Street Gallery, which he used as a laboratory for testing spaces freed of habits, restrictions and constrictions. “I wanted – he stated to alter the whole space to its very roots, which meant a recognition of the building's total (semiotic) system, not in any idealized form, but using the actual ingredients of a place. […] So, on the one hand, I am altering the existing units of perception normally employed to discern the wholeness of a thing, On the other hand, much of my life's energies are simply about being denied. There's so much in our society that purposely intends denial: deny entry, deny passage, deny participation, etc.”. Matta-Clark employed essentially three techniques: changing the point of view from which the user perceives a real space, utilising unusual objects – even perishable – to create new environmental configurations, cutting and excavating into existing matter to create readings that are simultaneously inside and outside the object. *Garbage Wall* from 1970 is a wall made from urban waste and shown for a few days near St. Mark’s Church, before it was destroyed. Beginning in 1972 Matta-Clark photographed the traces left by wallpaper on the surfaces of partially demolished houses. Similar to archaeological fragments, they allowed for a reconstruction of the logic of the lives that once unfolded in these spaces.

Between 1972 and 1973 Matta-Clark showed the *Bronx Floors*. They were fragments from floors or walls taken from the homes of one of the poorest neighbourhoods in New York. These elements were exhibited together with photographs of the homes from which they had been taken. They expressed the state of abandonment of a neighbourhood-ghetto with the coldness of an anatomic dissection and, at the same time, communicated a sensation of unsettling discomfort: that of having violated the privacy of these homes through holes that allowed one to see from one room into the next, from one apartment into the other.
Matta-Clark’s fragments raised a number of questions: where do we live? What relationship exists between the scape of the home and the space of existence? What is the relationship between building and nature? What is space? Yet they offer no answers. At best they produce a sensation of vertigo. The contemporary vision of so many cells that succeed one another provoked the same effect as Piranesi’s prisons: they present us with a destructured and fragmented space that resembles something we are accustomed to, but at the same time, is radically different because it violates its order. Chaos, the prison, the labyrinth, are not the individual dwelling cell, but their simultaneous vision, at the moment when the structure is exposed. Order, as Borges would say and Smithson would agree, is only one of the combinations of chance and the nightmare is the vision of this ordered and senseless world in its final state, that of death.

Despite declaring himself an artist (“I do not work with architecture. I work with buildings. My interests are not utilitarian”) in 1973 Matta-Clark was one of the promoters of the Anarchitectcure group. Its members were Laurie Anderson, Tina Girouard, Suzanne Harris, Jene Highsteun, Bernard Kirschebaum and Richard Landry. Anarchitectcure means the negation of architecture, the refusal to adhere to its conventions, to its aims, its functions. But also the desire to discover essence as a purely mental fact through the cancellation of epidermic and superficial aspects.

The group’s first show was in 1974. It returned to uncontaminated landscapes, decaying railway depots, barges transporting prefabricated homes, apparently bottomless wells, lighthouses swamped by enormous waves, greggi and even a glass containing a set of dentures. In short, anarchitecture was much more than architecture. But it was also much less. It was a void language for those who wished to grasp all space and speak of the unspeakable. It is similar to what Fontana achieved in painting – loved and quoted by Matta-Clark – with his perforation of the canvas. However, as much as he photographed, catalogued perforated and sectioned material with an obsessive care, what remained was what remained of life in the hands of the pathological anatomist: inanimate objects. This generated an endless frustration and a void that bound Matta-Clark to the radical architects, increasingly more fascinated by the themes of silence and death: in 1970, for the Venice Biennale, Hollein realised a number of tombs to evoke a possible archaeology of the present; in October of 1973 Gianni Pettena wrote a text entitled L’anarchitetto (The Anarchitect) in which he denounced the existential anxiety of the young architect entering the profession at the wrong time; in 1975 Mendini designed a coffin table that served to flee from any optimistic vision of design and recall the moment when the human body becomes and object.
There was also a certain parallelism with the research of Eisenman and the Five: they shared a formativeness dominated by the contextual dimension, while words were only combinatory and positional. In 1976 Matta-Clark was invited by the IAUS to show with Meier and Graves in the exhibition *Idea as Model*. The differences were not long in surfacing: the artist’s decomposition was physical, that of the architect only conceptual. Matta-Clark made a proposal to the curator of the show, MacNair, to cut a seminar room into 2 foot square pieces (approx. 60 x 60 cm). When he was told this was not possible, he proposed an installation of broken glass and photographs. After borrowing an air gun from Dennis Oppenheim, in an altered state at 3 a.m. he travelled to the home of the IAUS and destroyed a number of windows, gathering up the fragments and ordering them alongside a number of images of houses in the South Bronx whose windows had been shattered by their residents. Beyond any intellectual reflection, the operation is clearly political and controversial in its intentions. It was the denunciation of all of the presumed theories founded on claims to disciplinary autonomy advanced by New York’s radical chic architects, led by Eisenman. Director of the IAUS at the time, he captured the message and ordered the windows to be repaired immediately and the removal of Matta-Clark’s installation, under the pretext that the violence of the work recalled the *Cristallnacht* of the Nazis, the famed night when the windows of Jewish shops were destroyed.

Compared to Jack the Ripper, Matta-Clark, in reality, confronted architecture with the ardour of a Situationist. It was no accident that one of his most successful works was completed in France, close to Les Halles, so beloved to Debord. The year was 1975 and works were underway to demolish part of the district to make way for the Beaubourg Museum and the modernisation of the area. Matta-Clark worked with two houses built in 1699. He cut a cone shape into them (hence the title: *Conical Intersect*), whose base, measuring 4 metres in diameter, ran along the perimeter wall, while its vertex cut through walls and floors up to the attic and, as a consequence, the sky. For fifteen days it was possible to observe through the hole of *Conical Intersect* the city of Paris and the construction site of one of the most imposing buildings representing the new concept of culture and, with it, space: neutral, limitless and infinite. It was also anarchitectural, if we wish, if anarchitecture is the refusal of composition, of conventional figurative values, of the rigidity of a system imposed once and for all. Perforating the walls of the Beaubourg, unlike the walls of a traditional home, would make no sense: they are already perforated in their infinite, at least as they were intended, flexibility.
3.6 Aldo Rossi and La Tendenza
Aldo Rossi developed under the umbrella of *Casabella-continuità* directed by Ernesto Nathan Rogers. He gained notoriety for his cultural approach, aligned with the neo-historicist positions of the other young members of the editorial board, highly critical of the International Style, organic architecture or neo-expressionist trends. The work of Adolf Loos, Étienne-Louis Boullée and the architects of the Italian *Novecento* (the twentieth century), drew his attention and predisposed him toward elementary and highly plastic forms. This can be seen in his project from 1962 for a monument to the Resistance in Cuneo, made from a cube cut by a stair providing access to the interior space and by a long and narrow cut on the opposite side, or by the monument to the Partisans in Segrate, from 1965, a concrete structure made from a rectangular prism and a cylinder, connected by a triangular prism that alludes to the archetypal roof and, the pediment of a Greek temple.
Tempering an otherwise intolerable monumentality, generated by the rigorously symmetrical and stereometric composition of abstract and highly evocative figures, is the elementary nature of their assembly, reminiscent of children's wood block constructions. Hence the dreamy nature of his urban compositions, which appear to be the three-dimensional transposition of the paintings of Giorgio de Chirico. His numerous drawings also possess the same metaphysical flavour. They were complementary to his professional activities and contributed to launching the so-called phenomenon of paper architecture that would involve an entire generation of architects, fascinated by the possibility to flee from the rigid constrictions of the real estate market to create a parallel world, made of images destined to remain on paper.
Rossi completed his masterpiece between 1969 and 1973: the Monte Amiata residential complex in the Gallaratese 2 district. The building – unlike the exuberant block of flats by Carlo Aymonino – concedes nothing to the psychological needs of its inhabitants. With an evident intellectual self-satisfaction, it returns to the stylistic elements of functionalist architecture and the rigid forms of Italian Rationalism of the fascist *Ventennio*. It has all the airs of the *Cardboard Architecture* of the Five (a name that referred to the fact that they resembled full size versions of cardboard models), and recalls de Chirico’s backdrops of Italy’s piazzas. Between 1972 and 1976 Rossi completed the school in Fagnano Olona, a symmetrical building in the form of a double comb with a central courtyard, in turn containing a the circular volume of the library. It recalls the buildings of the 1800s, as rigid as a prison and with a fascination, albeit severe, worthy of Edmondo De Amicis’ *Heart*. Between 1971 and 1978, with Gianni Braghieri, Rossi completed the cemetery in Modena, conceived as a metaphysical city for the dead.
Not without their own form of appeal, due perhaps to the historically recurring need for a call to order after phases of creative expansion, Rossi’s projects spilt architectural culture in two. On the one hand he was accused of setting Italian architecture back in time, returning to monumentalism and fascist classicism: this was the position adopted by Bruno Zevi. On the other hand – thanks also to the exegis of Manfredo Tafuri – they were seen as examples of how to re-centre architecture around the autonomy of language and the logical construction of the city. The autonomy of language because Rossi’s architecture – not unlike that of Eisenman – appears as a text composed of words that are not constituted beginning from the exterior but borrowed from the internal workings of the discipline, in other words from the tradition of architectural history. Logical construction of the city because – and this is the principal sense of Rossi’s *The Architecture of the City* published in 1966 – these buildings, rather than being presented as the negation of urban configurations handed down from tradition, wish to be its continuation, its logical development. This produced an operative attitude whose tools were building typology and urban morphology. Reasoning by building types made it possible to work by models, tested by tradition and equipped with their own meaning and autonomy. Operating in agreement with urban morphology, with the concrete form of the city, served to avoid the avant-garde approach of the tabula rasa, with a process of listening to context, modification and fine tuning, in order to ensure the correct insertion of the same building types. The drawing entitled *La città analoga* (The Analogous City) from 1976, an assemblage of fragments of different parts of the city in a Piranesian collage filtered through the world of Pop Art, established the sense of this approach in a poetic image.

Rossi’s poetic would inspire many younger architects working with the same themes during these years. They came together under the banner of *la Tendenza* (The Trend). In Rome, where *la Tendenza* was particularly active, Renato Nicolini, Franco Accasto, Vanna Fraticelli, Franco Purini, Francesco Cellini and Claudio D’Amato would all refer to the Roman magazine *Controspazio*, born in 1969 and directed by Paolo Portoghesi and, later, the Architettura Arte Moderna (AAM) Gallery run by Francesco Moschini.

### 3.7 Post-Modern

The Post-Modern phenomenon was launched in 1975 by the architecture critic Charles Jencks. After 1976 the term would be used with growing frequency also in other fields to express an attitude of continuity and, at the same time, rupture with modern culture as it had developed in the West from the early 1900’s onward. In 1977 Jencks published *The Language of Post-Modern Architecture*. Translated
into numerous languages and countless editions, the book is both a brilliant pamphlet against internationalist architecture and a manifesto for a new style. Jencks identified its origins in an emblematic episode that occurred on the 15th July 1972 when the City of Saint Louis dynamited the Pruitt-Igoe complex designed by the architect Minoru Yamasaki: ten-storey apartment blocks, built between 1952 and 1955 according to the canons of the Modern Movement. Recognised in 1951 by the American Institute of Architects, they proved an immense failure. Unloved by the black population that inhabited them, they had become a no man’s land, dangerous and the object of mass vandalism. They offered the latest proof that the theories on habitat launched by the CIAM and adopted by Yamasaki, were the victims of an underlying error: that of being too abstract and unrealistic because they were spoiled by the imperative of formal inventiveness at all costs, independent of the tastes and preferences of their end users.

Jencks claimed that the peripheries of our cities were rife with buildings like Pruitt-Igoe. They testified to the failure of an ideology founded on abstract and mechanical principles that, even in its most refined manifestations, produced cold and lifeless architecture. As demonstrated, for example, by the IIT campus by Mies van der Rohe, where even the chapel for religious functions resembled the heating plant and vice versa.

The Post-Modern distanced itself from this type of formalist and elite approach. It proposed working with continuity rather than discontinuity. This occurred on two levels. One functional, inspired by the past, focused on privileging the individual over the standard. The other, linguistic, refused the exclusive use of the codes of the avant-garde: hermetic, ultra-refined and appreciated only by a narrow group of those in the know. Hence a return to vernacular and spontaneous architecture? Not for Jencks, who spoke instead of an approach based on a double coding, an attitude that aimed at producing works that were able to communicate at both an elementary and a more profound level. For this to occur, Jencks went on, architects should not be afraid to return to the consolidated language of the historic styles of the past, made of ornament, but also of columns, pediments, mouldings and loved by the common man, combining them with more contemporary stylistic elements as part of a mannerist discourse that, as indicated by Venturi in 1966, would allow them to play with the complexity and contradictions of the discipline. It was thus the end of minimalism and the International Style and a return to tradition whose predecessor was Gaudí, but also a recognition of its own precursors in the tradition of modern historicism (from neo-liberty to Venturi), or revivalism (from Disneyland to Lapidus), the neo-vernacular (from Erskine to van Eyck), the scholars of the history of the city (from Ungers to Stirling to Rossi), the neo-organic (from Scharoun to Pietila and
Saarinen) and the architects of postmodern space (from Aalto to Scharoun, from Graves to Moore). The result – already visible in this picturesque division into categories – is a bouillabaisse that admits everything and its opposite. The pages of the book were thus filled with illustrations of the Rinascente building by Albini and Helg alongside the Baldi House by Portoghesi and Gigliotti and Highpoint II by Lubetkin and Tecton. There were also houses by Venturi, the cemetery in Modena by Aldo Rossi and a stand in the form of a hot dog. There were also the Medical Faculty Buildings by Lucien Kroll, Erskine’s Byker complex and images of Agent 007’s bed. There was also the Bavinger House by Bruce Goff and Eisenman’s House VI. In short, if this was the freedom from the constrictions of the Modern Movement, the price to be paid for its acquisition was the reduction of its tradition, comprised of antagonistic though vital moments, to an eclectic and nerveless repertory of images, different though substantially the same, to be consumed with ease and nonchalance.
Part Three Chapter 4: Rhizomes: 1975-1980

4.1 Rhizomes

Saigon fell on the 30th April 1975. The American giant was forced to declare its impotence and retreat from Vietnam. It appeared to be the victory of the culture of May ’68, which fought against imperialism, theorised the fight for freedom, civil disobedience, a hatred for consumerism and hypocritical middle class values. Instead, it was their defeat. It did not take long in fact to witness the precipitation of the hopes for a moral and civil palingenesis into the tragedy of the latest violent, backward and ideologically base dictatorship. And to slip into discouragement and mistrust. In France the new philosophers took the place of the intellectuals alla Sartre on the comfortable barricades of their university chairs. They theorized the notion of disengagement: power is inherent to society, so one might as well come to an agreement with the democratic systems exercising it in an acceptable manner, or retreat into one’s private space. A generation of ex revolutionaries oriented its own mystic needs toward Eastern religions or drugs. Lotta Continua, one of the most extreme organs of the Italian student movement, found itself with the unexpected success of letters from readers, some very personal, and even intimate. The private became public. And terrorism, which would lead in 1978 to the assassination of Aldo Moro, was nothing other than the most visible manifestation of a now irreparable rupture between the individual and social structures.

Punk appeared together with the metropolitan Indians. They lived in small groups, sported aggressive and strident haircuts to express their diversity but, unlike the hippies before them, they did no longer dreamt of infinite spaces of freedom. They knew their dimension was urban, residual. They expressed an interest for the body by inscribing their anger on it with piercings and tattoos.

There was a need for primitivism. For ornament. The ornament that Loos attributed to the savage who did not hesitate to apply it directly to his or her own skin. There was also a need for the deconstruction of consolidated systems, to eliminate rules, codes of behaviour and acquired taboos, and rediscover essential original values. In practical and theoretical languages and manifestations, the young generation of 1977, often without being aware, practiced Cubist decomposition, Futurist verses and Dadaist performances. Art and life found a point of overlap – albeit precarious – and the avant-garde became the privileged language of the divided ego. A wealth of investigations and ideas, once the prerogative of a handful of artists, was transformed into a collective attitude. This key can be used to interpret one of the most clamorous events of 1977, the violent protest by the student movement during the political rally speech at the University of Rome by the secretary of the CIGL Union, the communist Luciano
Lama. The incompatibility went far beyond the *querelle* between an aesthetic of the private pursued by students and an ethic of work and sacrifice, proposed by the unionist. It was a clash between two different concepts of space. Lama stood on the podium in accordance with the rules of frontal and hierarchical communication of unionist and working culture, while the students chose other methods of aggregation and social interaction, decentred, mobile and apparently disorganised. The clash was inevitable, almost like the impact – as the semiologist Umberto Eco suggested – between two notions of perspective, that of Brunelleschi and that of the Cubists.

The retreat into the private sphere of student protest corresponded, in the field of philosophical research, with a mistrust in omni-comprehensive systems. The dismantling of the “great narratives”, to use an expression coined by Lyotard had its beginnings, in truth, in the 1950s and was brought to its fulfilment at the end of the 1960s with the works of Lacan, Bachelard, Foucault, Derrida, Lyotard, Deleuze and Guattari. However, it was during the second half of the 1970s that these themes reached their maximum divulgation. For example, in 1976 Deleuze and Guattari published *Rhizomes*, translated into Italian in 1977, while the Italian translation of *L'Anti-Œdipe* (Anti Oedipus) was released the year before. Theories presented the prevalence of desire over reason. There was an abandonment of the concepts of the worlds of organics and perspective in favour of a rhyzomatic vision of life, made of bands of knowledge, “that could be disassembled and connected to multiple inputs and outputs”. That is, to continue using the words of the two French philosophers: “an acentric, non-hierarchical and non-significant, with General, without organised memory or central automaton, defined solely by a circulation of states”. In lieu of a vision of the world they presented a great body of knowledge; in lieu of an aesthetic they offered multiple artistic practices; in lieu of principles they presented moods. It was the end of hope in the uni-directional transformation of the world, the radical critique of the ethic state, the definitive shelving of Marxism.

Karl Marx became a cumbersome dead weight that was tossed away piece by piece. Thinkers, ostracised for having been exalted by reactionary regimes and the Nazis, such as Nietzsche, Heidegger and Junger, became the object of constantly growing interest. They were re-evaluated by left-wing intellectuals for their ability to recognise, years ahead of others, the profound crisis of values being faced by Western society. It was the heyday of the Istituto Universitario di Architettura di Venezia and Cacciari, Rella and Tafuri, responsible for having introduced these uncomfortable figures to left-wing culture some years earlier. In 1976 Cacciari wrote “Krisis”, an essay on negative thinking, followed the year after by *Pensiero Negativo e Razionalizzazione*. 
In October 1977 Tafuri wrote a piece for *Casabella*, directed by Maldonado, published in an issue dedicated to the theme of *Architecture and Language*. What sense did it make, the citric asked, to speak of History at a time when the concept, in reality, as well as those of future and progress, were being radically questioned? Similarly, how was it possible to theorise research when, at the time, there was a conviction that the same fact could produce multiple reconstructions, in some cases radically contrasting, though all equally coherent and convincing? This led to the theorisation of criticism as a labour conscious of its own limits. An infinite research that cut into the, whose wounds rent the compactness of historic constructions, “problematizing them and impeding them from presenting themselves as truth”. Finally, there was a certainty that any certainty was the fruit of removals to be dealt with knowing that “a true story is not that which is cloaked in indisputable philological proofs, but that which recognises its own arbitrariness”. Tafuri sought to avoid the trap of the rhizomatic anarchy of Deleuze and Guattari. He cited them only twice, and only to establish his distance from them. All the same, as he himself recognised, the building was now unsafe and the drawbridge of the historicist fortress wide open.

In reality, the Marxist construction was not the only one to collapse. All of knowledge, science included – forever considered a source of certainties, even if relative. In 1975 Paul Feyerabend published *Against Method. Outline of an Anarchistic Theory of Knowledge*. It is perhaps the best synthesis against the pretexts of objective knowledge, even if it is concealed behind the easy falsifying relativism of Popper or the alternation of paradigms of Kuhn. He claimed that any theory was inherently arbitrary. That there existed no privileged criteria or methods. That science obtained results to the detriment of an intolerable impoverishment of our perception of reality. Evidence that the time was now ripe for the reception of these themes was also provided by a circle of intellectuals not specifically linked to this specialised field: in 1979 the successful collection of essays, curated by Gargani and entitled *Crisi della ragione*, was released in Italy, and soon reviewed in *Alfabeta* by a concerned Umberto Eco.

Roland Barthes, while presenting his inaugural lecture on the 17th January 1977 at the Collège de France, warned: it is the very language we use that ensnares us, with its system of rules, in the web of power. We believe we are speaking when, in reality, we are spoken by the language we use. Only literature and art, with their deconstruction and questioning of language from within its paradigms, offers us some illusion of salvation.

As mentioned, when examining the phenomenon of punk and the metropolitan Indians, the crisis of 1977 affected above all the urban dimension. It was the end of the myth of uncontaminated space. While in Italy, the death of Pier Paolo Pasolini (November 1975), brought a definitive end to the myth of the authenticity
of the dimension of the marginalised and the peasant. The space of the metropolis expanded with ever greater force. Its values products and habits absorbed any possible pocket of resistance. It was the period of the success of the Postmodern in all of its various definitions: Neo-Rationalism, la Tendenza and Historicism. They shared an attention toward the urban dimension of the city. Even if it was imagined as frozen in its nineteenth century splendour, or in a presumed pre-industrial harmony. This was the recipe adopted by Krier, Rossi, Grassi and Aymonino. If our culture was urban, they claimed, why not return to the civilisation of the street, of the public square, of the boulevard and the campielli. They studied the Paris of Haussmann and Napoleon III and the Vienna of Francesco Giuseppe. Their tools were urban morphology, the study of the forms of the city, and the building typology, an attention toward the recurring characteristics of buildings.

In their projects for traditional spaces and the rule of art, they sought to oppose the lacerating contradictions of all things urban, of the fragmentation of the social system into monads, the break up of the traditional family, and the increasingly oppression of metropolitan anxiety.

It was the same attempt at recomposition that, with the exhaustion of the monopoly of the radio, was attempted in Italy by private broadcasters. These included the Radio Alice collective that sought to create new spaces that were not necessarily physical. It also shifted the problem of the recomposition of society from the materiality of urban morphology and the prescriptive nature of the building typology, to the immateriality of mass media and the spontaneity of the individual response. “Behind Radio Alice – Umberto Eco justly pointed out – were parties in public squares, the rediscovery of the body, the private, the proud assumption of deviances (all, despite their incompatibilities) and the theme of the new young proletariat, the instances of the marginalised”.

The social subject, Class as a compact organism for which to create new rules and typologies, no longer existed. It no longer made sense to wink at the past. And attempts that were made, including the 1980 Venice Biennale, entitled The Presence of the Past, only served to demonstrate the uselessness, if not the danger, of the operation.

The problem, also understood, even if confusedly, by the individualist anarchists of 1977, by injecting their practices with the language of the avant-gardes, was that of substituting the concepts of regularity, standardisation and unification with those of individualism, the body and deprogramming. In so doing they sought to face up to the productive system that this approach – from mass production to personalisation, from socialisation to fragmentation, from the mass product to the individual response – was pursuing.
This was the direction – anti-nostalgic – adopted by a few young architects and a disgruntled professional who, precisely during this period, decided to change their lives. The young architects were: in Europe Bernard Tschumi, Rem Koolhaas and Elia Zenghelis; in Japan Toyo Ito. In 1977 they were of the following ages: Tschumi 33, Koolhaas 33, Zenghelis 39, Ito 37. The professional was the American Frank O. Gehry. He was 48 at the time. The three Europeans gravitated around the Architectural Association, directed by the tireless Alvin Boyarsky and attended by Archigram. They were strongly influenced by the radical architecture of the 1960s and early ’70s. Bernard Tschumi developed the theme of the body in space, mistrusting an exclusively intellectualist notion of architecture. In 1978 Koolhaas published *Delirious New York*, in which he analysed and pursued the poetic of metropolitan congestion. Elia Zenghelis transformed the anti-urban themes of the Modern Movement into poetic images. The Japanese architect Toyo Ito was a pupil of the Metabolist Kikutake. He explored the relationship between urban space and existential space. Gehry was trained in the experimental climate of California. He worked with industrial materials, urban *cheapscapes* and the legacy of Pop Art. More will be said about this group later.

To complete the situation we can take a look at the IAUS, the Institute for Architecture and Urban Studies founded and directed since 1967 by Peter Eisenman. A point of encounter for a wide range of different personalities, the Institute represented a point of comparison between the research conducted during the second half of the 1970s. It is sufficient to flip through the pages of *Oppositions*, the mouthpiece of the IAUS, to find articles by such different figures as Martin Pawley and Rafael Moneo, Bernard Tschumi and Leon Krier, Rem Koolhaas and Manfredo Tafuri, Colin Rowe and Denise Scott Brown, Alan Colquhoun and Giorgio Grassi. Furthermore, the IAUS represented a bridge between the research being conducted at the IUAV in Venice and the more extremist side of American formalism. Peter Eisenman at their head. In a position that was simultaneously trailblazing and rear-guard, that is difficult to separate.

### 4.2. From Archigram to High-Tech

1975. The year of the inauguration in Ipswich of the headquarters of Willis Faber & Dumas, the work of a recently forty-one year old Norman Foster. This three-storey office complex drew a great deal of attention for its façade resolved in the form of unique reflecting surface wrapping the curvilinear perimeter of the building. Though different in scale, it recalls the glass skyscraper designed by Mies van der Rohe along Friedrichstrasse in Berlin. Rather than imposing itself for its form or the faceted configuration of its volumes (you may recall Le Corbusier’s definition of architecture as a play of volumes under light) it tends to blend in or, at the very
least, to negate itself as a geometry, its mirrored panels reflecting the urban environment in which it is situated. Inside the building, spaces and volumes give way to a climatic continuum, highly technological, which can be subdivided as necessary thanks to the presence of flexible slots that can be modified to meet changing needs. The guiding concepts of the Willis Faber & Dumas building would be re-proposed by Foster in the Sainsbury Centre for Visual Arts begun in 1976/77. Once again the architect renounced the construction of a powerful geometry in favour of a container of a disarming simplicity, subdivided by thin moveable panels. We can look at the plan: it is the same as Archizoom’s No-Stop City, and recalls the cabled landscapes of Superstudio, though it is above all an homage to the research of Archigram and Cedric Price, highly admired by Foster. We can now compare this evidence with contemporary research, all resolved in formal terms, by the Five, the neo-rationalists or the postmodernists. Form, Foster seems to indicate, is an *a posteriori* product, and never an *a priori* assumption. It is the result of the functioning of a building and not is premise. What is more, those that move through space, together with the use of its structures, contribute to form the architecture of a building as much as the façades, piers, columns and openings. While architects were still discussing the Sainsbury Centre, in 1977 the Centre Pompidou was inaugurated in Paris. It was the work of Renzo Piano, Richard and Sue Rogers and Gianfranco Franchini. The themes developed by the four architects are the same as those of Foster: large beams to avoid structural interruptions in the midst of exhibition spaces, services situated along the perimeter, exposed plant systems and the use of industrially produced materials. Besides, Foster, Piano and Rogers all belonged to the same generation, with a similar cultural and technological education and a shared professional career, at least at the outset. The Pompidou is, in truth, only partially built in accordance with the 1971 competition winning entry. It is without the moveable floors and screen façade that would have guaranteed unlimited flexibility and a media link with the other museums in France. Nonetheless, the project had an enormous impact. Also because, unlike the Sainsbury Centre, it stands in the heart of Paris, and not in Norwich, on the campus of East Anglia. Charles Jencks compared it to the Eiffel Tower. Jean Baudrillard accused the building of being a supermarket of mass culture. Reyner Banham was enthusiastic; finally – he stated – the world had a monument to contemporary culture. In reality, the Pompidou was a breath of fresh air. It offers a fascinating image of a cultural institution: permeable, flexible, welcoming. However, its curse may be precisely the strength of this image. Thus, owing to a sort of formalist fetishism, architects and the public alike rather than working with the potentials of a
technological machine developed to produce and manage new initiatives, often limited themselves to interpreting it as a modernist symbol, an icon, to be frozen and bridled and used to host traditional activities. The same fate befell the Willis Faber & Dumas building and the Sainsbury Centre: the image is more striking than the technological openness toward new uses. This was the birth of High-Tech, a new style of exposed piping and ductwork, perfect joints and connections, vast expanses of glass and an immense waste of energy. The exact opposite of that which was imagined by Price, Archigram and Buckminster Fuller (who, it should be noted, was offered the occasion to work with Foster in 1982) whose projects were the ancestors of new buildings.

Foster understood that this new style could become the foundation of his professional fortune. Piano sought to prudently move away, adopting a softer use of technology, though exploiting its dividends when necessary to hint at his avant-garde past. This leaves us with Rogers, who continued with an incessant experimentation with function constantly suspended between concessions to the style of High-Tech and an authentic desire for innovation.

Already in 1978, the clever Charles Jencks launched a new turned, complementary to Postmodernism: Late Modern, of which High-Tech was one of the principal branches. Its characteristics were pragmatism, an exaggerated ultra-modernism, discontinuity, an experimental attitude and a taste for the new. Reduced to a style, a modern avant-garde movement, with yet unsounded potential, it beat a retreat.

4.3. Neo-Functionalism or Post-Functionalism?

The first four issues of *Oppositions* were published between September 1973 and October 1974. After a pause of almost two years, issue number 5 hit the stands in the autumn of 1976. It opened with an editorial by Mario Gandelsonas entitled: “Neo-Functionalism”.

Gandelsonas identified two current trends: neo-rationalism and neo-realism. The first, originated in the 1960s and reached its apex during the first half of the 1970s, was represented by Aldo Rossi in Europe and Peter Eisenman and John Hejduk in the United States. The second, which spread in the 1960s, was represented by Robert Venturi. The former was characterised by the search for disciplinary autonomy. For the neo-realists, instead, architecture was a historic fact *par excellence*. It communicates using the tools of Pop Art, advertising, cinema and industrial design. The common factor shared by neo-rationalism and neo-realism was, according to Gandelsonas, their anti-functionalism. Yet functionalism, despite an awareness of its many errors and naivety, was above all a way of looking at the problem of meaning in architecture, its symbolic dimension. It allowed for an escape from the abyss of arbitrariness and to develop the design
process in a systematic and conscious manner. It was thus necessary to overcome neo-rationalism and neo-realism, Gandelsonas concluded, in favour of a neo-functionalism without the naivety of the Modern Movement, conscious of the problems of the present day and capable of offering a dialectic re-elaboration. Peter Eisenman responded in the successive issue of *Oppositions*. He noted that functionalism was a humanist attitude founded on the centrality of the subject, with at least five hundred years of history. As such it could not be ascribed solely to the Modern Movement. However, Eisenman asked, did it make sense to continue speaking about the centrality of the individual at a time when the crisis of values was calling into question the very identity, and thus the privileged position of space? Furthermore, did it still make sense to pursue a humanistic attitude when for some time the other arts did exactly the same, privileging the abstract, the non-narrative and the non-anthropocentric? One need only consider the lesson of Malevich and Mondrian in painting, of Joyce and Apollinaire in literature, Schoenberg and Webern in music, Richter and Eggeling in cinema. Eisenman concluded: precisely because architecture can no longer represent anything, and less than ever its human inhabitants, it must look elsewhere. For example, a play of geometries and Platonic solids, or the fragmentation of signs, without any reference. In short, a work founded on the absence of meaning opposed to the fullness of meaning desired and promoted by so much humanist architecture. It is easy to observe behind Eisenman’s position, a public defense of his own uninhabitable architecture organised based on arbitrary rules of combinations (House VI is from 1975) as well as the architecture of fragments and silence of Rossi, the syntax of void signs exposed by Manfredo Tafuri and the mysticism of absence of Massimo Cacciari. At the same time, the article in *Oppositions* also contains something more. In fact, it is possible to read an attempt to overcome the mannerist position of the period of the Five in favour of new directions of research. Eisenman prepared two at this time. The first for House X, on the drawing board from 1975 to 1978. It was a formalist though not radically intellectual approach: the house dialogues with the site and the surrounding landscape, and is fragmented into four easy to use quadrants characterised by different materials: plaster, aluminium panels and steel grilles. Materials that appear in the coeval projects of such different architects as Richard Meier and Frank O. Gehry, and which call to mind an approach to architectural composition that was finally no longer one of terrorism (to use a definition by Tafuri). This was a successful line of research in professional terms. It was not unlike that carried forward by Meier: strikingly cold buildings, as refined as abstract canvases and the fruit of a calibrated organisation of selected forms. It was also – and Eisenman was most likely aware of this – the condemnation, as
would occur for Meier, of working with a consolidated repertoire, the endless return to the same result, a self-referential mannerism. The second direction, developed during his time in Venice and at the IUAV, moved in an opposite direction. It proposed a product with a highly conceptual impact, even at the cost of being uninhabitable. It read the landscape based on para-logical, a-logical and illogical parameters, though always pretentiously intellectual. It introduced dialogues with imaginary existing elements, with unbuilt projects, with literary texts, with philosophical reasoning. With the incomprehensibility of design. An effect of alienation. Hence, a forced ejection from the functionalist and humanist system of architecture. It was this nihilistic attitude that led in 1983 to the self-annulment announced by Fin d'Ou T Hou S; but it is also the premise for the fine tuning of new conceptual tools, many of which, after being emended and developed, would be reutilised by Eisenman after 1983 and as part of deconstructivist research.

4.4. Tschumi between Eroticism and the Poetic of the Body

Bernard Tschumi emphasised the importance of the body and the physical in space: architecture is above all a fact of space that is experienced and perceived, regardless of any theory. However, it is limiting to seek to deprive space of its intellectual dimension: "on the one hand, architecture as a thing of the mind, a dematerialised or conceptual discipline with its typological and morphological variations, and on the other, architecture as an empirical event that concentrates on the senses, on the experience of space". All the same, it is impossible to test the two dimensions of architecture – conceptual and sensual – at the same time. Space is either experienced or conceptualised. However, the wager in this case was the pleasure of Architecture that, by not pursuing utilitarian objectives, demonstrated the usefulness of the useless, and stimulated the components of the unconscious and desire repressed by utilitarian and commodified Western society. Architecture thus resembled eroticism: continually suspended between the corporeality of need and the intellectual pleasure of excess. The rules, imposed by the architect, are a form of bondage, a self imposed constriction that serves to heighten the pleasure of the game. However, we must beware. Eroticism does not mean the immediate satisfaction of needs: "[architecture] cannot satisfy your wildest fantasies, but it may exceed the limits set by them". Its role is thus that of being a threshold, a frontier, of the avant-garde. There are numerous points of contact with the reflections of Roland Barthes on the destructuring power of the poetic language, whose aim is precisely to annul the coercive mechanisms of common language in order to discover and surpass its
limits, exactly as the libertine, by surpassing the rules of religion, ethics and common sense, discovers new frontiers of reason. Tangents can also be found with the post-functionalist poetic of Eisenman’s work. For both, in fact, architecture must prefigure a dimension that exceeds itself, in other words an absence.

That said, for Tschumi the conceptual aspect is always filtered through a hypothesis of liberation, in the name of desire. It is not dissimilar from those theorized by the Radio Alice collective for the generation of ‘77. It outlined a new road, as brainy and aestheticising as it is, though without a doubt attentive toward the material and spatial dimension of the discipline. Tschumi was critical of the paper architecture proposed by the neo-rationalists in the name of the purity of concept. He stigmatized typological and morphological research as a partial and unilateral aspect of architectural discourse. He explicitly attacked the attitude of those who used historic citations and mistrusted the Talking Architecture that mimed concepts of general interest.

Instead, he emphasised the pleasure of the distortion and “dislocation of the universe that surrounds the architect”; the desire to exceed the dogmas of functionalism, semiotic systems, historic precedents and the formalised products of the past “preserving the erotic capacity of architecture by disrupting the form that most conservative societies expect of it”. He concluded with an ode to “fireworks”, intended as a sublime useless act, in which aesthetic pleasure takes the place of any functional or conceptual expectation.

4.5. Koolhaas and the Culture of Congestion

Rem Koolhaas is the same age as Tschumi. He began as a journalist and screenwriter. He later decided to dedicate himself to architecture, studying at the Architectural Association in London. The same school attended by Tschumi and where he met Elias Zenghelis. In 1972 Koolhaas gained attention for his “Exodus, or the Voluntary Prisoners of Architecture”, in which he analysed the relationship between architecture and the uses of space, in other words the dialectic between freedom and constriction – of movements, of points of view, of interpersonal relations – that any construction necessarily imposes on those who inhabit it. Fascinated by the American myth, in 1972 Koolhaas travelled to the United States where he made contact with the IAUS and Eisenman, teaching and publishing a few articles in Oppositions. In 1978 he published Delirious New York. For Koolhaas Manhattan was the Rosetta Stone for comprehending the relationship between modernity and architecture. In Manhattan there was no real or natural. The first was replaced by the simulation produced by fantasy. The second had given way to the artificial. It thus became the space in which dreams take form, and where it is possible to live inside one’s fantasies and experience the ecstasy of architecture.
Manhattan is also the prototype of the culture of congestion that, far from representing a problem, transformed abstract potentialities into effective occasions for development and interaction.

Koolhaas took away five operative lessons from his study of Manhattan.

First. It was necessary to change direction with respect to the community ideology, for example that of Jane Jacobs, circulating during the 1960s. To the idea that the metropolis was unliveable in because it did not favour a concrete life of relations between inhabitants, Koolhaas responded that it was the clusters proposed by their idea of community and wholesome peasant life that were in reality unliveable. It was only the metropolitan condition – whether we liked it or not – that marked the foundations of modernity and its values.

Second. The time had come to re-evaluate the artificial and simulatory dimension of the metropolis in opposition to the ideologies of authenticity proposed on multiple occasions by such theoreticians as Kenneth Frampton and Christian Norberg-Schulz who, by assuming the Heideggerian reflection on *Building, Dwelling, Thinking*, harkened back to an original dimension of dwelling. This dimension, Koolhaas affirmed, was definitively lost and no longer made any sense.

Third. It was time to prepare a critique of organic and largely inflexible systems in which all parts are interrelated with one another and cannot be removed without damaging the entire system. To this logic, assumed also by Eisenman and Rossi and, in the field of urban planning, by Krier and Gregotti, Koolhaas opposed the list ad the juxtaposition. The grid of Manhattan, he stated, functions because it activates weak forces of interaction, unlike the boulevards of Paris, which required a unified plan. What is more, the skyscraper performs its role because it allows for a different activity on each floor without having to declare its presence on the elevation, something impossible to obtain in a building with a rigid correspondence between internal functions and external façades.

Fourth. It was inconceivable to ignore technology and its affects on architecture. Koolhaas cites the example of the mechanical lift: proof of how an industrial product radically changed the way of designing buildings, projecting them skyward and rendering obsolete any previous formal principles (a base, an intermediate part, a crown).

Fifth. It was naïve to imagine that functionalist architecture was the fruit of banal functional facts. It was instead the concrete representation of lucid folly, of a hallucinatory functionality, the dream of a future in which, as in some surreal artwork, reality and utopia find a point of equilibrium, no matter how precarious. The claim to the principle of modernity as a value and the declared disinterest in the linguistic formalisms explain the editorial success of the book, and the growing attention, by critics, to the work of the thirty-four year old architect. Together with Zoe and Elia Zenghelis and Madelon Vriesendorp, Koolhaas founded OMA (Office
for Metropolitan Architecture) back in 1975. The office created a number of projects founded on the logic of *Manhattanism* and the re-evaluation of those movements that interpreted the poetic essence of functionalism: abstraction, suprematism and neo-plasticism. The assumption was clear. Against the logic of the Postmodern, which proposed the myths of the past, in accordance with the theoretical position adopted Gandelsonas, Koolhaas laid claim to the positivity of the Modern Movement: beyond its errors, functionalism represented the heroic attempt to face up to the future. What is more, it was in any case a valuable tool for anchoring the language of architecture to concrete and extra-disciplinary values, saving it from the abyss of self-referentiality.

In 1977 OMA participated in the competition for the expansion of The Hague. The group also featured the young Zaha Hadid. She worked for one year as a partner at OMA, after being a student of Koolhaas at the AA, where she developed a thesis inspired by the Suprematism of Malevich.

The project for The Hague is an essay in urban densification and complexity. It assumes a number of issues from contemporary debate, only to turn them on their head. For example, the cubiform modules of its buildings. Or a process of composition by disarticulated fragments, all strongly characterised by stereometric volumes used to produce streets, public squares and widenings. They recall the projects of Ungers – one of Koolhaas’ masters – and Colin Rowe’s *Collage City*. However, they were articulated by a logic unrestricted by stylistic and classical doubts, made of suspended walkways crossing buildings, inverted buildings with windows on the roof, spaces in which the category of below-above, left-right, high-low were all called into question. It was a breath of fresh air. Attention shifted from the closed volumes that had obsessed the imagination of the Postmodern, to the physical quality of spaces made fluid by the rapid succession of voids, articulated by hubs and intersections between buildings, eroded by glazed surfaces and further lightened by cantilevers and structures in a precarious equilibrium.

### 4.6 Ito and the Notion of Architecture as a Virtual Interior

For the Japanese architect Toyo Ito 1976 was marked by a need to re-evaluate the symbolic aspects of architecture, avoiding both the equivocal Postmodern pastiche of symbols applied to amorphous boxes, as well as the anachronism of highly metaphysical buildings, for example the central plan buildings of renaissance architecture, in which contemporary man, alienated and dislocated, was unable to recognise himself.

Ito defined his solution in the design of two single-family homes completed the same year: the house in Okazaki and a house for his sister in Tokyo.
The house in Okazaki is based on a square plan with a central space around with the rooms seem to fluctuate, thanks to the particular design of the interior partitions (two zigzags and one curve). The composition reveals the evident influences of the Five Architects. Allusions can be found in the axonometric presentation that is unmistakably in the style of Hejduk. However, with respect to the decontextualised permutations of the Five (where, to be clear, the houses are more akin to abstract spatial objects), the central nucleus of the house in Okazaki constitutes an explicit symbolic reference to the traditional values of dwelling. All the same, this is immediately contradicted by the centrifugal forces of the fleeting walls framing it.

The project in Tokyo inverts this point of view. There is no longer a central space but a ring. The reason for this antithesis is to be sought in the commission to design a home for his sister who, after the harrowing experience of the illness and death of her husband, was rather indifferent to practical and functional aspects. Instead, she sought an island isolated from the world, gathered around a garden and arranged so that it was possible to control each part of the house from any point. Completed in 1976, the house is a 50 meter long volume on a 300 m² lot that folds in an approximate “G”-shape (hence the name, in some cases also the U House). The exterior is finished in concrete and characterised by a tube-like living room delimited by curved white plastered walls and carpet paving, also white. It is cut by two strips of light that penetrate into the space by openings set into the internal perimeter and roof.

A play of contrasts, between the white interiors and grey concrete, between shadow and light, between the artificial envelope and the natural space of the internal garden, the house was only barely inhabitable. One of the owner’s two daughters recalls her impatience to leave the house, while the other spoke in an interview of how the garden was so inhospitable that even domestic animals refused to remain there alone.

An internal telescope for studying a wounded interior, the house overturns the central scheme of so much traditional architecture. By occupying the perimeter and negating the internal garden that it nonetheless delimits, it evokes an absence: of liveability, of centrality, of measure. To such a degree that, without expressing its immediate characteristics, for example regularity, it has been compared to a labyrinth, an alienating space in which it is possible to lose one’s way.

Interviewed some twenty years after its construction, Ito spoke of virtuality. He stated: “through this house I became aware that, and it matters not in what era, inhabitants want their home to express a certain symbolic strength and it is necessary to respond to this expectation. A virtual dimension is always required of a home: its inhabitants also seek a virtual and symbolic function, while architects
seek to eliminate it. The problem is that this request has lost its vitality in real society. Curiously, speaking of virtual reality today has become a banality, this issue is underestimated in the design of homes”.

In other words: architecture can recover its symbolic dimension by representing ideas through space, transferring them from the a-dimensional space of thinking into the three-dimensional spatiality of form. It is through this process that from establishes a nexus that is both physical and intellectual with its inhabitant: intellectual, because space becomes the virtualisation of more profound immaterial values; physical because it forces the body to move within the material confines developed from this intellectual reality. The solution proposed by Ito paradoxically coincides with that of Koolhaas, when he affirmed that Manhattan had given form to the fantastic aspects of modernity, in other words, it virtualised them. There are also many points of contact with the aesthetic of eroticism pursued by Tschumi, also suspended between the virtual and the concrete, between space and body, between geometry and materiality.

It is easy to see that during the second half of the 1970s, at the height of Postmodernism, a series of energies were activated. They shifted the point of view from which the discipline was observed. They refuted the nostalgia of classicism and reconsidered architecture from its founding principles. In so doing they prepared the way for the themes that would be explored by architecture in the coming years, with the rebirth of deconstructivism. More will be said in the next chapter.

What remains here is to analyse the position adopted by Frank O. Gehry who, unlike the architects mentioned above, worked on his own in California, far from any theoretical debate.

### 4.7 Gehry: A California Striptease

The same year that Ito completed the two houses mentioned above, the forty-seven year old Frank O. Gehry finally left behind a profound professional and psychological crisis. He decided to change his life and more toward a more gratifying artistic research. In 1978 he completed the addition to his own home, a masterpiece that brought him immediate international attention. This project was preannounced by at least four other projects produced between 1976 and 1978: the Gemini G.E.L. Studio, the Wagner House, the Familian House and the Gunther House. They revealed a diverse approach to design research, no longer oriented, as with the Ron Davies House & Studio from 1972, toward the articulation of a complex system of spaces and paths inside a compact and unified volume-container, but toward the fragmentation of the external volume, manifesting the spatial dialectic occurring inside. It was a choice opposed to that of Charles Moore,
one of the champions of Postmodernism, and the author between 1975 and 1978 of the Piazza d’Italia in New Orleans. Moore was also active in Los Angeles, at the Department of Architecture and UCLA. Gehry, mocking the aulic and classical nature, no matter how irreverent, of the Postmodernists, oriented his own research toward the use of poor materials – privileging those produced industrially – incomplete structures and fragmented compositions to the point of the “disappearance of the form of the building under the sky and its reflections in steel”. Gehry stated: “I guess I was interested in the unfinished - or the quality that you find in paintings by Jackson Pollock, for instance, of de Kooning, or Cezanne, that looks like the paint was just applied. The very finished, polished, every-detail-perfect kind of architecture seemed to me not to have that quality. I wanted to try that out in a building …. We all like buildings in construction better than we do finished”. In reality, Gehry had already explored this logic in 1968 when he realised a set of cardboard sofas, the Easy Edge Furniture. Atypical furnishings, poor and precarious in appearance. As the poster advertising them showed, they were so resistant that they could actually support the weight of an automobile. However, it was with the addition to his own home that he defined his own strategy of fragmentation, which can be summarised in three moves: Architectural Striptease, a mocking of structural integrity and the consequent exposure of the balloon frame; a pop sensibility for the ordinary and the mass produced; a poetic of the cheapscape, the contemporary urban landscape of fragments, relics and collages between components with no organisation or hierarchy.

The addition surrounds the original home with a variegated steel wall to add new dwelling spaces along three sides, used to create a new entrance, a larger living room and kitchen and service spaces. The steel panels, which give the house a stridently modern appearance, allow for glimpses of the original traditional wood roof. The added space, paving in asphalt, is announced precisely as such, almost underlining its precariousness. The result is an overlap of styles and materials and a refined play of contrasts: between new and old, interior and exterior, inside and outside, finished and unfinished. There is also the system of openings: traditional windows, the corner window with its overlapping skylight above the living room, the cube-skylight above the kitchen, the opening in correspondence with the steel screening the garden. The largest openings expose the balloon frame of the original house.

Gehry experiments with the possibility to renew architectural research by enlivening it with a language free of any rules and constrictions, a zero degree of language, to use the expression coined by Barthes, undoubtedly more flexible and more adherent to reality because it is less compromised by stylistic canons and consolidated rhetorical apparatuses.
Decontextualised, meshes, steels decking and plastic materials acquire unexpected values: they become transparent screens, undulating planes covered by light, objects with a strong material intensity; new materials, whose unexplored expressive potentialities have yet to be compromised by values crystallised over time.

Finally, there is a shift in the criteria of judgement from the beautiful to the real. The beautiful presupposes an object that represents something other than itself: a perfection that is pursued, a logical truth, the proof of evidence. The real, instead, is the correspondence between the object and what it represents, its being what it is and nothing more: no stylistic masks, now ideological camouflage.

Behind Gehry’s choice of the *cheapscape* it is easy to see the transubstantiating logic of Duchamp’s *readymades*, the decontextualizing sensibility of Dada, the leftover materials of the French Noveaux Réalistes and the mise-en-scène of the object in the happenings of Karpow.

This approach differs from that of Venturi and the postmodernists, where the box, always finished, is overlapped with symbols and images that tell a story. Here the box is stripped bare, deconstructed and thus able to speak through its own layers. It is a similar approach, if we will, of that adopted by the coeval Gordon Matta-Clark when he cut into the suburban homes of America to expose the layers and overlaps of spaces and materials. It is also an attitude that preceded deconstructivism, of which Gehry’s house can be considered the first example. Even if this approach conceals a freshness and a lover for the concrete aspects of the profession difficult to find in the work of other avant-garde architects from the late 1970s: Eisenman, Tschumi, Koolhaas, Ito. The idea of “getting one’s hands dirty”, the use of poor materials and unusual forms without any linguistic connotation place him in a position of dialogue with the research of architects more attentive toward popular culture, such as Erskine, who completed Byker in 1974, or Lucien Kroll who completed the Perseigne district in 1978. Other than the head of the fertile California school, which produced architects of the calibre of Eric Owen Moss, Franklin D. Israel, Thom Mayne, Michael Rotondi, Craig Hodgetts, Robert Mangurian and Fred Fisher.

**4.8 Death in Venice: 1980**

The works belonging to this current differed widely, also in their quality. They range from the tawdry kitsch of the Piazza d’Italia (1976-79) in New Orleans by Charles Moore, to the refined interiors of the Viennese jewellery store designed by Hans Hollein (1975); from the post-vernacular mannerism of the Tucker House (1975) by Venturi and Rauch, to the nauseating Daisy House (1976-78) by Stanley Tigerman; from the neo-Pompeian Westchester Residence (1974-76) in Amonk by Robert Stern and John Hagmann to the neo-Palladian Maison Tonini (1972-74) by Reichlin and Reinhardt; from the convincing urban planning experiment of Rue des Hautes-Formes by Benamo and de Portzamparc, to the first neo-Kahnian homes by Botta; from the gigantic Chippendale AT&T skyscraper (1979) in New York by Philip Johnson to the captivating Neue Staatsgalerie (1977-84) in Stuttgart by Stirling. Finally, there is the building that Charles Jencks considered the symbol of Postmodernism: the awkward Portland Public Service Building (1980-82) by Michael Graves: “evidently an architecture of inclusion which takes the multiplicity of differing demands seriously: ornament, colour, representational sculpture, urban morphology.”

In 1980 the first international exhibition of architecture was inaugurated in Venice under the title “The Presence of the Past”. The banner of postmodernism brought together neo-rationalists, Venturians, the neo-Baroque, historicists and classicists. It was directed by Paolo Portoghesi. He was assisted by a committee comprised of Nino Dardi, Rosario Giuffré, Giuseppe Mazzariol, Udo Kulterman and Robert Stern, and four internationally recognised critics: Vincent Scully, Christian Norberg-Schulz, Charles Jencks and Kenneth Frampton. The latter eventually pulled out over contrasting opinions. The English scholar assumed a clear position: Postmodernism, correctly intended as a the crisis of modernism and its overcoming, is not a stylistic pastiche. In short: it was not what was presented at the Biennale.

Despite the controversy over Frampton’s leaving, the exhibition was a great success. This is thanks in part to the Teatro del Mondo, the Theatre of the World, a floating wood construction designed by Aldo Rossi, and La strada novissima, a street scape constructed inside the Corderie comprised of twenty fake façades, each designed by an architect, providing access to an equal number of exhibition spaces. The selection of the twenty architects was no easy feat. Prior to leaving Frampton managed to impose Koolhaas and two other architects, ousting other names. The result: Roberto Gabetti and Aimaro Isola, Ricardo Porro and Hassan Fathy were left out in the cold.

Inspired by a false street at a German fun park, La strada novissima was intended above all as a game. However, it was taken very seriously by both those whose work was on display, some of whom proposed exaggeratedly haughty elevations, and by the numerous critics who tore the operation to shreds. They included Bruno
Zevi who stigmatised its dangers, pointing out how such a playful and nonchalant approach actually concealed a rear-guard phenomenon of great danger to the fragile world of Italian architecture.

Not all of the twenty were entranced by the anxiety of postmodernism. Three projects stand out for their intelligence. The first is that by the radical Hans Hollein, who proposed an ironic meditation on the architectural orders. His façade was ideally supported by four columns, each actually something else: the Chicago Tribune skyscraper by Loos, a tree from an Italian garden trimmed into a cylindrical form, a broken support, a stone from which spouted branches. The sense of the operation was clear: the column defined in all of its historic manifestations has always been the opposite of everything else, and thus perhaps nothing.

There was also the project by Frank O. Gehry, who refused to design a façade. Instead he proposed the exposed skeleton of a balloon frame based on the strategy of the striptease described in the previous paragraph.

Finally, the project by Rem Koolhaas used a sky coloured tent perforated by a thin red line and crossed by an equally thin black line. The significance appears to be that the value of contemporary architecture lies in transparency and lightness and not in the mass of the building.

Of the three solutions, Hollein’s is perhaps the most sophisticated. But it is also the loser. The weapon of irony, which filters through the dialogue between columns, is no longer a sufficient tool of controversy. It may have functioned during the 1960s, but it was no longer valid at the threshold of the 1980s, when Postmodernism itself, through the continuous use of paradoxical citations (irony to be precise), made ample recourse and emptied it of any effective capacity. Apparently innocuous, though in reality appealing, because they prefigure a new architecture, are the solutions proposed by Koolhaas and Gehry. They upend the terms of the problem. Contemporary architecture and urbanism will no longer be made of solids, but instead of voids and transparencies. This meant it was necessary to abandon the masses of walls and start over from zero, to strip, destructure, to the limits of disappearing. These were the issues that would be confronted during the Eighties by the avant-garde.

La presenza del passato, an exhibition that was to have sanctioned the rebirth of traditional architecture in reality sounded its death knell.

5.1 An End to Mourning

“There shall be no mourning. It is not worth beginning again”. With these words the French philosopher Jean Francois Lyotard, in 1979, one year earlier, concluded the decade of the 1970s and marked the beginning of the 1980s. We are all to familiar, he stated, with the problems of our time: the failure of grand utopias; the renunciation by philosophy of its functions of legitimization and the consequent crisis of the concept of truth; too many specialised languages impossible to translate; the absence of a universal meta-language; the transformation of scholars into scientists managing specialised tasks. However Lyotard affirmed, all of this was known for more than fifty years. As demonstrated by Robert Musil, Karl Kraus, Hugo von Hoffmannsthall, Adolf Loos, Arnold Schoenberg, Hermann Broch, Ernst Mach and Ludwig Wittgenstein. Contemporary man, nonetheless, was left with the freedom to dissent. As a local node in the network, he would re-elaborate information received in unpredictable ways or alter the pattern by introducing new rules. This was the strategy of the “unexpected move” that opened up new scenarios. By modifying the fabric of relations, it permits the system to settle at a new and more interesting level of equilibrium.

There were no revolutionary illusions. Despite the passage of a decade or so, we are far from the negative philosophies of such figures as Herbert Marcuse or Wilhelm Reich how, in ’68, developed other ideas in order to found the society of equals. Negative thinking also informed the youth of ’68 who saw life in the metropolis as the justification for a rhizomatic, individualist, disenchanted attitude of opposition. Instead, this was the beginning of an openness toward the information society. Characterised by a structural openness toward the unexpected and the new, typical of technologically advanced societies, which postulated the perennial shuffling of the deck. It was impossible to offer the same predictable answers because the system would come to a halt, as it was no longer based, as the society of machines, on the time of socially useful labour but instead on a surplus of information produced by innovation. The new movement of capital required lateral thinking, the unexpected and the creative leap forward. The new heroes were Bill Gates, William Atkinson and Steve Jobs, who demonstrated an ability to activate these skills. The offices of large Corporations learned to valorise down time, recreational breaks, casual interactions; they learned that the brain works better when it is extraneous to the routines of production. The discontinuous and the negative were transformed into positive values. The discovery of new territories, typical of the avant-garde became a mandatory phase in the new economic cycle.

Obviously creativity existed on different levels: that which produced consumer goods and that of the scientist and the artist. The first, as a general rule, was
required to be inventive by bringing an unexpected move to a known playing field; the second were asked to provide new rules and to create new games. Yet this was not always the case. The genius producer of consumer goods – we need only consider the radical changes during the 1980s to the means of producing and proposing products – could also rewrite the rules of the game, while the honest scientist or the mediocre artist could simply work to earn a profit in a field of consolidated paradigms.

From this moment forward the modern condition (or, for some, including Lyotard, the postmodern) would be marked by the awareness of living in an highly unstable system characterised by a dialectic as simple as it was cyclical: equilibrium, crisis, creative response, new equilibrium, new crisis, new response.

The culture of endless crisis obviously drew – placed under a new light – the reflections on discontinuity matured at the end of the 1950s/early 1960s: the linguistic games of Ludwig Wittgenstein, the falsificationism of Karl R. Popper, the paradigms of Thomas S. Kuhn, the episteme of Michel Foucault, the deconstructive contradictions deconstructive of Jacques Derrida. They came together, freed of their original tension. The period of mourning had definitively come to an end.

Was it true, as Wittgenstein had discovered, that language could no longer be reduced to a unitary structure? Did this mean it was possible to activate a multiplicity of strategies, both within each game as well as transversal to all of them, in order to attempt new translations, grafts and hybridisations? Were scientific theories, as Popper would have it, destined to be falsified by successive discoveries? A more fluid vision of science appeared, and a more aggressive and productive attitude toward truths that were handed down as such. Did we live, as Kuhn stated, in cultural universes marked by paradigmatic conceptions or, as Foucault affirmed, are we subject to the a priori concepts or our era? The historian would develop more sophisticated models to help us understand the idiosyncrasies of the eras that preceded ours and those of ours to be overcome. Was thinking, as Derrida affirmed, marked by irremediable contradictions that we exceed by learning linguistic tricks? The work of deconstructing language would lead us toward a greater comprehension of the limits of the brain.

All the same, the consciousness of the unsustainability of grand narratives, in other words the traditional visions of history, Marxism included, together with the insertion of the culture of crisis within the system produced their own parodies. The 1980s were without a doubt responsible for the myth of wealth at all costs, the transformism of condescending intellectuals in the face of new powers and the dismantling of strong social ties.

Let us return to architecture. If, as philosophical research would have it, our horizon was positively delimited by the plurality of languages, erected on shaky foundations, the perennial obsolescence of conceptual systems, then it no longer
made any sense to maintain a nostalgia for pure forms, set in an atemporal horizon. The only certainty, if any existed at all, was change. There was a collapse of the aesthetic canons of classicism founded on concepts of order, symmetry and continuity. They were replaced by the aesthetic of the sublime. It expressed our inability to plan definitive solutions and, at the same time, a changing attitude that was operative rather than contemplative, assuming eccentric points of view, raising new questions and stimulating unexpected reactions.

5.2. Jameson and the Logic of Late Capitalism

The aesthetic of the sublime was marked by the awareness that value is freed by generating diversity: of opinion, of sexual habits, of religious credos, of life models. A value that led in 1988 to the fall of the Berlin Wall, the dissolution of a nuclear power, and the return, in some cases barbarous and bloody, of ethnic groups.

Diversity was produced in one of two ways: by creating something new that was fascinating and captivating. This was a banal, though appreciable variation on the aesthetic of the sublime that led to the whirling succession of trends. It was the technique adopted by advertising, the indisputable protagonist during the 1980s of the productive system. Or it could be produced by working directly with the needs of the individual, moving through its problematic universes, cutting through questions and proposing partial responses. This was the approach adopted by artists who, in this manner, brought about an inversion in the classical aesthetic, oriented, instead, toward universal values. The objective was to obtain a diverse involvement of the user. A classical work exists independent of its audience. It was an idea in and of itself. The art of the sublime ignored this ontological aspect of the object, moving toward the phenomenological, to provoke a reaction, which was always personal and contextual. This sanctioned the dominion of the image over more profound symbolic values. The image was the interface with the public. It is what provoked an immediate response, activating metaphorical connections, inducing behaviour and generating or impeding flows of information.

For Lyotard, as we have seen, the logic of stimulus-response is what marked postmodern society and guaranteed individuals unexpected margins of freedom. For Fredric Jameson – as he wrote in Postmodernism, or The Cultural Logic of Late Capitalism – postmodernism was instead the negative result of the logic of late capitalism. A period marked by the fragmentation and loss of a critical distance, but also by American imperialism.

While it may be infantile to believe it is possible to avoid this epochal logic, all the same, neither is it correct to be blinded by the sublime side of technology, or to become lost in the information network, a machine that “does not, like the older
modernist machinery of the locomotive or the airplane, represent motion, but which can only be represented in motion”. To orient ourselves within modern hyperspace, Jameson suggested the creation of cognitive maps, referring to the maps of Kevin Lynch, an architect dealing precisely with the problem of the image of the contemporary city. His proposal was a bit of a let down, and it would have little or no following. However, Jameson’s book was an extraordinary success. He developed an intense debate that touched more than one exposed nerve. Bruno Zevi weighed in. According to the critic, the term postmodernism, though it was used to express a cultural attitude of mistrust in large systems, was incorrect. The continuous surpassing of limits and the attempt to transform crisis into a value, were modern attitudes, what is more, present throughout the history of human evolution. The idea of the existence of a classical history devoid of any interruptions and crises was, as demonstrated by the excellent text “L’antirinascimento” (The Anti-Renaissance) written by Eugenio Battisti in 1960 and republished in 1989, was a myth. Invented precisely by academics and classicists. Another important contribution was made by Gianni Vattimo. The aesthetic of the sublime characteristic of our era does not serve to create a new unity, but to expand this plurality. The state of alienation was now understood to be definite and not temporary. Paradoxically, art was not individualistic. It was communitarian: it created contexts in which some individuals could recognise themselves, with the awareness of the existence of other problems, other answers, other universes, other communities. It lightened the condition of being because it tended to dissolve form in favour of the event, marking the end of the aesthetic of the object, but also the beginning of the poetic of involvement and interrelation.

5.3 The Aesthetic of the Sublime
Redefining the point of view. Abandoning conventional perspective. This was the first operative imperative of the new aesthetic of the sublime. It served to observe what was normally missed, but also to propose intellectual and non-empirical readings of the poetic object. A very young Zaha Hadid proposed observing her projects by laying on the ground, from a rocket rising skyward, or by composing diverse views in a single abstract image, in the manner of the Futurists or Cubists. Peter Eisenman represented the model of a house in an axonometric drawing, applying the rules of two-dimensional projection to a three-dimensional tool. The undistorted result could only be observed from a particular viewpoint where the skewed lines appeared perpendicular. This anamorphosis distracted the observer
from the traditional reading of the project and directed attention toward the analysis of the relations, grammatical or syntactic, that linked the different parts of the object. Libeskind produced layered, almost incomprehensible drawings in which he overlapped one or more empirical points of view with conceptual notions. Space, once considered homogenous and continuous, in order to be better understood, was fragmented. The same was true of time: it could be dilated or narrowed to infinity. This technique was borrowed from photography, but above all from cinema. During the 1980s it was dominated by the effect of the moviola (three exemplary films: *Nine and a Half Weeks*, *Flashdance*, *The Longest Yard*) featuring accelerated filming to create emotions or slow motion that allowed the audience to take part in a moment of maximum intensity. *Break dancing* broke movement down into syncoped rhythms. Georges Perec fragmented the setting of his masterpiece of contemporary literature *Life a User's Manual* into a puzzle. A variation on the decentring of the viewpoint is the play of mirrors. it multiplies projected information and images to infinity. *Sugli specchi* (Mirrors) is the title of a collection of essays by Umberto Eco published in 1985. “Art in the Mirror” was the title of an exhibition at the Venice Biennale, curated by Maurizio Calvesi. Other works dealing with the same theme include David Byrne’s *True Stories* and the metaphysical triangulation of views presented in the three novels of *The New York Trilogy* of Paul Auster's debut (1985/86). Reflection is also at the base of the game of citations and analogies of postmodernism. Tschumi used mirrors when he asked his students to design a project beginning with the texts of James Joyce and Italo Calvino. With the process of scaling, Eisenman established projective relations between architecture and itself, using precedents and references borrowed from outside the discipline. Another characteristic of the aesthetic of the sublime that marked the 1980s was the preference for projects that do not respond to the canons of normalcy, of beauty, of measure, of grace. There was a preference for eccentricity, excess, ambiguity, anti-graciousness and the out of scale. As Wolf D. Prix and Helmut Swiczinsky of Coop Himmelb(l)au affirmed: “There is no truth. There is no beauty in architecture”. This affirmation would be taken up by most of the architects involved in figurative research at the time. They did not hesitate to propose barely inhabitable buildings, out of scale, often excessive and rent by cuts and lacerations. Bernard Tschumi promoted the poetic of excess, drawing inspiration directly from the reflections on eroticism of the Marquis de Sade. Besides, the 1980s introduced the aesthetic of infraction into everyday habits. In sexual behaviour: *Last Tango in Paris* or *The Night Porter*, the latter of which broke the most unspeakable of taboos, recording the sadomasochistic relationship between a Jewish victim and her Nazi torturer. Sexual identity: with such ambiguous figures as Boy George, Madonna, Prince and Renato Zero. In race: Michael Jackson. In clothing: an oscillation between punk and casual
transgressive. In the arts: with the phenomenon of the Transavantgarde that adopted the anti-gracious as the price to be paid to restore art to the world of the figurative, or Graffitism that adopted the walls of urban areas or subway stations as canvases for works painted illegally at night that imposed itself on passers-by as a form of urban counter-violence.

Another characteristic of the aesthetic of the sublime was the homage to sentiment, to the authentic even if incoherent act of the gesture. Coop Himmelb(l)au produced its projects by founding them of a discussion followed by a few sketches realised in a sort of trance. Massimiliano Fuksas, as we have seen, created his projects from a canvas that synthetically and intuitively established the terms of the problem. Zaha Hadid sketched her ideas in intense and immediate drawings. Even such a cold intellectual as Rem Koolhaas confessed that functionalism concealed an aesthetic of the fantastic with no shortage of similarities with the research of the Surrealists and artists of Dada. Finally, for the 1985 Venice Biennale Gehry did not hesitate to disguise himself as Frankie P. Toronto. He donned outlandish costumes he had designed to mock the rigidity of traditional architecture and present the antithesis of the free gesture of contemporary architecture.

There was also a taste for contamination, at the limit of stylistic pastiche. In some cases it was the nauseating play of fragments and citations of Postmodernism. Two of the best examples include: James Stirling’s Neue Staatsgalerie in Stuttgart and the addition to the National Gallery in London by Robert Venturi and Denise Scott Brown. There is also the elegant succession of modern citations implemented by Rem Koolhaas in such projects as the Villa dall’Ava or the museum centre in Rotterdam, where Mies, Le Corbusier and the Suprematists are all called upon, to the limits of plagiary. Or the pastiche of disorganic objects of Nigel Coates, a pupil of Tschumi at the Architectural Association, or Gehry’s project for the Loyola Law School and Chiat-Day-Moyo offices in Los Angeles whose main entrance is marked by the gigantic pop art sculpture of an enormous pair of binoculars. The attitude of cultural syncretism is similar to that which can be found during the same period in such films as Raiders of the Lost Ark, in which different genres are assembled to create an enjoyable compilation of fantasy-adventure, or the complex sculpture of Umberto Eco’s The Name of the Rose, a novel, historic work, erudite treatise and philosophical compendium.

Lukewarm toward closed structures, the artists of the 1980s wandered into unstable configurations, testing processes of metamorphoses, falling in love with hybrids that perfectly expressed tensions and forces, without trapping them in a static situation. René Thom and Benoit Mandelbrot had studied natural phenomena linked to discontinuity during the 1970s, developing mathematical instruments for
the study of fractals. They were discovered by artists toward the end of the same
decade and became fashionable in the 1980s.
In 1979 the scientist Ilya Prigogine wrote La nouvelle alliance (Order out of
Chaos): what once appeared to be marked by chance and the unpredictable whims
of time could now be easily explained and modelled by the new science of
complexity. Time, the measure of all things, was of equal interest to scientists and
artists. Thus it was worthwhile advancing together. This was the thesis supported
by the exhibition L’Arts et le temps: regards sur la quatrieme dimension held in
Brussels in 1984, whose catalogue continued the lengthy essay by Prigogine. The
cover was a reproduction of a Salvador Dali’s L’Heure triangulaire from 1933. In
1981 the Spanish artist realised Omaggio a Thom to visualise the theory of
catastrophe in pictorial form.
In 1985 the centrality of the theme of complexity was unquestioned: it became a
challenge for sophisticated conferences. In 1986 the critic Gillo Dorfles wrote
Elogio della disarmonia, in which he used recent scientific discoveries to justify the
preferences of contemporary artists for non-classical configurations.
The utopia of the unity between science and art was, however, founded on a
misunderstanding, that was soon dispelled by disciplinary specialization. It was in
fact easy to observe that scientists possessed a superficial vision of art and artists
an amateur education in the sciences.
Forms without stable configuration inspired film directors ranging from Woody
Allen’s intellectual Zelig, the story of a man who became famous for adapting to
any situation he encountered, to the enjoyable Gremlins and An American Werewolf in London, which inaugurated the comedy horror genre, to the
science fantasy of E.T. and Star Wars, in which hybrid images are used to
reconstruct alien worlds and characters.
The theory of catastrophes was that which most captivated the attention of
architects during the 1980s. The theme of morphogenesis would be investigated
largely during the following decade. Since the early 1970s, SITE had been eroding,
fracturing and distorting their buildings to make them look as if they had survived
an earthquake or other cataclysm. Toward the end of the 1980s Günther Domenig
completed his project for a bank that appeared to be the result of a process of
torsion and metamorphoses. In 1983 Coop Himmelb(l)au designed the Open
House and the Vienna 2 apartments, using traumatising and traumatised forms
made of complex geometries, sharp angles and multi-directional lines of force.
The aesthetic of disorder and chaos was also adopted by Tschumi and Koolhaas in
their projects for the La Villette Park in Paris, and by Zaha Hadid for The Peak
competition.
There are also the parallel themes of the labyrinth, entropy, delocalisation and
loss. More and more often they were made possible by the use of computers to
control the growing levels of complexity. Besides, the hypertext, one of the results of writing using a computer, is little more than a labyrinth in which it is possible to become lost if one is not equipped with the Ariadne’s thread of new culture. Deformation and anamorphosis, which once required extraordinary manual and technical skills, were now facilitated by new media founded on incredibly rapid processes of projection and translation that produced simple and immediate results.

5.4 The Layers of the Architectural Association

1983. The spotlight shifted toward the Architectural Association thanks to the contributions of three architects who were educated, and later taught at the school in London: Bernard Tschumi, Rem Koolhaas and Zaha Hadid. Tschumi won the competition for the Parc de la Villette. Koolhaas, already known for his tireless promotional activities, designed a project for the same competition that earned a mention and the attention of the international press. Zaha Hadid, just thirty-three at the time, had been awarded the competition for a residential and leisure complex overlooking the city of Victoria in Hong Kong. Zaha Hadid’s project for Hong Kong is a complex of longitudinal volumes precariously assembled along the slope of the hillside. There are 5 layers, as Hadid referred to them, borrowing the term from the language of computers. The first is composed of 15 duplex apartments; the second is formed of two levels, each featuring ten simplex units; the third is a 13-meter void containing satellite-like objects floating in space: gyms, change rooms, spaces for social activities; the fourth layer is occupied by four attic units overlooking the bay; the fifth layer is reserved for the private home of the project’s developer. Each layer features a linear configuration. Yet each, oriented in a specific direction, occupies the site in a different way. The result is an intense dynamic that appears to violently attack the hillside. It is almost an earthquake: “a gentle seismic shift on an immovable mass”, to use Hadid’s words. All the same, the lines of force, represented by slender built masses, almost float in the air and thus have none of the terrible ctina of an earthquake. The intermediate void of third layer strips the mass of the building of any consistency, and makes it vibrate. The same vibration can be found in the floating fourth and fifth layers that supported on slender columns. In short, the building is an object that confronts the natural setting of the site, though without overlapping and destroying it. The response to the problem of how to insert the project within its environment was both contextual and abstract. To present the project Hadid played with two levels. On the one hand she used intensely beautiful drawings, though often difficult to decipher for their use of deformed and skewed perspectives or the overlapping of plans to create an
abstract system. On the other hand, in terms of construction, she proposed forms with an elementary geometric purity, marked by the use of primary colours. Complexity was not inherent to the object, but the experience of perception; it was to be found in the continuous change in the horizon requested by forms freely arranged in space. The need to perceive the project from infinite points of view implies a historic debt to Constructivist and Suprematist painting and sculpture. The approach was formalist. However, it derived from a factionalist ethic, founded on the consideration that to only did programmatic aspects determine forms but, on the contrary, it was above all these latter that allowed for new, unexpected and liberating ways of organising objects. If the world is the construction of figures, it was only by selecting them that a pure vision could be recovered, the applied conceptual structures could be stripped away, allowing for considerations of new and more authentic functional relations. If Hadid’s project, which was to have been urban, stood out for its notable environmental qualities, the work of Tschumi and Koolhaas, involved with the design of a park, moved instead within an anti-natural and metropolitan dimension.

The work of Tschumi, Koolhaas and Hadid share a decisively neo-modernist approach and the development based on the logic of layers. While Hadid returned to the modernist traditions of the Russians, in particular the suprematism of Malevich, Koolhaas and Tschumi looked above all to architectural rationalism and early abstract painting: the latter owes an evident debt to Kandinsky, and the former to Klee.

With regards to the logic of layers, it must be emphasised that that while Hadid adopted it to identify coordinated lines of force, Tschumi and Koolhaas employed it to prefigure autonomous levels that, once overlapped, created unexpected configurations. Tschumi identified three layers: points, lines and surfaces. The points we the follies, constructions that formed a grid of 120 x 120 meter bays. These indifferent industrial structures were organised by a cubic grid measuring 10x10x10 m. Each of the follies hosts a different function and each has its own particular form, determined by a casual permutation of basic elements. The lines are paths – one composed of two orthogonal axes and another by a snaking line – and the walls. The surfaces are the spaces that host activities; they have various forms, some elementary – triangular, circular, rectangular – and others more complex.

Koolhaas identified five levels: horizontal bands, each hosting a different function; the confetti of different specific activities – kiosks, picnic areas or children’s playgrounds – distributed, as the name infers, in a casual manner; axes of entrance and circulation, including the main north-south boulevard; monuments such as museums, pre-existing buildings and two artificial hills; connections with the city around the park.
Given the widespread use of the technique of layers during the 1980s and '90s it is worthwhile taking the time to analyse the there conceptual passages atop which it is founded.

*One*: a list of expected programmatic requirements;
*Two*: the recomposition of disaggregated elements, arranged according to a weak principle of order;
*Three*: the overlapping of layers based on a logic that is either primarily or exclusively casual.

The reason for annulling and later recompiling the list of programmatic aspects is clear: the elimination of any pre-packaged solutions in the form of consolidated schemes, typologies or morphologies. Unlike what the postmodernists claimed, innovation could only be born from a rupture with the past.

The weak principle of order derives from the suspicion of structures in which all of the parts are correlated in order that nothing can be added or subtracted without altering the overall equilibrium because they determine functional configurations that are blocked and admit no flexibility. There is a preference, instead, for simple organisms linked by weak forces, at the limit of simply being placed side by side.

We have already seen how Rem Koolhaas borrowed this approach from the lesson of urbanism and architecture in New York: respectively from the city grid and the skyscraper. His was an attempt to overcome a structuralist culture by adding techniques of aggregation based on the logic of the rhizome postulated by Deleuze and Guattari.

This overlapping of layers is a response to a double imperative: complexity and the randomness. Complexity because the overlapping of functions can be used to obtain stimulating and non-monothematic environments. Randomness because the overlapping of layers, with its ample margins of arbitrariness, introduces the unpredictable.

By mixing the annulment of typology, fragmentation and randomness the projects of Koolhaas and Tschumi indicated a new direction for research that moved away from other trends – and other exponents of the avant-garde – that, instead, preferred to follow know paths made of theatrical mise-en-scène, symbolic values and complex elaborations of form. There was a rich presence of Italians representing the schools of Venice, Rome and Milan, though their work, some of notable thematic interest, focused more on the realm of theoretical debate through discussions of typology and urban morphology. Standing out among them was Luigi Pellegrin, who proposed two macrostructures in the form of a fan facing the two main building in the Parc: the Grande Halle and the Museum of Science and Technology. Each fan is an enchanting sequence of meeting spaces and functional spaces, covered by an elegant structure with a sloping section planted with an artificial rooftop park. Pellegrin stated: “They are two palms set close to
one another that offer protection and, at the same time, a projection of the sky". They create two worlds: a subterranean world of gorges, caves and spaces trapped in the earth, and a sunny, aerial world suspended atop an artificial hill that creates an unexpected landscape. The sloping macrostructure, supported by a limited number of columns to avoid compromising the use of the park, also functions as a support to public and private circulation and the networks serving the office buildings crowning the fan-shaped structures. By insisting one theme – the macrostructure – now forgotten by architectural debate, the project as intentionally démodé. Yet its utopian lucidity gives it the clarity of a mathematical proof. The problems of our era – Pellegrin affirms – are resolved neither with the elegant formalism proposed by the emerging younger generation, nor by the compositions that refer to historic cities and gardens, nor by an ecological approach unable to confront the world of constructions. This was the positive attitude of Paolo Soleri and Frank Lloyd Wright, but above all that of Buckminster Fuller. Does the city need parkland? If so, why not build supports that can serve to double its presence. Is there a need for spaces of encounter? If so, let’s create them and connect them with systems of transportation. Does vehicular circulation compromise the system of pedestrian spaces? All that is necessary is to raise them above the ground. However, these problems are not resolved one by one as if they were independent of one another. This would run the risk of slipping into the famed technological myths of the 1970s. To avoid them, Pellegrin borrows Fuller’s concept of synergy. In other words, individual choices interact to optimise human comfort which is founded not only on technical standards (speed of movement, costs of construction, productivity), but also and above all on psychological and formal standards. However, this proposal, demonstrated by the visionary projects submitted by Pellegrin to other competitions during this period, while technically accurate down to the smallest detail, was frightening. It required a notion of long-term investment whose higher up-front costs were not compensated by immediate dividends, but instead by future benefits and a coordination of technical and productive resources that exceeded the traditional divisions of responsibilities (those who built homes and offices, those who built the parks, the roads, the networks, etc.). There was a preference not for the anachronism of the utopia, possible though totalizing, but for the realism of a new generation that tended to circumscribe a more limited field of action, often exclusively superstructural, in which problems were represented through form rather than resolved through technique.
5.5. Architecture and Nature

1979. Sym van der Ryn, California State Architect and professor at Berkeley wrote *The Integral Urban House*, together with Sterling Bunnell, *The Integral Urban House*: in the wake of the 1973 energy crisis, he stated, it was unimaginable to continue acting as if nothing had happened; it was necessary to look at the natural world with a new attitude, founded on the concept of information. While entropy, the dissipation and waste of energy determined a loss, negentropy – the sum of all vital processes that capture and transform energy into forms that can be used – permits, on the contrary, its conservation. It is obtained by creating systems in which memory is stored; the mechanisms of regulation are spontaneous and automatic (self regulating); waste is reduced to a minimum; there is a prevalence of concepts of diversity, complexity and stability; an elevated number of species are present; products are multiuse; energy tends to be reused.

This was an invitation for a *biomorphic aesthetic* founded on natural forms and with the ability not only to represent, but also to favour these processes.

Sym van der Ryn’s proposal met with a certain practical success, above all among architects, primarily Northern European and American, dedicated at the time to the development of alternative energies to be applied to the world of construction. The book also contributed to the structuring research in correct terms: overcoming the phase of waste – of buildings, infrastructures, cement – in favour of a more informed way of building that pursued the objective of reviewing and optimising flows of information between nature and architecture. Just how this was to come about, producing results of aesthetic interest, remained an unresolved problem that went beyond the structure, in some cases naively naturalistic, of its author. One answer was provided by James Wines of SITE. If nature is information – and with a greater value than that provided by façades, windows, columns and portals – it was necessary for it to become an integral part of construction, substituting traditional elements that had now been consumed by use. For the Best Products Hialeah Showroom from 1979, Wines places a greenhouse filled with local flora, complete with water, sand, earth and stones, behind the curtain walls façade. The greenhouse favoured the balance of energy and, at the same time, became the real elevation of the building, producing an effect of displacement with a aesthetic and didactic added value.

An analogous operation was carried out with the *Forest Building* from 1980. The building features a brick façade detached from the main volume to create enough space between these two elements for the growth of abundant vegetation. The project questions the unified images of the building, linking it at the same time to the natural context in which it is inserted.

Finally, Wines advanced the proposal for the *High Rise of Homes*, a concrete structure into which users could insert their own single-family homes. The idea
was borrowed from Le Corbusier’s Obus Plan, with the difference that while for the Swiss architect it was the macrostructure that served to unify individual choices, for Wines it was the preference of each individual that defined the character of the structure. Furthermore, the High Rise of Homes multiplied the amount of vegetation and, by concentrating density in a vertical structure, diminished the impact of built space on the territory. It was an indication of a possible new way of working. The project would be further developed, almost twenty years later, for the Hanover Expo in 2000 by the Dutch group MVRDV whose concrete and landscaped pavilion was founded on similar concepts.

This new ecological awareness, according to Wines, moved toward the dismantling of the myth of architect demiurge. It promoted participation and self-construction. It abhorred the production of sculptural objects, in which the interrelation between man and what is built was a one-way relationship. It was the same direction pursued for some years by Lucien Kroll and Ralph Erskine – also attracted by an ecological notion, though more of a human ecology – and by Aldo van Eyck and Giancarlo De Carlo who, during the early 1980s presented, respectively, a house for orphans in Amsterdam and social housing in Mazzorbo, two highly captivating structures with a great deal of vital energy.

In 1981, the same year Wines proposed the High Rise of Homes, Maya Lin, a twenty-year old student, won the competition for the design of the Vietnam Veterans Memorial on the Mall in Washington with strongly landscape-oriented project. The monument consists of only a few signs: part of the site, delimited by two sharp cuts, is set into the earth and the resulting level change is managed by a continuous blade of black granite into which the names of every solider killed in Vietnam is engraved. It resembles a Land Art sculpture, in the tradition of Robert Smithson, Richard Long and Michael Heizer, though modified by the sensibilities and naiveté of an adolescent.

The extreme simplicity of the work triggered widespread protests: it was considered too minimalist, laconic and excessively modern. People expected statues commemorating the fallen heroes brandishing arms or flags. It was disturbing above all for its silent remembrance of the war.

With great effort and no shortage of questions, the Memorial was completed in 1982. It was an immediate public success, drawing 2,500,000 visitors a year. Some were unable to hold back their emotions in front of such a cold yet so eloquent list of the dead. Others searched among the names for their beloved, using frottage to trace them on sheets of paper. Others still, reflected in the granite surface, saw their own image overlapped on the names of the dead: or, as fantasy and popular iconography would have it, the images of the fallen appeared in this play of reflections.
For the American critic Vincent Scully, the project “triggered a radical change in the collective conscious” and “the single most significant work of architecture to be constructed in the United States during the second half of this century”. There was an advancement of the idea that it was possible to design with nature, reducing architecture to a few select emerging elements. Gunnar Birkets chose this direction of the annulment of architecture, concealing it below the ground in very interesting hypogeal constructions. Following the 1983 competition for the Modern Art Museum in Frankfurt – for which he surrounded the building with a greenhouse, save for one side that was deconstructed and on the verge of collapsing – in 1985 Wines developed a project for the Ansel Adams Center that was almost entirely below ground and covered by a the lawn of a garden. However, it was Emilio Ambasz who made the most convincing proposal with his Lucile Halsell Conservatory in San Antonio, Texas (1985-1988). Unsettling skylights emerge from the lawn, while a series of wells suggest that what is going on below the ground is simultaneously archaic and technologically advanced. It was an intelligent way to develop the ninth commandment of ecology defined by Nancy Jack Todd and John Todd in 1984 in the wake of the teachings of Buckminster Fuller and Gregory Bateson: ecological design must give value to the sacred aspect of nature.

5.6. Architecture is Now

In 1983 Wolf D. Prix and Helmut Swiczinsky designed the Open House: a 100 square meter house with a spontaneous form. It was developed from a sketch drawn with closed eyes, after a discussion between the two architects. As Prix stated: “architecture is vital when it can be heard; it is the moment when the project develops without mediations. This is the moment when the pressures from the exterior vacillate and when the principle of randomness is overcome. Architecture is now”. Open House is an environment without any preconstituted functions that, as the name suggests, is open and “those who inhabit it will decide how it live in it”. The two architects were fascinated by lofts and industrial spaces that offered maximum flexibility. They hated rigidly mono-functional architecture. They were aware that the logic “form follows function”, was the same logic applied to assembly lines, which mortified the body by forcing it to reproduce mechanised movements. The house, Prix continued, was not a building but a feeling. Organised on three levels overlooking a double height space, Open House is introverted by blank walls that emphasise its shell-like form. At the same time it is extroverted by large curving glass elements that, substituting the roof, allow the
sky to enter the building and by a balcony that, ripping through the walls, cantilever out into its surroundings. Also from 1983 is the Apartment Complex Wien 2 in Vienna, a condominium building whose apartments are connected by sloping planes and flanked by a structure that symbolically represents a roof on fire (an element that also appears in the Hot Flat project from 1978, and in other projects by Coop Himmelb(l)au). The configuration of the building is chaotic. Little or nothing of its logic can be understood from the exterior: “if we could observe the buildings using an x-ray we could understand how sharp and cutting their contractions and expansions are”. The following year (fu completato nel 1988) they completed the Rooftop Remodelling Falkestrasse in Vienna, the most iconic project by the Austrian duo: it was presented during the exhibition Deconstructivist Architecture. The steel and glass structure covering this lawyer’s office resembles a landslide. As Noah Chasin pointed out it makes “no effort to harmonize with the building on which it balances, the entire structure seems to sway with the breeze, threatening at any instant to topple onto the street below”. Counterweights, transparency, tensions and torsions are like signs on the body that, instead, recall the materiality of Body Art. the performances of Marina Abramovich, the cuts of Arnulf Rainer, the self-flagellations of Gina Pane and Vito Acconci. Body Art would be witness to a resurgence in the late 1980s, thanks also to the work of Jana Sterbak, La Fura dels Baus, Andres Serrano, Franko B., Cindy Sherman and Yasumasa Morimura. Hence Wolf D. Prix’s licit comparison between the house and a tormented body: “The house is very complicated and is therefore like the disabled child which we love very much”. In 1984, Coop Himmelb(l)au organised two crowded lectures in Frankfurt and at the Architectural Association in London entitled Architecture is now. They were followed by a manifesto. It was filled with many no’s: toward architectural dogmas, the search for beauty, the delimitation of architectural spaces, the certainty of philosophical ideas, functionalism, speculation and monuments. It was also field with trust in the idea of open architecture, in design as a notion of throwing oneself into the fray, and the immediacy of sentiment.

5.7. Choral Works
The year 1983 was one of ferment in the world of American architectural culture. The IAUS was agonising: it would close the following year. Oppositions also closed up shop, though not before preparing a final issue after years of silence. There was now an irreparable contrast between the two lines that had once coexisted within the American school: the lines of the avant-garde and the conservatives. Eisenman, who had resigned from the IAUS the year before and was preparing to
relaunch his professional career, sided with the first group. Kenneth Frampton, the critic who had contributed in 1969 to the discovery of the Five and who had imposed the participation of Koolhaas at the 1980 Venice Biennale directed by Paolo Portoghesi, was for some time now involved in the study of Heideggerian notions of the phenomenology of space, was decisively in favour of the second approach. He published the essay “Prospects for a Critical Regionalism”. Frampton claimed that we lived in an increasingly more globalised world that was destroying any local culture. It was invading the planet with the same trashy products that we the same everywhere. If we could not stop this modern process of civilisation, it was at least necessary to make a change in direction. It was necessary, as the philosopher Paul Ricoeur hoped, to make an effort to understand how we could be modern and, at the same time, not lose contact with our origins. In the realm of architecture Frampton claimed that this required an attention toward regional cultures, to urban and geographical references and traditional values. Without any concessions to the vernacular, to the limits of local styles or Disneyland-ish reconstructions. It was not the eclecticism of Ricardo Bofill, but the sober approach to tradition of Alvaro Siza. The creative strength of Raimund Abraham, the Mexican sensuality of Luis Barragán and, among the Europeans, of Gino Valle, Jørn Utzon, Vittorio Gregotti, Oswald Mathias Ungers, Sverre Fehn and late Carlo Scarpa. However, there were three architects that best embodied the attitude of critical regionalism: the Swiss Mario Botta for his sensitivity toward geographic context, the Japanese Tadao Ando for his roots in traditional Japanese construction and the Greek Dimitri Pikionis for his continuous comparison with the classical heritage of his native land.

The group nominated by Frampton contained no representative of radical architecture. Nor of the avant-garde: the lacerated structures of Coop Himmelb(l)au, the suprematist compositions of Zaha Hadid, the refined neo-modernism of Rem Koolhaas and the sensual intellectualism of Bernard Tschumi had little or nothing to do with critical regionalism.

It was the latter of this group who, in May or 1985, called on Eisenman and Derrida to work on a joint design of a garden inside the Parc de la Villete. During the early 1980s Jacques Derrida was the most fashionable philosopher in the United States, so quoted that the pungent David Lodge dedicated his next novel to this mania: Small World: An Academic Romance. We have already come across Eisenman: founder and director of the IAUS, a member of the Five, a refined theoretician and the figure who more than any other was involved in architectural research, with largely positive responses from radicals and conservatives alike. Their common efforts brought Derrida to the attention of the vast audience of architects; he would relaunch Eisenman, pulling him out of a period of productive and professional crisis; he accredited Tschumi who, at the
time and together with Koolhaas, was the emerging architect of the new generation. The competition represented an occasion for concretely testing to what point philosophical deconstruction could be applied to contemporary architectural research. Finally, it would bring international recognition, with the label deconstructivism, to a phenomenon that may otherwise have gone largely unnoticed.

It was Derrida who proposed the theme of the garden for La Villette: a fragment from Plato’s *Timaeus* on *Chora*, the space used by the Demiurge to transform Ideas into everyday objects. The text is one of the most obscure in all of Greek philosophy. Despite the efforts of interpreters, Derrida among them, no one has ever managed to fully understand the qualities of this space that contains no spaces, both limited and unlimited, homogenous and inhomogeneous. However, the intention was never to clarify this issue, but instead to work with it, to introduce contradictions and open up to new interpretations. Eisenman accepted enthusiastically and, a lover of titles based on word play, referred to the project as *Choral Works*, alluding to the common effort, the word *Chora* and choral music. The project was founded atop a grid that referenced that used by Tschumi for the park. Above all it recalled the grid proposed by Eisenman for his project for the Canareggio (1978). This latter composition was in turn based on the entirely arbitrary hypothesis borrowed from a reading of signs that were literally, virtually or even hypothetically overlapped on the territory, including, for example, the grid proposed by Le Corbusier for a hospital in Venice, which was never built (1965). It was a complex and perverse play of references and signs of spatial measurement and their history. After a few meetings with Derrida, the work was complicated by the addition of further signs. Derrida was agitated when he noticed that Eisenman had more or less assumed control of the project. He ended his collaboration in a letter that, concealed behind a succession of allusions to the relationship between Nietzsche and Wagner, accused Eisenman of Wagnerism, exactly the rhetoric of the ego founded on absolutism that the architect sought precisely to avoid. An offended Eisenman responded: “Perhaps what I do in architecture, in its aspirations and in its fabric, is not what could properly be called deconstruction. [...] My architecture holds that architecture could write something else, something other than its own traditional texts of function, structure, meaning, and aesthetics”.

In reality, as mentioned, *Choral Works* is not one of Eisenman’s best projects. It represents a delicate moment of passage. After 1986, without ever renouncing his earlier rhetoric, the New York architect abandoned the exasperated intellectualism characteristic of his formally more attractive work, founded on the application to architectural composition of codes borrowed from other disciplines. The project for the Biocenter in Frankfurt – presented during the 1988 exhibition *Deconstructivist*
Architecture – for example, employed the same syntax of DNA. Others utilised the logic of fractals or Boolean algebra.

In all of these projects, Eisenman presents himself as an aesthete and, as much as he seeks not to reveal it, as a romantic who perversely plays with fragments of classicism by applying formal logics. An unrepentant classicist who was unable to accept the death of classicism: a post litteram avant-garde, a creator of forms that were intentionally separated from any reference to the concreteness of life.

5.8. Electronic Ecology

In 1987, the Malaysian Kenneth Yeang, a former student at the Architectural Association who later specialised at the University of Pennsylvania and Cambridge University, wrote an essay entitled “Tropical Urban Regionalism”. He claimed it was no longer possible to continue with the logic of the International Style that produced buildings wholly insensitive to local context: objects extraneous to their sites that could only function thanks to an intolerable waste of energy and resources. A greater ecological awareness imposed a respect for environmental diversity using structures suitable to local climates. For this to occur it was necessary to revolutionise the way we conceived of buildings, which would no longer be isolated and self-referential objects, but environmental filters that activated exchanges between external and internal microclimates. This was made possible by the use of information technologies and the realisation of intelligent buildings that receive information from the exterior. Information that is processed and used to activate different strategies.

Thanks to electronics once inert artificial structures could now react as if they were organic. This meant it was no longer necessary to transform a building into a greenhouse – similar to SITE’s Hialeah Showroom or the Forest Building – to make it ecologically correct.

Things were much simpler, as demonstrate by Jean Nouvel’s façade at the Institut du Monde Arabe which changed under different lighting conditions, activating sensors connected to computers that controlled its apertures. Electronics and computers – though not necessarily alone, as the use of traditional technologies was to only possible but actually encouraged – that would bring us into a relationship of synergy with natural space.

Using electronic technologies, one year earlier Toyo Ito completed a project that, while less complex than the Institut du Monde Arabe, was no less important for its methodological value. In Yokohama-shi Ito had covered a concrete cylinder – a water and ventilation tower for a shopping centre below it – with 12 neon tubes and 1,280 lights connected to a system that turned the lights on and off in relation
to changing winds and environmental noise. The result is an organism that responds to both the natural environment and the artificial context.

While presenting the building to the Italian public, the February 1988 issue of Domus accompanied the article with an essay by Ito entitled “Transfinity. Sciogliere la camicia di forza all’architettura” (Transfinity. Removing the Architectural Straight Jacket).

Today’s younger generation, affirmed the Japanese architect, wrap themselves in colourful and shimmering fabrics that float in the air as if they were weightless. These supple and wrapping cocoons recall the traditional clothing of Arab and Indian women and their incessant nomadism. Cities like Tokyo are clothed in advertising billboards, lights and membranes that wrap it like a second skin. We “move in the recondite recesses of this fabric, totally immersed in the consciousness of this space-body”. If this is the reality of our era – Ito continued – what sense did it make to continue to produce buildings that trap their inhabitants without allowing them to participate in the flow of communications with nature and the metropolitan environment? It was only through the process of rarefaction and the liberation of architectural space that “we manage to create a truly transfinite environment”.

In reality, Toyo Ito had been working with the notion of transfinite space for a number of years, for some since 1984, the year he completed his own home, the Silver Hut, characterised by an unusual opening toward the sky, and for others since 1985, with the exhibition PAO I: Dwellings For the Tokyo Nomad Woman. The project consisted of three transparent and essential shelters – one for make-up, one for intellectual activities, one for eating – designed to replace the home in the contemporary metropolis (the three shelters would be re-proposed inside a tent in 1989 for the exhibition PAO II). Ito asked why create walls in a space marked by an exchange of flows? And why create homes filled with objects when, thanks to the system of communications, it is possible to access goods and services in real time?

In 1986, Ito realised the Nomad Restaurant characterised by screens that dematerialised architecture, using lightweight screens on the ceiling to reflect lights in all directions. Others moving along the same wavelength included Itsuko Hasegawa (another disciple, with Toyo Ito, of the Metabolist Kiyonori Kikutake) and Riken Yamamoto.

For Hasegawa modern technology allows us to conceive of architecture as a second nature, yet, as demonstrated by the Higashi Tamagawa House and the Fujisawa Cultural Center, this is only possible using sophisticated and lightweight building technologies. The same system – a transparent drape covering domestic
units anchored to a steel structure – used by Yamamoto for the Hamlet Apartments project from 1988.

Similar considerations were made during the same period by such architects as Norman Foster, Richard Rogers, Nicholas Grimshaw, William Alsop and Thomas Herzog. They employed High-Tech to test what technology could offer to create intelligent and ecologically correct structures. Spain’s Santiago Calatrava imagined them in movement, while the Italian Renzo Piano played with lightweight technologies, natural materials and local building traditions. The result was Eco-Tech that, while it may not have produced memorable works (though all of an elevated formal quality), would introduce the themes of environmental sustainability within the buildings of large Corporations.
PART FOUR: TOWARD THE PRESENT

Parte 4 Chapter 1: After Deconstructivism: 1988-1992

1.1 Precedents

‘Deconstructivist Architecture’ opened on 23 June 1988 at the Museum of Modern Art (MoMA) in New York. The exhibition presented the work of seven offices which at the time were not particularly well known internationally. They were: Coop Himmelb(l)au, Peter Eisenman, Frank O. Gehry, Zaha Hadid, Rem Koolhaas, Daniel Libeskind and Bernard Tschumi.

The show, as we will see later, was successful enough to launch a new style: Deconstructivism. Deconstruction can be characterised by its captivating spatial experimentation: the invention of complex and articulated forms with a highly sculptural impact; by the use of new building materials; by references to the poetics of the incomplete; and by a preoccupation with the imbalanced and the precarious. Furthermore, Deconstructivism contributed by defining the end of the Post-Modern period in architecture. Unlike the direct spatial involvement of Deconstructivism, the Post-Modern favoured a more contemplative and cerebral approach. It frequently featured consolidated images and simple, stereometric forms, which were enriched by decorative and figurative elements – such as pediments, column capitals, arches – that were more often than not historical.

The ‘Deconstructivist Architecture’ show did no more than group together a variety of formal investigations in design under a single label. Initially periodic, these explorations had intensified during the 1980s. In fact, even by 1978 Gehry had already completed the addition to his own home in Santa Monica, California which was to become synonymous with the ‘Deconstructivist Architecture’ exhibition and the style it advocated. Using sheet metal and chain-link fencing, the house’s construction played with the contrast between interior and exterior, old and new and finished and unfinished. The year 1983 had witnessed the competition designs for The Peak in Hong Kong and the new Parc de la Villette in Paris. The first was won, to everyone’s surprise, by a 33-year-old Zaha Hadid, whose project appeared to skim across the surface of its hilly site; in contrast the Parc de la Villette was characterised by the juxtaposition of order and chaos, generated by the overlapping of internally coherent but unrelated functional layers. It was a design strategy proposed both in the winning project by Tschumi and in the competition entry by Koolhaas. Once again, at the beginning of the 1980s, Coop Himmelb(l)au had produced a series of highly expressive projects, including a fragmented
apartment complex in Vienna and a manifesto entitled *Capturing Architecture in Words* that, amongst other things, stated: ‘We do not believe in the architectural dogmas which try to put us back in the nineteenth century and – not coincidentally – always speak of closing down... We do not want any closed, confined square, any closed, confined house, any closed, confined street, any closed, confined minds, any closed, confined philosophy.’

Furthermore, back in August 1986 the *Architectural Review* had already sensed the new cultural climate, publishing a monographic number emblematically entitled ‘The New Spirit’. The introduction by Elizabeth M Farrelly read: ‘Post-Modernism is dead. Some have known from the start that it was no more than a painted corpse, but for others it has taken a little longer... Now, however something else is happening. Something new. After the relentless ossification of the Post-Modern era things are beginning to stir again. Like the first breath of spring after a long and stultifying winter, these first stirrings are signs of hope.’

For Farrelly, Post-Modernism, even while produced by a real need for innovation, had quickly been transformed into a ‘meaningless mannerist charade’, if not an annoyingly static, symmetric, heavy and stylistically confused academia. In opposition to this classical and conservative attitude, the renaissance taking place appeared to be related to a vigorous, vital and romantic approach, an attempt to translate, into a language of forms, the complexity and contradictions of the world, rather than hiding behind a system of pre-established rules. This was similar to what the most interesting protagonists of the Modern Movement had been able to do at the beginning of the 1900s, and unlike what those who followed them had done after the Second World War in the name of the canons of the International Style, translating the research of their masters in exclusively formal and stylistic terms.

Another important figure to have defined this phenomenon was Peter Cook, in his article entitled ‘At last! Architecture is on the wing again’.

Cook speaks of the two lectures held by Coop Himmelb(l)au in 1984, in Frankfurt and at the Architectural Association in London, that he attended together with attentive and enraptured students – the opposite of what took place during the lecture by Michael Graves, who watched the room empty after only an hour. What had captured the interest of these young students? Surely it was the return to a heroic tradition of architecture – the same that had been embodied by Bruno Taut and the Constructivists in the 1920s; the CIAM in the 1930s; the Smithsons in the 1950s; Archigram in the 1960s. This is the tradition of the avant-garde who saw architecture as hand-to-hand combat with things and not with semantics, semiotics of the rhetorical syllogisms that, instead, represented one of the central aspects of the Post-Modern period. Coop Himmelb(l)au , it would appear, was not
an isolated phenomenon. In reference to Zaha Hadid’s victory in The Peak competition and that of Tschumi at Parc de la Villette, Cook affirms: ‘Both [produced] schemes of great verve and thrust, great confidence and a reaching out into space. The subsequent history of architecture – both built and unbuilt – could never be the same. An immediate spin-off was the feeling of elation amongst their friends and some students, who knew that these schemes were no flashes in the pan, but a recognition point in years of increasingly dynamic work.’

Continuing his examination, Cook underlines the interesting nature of the work of OMA, in particular the results of the collaboration between Rem Koolhaas and Zaha Hadid for the competition for an addition to the Dutch Parliament. He also recalls how the two generations of the school of Graz, whose architecture has a decidedly expressive impact; the new Australian designers who managed to establish a beneficial dialogue between nature and contemporary forms; and the New Yorkers from Cooper Union, under the direction of John Hejduk – were all investigating the relationships that unite signs and space. Finally, he speaks of the architects of Los Angeles, distinguished by their particularly inventive approach. These groups were the result of the arrival, in 1968, of Archigram and students from the Architectural Association and later exponents of the school of Graz. This grafting exploded in the fertile climate of the West Coast, where innovation and avant-garde approaches have always attracted interest.

What were the references of this new generation? Peter Cook mentions at least three:

One: the recovery of the anti-institutional values of the Modern Movement. Not the classicist elements of much of the Bauhaus, but phenomena that were lateral to it. In particular, Constructivism, with its airships, agit-trains, theatre sets, paintings, towers and huge creaking abstractions.

Two: the progressive traditions of English High Tech, derived from Buckminster Fuller and Cedric Price; not the stylistically attractive typology adopted by large international corporations and, as a result, focused on a more conservative approach.

Three: the mastery of the Brazilian architect Oscar Niemeyer, an authentic and reckless modern artist, the inventor of sensual and attractive forms and, perhaps for this reason, ostracised by contemporary culture.

In short: the creation of a network of men and ideas, founded on a common tradition, allowing us to look with hope towards the future. Cook concludes: ‘The present messages being sent out are just the first few hops from branch to branch, but those with good hearing can discern a fantastic rustling and the healthy sound of twigs breaking.’
Cook’s forecast proved to be both timely and exact. In fact, from 1986 onwards there was a flowering of projects and built works that oriented architecture in a new direction.

In 1986 Zaha Hadid designed the residential and shop complex for the IBA (completed in 1993), which has an articulated profile that contradicts the requirement laid down in the rigid Berlin building codes to maintain a single eaves line, in order to give movement to the building mass and greater expressive importance to the resolution of the corner. She also designed a cantilevered office building on the Kurfürstendamm in Berlin, located on a strip of land that was only 2.7 x 1.6 metres, demonstrating that it is possible to create excellent architecture, with an extremely dynamic visual impact, even under almost impossible conditions.

Meanwhile Rem Koolhaas was designing the Villa Dall’Ava in Paris (completed in 1991), a single-family residence that represents a clash between Le Corbusier’s *promenade architecturale* and the poetics of the almost nothing of Mies van der Rohe, and creating a paradigmatic house that is simultaneously as introverted as a sequence of volumes under light and as extroverted as a glass house. In 1987, while completing the new IJ Plein neighbourhood in Amsterdam, which controversially recalls the principles of settlement proposed by the Modern Movement, he also completed the neo-Constructivist dance theatre in The Hague (begun in 1980) and, the following year, two patio houses of a vaguely Miesian flavour in the periphery of Rotterdam.

In 1986 Frank O. Gehry commenced the Chiat/Day Building in Venice, California, whose entrance is marked by a pair of binoculars, designed in collaboration with the artist Claes Oldenburg. The result is a gigantic pop insertion that caused a discussion of the distinction between sculpture and architecture. In the same year he inaugurated the retrospective exhibition dedicated to him by the Walker Art Center in Minneapolis. In 1987 he began the design for the Vitra museum and factory in Weil am Rhein, an attempt to juxtapose, in a single building, the exuberant volumes that, in previous buildings, appeared as separate elements. He returned to this form of experimentation the next year for the American Center in Paris.

Coop Himmelb(l)au continued to work on the design of fragmentary and highly gestural buildings, often based on a sketch produced in an ‘altered’ state of mind: in 1987 they designed the Ronacher Theatre in Vienna and won the international competition for the Melun-Sénart museum in southern Paris.
Bernard Tschumi and Peter Eisenman were working with Jacques Derrida on the Parc de la Villette, attempting to find a correspondence between Deconstructivism in architecture and in philosophy.

In 1986, Eisenman began a series of experiments – including the Wexner Center for the Arts in Columbus, Ohio and, in the following year, the Biocentre for the University of Frankfurt, seeking to import the formal principles that guided the design process of other disciplines.

In 1987 Libeskind won the City Edge award in Berlin with a project whose lines and volumes, rather than coming together, appear to crash into one another, generating dynamic and exhilarating elements.

1.2 Deconstructivist Architecture

What made the ‘Deconstructivist Architecture’ exhibition a true event was the choice of its Guest Curator: Philip Johnson.

At 82 years of age Philip Johnson was a famous figure and one of the principal protagonists of the entire history of contemporary architecture: together with Henry-Russell Hitchcock he was responsible, through the 1932 International Style exhibition, for the importation of modern European architecture to the United States. He was the former director of the architectural department at the MoMA, responsible for a Miesian fashion of the almost nothing after the completion of his Glass House (1947–9), which he had built for himself in New Canaan, Connecticut and had worked with Mies van der Rohe on the Seagram Building in New York (1954–8). Finally, after a sudden shift, he had become the champion of Post-Modern architecture, the anti-Miesian style *par excellence*, after completing – amongst other projects – the AT&T Tower in New York (1979–84), together with his partner John Burgee.

Johnson, who abandoned Post-Modernism after this exhibition in order to embrace Deconstructivism, was returning to the world of curating after over 30 years, that is since 1954, when he left the direction of the architectural department at the MoMA.

In the preface to the catalogue, Johnson presents two images: a ball bearing, from the cover of the catalogue of the 1934 MoMA exhibition entitled ‘Machine Art’, and a partially underground refuge, built during the 1860s in the Nevada desert, that was little more than a hole in the ground, the entrance to which is marked by a canopy made of found materials (the Spring House), photographed by Michael Heizer. Nothing, he states, could better present these two eras than the crude
difference between these images. On the one hand the platonic ideal of the Modern Movement, represented by the perfection of a steel mechanism with its pure geometric form. On the other, an unsettling construction, dislocated, mysterious, made of rough-hewn wooden boards and sheet steel.

While both objects were designed by unknown hands for utilitarian purposes, today – Johnson continues – we feel closer to the sensibility of the second, rather than the abstract rationality of the first. It is the same sensibility that we find in the work of the seven architects invited to reflect upon the theme of ‘violated perfection’ – a theme that, even if unconsciously, inspired artists such as Frank Stella, Michael Heizer and Ken Price.

A further development of Johnson’s theses is provided in the essay by the Associate Curator of the exhibition, Mark Wigley, according to whom the 1970s were witness to the birth of a culture of disharmony, as demonstrated by the martyred Best supermarkets built by SITE and the programmed lacerations of Gordon Matta-Clark. Today, nonetheless, deconstruction no longer implies the refusal of architecture – this took place through non-architecture (SITE) or an-architecture (Matta-Clark) – but the awareness that imperfections (flaws) are inherent to the making of architecture, are part of its very structure, and cannot be removed without destroying it. For this reason the work of these contemporary architects recalls the inheritance of the historical avant-garde and, in particular, the Russians. Both make use of pure forms to produce impure compositions, and both step back from the elegant aesthetic of functionalism, which did not go beyond the perfection of the envelope, without investigating the contradictory dynamic of function in and of itself. Obviously, as Wigley affirms, it is not important that all the architects presented are aware of their references to the constructivist tradition. What counts is that they create an architecture of tension, distorting the structure, without willing its destruction.

Deconstructivist architecture, on par with that of the Russians, has a dialectic approach to context: it neither imitates nor ignores it, but uses it as an instrument of dislocation. In the same way it uses traditional dialectic categories – inside/outside, above/below, open/closed. It is perhaps precisely for this stylistic interest – Wigley concludes – that Deconstructivism cannot be defined as avant-garde. It is not a means of announcing the new, a rhetoric of the new, but rather displays the unfamiliar concept that is hidden behind what is known. It is, in the end, the surprise of the old.

Let us look at the projects that were presented. Many of them were not new. For example the work of Gehry was precisely the aforementioned addition to his house in Santa Monica, California (completed primarily between 1978 and 1979, with a third phase in 1988) and his project for the Familian House, from 1979. Koolhaas
presented his Apartment Building and Observation Tower in Rotterdam (1982), Hadid The Peak (1983) and Tschumi the drawings for the 1985 version of the Parc de la Villette in Paris. The three Coop Himmelblau projects were from 1985 to 1986: the Rooftop Remodelling in Vienna (1985), an Apartment Building in Vienna (1986) and the Hamburg Skyline (1985). The most recent projects were Eisenman’s Biocentre for the University of Frankfurt (1987) and the City Edge in Berlin (1987) by Libeskind.

Thus, if we exclude Gehry’s Santa Monica house, we are dealing with a collection of works that were still under construction or destined to remain on paper. The exhibition and the catalogue featured only drawings and models, rendering the projects homogenous and, where possible, underlying the common formal qualities. There were no photographs or images of construction sites, which would have shifted attention from an abstract formal reflection to the more concrete issues of construction.

The ‘Deconstructivist Architecture’ exhibition, as mentioned at the beginning of the text, had an immediate and unexpected echo, presenting a new sensibility and focusing international attention on the seven invited architects together with others who were not asked to present their work but who shared the same sensibilities.

Nonetheless, with respect to the impassioned article by Peter Cook for *The Architectural Review* published in August 1986, the exhibition was a step backwards, reducing to a common stylistic detail poetics that were, in reality, very different. This is demonstrated by the exaggerated references made by Johnson and Wigley to the formal analogies with Russian Constructivism, whose over-evaluation disqualifies the novelty of the research. Thus, in an era of rapid formal consumption, Deconstructivism is nothing other than a style like any other: similar to strict classicism and strict Modernism.

On the other hand, the very word Deconstructivism generates a misunderstanding given that it represents both an attitude of surpassing the Russian avant-garde (de-Constructivism) and the parallel philosophical trend founded on the writings of Jacques Derrida (philosophical deconstructivism), particularly in vogue at the time.

What is more– as demonstrated by the failed 1985–6 experiment begun when Tschumi asked Eisenman and Derrida to work together on a garden in the Parc de la Villette – philosophical deconstruction has little or nothing to do with its architectural cousin. In fact, the first is applied to concepts and used to identify, within a rational discourse, the presuppositions, even terminological, that are taken for granted and that instead, once revealed, place the structure of reasoning in a state of crisis, opening it up towards new and unexpected interpretations. The
second, on the other hand, is a technique for increasing the interest of a project through a series of conceptual references, and, as a result, organising it according to formal logics that can no longer be related to any previous canons. All the same, the idea of uniting philosophical and architectural research, as is the case in all these examples, attracted a great number of scholars and led to a flowering of theoretical books and essays that attempted to unite architectural and philosophical deconstructivism, seeking to overcome the conceptual problems encountered by Derrida and Eisenman.

Other lines of research focused on the rediscovery of Russian Constructivism, explicitly referenced in the work of Koolhaas and Hadid. Yet, as can be easily observed, this category, already ambiguous, is not so easy to apply to the work of Libeskind, Coop Himmelb(l)au and, above all, Gehry. However, at least at the outset, this was of little importance.

Despite this collection of ambiguities, or perhaps because of this openness to differing and contradictory interpretations, the term Deconstructivism was wildly successful. It synthesised the optimism of the late 1980s and early 1990s. By proposing an experimental approach focused on creating a new relationship with the world, it ran contrary to the conformist traditionalism of the 1980s – embodied by Post-Modern architecture – that, on the other hand, was unable to consider the future if not in terms of a re-proposal, more or less nostalgic, of the past.

What is more, in 1989, only one year after the ‘Deconstructivist Architecture’ exhibition, the world was witness to the fall of the Berlin Wall, one of the most profound processes of de-structuring the world had ever known. It was the collapse of an empire, the USSR, that no one had even come close to forecasting. It was the collapse of cultural and ideological barriers and the freeing of energies that, in previous years, had been mortified and compressed. Above all it represented the delineation, amongst the younger generation, of an awareness of the possibility of living in a better world, where creativity is not constricted to the confines of conformism and clichés.

The universities and magazines were filled, in an extraordinarily rapid manner, with more courageous ideas. Those greatest contributors to the debate, with their projects and theoretical positions, assumed a charismatic role. In architecture this led to the creation of the phenomenon of the Star System. The greatest benefits went to the aforementioned seven architects who, even while seeking to capitalise on the notoriety gained with the Deconstructivist trend, were very careful to not be labelled as the exponents of a movement characterised by shared objectives.
1.3 A New Paradigm

Beyond the attempt to express the tensions and energies of a new era through a dislocated and fragmented architecture, the theme that became the yardstick for the next decade was that of the IT revolution.

In the 1980s new products spread in a capillary manner: first entering the world of production, later professional offices and finally the everyday. From the 1990s onwards, computers, new media, real-time television, Internet, faxes and video games created an ethereal and artificial world that was both parallel to and superimposed upon real space. It could be examined and dominated by products whose ultimate expression is found in the ‘smart bombs’ so successfully employed by the Americans during the Gulf War (1991), guided by flows of information produced by the enemy and capable of targeting, with surgical precision, even what is hidden to the naked eye.

Immersed in the universe of information – infospace – contemporary architecture needed to redefine itself. This problem was intuited by Jean-François Lyotard back in 1985, when he organised an exhibition at the Centre Pompidou entitled ‘Les Immatériaux’: how does one render visible the concept of flows of information that, by its very nature, is invisible?

This theme had already been anticipated by the French architect Jean Nouvel, who demonstrated an extraordinary ability to take advantage of new instances and situations. His Institut du Monde Arabe was completed in 1987 (the design is from 1981). The project was one of the Grands Travaux that were changing the face of Paris during those years under the presidency of François Mitterrand (1981–95). The building is notable for its continuous glazed facade, behind which are positioned a series of metal oculi that, like the lens of a camera, open and close based on the quantity of light perceived. These are controlled by electronic sensors programmed to guarantee constant values of internal illumination, independent of the variations in the intensity of the sunlight outside the building. The result is a building whose appearance is in constant mutation, behaving like a living organism that activates strategies of change which are both functional and formal.

The same line of research also motivated the Japanese architect Toyo Ito who completed his Tower of the Winds in Yokohama in 1986, a structure that, once again using electronic sensors, transforms the air, sounds and noises of the city into shifting patterns of light.

Between 1985 and 1986, with his installations Pao 1 and Pao 2: Dwelling for Tokyo Nomad Woman, Ito used highly suggestive images to represent the new electronic house. He designed an oval tent, made up of transparent curtains. The interior
was occupied by three almost evanescent furnishings: a make-up table, a dining table and a table for intellectual activities. The differences between this and a traditional house are evident: the latter is rooted to the ground and, overburdened with symbolic and functional objects, constitutes a world apart, almost a microcosm, whilst the contemporary house is the exact opposite, by its very nature unstable and not self-sufficient. In fact, new technologies stimulate nomadism, the willingness to be uprooted, to travel continuously, both in material terms (car, train, aeroplane) and via instruments of communication (radio, television, internet, telephone, teleconferencing). Furthermore, it does not imply closed and introverted spaces because it ties us together, as if we lived inside a single nervous system. Finally the ease of transferring information accelerates the exchange of goods and, by rendering them available anywhere, renders their conservation unnecessary.

It is from Marshall McLuhan, the genial Canadian media researcher, that Ito takes his reflection on the centrality, in a society based on both electronics and information, of the meaning of the tactile and the importance of the skin: a sensible epidermis that wraps buildings and allows for interaction between the domestic environment and urban space, absorbing lights, sounds and flows and returning them as images and vital tensions.

In 1991 Ito took part in the London exhibition 'Visions of Japan', creating a room that he initially wanted to call Simulation but to which, based on the advice of Arata Isozaki, he finally gave the more popular name of Dreams. This 10 x 28 metre space featured a raised floor made of opaque acrylic panels onto which 26 projectors, suspended from the ceiling, cast images of Tokyo. The short wall featured an LCD display. Along the long side, a slightly undulating wall covered with aluminium panels and hidden behind a curtain displayed images of life in the Japanese capital from 44 projectors. A battery of speakers filled the space with music, processed by a synthesiser and based on the sounds of the metropolis.

Ito was amused by the fact that the Prince of Japan, while inaugurating the exhibition, had to drink a few glasses of saké before entering such a chaotic and evanescent space and that Prince Charles – a well-known enemy of the metropolis – asked what messages were hidden behind the image. When Ito responded that there were no hidden messages, the Prince asked if he was not perhaps an incurable optimist.

Ito often works with an image that is devoid of any meaning, left in an almost impressionistic state, at a point that has reached the senses but is not yet formalised in the intellect – like the Egg of Winds (1988–91) in Okawabata River City, a sculpture-kaleidoscope clad with perforated aluminium panels that reflect images of the city projected onto its surface and allow for a glimpse of other
images screened on televisions inside the sculpture. The images, exactly like those on a television with no sound, lose any meaning, becoming purely sensorial phenomena: colours and forms that vibrate and fluctuate in space.

Space, seen in this light, no longer appears as the void that is home to solid bodies, but as the medium through which to propagate information. ‘The object differs in character from TV sets installed on street posts or a large Jumbotron colour display which decorates the wall of a building in downtown. It is the object of video images which can be seen through the information-filled air in the surroundings. It is the object of images which come with the wind and which are gone with the wind.’

Let us return to Ito’s comment to Prince Charles that the images did not conceal any meaning. This could easily have been said by Andy Warhol, with whom Ito certainly shares a fascination for reality, independently of any contextualisation or conceptual mediation.

While Warhol freezes the image in easily recognisable figures (whether it is the box of Campbell’s soup cans or his portraits of Marilyn, Jackie or Mao Tse-tung), Ito captures it at the moment when it is still a flow of energy. Electronics, we will see later on when we look at the Sendai Mediatheque, is like a vital breath that can be metaphorically associated with the waves of the ocean. It is precisely this immateriality, which privileges the intelligence and flexibility of software over the materiality of hardware, that has made it possible to surpass the mechanical society that preceded us.

However, if this process was taking place in the most advanced industries, it had not yet appeared in the world of construction, where there had been no changes to a rigidly functionalist – and in the end mechanised – organisation of residential space: ‘We have not yet found,’ Ito affirms, ‘a space suitable for the ideal life in the computer age.’

Yet new technologies have overturned the formal coordinates of the environment in which we live. All we have to do, Ito tells us, is to look at the design of the automobile. The Citroën 2CV and the Volkswagen Beetle were replaced by more modern Japanese models by Toyota and Nissan, whose forms no longer reflected internal mechanics, but more abstract processes: comfort and ease of driving, the recognition and management of instrumentation, automated location control, radio and telephone communications, climatic comfort, ergonomics, energy savings and manageable and automated safety functions. In other sectors the changes were even more profound: we need only look at the field of bioengineering, where biology and microelectronics work together.
In 1992 Ito participated in the competition for the new University Library in Paris. He designed a Minimalist box: a plate created by the union of two-storey longitudinal volumes that overlook other longitudinal and double-height volumes. The scheme is interrupted at two points by two elliptical volumes that act as points of encounter; the external surfaces are clad with transparent materials that allow for a glimpse of the shelving and furnishings.

Ito refuses any concessions to expression: there are no references or alluring connections with history, allusions to consolidated languages, plays of chiaroscuro, chromatic tones or harmonic traces or modulations. What he pursues, as noted by Iñaki Ábalos and Juan Herreros, is the search for an almost absolute simplicity: ‘a sort of new ease, a new simplicity that believes that complexity is no longer expressible in geometric terms, or to be more exact, that geometric complexity and its deformations have ceased to be pertinent resources in relation to architectural expression.’

The ideal of this architecture is thus the search for a space that is neutral, homogenous, a-perspectival and transparent, in the end becoming ephemeral, the antithesis of the principles of the monumental architecture of the classical tradition, expressed in buildings intended to last for eternity.

The precariousness and lack of expression of the envelope shift the observer’s attention from the container to the content. The result is that the Library resembles a chip in a calculator: both are aseptic spaces that offer interconnections which facilitate the passage of information and both are marked by a grid of paths, preferably orthogonal and, in any case, structured on the logic of the shortest possible connection.

What is more, the two elliptical volumes, even while not finding any immediate resonance in the architecture of information, in this case the microchip, suggest the movement of energy flows: ‘The oval – Ito notes – contrasts with the classical square court configuration formed by the inner walls of a group of buildings. I am creating a new kind of square to express the dissemination of information in dense area. It is the oval, rather than the circle, which embodies the sense of flowing.’

1.4 Zaha and the Game of Opposites

Without a doubt Zaha Hadid is amongst those who most benefited from the ‘Deconstructivist Architecture’ exhibition, obtaining two important commissions: the Monsoon Restaurant in Sapporo, Japan and the Vitra Fire Station in Weil am Rhein, Germany.

The latter suffered a number of setbacks, the result of a budget that ‘constantly changed’, and was completed only in 1994.
The Monsoon Restaurant (1989–90) in Sapporo can be interpreted in two ways, the first being metaphorical: the restaurant represents the contrast between cold and hot, between fire and ice. The furnishings on the first floor are sharp and cutting like crystal, while those on the second floor are warm and soft, references to Sapporo, a winter city famous for its ice sculptures, and the fire of the hearth and warmth of interior spaces. The second interpretation is formal and founded on a technique that Hadid learned at the Architectural Association in London from Rem Koolhaas, who uses it often in his projects. It consists of playing with opposites – hot and cold, solid and void, opaque and transparent, light and heavy, spiral and box. What is more, in this case, the recovery of the contrast between the acute nature of cold and the softness of hot allows her to bring together, in one project, the penetrating experimental geometries of the Hong Kong Peak project and the wrapping elements of other projects, for example the renovation of the apartment building at 24 Cathcart Road in London (1985–6).

The Music Video Pavilion in Groningen, Netherlands (1990) – like the Monsoon Restaurant, though different from the Vitra Fire Station – is a multi-coloured object, fragmented by a plurality of signs, chaotic to the point of confusion. It is also split into two halves: a closed space, clad in metal and delineated by a window from which protrude off-kilter ribbons with triangular forms; and an open space, resolved with a thread-like structure of slender columns and beams, allowing for glimpses of plastic volumes.

It is useless, Hadid suggests, to opt for one or the other of the countless couplings of opposites inherent to the dynamics of form; it is necessary, on the other hand, to accept their co-existence, exalting contrasts. This irreducible dualism is taken to the extreme at the most private scale of existence: the single-family dwelling, a field dominated by conventional ideas and the rarity of radically innovative proposals. This is the case with The Hague Villas (1991), a study for the construction of eight single-family units to be located in the Dutch capital. Hadid proposed two typologies: the ‘cross house’, derived from a linear generating principle, and the ‘spiral house’, founded on the opposing matrix of the curve.

The ‘cross house’ is based around the intersection of two rectangles, one negative and one positive. The first, at ground level, is a parallelepiped subtracted from the volume of the surrounding dwelling: a void. The second, on the first floor, is the same parallelepiped, this time a solid, though almost perpendicular to the void below and completely carved out to contain the living spaces. The result is a dwelling that wraps around an internal courtyard at ground level, while the first floor opens towards the landscape: simultaneously introverted and extroverted, it is part of a dualism that synthetically expresses the dilemma of contemporary architecture, in a constant balance between the ‘brick house’, characterised by a
perimeter wall to defend the interior spaces, and the ‘glass house’, whose glazed surfaces project the interior into its natural surroundings.

The ‘spiral house’, instead, is the result of the opposition between the cube of the envelope and the spiral of the ramp that passes through the spaces. The coming together of these two geometries creates surprising internal views and unexpected channels of communication and interaction. There is also a vertical progression from heavy to light, from enclosed to transparent.

In 1992 the Guggenheim Museum inaugurated the exhibition entitled ‘The Great Utopia’ dedicated to the masters of Suprematism and Constructivism. This was the occasion – Hadid confessed – to verify the three-dimensional force of Malevich’s abstraction and range of influence.

The installation is a direct response to this idea: the reconstruction of the tower designed by Tatlin as the Monument to the Third International at the centre of the museum, and a series of parallel episodes, each dedicated to a spatial theme. They can be described as the opposition between the constructions of the *Red Square* by Malevich and the *Corner Relief* by Tatlin; the extrusion of one of Malevich’s compositions, laid out on the ground; paintings hung in the form of a flow of energy, a geometric storm; apparently ‘floating’ paintings, displayed in transparent Perspex supports; and the gravitational placement of Suprematist sculptures that follow an orbit which emerges from the floor and moves upwards to the ceiling. What was important in this show, beyond the single inventions, was a declaration of principle: that architecture is not a neutral support of walls to be used for the orderly display of a sequence of works. On the contrary, it is a spatial construction that, precisely because of its qualities of involvement, offers interpretations and becomes a text. It is the result of a form of artistic research which, in order to verify its assumptions, can and must enter into conflict with the current system of expectations.

1.5 Rem Koolhaas: Method and its Paradoxes

Is architecture able to respond to the needs of contemporary society? Is it possible to design based on rational principles? If we admit that it is possible, what results can we hope to obtain? To respond to these demands in 1989 Rem Koolhaas participated in three important competitions: the Bibliothèque Nationale de France in Paris, the Zentrum für Kunst und Medientechnologie in Karlsruhe and the Sea Trade Centre in Zeebrugge.

In each proposal the Dutch architect defines a strategy that, when coherently applied, in the end produces paradoxical results. The first strategy, refined in the competition for the Bibliothèque Nationale de France, focuses on voids and their
interconnection. In fact, this project consists of a compact parallelepiped – the built volume filled by the book deposits – inside of which a system of interconnected spaces is carved out by excavation and subtraction: the reading rooms, the auditorium, the conference rooms and horizontal and vertical circulation located in a continuum of tunnels and underground spaces. Designed by focusing primarily on the void and not, as was the case with Post-Modernism, the solid, it shifts interest from the container to the content, that is the space in which activities take place and thus, in the end, to the events themselves. However, the fact that the voids contain the events makes it difficult to design the exterior envelope of the building – that is unless the architect chooses, as Koolhaas has, to execute it in the form of a piece of ‘Swiss cheese’, perforated by holes created by the intersection of the facade with the volumes of the voids.

The second strategy was created in order to respond to a no less embarrassing question: if movement is the generating principle of the contemporary metropolis, does this not lead to the dissolution of architecture that, instead, is founded on the principles of solidity and permanence?

In the project for the Zentrum für Kunst und Medientechnologie in Karlsruhe, Koolhaas designed a building conceived of as a ‘Darwinian arena’ that was to have involved its urban surroundings and hosted temporary and permanent exhibitions, events and performances of various types. Located near that station, the Centre was to have connected with the historical city via the railway underpass, partially occupying it. In this manner, passengers who daily passed through the station could observe the works of art and artistic events through a glass wall. A similar function of diffusion and attraction was to have been played by the large projection screen located on the facade facing the public square. After entering the building, the visitor found himself in an espace piranesien, with escalators and ramping floors that would have allowed for a sequential sampling of the various programmes contained in the building, culminating in the roof garden. During his vertical ascent, the visitor would have been offered an aerial view of the station, the movement of the trains and, finally, a panoramic view of the historical centre of Karlsruhe. Observed from the point of view of the architectural drawing the result is, however, paradoxical: the building tends to dematerialise and exist in a situation of precarious equilibrium between form and non-form.

The third strategy, represented in the project for the Sea Trade Centre in Zeebrugge, Belgium, deals with the symbolic dimension.

Already in Delirious New York the Dutch architect had identified two urban archetypes: the needle and the globe. The needle is a building with no interior, occupying the minimum volume and projecting upwards. The globe, on the other hand, has the maximum internal volume with the minimum surface area. What is
more, it has a notable ability to absorb objects, people, iconographies and symbolisms thanks to its ability to make them co-exist within it. The history of the Modern metropolis is, for Koolhaas, the attempt to make these two archetypes live together, 'with the needle wanting to become a globe and the globe trying, from time to time, to turn into a needle – a cross-fertilisation that results in a series of successful hybrids in which the needle’s capacity for attracting attention and its territorial - modesty are matched with the consummate receptivity of the sphere’.

The prototype of the needle is the New York skyscraper and the prototype of the globe the geodesic dome by Buckminster Fuller. Koolhaas, in a shocking move, seeks to synthesise them in a single object: the resulting form is a volume that opens up like a spiral and is crowned by a dome. The centrifugal expansion is suggested by the movement of automobiles that run along the heliocoidal ramps inside the building, and along which parking spaces are located. On the upper levels, restaurants, offices, hotels and casinos alternate with one another all the way to the top of the building, with its panoramic dome.

Though these three projects were never built, thanks to the paranoiac clarity of their conceptual structure they had a considerable influence on theoretical debate. What is more, they helped Koolhaas to define the ideas that he would theorise in his 1994 article entitled 'Bigness or the Problem of Large', in which he proposes the investigation of a dimension that lies somewhere between that of the building and that of urban planning becoming, from this moment onwards, the subject of growing theoretical interest.

The same lucid, ironic and paradoxical method is applied by Koolhaas to his smaller projects from this period, which demonstrate an approach to construction that joins a paratactic logic with fragments of famous works of architecture. It is a method that recalls the Post-Modern approach to composition, with the difference being that while the latter did not hesitate to build works by copying – or as one said at the time, citing – the architecture of a pre-modern past, in most cases with classical roots, Koolhaas’ works used examples from the Modern Movement, precisely the innovative and experimental tradition that Post-Modernism attempted to abolish. The objective was to create a contemporary language that displayed, through the plurality and fragmentariness of references, the tensions and contrasts of our contemporary era.

For example, in the Villa Dall’Ava, a project begun in 1985 though only completed in 1991, Koolhaas, inspired by Mies van der Rohe and Le Corbusier, attempted to unite the opposing needs of two clients, one of whom wanted a glass house, and the other a pool on the roof. He thus created a longitudinal volume that ends in two transversal volumes. The longitudinal volume is a glass house, surrounded on four sides by glazing reminiscent of the work of Mies. The two transversal
volumes, on the other hand, recall the work of Le Corbusier: like his Villa Savoye in Poissy, France (1928–31) they are tripartite spatial organisms – pilotis, inhabited space and roof garden – with strip windows. Through the use of these two references, Koolhaas resolves a professional dilemma and, simultaneously, guarantees the coexistence of two different languages by placing one beside the other. The result is an aesthetic of the fragment that is typically Deconstructivist in flavour, in which the sum of the pieces that come together could not be harsher, or less organic. No alignments are respected and there is no well-resolved corner condition. When a window meets a transversal wall, it is rudely interrupted and the passage from one material to the next is brusque and unforgiving.

Koolhaas’ most important work from this period is the Kunsthal in Rotterdam, Netherlands (1987–92). The project resulted from a desire to construct a square building, the volume of which is cut by two streets: an existing east–west road and a pedestrian ramp that runs north–south, used to identify the entrance to the park and the Kunsthal. Reconnecting the box, cut into four parts, is a spiral created by the placement of the sloping planes of the ramps, the raked seating in the auditorium and the horizontal planes of the display spaces, offsetting them in order to create a spatial continuum that begins on the ground floor and, passing through all of the spaces, culminates in the open area of the roof garden. The display spaces and the auditorium thus become elements of a single path that, when followed, allows for an informal meandering from one exhibition to the next, and from the latter to a conference.

The motivation behind this strategy is primarily formal: the encounter between opposing principles. It not, however, without functional merit: if the spaces articulate a chain of events, then free circulation between them undoubtedly moves towards the culture of multiplication of stimuli, or what Koolhaas calls the culture of congestion.

If we look at the exterior volume of the Kunsthal and its four facades what we see is a banal rectangle of an alarming linearity. However, if we look at the building from an angle we note, at all four corners, that the two converging facades use different materials and are not visually or formally connected with one another: there is no alignment or juxtaposition that is resolved in a pleasurable or harmonious architectural composition, despite the fact that each elevation honestly declares the functions behind it. It is thus a strange paradox typical of the Deconstructivist aesthetic: the application of canonical rules (such as the correspondence between interior and exterior), though within a complex and paradoxical context that creates non-canonical buildings, with a de-structured appearance.
1.6 Frank O. Gehry: New Compositions

At the time of the ‘Deconstructivist Architecture’ show, Frank O. Gehry was undoubtedly the most well known of the architects involved. By 1988 he could already boast a lengthy and brilliant professional career and, only the year before, he had been the subject of a personal exhibition in Minneapolis, later shown in Houston, Toronto, Atlanta, Los Angeles, Boston and New York. This show precluded the awarding of the Pritzker Prize, one of the most sought after in the field of architecture, which he received in 1989.

As highlighted by Alejandro Zaera Polo in an article on Gehry published in El Croquis, the primary fascination with this figure consisted of his solid popular roots, which allowed him to escape from annoying debates between other architects. In fact, Gehry, unlike Eisenman, Koolhaas, Tschumi or Libeskind, lost no time with complicated theoretical questions. His work focused directly on the imagination, involving the senses rather than the intellect, presenting a decisively iconic impact, a highly plastic and sculptural appearance and the creative use of the ‘poor’ materials of industrial production.

Gehry had been working on his home in Santa Monica, California (1977–9) in previous years, attempting to define a progressively more convincing design strategy. To this end he did not hesitate to experiment with numerous types of research, of which three appear to be the most convincing.

The first focuses on the de-composition of the building into distinct, elementary volumes, each of which is characterised by a form and a material: stucco, stone, copper and zinc. This is the case with the Winston Guest House in Wayzata, Minnesota (1983–7), where four volumes ‘are placed together in a tight complex, like a still life, like a Morandi’; the Schnabel Residence in Brentwood, California (1986–9); the psychiatric centre in New Haven, Connecticut (1985–9); and the Edgemar Development in Santa Monica, California (1984–8).

The second focuses on creating unitary buildings, obtained by uniting different elements, or elements that appear to have been subjected to forces of deformation, placing the overall composition in a state of crisis. This can be observed in the American Center in Paris (1988–93), played out entirely on the dialectic between the monolithic nature of the building and the fragmentary aspect of its multiple parts, some of which, surprisingly, appear to slip and pop out of the building itself. Later – the design is from 1992, though the building was only completed in 1997 – with the Dutch National Bank headquarters in Prague, a building better known as ‘Fred & Ginger’ because it is recalls the two famous dancers as they move in a close embrace. What strikes us about this building is the particular solution of the corner, where the glass volume narrows at the
midpoint and flares at the base, resembles the hips and dress of a female dancer. In reality, beyond the iconic references, it is a brilliant way of ensuring unexpected views of the building and creating a dialogue with the Baroque forms of the city of Prague.

The third approach focuses on objects with complex forms and highly sculptural impact such as the Vitra Design Museum in Weil am Rhein, Germany (1987–9). In this work, greatly admired by a generation of young architects who, from the early 1990s, sought to propose a new aesthetic founded on morphogenesis and digital calculation, Gehry sought to subtract architecture from the traditional aspect that marked it, up to this point, in order to make it a purely plastic event. Gehry later pursued this latter direction with great perseverance, resulting in the completion of his two masterpieces: the Walt Disney Concert Hall in Los Angeles (1988–2003) and the Guggenheim Museum in Bilbao (1991–7). More will be said about both of these projects later.

1.7 Disjunction and De-localisation

In 1992, ten years after the competition for the Parc de la Villette and four years after the ‘Deconstructivist Architecture’ show, Tschumi won another important international competition for the Le Fresnoy art school in Tourcoing, north-east of Lille, France.

The site is a piece of land with a few buildings that Tschumi, as per the competition brief, maintained, making only a few modest changes. He occupied the open space with a cinema, recording spaces and administrative offices, covering the entire complex with a steel roof of approximately 100 x 80 metres, composed of opaque and transparent elements. He thus gave the entire complex a coherence of image and simultaneously exalted the different morphologies of the buildings he covered. Between the tops of the buildings and the underside of the roof he created new covered spaces, connected by a complex system of stairs and walkways, capable of hosting educational activities, lessons and exhibitions and of offering havens of tranquillity and for study.

The resulting space is neither unitary nor fragmentary, neither interior nor exterior. It would probably have found favour with Guy Debord and the Situationists due to its characteristic of not falling into the banality and mechanical nature of the Modernist style, but emerging, almost unexpectedly, from the interaction between structures belonging to different eras and styles. It is precisely for this reason that it represents an example of disjunction, an architectural praxis theorised by Tschumi for some time.
Disjunction is founded on the assumption that, after the crisis of the Modern Movement and its concrete certainties, it no longer makes sense to propose syntheses of resolution, whether they are functional, organic or rationalist. Instead, it may be more productive for architecture to become the expression of a lack of something, of a tension. This lack transforms into an opening (this is the meaning of the word dis-junction), into a desire, a stimulus for discovery, and an invitation to exceed limits.

The same year that Tschumi won the competition for the Fresnoy school, Peter Eisenman wrote an article for Domus entitled ‘Visions’ Unfolding: Architecture in the Age of Electronic Media’ in which he proposed theoretical questions based on his recent architectural work, oriented towards complex geometries, vibrant spaces and precarious points of view. The architecture that has been handed down to us – Eisenman states – has, up to now, been responsible for overcoming gravity, monumentalising this action and translating it into visual relationships. This has two consequences: firstly it has established, through the opposing categories of inside and outside, above and below, in front and behind, left and right, a precise relationship between itself and the user; secondly, it is structured in such a way that ‘any position occupied by a subject provides the means for understanding that position in relation to a particular spatial typology, such as a rotunda, a transept crossing, an axis, an entry’.

At the base of this architecture, stable, functional, conceptually harmonious and hierarchical, there is a perspectival conception of space that, as much as it was criticised by 19th-century avant-garde art, for example Cubism and Constructivism, still survives in architecture. However – Eisenman continues – if electronic society is discarding the traditional way of understanding vision, transforming it from an intellectual activity (perspective) into an emotional fact (pure image), then architecture must also take this into account in some way.

This leads to the proposal of introducing a new operative category – ‘dis-location’ – that, for various reasons, resembles the ‘dis-junction’ proposed by Tschumi. Dislocation is an attempt to separate the subject of the work of rationalisation from the space that it instinctively attempts to create within a given site. We are thus speaking primarily of ‘separating the eye from the mind’. Dis-location allows one to glimpse the existence of different spaces, ‘other’, with respect to those that we are used to experiencing and, above all – as hermetically affirmed by Eisenman – to understand that there exists ‘an affective space, a dimension in the space that dislocates the discursive function of the human subject and thus vision, and at the same moment, creates a condition of time, of an event in which there is the possibility on the environment to look back at the subject, the possibility of the gaze’. 
If the dis-location proposed by Eisenman aims primarily at criticising the conceptual references through which the intellect appropriates space, the work of Coop Himmelb(l)au aims at involving the senses and the body. This leads to the construction of strident and anti-ergonomic spatial creations that are simultaneously curious and involving. An example of this is the rooftop remodelling at Falkestrasse 6 in Vienna (1983–9), where the new construction appears like some mechanical and parasitic monster that sits atop the 19th-century building. However, once we overcome our initial reaction, we notice that it is an object that creates unexpected relationships with the sky, dis-locating the observer towards a sublime dimension that boxes, on the other hand, preclude. We can also mention the Funder 3 factory in St Veit/Glan in Austria (1988–9), where the dis-articulation of the building volumes into planes and lines in an apparent state of precariousness and imbalance creates a sense of discomfort that observers can overcome only when they free themselves of the academic idea of order, allowing for the enjoyment of an explosive landscape that is rich with surprises.

Another architect who moves along the lines of dis-location is Daniel Libeskind, though in a metaphorical, analogical and poetic way. For Libeskind, in fact, architectural signs are understood only in relation to another reality: that of history, music and poetry. Vice versa, history, music and poetry can only be understood if they are translated into signs that characterise the spaces of our existence: architecture. All of these signs, which together create a vortex of references, weave the pattern of the world, constituting its meaning (meaning is in fact the translation of a system of signs into another system of signs). However, it is a meaning whose ultimate aspects escape us because, as hard as we try to organise a matrix of meaning and identify its roots, in the end the framework that we manage to reveal is always incomplete, temporary, fragmentary and dis-articulated.

Inspired by Hebrew mysticism, the work of Libeskind has a cryptic and esoteric aspect. There is also a fascination with a metaphysical vision that he matured with the Jewish Museum in Berlin, a work that Libeskind began in 1989, though it was only inaugurated in 1998.

During the same years in which the poetics of Deconstructivism were being developed, there were also other lines of research that were less dis-articulated and more unitary. Some were aimed at the rediscovery of the concrete qualities and materiality of space, others at a more Minimalist approach – which we will discuss later – and others still that were more focused on the technological dimension.
1.8 Between Gesture and Perception: Fuksas and Holl

After moving to Paris in 1985, motivated by the search for new professional opportunities, Massimiliano Fuksas abandoned the style that had marked his previous work, characterised by elementary geometric figures that, due to their iconic aspect, are a Post-Modern derivation. The definitive break from these forms takes place in 1986 when, after being invited by François Geindre, the Mayor of Hérouville-Saint-Clair, he called upon Otto Steidle, Will Alsop and Jean Nouvel to work together on the construction of the Europe Tower. The designers avoided the production of a unitary organism, opting to casually pile their four different projects on top of one another, developing the logic of overlapping that, in 1983, led Tschumi and Koolhaas to their proposals for the Parc de la Villette.

In later projects, such as the Culture Centre and Media Library in Rezé, France (1986–91), the Îlot Candie Saint-Bernard in Paris (1987–96), the Saint-Exupéry College in Noisy-le-Grand, France (1989–93) and the Faculty of Law and Economic Sciences in Limoges, France (1989–96), Fuksas returned to the creation of a more unitary image generated by a unifying design gesture. At the same time, by using different materials for each project – from glass to metal mesh, from cor-ten steel to copper and wood – he experimented with a sensual architecture, rich with material and chromatic values. The apex of this approach is the Musée des Graffiti at Niaux, France (1989–93). The entrance to the grotto that contains a series of famous prehistoric cave paintings is defined by a walkway sandwiched between two angled walls of cor-ten steel, which recall an abstract representation of a prehistoric animal or an ancestral force that emerges from the cave. As the layer of patina covers the steel, it gives the object a strong tactile component and favours its insertion within its natural context.

The American architect Steven Holl was also of the opinion that it was necessary to move beyond Deconstruction.

‘Deconstruction’ – Holl states, in the words of Mark Taylor – ‘has finally run its course. We have tried to deconstruct, to fragment everything ad infinitum. What we need now is a philosophy of how to put things together. My insistence is on the value of the whole, especially for architecture.’ To achieve this, Holl implements a strategy that combines phenomenology with a conceptual approach.

The phenomenological approach that Holl attributes to the philosophy of Maurice Merleau-Ponty, results in his valorisation of materials, sites, colours and light. The conceptual aspect is derived from the search for a theory that guides each project, bringing unity to the composition and avoiding a chaotic and disordered design in which various effects follow one another without a precise guiding line. For example, in the Stretto House in Dallas, Texas (1990–2) the concept is taken from
a musical composition by the composer Béla Bartók, whose four-four times were in turn inspired by the observation of the site, which contained four pre-existing dams.

The most interesting works produced by Holl, other than the Stretto House, are the residences in Fukuoka, Japan (1998–91) and the DE Shaw & Co Office and Trading Area in New York (1992). In both cases Holl plays with the dialectic between the simplicity of the structure and the variety of the components. In Fukuoka, he does this by making each apartment different from the next, and articulating each according to an elegant system of coloured and pivoting screens, inspired by the Japanese ideal of fluid, flexible space. In New York this is achieved by designing a central atrium illuminated by multiple windows, each of which filters a different colour of light.

1.9 The Minimalist Approach: Herzog & de Meuron

The German-speaking part of Switzerland, towards the end of the 1980s, was home to the development of a line of research that was antithetical to that of Deconstructivism. This was discovered in 1991 by The Architectural Review and presented in an issue dedicated to the phenomenon, introduced by an article written by Peter Buchanan.

‘There is,’ states the critic, ‘an up and coming generation of architects whose work is a welcome relief after the fashionable formal excesses of the ‘80s. Some of them, such as Jacques Herzog & Pierre de Meuron and the very un-Swiss Santiago Calatrava are starting to achieve near cult status internationally; others deserve to be better known. Except for Calatrava, most of these architects share a continuing fascination with Modernism, with its early architecture and its contemporary art, both of which inspire a common concern to distil and express essentials.’

His insights revealed themselves to be accurate: in only a few years Herzog & de Meuron acquired enormous renown, as did at least one of the other architects mentioned in the issue: Peter Zumthor. A no less famous future awaited the Spanish-born Santiago Calatrava who, because he followed a different form of research than the rigorous Minimalism examined here, will be discussed in the next paragraph.

It was during the second half of the 1980s, with the Ricola Warehouse (1986–7) in Laufen, a city near Basel, that Herzog & de Meuron defined a strategy that went beyond the vernacular approach of their previous work, focusing, with more abstract and figuratively more efficient images, on the building envelope – what Robert Venturi had called the theme of the ‘decorated shed’. Here they proposed a simple rectangle whose facades are designed by the overlapping of concrete
panels, installed in such a manner as to recall the stacking of products inside the building. The gap between the panels allows for internal ventilation. However, the vertical progression of the strips is organised according to the golden section, giving the building a quality reminiscent of a Minimalist sculpture. The exposed installation of the wooden slates, concrete panels and insulation recall the poetics of poor materials used in the architecture-sculptures of Gehry, though they overturn the presuppositions, orienting their research no longer in the direction of Deconstructivism, but in a decidedly rigorist one.

'The Ricola warehouse,' Antonio Citterio once confessed to me, 'was a true revelation for the younger generation. It showed us that there was a way of working that was different from what had become the asphyxiated historicism of Post-Modernism and, at the same time, that was not lost in the excesses of form, as was the case with the Deconstructivists.'

In the years around 1989, the change announced by the Ricola Warehouse was concretised in works in which the theme was progressively more that of the skin, the epidermis of the building. They include the signal building in Auf dem Wolf, Basel (1989–94), the SUVA Apartment Buildings in Basel (1988–93), the Pfaffenholtz Sports Centre in St Louis, France (1989–93), the Goetz Gallery in Munich (1989–92) and the Schützenmattstrasse apartments in Basel (1984–93). These projects take the form of envelopes designed as if they were works of art, and thus use the same techniques employed by artists, such as decontextualisation, disorientation, perceptive deception and changes of scale. The signal box in Auf dem Wolf, for example, is similar to a giant pop battery and, thanks to the delicate plays of chiaroscuro caused by the differing orientation of the copper bands that wrap it, appears like a vibrant Minimalist sculpture. The shutters on the Schützenmattstrasse building, based on the design of the sewer grates in Basel, create a perceptive dislocation resulting from the fact that what we expect to find on the horizontal plane of the paving is found on the vertical facade. The etched panels of the Pfaffenholtz Sports Centre – which reproduce, at a giant scale, the grain of concrete – play with the ambiguity that a visually poor material is decorated precisely with the same material, though shown under a virtual magnifying lens.

1.10 Minimalism in England, France and Japan

In the early 1980s, John Pawson had already completed a number of clearly Minimalist works, including his 1982 renovation of the apartment of the author Bruce Chatwin, a 45-square-metre space, aesthetically furnished with a few carefully selected objects. However, it is at the start of the 1990s that we can observe the beginnings of the definition, in Great Britain, of an alternative to
Deconstruction and High Tech in the work of Pawson, Tony Fretton and David Chipperfield.

This was initially visible in the design of interior spaces, houses and shops, that employed a synthesis of clear and elementary forms, limiting the effects of decoration to plays of light and the contrast of materials, for example plastered surfaces (often white or grey) and the use of marble, wood or exposed concrete. This is the case with the Equipment stores designed by Chipperfield in London and Paris (1991) where the only bright colours are those of the shirts, displayed on a diaphanous, backlit shelf.

Perhaps the most well-known work from this period is the Lisson Galleries in London (1992) by Tony Fretton, with its sober exterior designed primarily with large sheets of glazing that give the building an abstract appearance, almost out of time. Yehuda Safran, in an article for *Domus*, speaks of a rigorous, attentive and profound architecture and does not hesitate to recall the affirmation made by Mies van der Rohe: ‘In my opinion only a relation that touches the essence of time can be real.’

From the second half of the 1980s onwards, France was also home to the definition of a form of research that tended to favour essential forms. One of its forerunners, demonstrating his usual ability to anticipate the future, was Jean Nouvel. His work from this period manifests a growing interest in the theme of transparency. This would lead him to design the Tour Sans Fin for the La Défense neighbourhood in Paris (1989), a tower whose summit almost dissolves into the surrounding atmosphere; the building for the Les Thermes Hotel and Spa in Dax, France (1990–2); the Cartier factory in Villeret, Switzerland (1990–2); and, later, the Fondation Cartier in Paris (1994), a building that – as we will see in the next chapter – uses a system of glass screens, both transparent and reflective, in an attempt to render tangible the theme of the disappearance of the architectural object.

Less loaded with atmospheric qualities is the Minimalist work of Dominique Perrault. With his École Supérieure d’Ingénieurs en Électronique et Électrotechnique (ESIEE) in Marne-la-Vallée, France (1984–7) he had already proposed a building whose form was reduced to a large, sloping plane, to which were attached the linear volumes of the laboratories. However, it is with his Hôtel Industriel Jean-Baptiste Berlier in Paris (1986–90) that he proposes a glass box whose simplicity is the clear antithesis of the complex forms favoured by Deconstructivist architects. His objective, as noted by Frédéric Migayrou, was that of achieving a ground zero of form, a ‘neutral state that precedes and conditions all expression.’ In practical terms this is rendered concrete in a building-display case that exposes the transparency of its internal spaces, occupied by about 40
different companies. The image of the building, consequently, while maintaining the constancy of its envelope, was destined to change over time in relation to the history of its inhabitants and the changes they made. Perrault won the competition for the Bibliothèque Nationale de France in 1989. The project, a large central void defined by four L-shaped corner towers, was completed in 1995.

This passion for simple forms also attracted Bernard Tschumi who, between 1990 and 1991, completed a pavilion in Groningen where, with the exception of the sloping floor resting on a few concrete piers, the walls, roof and load-bearing structure are all made of glass. It is the starting point for a form of research that favours the construction of neutral containers – ‘zero-degree envelopes’ – where architecture almost tends to disappear.

In Japan this Minimalist approach was represented by two figures pursuing antagonistic lines of research: Toyo Ito and Tadao Ando. For the former, as we have seen, transparency and lightness were the results of the IT revolution and its consequent dematerialisation of the real. For the latter, whose research began with his first works in the 1970s, formal reduction was, instead, an expedient for creating new aesthetic spaces, essential and qualitatively excellent – inspired by the imperative of an almost Miesian nothingness, and in opposition to a world that, precisely because of the domination of new technologies, was chaotic, unauthentic and consumerist. The result is a certain quality that could be called rhetorical, class-conscious and monumental, compromising even the best examples his of work where, fortunately, architecture confronts its natural environment, almost absorbing and disappearing into it, thanks to studied cuts and the use of light.

A third approach to Japanese Minimalism was discovered at the beginning of the 1990s by an architect who had been apprenticed to Toyo Ito: Kazuyo Sejima. She is extraneous to the temptations of technology and, at the same time, far removed from the monumentalism of Ando. Sejima experimented with this approach in the Saishunkan Seiyaku Women’s Dormitory in Kumamoto, Japan (1990–1), a building composed of elementary forms that are joined to one another by an additive and almost diagrammatic logic that recalls the abstract space of comics. The relations between the parts are essential, objects are reduced to primary and elementary characteristics – colours and geometric forms – and the absence of points of reference or qualitatively relevant nodes leads to the creation of a homogenous and isotropic space that, as in a video game, allows for a freedom of movement, theoretically in all directions. Finally, there is also the cancellation of almost any expressive or stylistic desire. This research was re-proposed by Koolhaas in a competition that he organised in 1992 for the magazine *The Japan Architect*, which called for the design of a House With No Style, a project that aspired to anonymity.
1.11 The Development of High Tech

Initially launched in the 1970s and consolidated in the early ’80s, High Tech continued to spread in a variety of different directions: from the neo-organic work of Santiago Calatrava, to the neo-humanist approach taken by Renzo Piano, to the playful work of Will Alsop.

The Spanish Santiago Calatrava earned international attention with his Hall for the Lucerne Station in Switzerland (1983–9) and the Stadelhofen Station in Zurich (1983–90). They recall the wrapping forms of 1950s and ’60s architecture, experimented with by Eero Saarinen, Jørn Utzon and Felix Candela and the neo-gothic and neo-organic forms of Antoni Gaudí.

In particular, the Stadelhofen in Zurich is a railway station marked by a lightweight steel canopy that recalls the articulations of a living organism, fixed in a moment of equilibrium and, in its commercial spaces, the entrails of a prehistoric animal, whose rhythm is marked by a powerful structure of flat arches in reinforced concrete.

Fascinated by nature, Calatrava also experimented with complex moveable elements: for example the Kuwait Pavilion for Expo ’92 in Seville, whose roof, made of shaped wooden beams, was able to assume infinite intermediate positions between closed and open. We can also mention the competition for the addition to and restoration of the Reichstag in Berlin (1992), where he designed the assembly halls with an operable glass roof that allowed the public to follow the parliamentary sessions. Calatrava reached his maximum poetic intensity in his bridge designs, for example the Alamillo Bridge in Seville (1987–92), or the Devesa in Ripoll, Spain (1989–91), where elegant, asymmetric structures balance a dynamic image.

Renzo Piano is an architect who is poorly represented by the moniker High Tech. In 1986 he completed the Menil Museum in Houston, Texas, where he attempted to demonstrate that a technologically innovative work could use traditional materials, such as wood, and achieve, not unlike the ancients, delicate effects of light. Between 1987 and 1990 Piano was presented with the opportunity to design the Institut de Recherche et Coordination Acoustique/Musique (IRCAM). The building, located beside the Centre Pompidou in Paris, refuses the aesthetic of exposed building services and large glazed surfaces: it is primarily below-ground, and the exposed portion, inserted with much discretion within the historical block, is clad in moderately designed terracotta bricks. The only memory of the futuristic components of High Tech is the elevator, the glass cabins of which are exposed, and some exposed air conditioning ducts, aligned, well ordered and protruding above the street level.
The separation from his earlier works is even clearer in his later work, including the design of the Columbus International Exhibition in Genoa, Italy (1988–92), the UNESCO Research Laboratories in Vesima, Italy (1989–91) and others, such as the passenger terminal at Kansai Airport in Japan (1992–7), the church of Padre Pio in San Giovanni Rotondo, Italy (1991–2004), the Potsdamer Platz in Berlin (1992–2000) and the Jean-Marie Tjibaou Cultural Center in Noumea, New Caledonia (1991–8). Despite the fact that they are highly different works, they are all united by the desire to humanise technology, to recover the materials and atmospheres of the past, and to mediate between the old and the new, without renouncing innovation or falling into the trap of nostalgia.

Even Norman Foster, Richard Rogers, Michael Hopkins and Nicholas Grimshaw, whom we can consider as the most canonical representatives of High Tech, were experimenting at this time with a softer approach, part of an attempt to create relationships with context and move in a more ecologically responsible direction.

Between 1989 and 1991 Norman Foster completed the Sackler Galleries at the Royal Academy of Arts in London, demonstrating that a contemporary structure, lightweight and transparent, can contribute to the functional reorganisation and valorisation of a historical one. This experiment was successfully repeated with the Carré d’Art in Nîmes, France (1987–93) where he inserted, in the midst of the historical centre and in front of a Roman temple, a five-storey cultural centre (with an equal number of storeys below ground). Thanks to the simple, almost classical design of the glazed facades and the insertion of a high portico, supported by slender columns, the building easily dialogues with its Roman counterpart, demonstrating the unfounded nature of the negative accusations made against High Tech which are based on the idea that the style is necessarily cold and a-contextual. Between 1989 and 1991 Foster completed the Century Tower in Tokyo which marks, with respect to the more machine-like Hong Kong and Shanghai Banking Corporation Headquarters in Hong Kong (1981–6), a moment of formal simplification – a simplification that is reinforced in the elegant structure of London’s third airport at Stansted in Essex (1987–91), supported by slender structures that create a rectangular grid of square modules.

More characteristic in expressive terms are the buildings of Richard Rogers from this period. We can mention the Kabuki-cho Tower in Tokyo (1987–93), the Channel 4 Headquarters in London (1990–4) and the Human Rights Tribunal in Strasbourg, France (1989–94). His unbuilt works include the Tokyo Forum in Tokyo (1990), a complex architectural machine which was to have contained three large halls connected by escalators and panoramic elevators that, in turn, covered large spaces of daily life, including shops, cafés, cinemas, restaurants, exhibition spaces, musical workshops and theatres.
1.12 Post-Modernism and Modernism Continued

While it is true that the five years between 1988 and 1992 were witness to the emergence of new lines of research, it is also true that while some were consolidated, others were exhausted. Though Post-Modernism can be said to have exhausted itself, it continued to produce a variety of works, some even very interesting.

Undoubtedly the most worthy of note is the Sainsbury Wing at the National Gallery in London (1986–91) by Venturi, Scott Brown & Associates. Robert Venturi and Denise Scott Brown were awarded the commission after Prince Charles called the proposal by Ahrends, Burton & Koralek ‘a monstrous carbuncle on the face of a much-loved and elegant friend’. The two American architects chose to create a backdrop whose style was not dissimilar to that of the adjacent museum, eliminating a piece through a decisive cut near the entrance that announced its modern qualities. A monumental stair on the interior, not without its ironic references to the past, leads to the upper rooms.

Completed in 1990 (the project dates back to 1985), another project worthy of mention is the Haas Haus in Vienna by Hans Hollein, an exuberantly contemporary building, though not without its references to traditional Viennese architecture and the logic of excess and overabundance typical of Post-Modern taste.

The same year was also witness to the inauguration of the Cité de la Musique in Paris (1984–90) by Christian de Portzamparc, a project that well represents a desire not to design giant buildings, proposing balanced urban environments of smaller, more articulated buildings in order to avoid rigid hierarchies or monumental compositions.

The Disney Building by Arata Isozaki in Orlando, Florida (1987–91) is a giant toy composed of vividly coloured stereometric volumes that culminate in an enormous chimney which functions as the entry hall.

During the same years Aldo Rossi, at the time an internationally recognised star – he was awarded the Pritzker Prize in 1990 – completed his Il Palazzo Hotel in Fukuoka, Japan (1987–9), the Bonnefanten Museum in Maastricht, Holland (1990–4), the addition to Linate Airport in Milan, Italy (1991–6), the Walt Disney Headquarters in Orlando, Florida (1991–6) and the Schültenstrasse block in Berlin (1992–8), all composed of fragments taken from an imagination inspired by forms, often archetypal, of the city of the past.

There was also another approach that, while reducing the concessions to Post-Modernism to a minimum, sought to unite the tradition of the Modern Movement with more conservative approaches focused on recovering a relationship with
historical architecture and/or local traditions of building. Members of this group include the Spaniard Rafael Moneo, the Portuguese Álvaro Siza, the Ticino-Swiss architect Mario Botta and the Italian Vittorio Gregotti. Active for many years in the field of architecture (Botta, the youngest, fully experienced the Post-Modern season), they placed themselves in opposition to Deconstructivism and what they felt to be the ephemeral trends of the time. Beyond the specific interest of their architecture, they coagulate an element of protest. While Botta and Gregotti continued to act from a progressively more conservative, and at times reactionary, position, Siza and, above all, Moneo – who demonstrated a more open, pragmatic and, at on occasion, experimental attitude – became, respectively in Portugal and Spain, the points of reference for a younger generation who, while critical of the formal excesses of post-Deconstructivist trends, sought to update their personal architectural language.

The same years, finally, were also witness to the activities of professionals who completed quality projects, working laterally with respect to the trends of the time, though no less important as a result. At the head of this group we find Richard Meier and IM Pei. The former, in projects such as The Hague City Hall and Central Library (1986–95), the Royal Dutch Paper Mills Headquarters, Hilversum, Holland (1987–92) and the Canal+ Headquarters in Paris (1988–92), continued to experiment with his personal language of forms taken from the purist vocabulary of Le Corbusier. The latter, after completing the pyramid at The Louvre in Paris (1982–9) and the elegant Bank of China in Hong Kong (1982–9), was actively involved in numerous projects, including the Miho Museum in Kyoto, Japan (1991–8), where the primary theme was that of the insertion of the architectural object within a natural context.

1.13 The Legacy of Deconstructivism

There is no doubt that between 1988 and 1992 Deconstructivism was the most relevant and controversial phenomenon. It would be fair to state that precisely this phenomenon, paradoxically not embraced by any architect in particular, brought an extraordinary impulse to contemporary architecture. In fact Deconstructivism was responsible for the renewed interest of an entire generation of young designers in spatial research, the setting aside of the iconic excesses of the Post-Modern period, and re-elaboration of projects that were capable of giving form to the yearnings for freedom and experimentation expressed by contemporary society.

Deconstructivism can claim the merit of having produced a season of unprecedented theoretical reflection and stimulating and heated discussions that led in turn to the elaboration of contrasting and alternative lines of research. This
makes it difficult to share the opinion of those who see it as merely another formalism, the degneration of Post-Modernism and a style of excesses, if not the very negation of architecture. Whatever opinion we have of this phenomenon, it is undeniable that one of the merits of the architects of Deconstructivism was that of having rediscovered, and recovered, the avant-garde tradition, or of having introduced, and reinvented from scratch, new techniques of designing space, turning it into a shared heritage of architectural research, even non-Deconstructivist. These include experimentation with the in-between; with folds and changes of points of view; with the dynamics of the contemporary metropolis; with deformations, vibrations and oscillations; with new relationships between the natural and the man-made; with the exasperation of opposites in order to stimulate the perception of the observer; with a more involving relationship between the body and architecture.

A further merit of Deconstructivism was that of having demonstrated – after the Post-Modern conformism that favoured plaster, stone and brick – that almost any material, from sheet metal to chipboard to plastic fencing used to protect construction sites, can be successfully used. It is difficult to consider the post-Minimalist research into the skin of buildings without this anti-classical and liberating premise.

Beginning in 1993, as we will see in the next chapter, Deconstructivism would be declared superseded, even by those who were so strongly influenced by it. Nonetheless, because its design techniques continued to be employed (and many young architects will clearly recognise this debt), or because many buildings designed during its heyday were now being completed, the phenomenon did not cease to have an important influence – at the very least until October 1997 when, with an unprecedented media whirlwind, the world was witness to the inauguration of Gehry’s Guggenheim Museum in Bilbao; or January 1999, this time on the occasion of the opening of Libeskind’s Jewish Museum in Berlin.


2.1 The Turning Point

The beginning of the end the Deconstructivist movement was sanctioned by the publication, in 1993, of a monographic edition of Architectural Design magazine, ‘Folding in Architecture’, guest-edited by Greg Lynn. ‘Deconstruction has done its job,’ Kenneth Powell declared in the introduction. The other critics invited to write for the issue were all in agreement.
The turning point was also a reflection of changes in philosophical interests. Derrida was no longer in vogue and other philosophical theories were now being explored: Deleuze’s folds, the morphogenesis of René Thom, and the sciences of complexity proposed by theoreticians at the Santa Fe Institute.

What is more, there was also a change in taste that led to the obsolescence of fragmentation, acute angles and broken lines in favour of an aesthetic focused on the theme of continuity. This was expressed in a return to soft curves – a reflection of the teachings of Deleuze – and the Baroque. The circle, so admired for its perfect simplicity and Renaissance traits, was no longer the ideal figure; instead, it was superseded by the soft and wrapping folds of the drapery of statues and the whirling spaces of the 17th century. These are the more appropriate references for a culture that loves to play with the themes of complexity, of the ineffable dialectic between chaos and order. Greg Lynn states: ‘For the first time perhaps, complexity might be aligned with neither unity nor contradiction but with smooth, pliant mixture;’ and later: ‘Where Deconstructivist Architecture was seen to exploit external forces in the familiar name of contradiction and conflict, recent pliant projects by many of those architects exhibit a more fluid logic of connectivity’.

Two architects were recognised as the precursors of this new trend: Frank Gehry and Peter Eisenman – the former for his museum in Weil am Rhein, completed in 1989, and the latter for Rebstock Park (1990–91). Both projects make ample use of curves: the museum in order to achieve a sculptural conception, where the object, even while referring to the forms of the landscape, is clearly separated from it; and the park in order toimmerse itself in nature, creating a more empathic and less aggressive relationship. Both approaches were tested in later experiments: the first led to highly plastic buildings, the second to landscape architecture.

In any case, in order to proceed, there was an abandonment of the old ways of designing, which were based on hand drawing, and they were replaced by a new faith in the computer. The use of new technologies was made necessary by the complexity of the spatial configurations obtained by the process of folding, as well as the necessity of abandoning the empiricism that, in other historical periods, in particular the 1970s, characterised research into the use of soft and wrapping forms. This was further made possible by a market that, year after year, proposed more advanced computers at progressively lower costs, and the parallel diffusion of ever more sophisticated software capable of managing three-dimensional surfaces and complex volumes.

The final element that favoured the birth of a new generation of ‘Natural Born CAADesigners’ was an initiative that was quickly emulated by other universities: in
1994 Bernard Tschumi, Dean of Columbia University’s Graduate School of Architecture, Planning and Preservation in New York since 1988, introduced the first ‘paperless design studios’, entrusting them to such professors as Greg Lynn, Hani Rashid and Scott Marble.

They would contribute to the diffusion, primarily among young architects, of what Jeffrey Kipnis, in one of his essays for *Architectural Design* in 1993, baptised with the term the architecture of DeFormation. They were accompanied by other, previous experiments that were also stimulated by a reflection on new technologies. There were those that hypothesised a lightweight and transparent architecture that designs its own disappearance; those that sought to transform the facades of buildings into screens for the projection of information and events; or those that designed works of architecture which mutated according to the variation of flows of communication.

To these approaches to research we must add another, developed during the second half of the 1990s, and generated by progressively more complex virtual computer-generated models. It consists of the ideation and creation of digital simulations of spaces that are particular and multi-dimensional. This is the case with Marcos Novak’s notions of ‘transArchitecture’, which coincided with the enthusiasm for cyberspace architecture and forecast the unravelling of new territories in our brains. Or the works of Diller + Scofidio and Asymptote, who place fragments of the virtual within everyday reality: for example, by inserting video cameras connected to monitors that look beyond the physical space that architecture allows us, or projecting graphics on the floor, offering an immediate, three-dimensional perception of data and information about a site.

### 2.2 Explosive Buildings

Completed in 1994, the Vitra Fire Station in Weil am Rhein, Germany by Zaha Hadid met with an almost unanimous chorus of acclaim. Writing for *Architecture* magazine, Joseph Giovannini stated: ‘This building tricks the eye and body into feeling sensations of Einsteinian speed.’ Ziva Freiman wrote in *Progressive Architecture*: ‘the ostensibly dynamic building, executed as it is with great precision, inspires rather restful contemplation.’ For *Domus*, Michael Mönninger spoke of the building as a milestone in the history of architecture.

The commission was the result of a series of coincidences. Rolf Fehlbaum, the director of Vitra, having seen an article in *Vogue* magazine, contacted Hadid to design some furniture. His visit to the architect’s office in London was followed by a reciprocal visit to Switzerland by Hadid. A few months later she received a proposal to design a small, 800-square-metre, two-storey building, for five vehicles and 24 firemen who were to protect Vitra’s highly flammable productive
equipment and furniture warehouses. Designed for a utilitarian purpose, the building was also to be used for occasional exhibitions, promotional activities and meetings.

The objective was that of creating a building of significant architectural value that would complement the factory designed by Nicholas Grimshaw and the museum by Frank O. Gehry, under construction at the time (the buildings by Álvaro Siza and Tadao Ando came later).

Built in reinforced concrete at a cost of 2.6 million German Marks, while – in Mönninger’s words – ‘the building does not “speak” and does not represent anything either ... [i]t could be seen as a starfighter or a speedboat, as a collapsing bridge structure or an exploding spaceship.’ However, the most convincing image comes from Hadid herself: it is a structure that vibrates like a fire alarm bell when it first sounds. ‘The whole building is frozen motion, suspending the tension of alertness, ready to explode at any moment.’

Completely different than the Monsoon Restaurant, so much so that it appears to have been designed by another hand, the Vitra Fire Station in reality presents the same scenographic sensitivity, this time projected towards the organisation of the exterior spaces. In fact, the building functions as a wall to the exterior and a backdrop to internal circulation, reorganised in offsets and shifts in perspective.

There is also a similar logic, founded on the highlighting of the encounter-confrontation of opposing principles, primarily between the unit of composition and the multiplicity of compositional elements, each of which is highlighted and treated with specific care. In particular we can observe three longitudinal elements that seem to have been caused by the vibration – from the right to the left and upwards – of a single linear mass, while the roof reinforces the horizontal qualities of the composition, blocking the upward movement, and opening the entire construction up in other directions.

The second opposition is between volume and plane. The building is more than a composition of lines; it is a play of volumes that intersect with one another. However, if we look closely we see that the volumes are obtained by planes that, as much as they are connected, folded and tormented, never lose their planar characteristics or, in the end, their dynamism.

The third opposition is between the weight of reinforced concrete – serious, material and sculptural – and the lightness of an immaterial energy, rendered possible precisely by the fundamental quality of concrete: that of eliminating the duplications between structure and cladding and thus creating a poetic of subtraction, where signs are reduced to their pure essentiality, stripping volumes down to their essence and transforming them into pure lines of force.
In 1995, thanks in part to the success of the Fire Station, Hadid was already a star. Of her more interesting projects from this period we can mention the recasting of an area in New York, near Times Square, between 8th Avenue and 42nd Street. The project called for two blocks with the same number of commercial plates, atop which were to be built, respectively, a 22- and a 45-storey tower. The lower tower comprises a simple, almost elementary envelope, inserted as an ordering element within the urban fabric. The taller tower, instead, has a fragmented form, created by the alternation of glass and opaque walls, which can also contain the brightly lit screens and publicity banners that characterise Times Square. The glass walls define the residential functions and the opaque the service spaces that can be lit with fluorescent lighting, such as conference rooms, banquet halls, a gymnasium and a pool.

The fragmentation of the building into blocks, other than permitting the alternation of glazing and advertising banners, is also reflected in the vertiginous, full-height atrium. This space is overlooked, in a controlled disorder, by private and public spaces, re-creating, on the inside of the building, the vitality of flows of people and activities that are, on the exterior, integral to the urban environment that is New York.

The same strategy used for the 42nd Street Hotel – the decomposition of form into elementary units that are later recomposed into a new, typologically innovative organism – was also applied by Hadid to the project for the Boilerhouse Extension to the Victoria and Albert Museum (1996) and, later, the Contemporary Arts Center in Cincinnati, built and inaugurated in 2003. The difference, however, is that in these later works the elementary units are assimilated to pixels – minute fragments of light which, as they are composed and recomposed, allow the screens of televisions to produce a flow of images that complete architectural space. This space is characterised by the flexible and ample covered plaza that welcomes visitors ('the urban carpet'); by the variety of display spaces suspended in the air, in order to offer, through their strange intersections, unusual views ('the jigsaw puzzle'); and by a double facade system that creates a cushioning layer between the interior and the exterior. This facade system can simultaneously be a membrane, an interface or a fully autonomous form ('the skin/sculpture').

The Habitable Bridge on the River Thames in London (1996) transforms the bridge typology into a double system of lines of force, rendered concrete by the cluster of long-limbed elements placed along the two banks of the river. These latter, used for commercial and cultural activities, generate an intense attraction that creates a physical and ideal connection between the two sides of the city, otherwise separate. At the same time, the paths, placed at various levels and oriented along
shifting directions, offer new openings towards this natural space of the river and 
the artificial skyline.

2.3 Los Angeles, Graz and Barcelona

Morphosis, the Los Angeles-based office run by the partners Thom Mayne and 
Michael Rotondi, earned its initial fame with a few small projects, mostly interiors, 
completed during the 1980s. These were composed of sharp and decisive forms 
executed in industrial materials (cor-ten steel, steel mesh, exposed bolted steel 
beams), the junctions between different geometries constituting exploding or 
syncopated and fragmented spaces. Coherent with a form of research that, during 
this period, was also being pursued by protagonists like Zaha Hadid and Coop 
Himmelb(l)au, Morphosis demonstrated a preference for the intense over the 
beautiful and energy over harmony, pursuing an aesthetic of the sublime that led 
them to introduce forces and tensions. This approach has been referred to as Dead 
Tech, a poetic form of High Tech in the wake of an atomic disaster. It must be said, 
however, that while the term suggests a state of devastation, the objective here, 
on the contrary, is that of alluding to the tension and vital force of matter during 
deflagration.

Completed between 1994 and 1997, the Sun Tower in Seoul, South Korea is the 
office's first important built work. It is the result of the confrontation within the 
same form of two 10-storey towers for two different clients, with a shared foyer. 
The complex and, in parts, chaotic volumes of the whole are exalted by the use of 
perforated sheet steel that wraps the building like a skin, creating effects of 
transparency that help to lighten the overall image. At night, thanks to artificial 
lighting from the interior, the tower becomes a gigantic billboard, an urban 
landmark.

Between 1992 and 1996 Morphosis were busy completing the Blades Residence in 
Santa Barbara, California, a single-family dwelling skilfully fragmented into 
multiple nuclei. It is an example of 'landform architecture', an approach that 
Mayne had been pursuing for years. It consists of works that became landscape, 
abolishing the opposition between figure and ground, building and context, artifice 
and nature.

Eric Owen Moss can be considered, together with Morphosis, as one of the most 
important points of reference for new Los Angeles architecture. He owes much of 
his fame to numerous projects in Culver City, an abandoned industrial area in Los 
Angeles, many of which were commissioned by Frederick and Laurie Samitaur 
Smith, two enlightened clients who saw the regenerative potential of a new and 
unusual architecture in attracting businesses and innovative activities, generating 
public interest and offering a new and more desirable way of inhabiting space. His
more important works include Box (1990–4), an off-kilter steel box with a large window that erodes the corner, containing a conference room, built on the roof of a restored industrial building; the Beehive/Annex (1996–2001), a conference centre whose spiral form is interrupted by a stair that functions as a roof; the Samitaur Complex 1 (1989–96); the Samitaur Complex 2 (begun in 1997); the Pittard Sullivan Building (1994–7); and the Wedgewood Holly Complex (1989–2001), also known as ‘Stealth’ for its resemblance to the airplane of the same name, designed to elude radar interception. All of these projects are marked by a form of spatial research, in some cases exasperated, that questions traditional forms, materials and relationships in order to arrive at what Moss calls Gnostic architecture: ‘Gnostic architecture is not about a faith in a movement, a methodology, a process, a technique, or a technology. It is a strategy for keeping architecture in a perpetual state of motion.’ An extraordinarily talented designer, Moss in many ways recalls Antoni Gaudí. He takes a metaphysical approach to architecture, seen as a discipline that is capable of rendering spatially concrete that which, going beyond the banal, is truly important.

Oriented towards an expressive, and in some cases mystic, vision of architecture we find the architects of Graz, in Austria, dominated by the figure of Günter Domenig. The Architectural Review first brought them to the world’s attention in 1995 in a monographic issue entitled ‘New Graz Architecture’. They were: Konrad Frey; Bernhard Hafner; Heidulf Gerngross; Helmut Richter; Manfred Kovatsch; Szyszkowitz-Kowalski; Klaus Kada; and Volker Giencke. For the critic and historian Peter Blundell Jones, the author of the introduction to the issue, their work led to the emergence of eight themes of significant importance for contemporary research: an ability to engage historical relations by contrast; an attention to functional aspects; an interest in mega-structures; the use of curves, skews, asymmetries and irregularities; composition using bridges and voids; an interest in new technology, exposed structures and details; the rediscovery of the roof as more than a simple flat plane; and an attention to the participation and involvement of the building’s users.

Another centre of new architectural expression was the city of Barcelona, home to Enric Miralles, initially partnered with Carme Pinós and, from 1990 onwards, with Benedetta Tagliabue. In 1991 El Croquis magazine published a monographic issue of the work of Miralles and Pinós, giving ample importance to what many consider to be the couple’s masterpiece: the Igualada Cemetery in Spain, that was about to be completed. The project has a formidable expressive power: inserted within the topography of an arid Spanish landscape, it becomes part of it and, at the same time, emerges as a privileged microcosm with a powerful symbolical impact. Plantings, reinforced concrete and gabion baskets (steel cages filled with small and
large stones) define a long facade that is simultaneously artificial and natural, based on principles that are not unlike those of landform architecture tested by Morphosis and Domenig. Between 1993 and 1994 Miralles completed the Centro de Gimnasia Rítmica y Deportiva in Alicante (1990–3) and the Sports Facility in Huesca (1988–94), both in Spain. These projects offer him an opportunity to display his talent, typically Catalan, of playing with spaces, light and materials, even those that belong to the world of technology. International success arrived in 1997 when the French architectural magazine *L’architecture d’aujourd’hui* dedicated a monographic issue to his work. This was also the year that Miralles won the competition for the new Scottish Parliament in Edinburgh.

### 2.4 The Radicals and Coop Himmelb(l)au

Rediscovered and appreciated after a lengthy period of silence, radical architects, particularly active in the 1960s and ’70s, once again captured media attention. Given that most of them were still practising and teaching in major institutions, their new work demonstrated an affinity with the advanced research of their young contemporaries.

In 1994, for example, Jay Chiat, the owner of the same advertising agency that hired Gehry to design the binocular-building in Venice, California, decided to renovate his offices in New York, entrusting the work to Gaetano Pesce. Perhaps the most notable feature of Pesce’s project for Chiat is the highly iconic and striking paving: red, blue and yellow resins define the fields in a design with the form of a face, seen from the front and in profile, and an enormous arrow that indicates the direction of entry. The choice of materials is equally strong: some are recycled, such as overlapping video cassettes that create the wall of the media library; others have a strong tactile impact, such as the felts that cover the fronts of the computer tables; others still are shaped in ways that suggest anthropomorphic images, some of which are unsettling: of these latter there is a perforation, in a plastic material, that recalls the lips of the inflatable dolls sold in pornographic shops around the world.

We are undoubtedly dealing with a work that is outside the functionalist canon, fresh with an air of innocence, and that does not hesitate to recover the useless, the arbitrary and the unnecessary, even if it is based on a paradoxical reasoning: in a complex and advanced society, the useful is that which goes beyond function, while it is not necessarily – almost never to be precise – that which we obtain in a strict and rigorous manner. A substantially similar position was taken by Alessandro Mendini, the promoter of Radical design in Italy, who had been highly critical since the outset of products sold simply to respond to practical uses, though lacking in evocative and emotional terms. In 1995 Mendini completed the
new museum of art in Groningen, Holland. His collaborators included Philippe Starck, Michele De Lucchi and Coop Himmelb(l)au, in an attempt to underline that the completion of such a complex undertaking, such as a home for art, can no longer be achieved through individual syntheses. The entire work is surprisingly varied. On the exterior, the stereometric forms of the portion designed by Mendini recall the work of the Italian metaphysical artists – though they are destabilised by an excess of decoration, some of which is clearly Mediterranean in flavour, if not Islamic. The structure designed by Coop Himmelb(l)au contrasts the former with its sharp walls that almost seem to slip from the building, and the highly decorative flavour of the unusual chromatic patterns. On the interior Starck works to create an evanescent language in the pavilion of decorative arts, using transparent drapery; De Lucchi, for the pavilion of archaeology and history, employs elements from the rationalist tradition; Mendini, called on to design the temporary exhibition halls, uses images with a metaphoric meaning; Coop Himmelb(l)au’s ancient arts pavilion is a strident and mechanical space.

In the Groningen museum, the contributions of four teams of designers overlap, without any real sense of continuity, proposing a chaotic microcosm of meanings and spaces that refer to cultures and trends which are both extraneous and incommunicable: closed volumes and fragmented walls, transparency and opaque masses, flashy polychrome effects and pallid monochromes, traditional and industrial materials, warm and inviting spaces and cold, uncomfortable ones. The result, as Mendini states, is focused on disorienting the visitor ‘to render the variety of architectural types ambiguous. In that museum every now and again you feel you are in a house, every now and again in a church, and then every now and again you seem to be in a theatre or in an office. We tried in fact to surprise the visitor by continuing to transform the system of spatial sensations vis-à-vis the works exhibited.’

2.5 Nouvel: Beyond Transparency

In July 1994 Jean Nouvel created a new company, Architectures Jean Nouvel, abandoning his previous partnership with Emmanuel Cattani that, though positive in terms of the quantity and quality of work, was a disaster in financial terms. Having handed over the economic management of the company to experts, Nouvel now fulfilled the exclusive role of artistic director. This allowed him to capitalise, in terms of image, on the success of five important works completed between 1993 and 1994: the residential complex in Bezons, France (1990–3); the Lyons Opera House (1986–93); the Congress Centre in Tours (1989–93); the Fondation Cartier in Paris (1991–4); and the Shopping Centre in Lille (1991–4).
The consecration of his professional status was assisted by monographic issues of *L’architecture d’aujourd’hui* and *El Croquis*, both published in 1994. They highlighted the creative talents of an architect who is difficult to label as belonging to a particular style or trend. In the Tours Congress Centre he works with fluid and precise forms, similar to those of a car body. In Lyons, he covers a historical stone building with a steel barrel vault, while the Fondation Cartier plays with the theme of transparency and lightness. The nine-storey building, located along the Boulevard Raspail, is little more than a simple glass box with a Miesian flavour. The project is a composition of transparent and reflective screens that dematerialise the construction. Some of the glazed facades are extended by approximately 10 metres beyond the volume of the building, becoming transparent backdrops through which one has a glimpse of the park that surrounds the building. Further confusing the perception of the building, the project features an 18-metre-high glass perimeter wall. The final result recalls the installations of the American artist Dan Graham: an infinite space that appears to be devoid of any solidity or materiality.

Nouvel thus moves away from the functionalist aesthetic – that would find such a waste of material inconceivable – and towards a poetic of appearance, where the identity of the building is the result of its context, of a continually variable interaction with the sky, the weather and passing traffic.

Further underlining Nouvel’s interest during this period in Minimalist trends is the collection of furniture designed specifically for the Fondation Cartier, produced by Unifor under the name Less. However, that the homage to Mies van der Rohe and Minimalism is more form than substance can be observed in the fact that reduction does not in any way lead, as with the German master, to a clarification of the structure of the object, but rather to a poetic of evanescence. This can be seen, for example, in the fact that the table – surely the strongest piece of the collection – is so thin that it seems to disappear. At the same time, for example with the rotating containers, Nouvel looks at other inspirations, in this case the ‘mobile’ furnishings designed by Pierre Chareau. The same can be said of his architectural research. In 1993 he started building two projects that test new poetic approaches: the City of Justice in Nantes and the Lucerne Cultural Centre (KKL). The latter will be discussed in the next chapter.

### 2.6 Herzog & de Meuron and the Skin of the Building

In 1993 Herzog & de Meuron completed four buildings whose success would contribute to orienting a progressively more consistent segment of architectural research from the theme of space, something dear to the Deconstructivists, to that of the building envelope, or in more popular terms, mutated from the world of
biology, its skin. The projects were: the Schützenmattstrasse apartments and the SUVA offices and apartments, both in Basel, Switzerland; the Pfaffenholz Sports Centre in St Louis, France; and the Ricola-Europe SA Factory in Mulhouse, France.

The Schützenmattstrasse building (1984–93) features cast-iron shutters that mimic, at an enlarged scale, the decorative motif of the sewer covers in Basel. Their inspiration is likely to be found in the work of Frank Gehry. However, while the works of the latter are visually exciting, the Schützenmattstrasse is discretely inserted within its context. The unusual and continuous facade of shutters replicates, as mentioned, the decorative motif of the sewer grates so familiar to the residents of Basel. What is more, because they fold back, and in some cases hide away, they give the building a lightweight and changing appearance.

The SUVA office and apartment building project (1988–93) consists of the modernisation of a building from the 1960s and the addition of a new volume. The formal coherence of the whole is obtained by using a continuous curtain wall to cover the existing building and the new construction. In this way the building, while presenting a contemporary appearance, through the stratification of successive interventions, demonstrates its history, becoming a sort of palimpsest. What makes this transparent skin interesting, aside from panels with the etched logos of its tenants and strips of windows with different functions, is that some are moved by the inhabitants themselves in relationship to their specific requirements while others, functioning as brises-soleil, are oriented by a centralised and electronically controlled system to match the angle of the sun’s rays.

The play of perception is also central to the design of the Pfaffenholz Sports Centre (1989–93). The main building – an extremely simple volume – sports dark green glazing covered with an etched pattern of the chipboard cladding behind it, and the latter can be seen through the glass, creating a pleasurable and disorienting effect of optical redundancy. The smaller volume of the change rooms – equally elementary – is constructed using concrete decorated with an oversized and out-of-focus image of the material itself.

Another building that is notable for the extreme rigour of its architectural lines and, simultaneously, the richness of its envelope, is the Ricola-Europe SA Factory (1992–3). Similar to a large packing crate, the two long sides are open and raised above ground level. What makes this building captivating are the etched polycarbonate panels featuring the motif of a hand and 11 leaves, a reference to nature. Meanwhile the short sides, in exposed concrete and without any guttering, are stained by rainwater run-off, giving the building a material quality whose colorations and visual effects vary over time.
In 1994, the same year that Nouvel inaugurated the Fondation Cartier, Herzog & de Meuron had just completed the signal tower in Auf dem Wolf, Basel and were working on the design of a second one, completed in 1997. They are two prisms clad in thin bands of copper, which fold up in correspondence with the windows behind to allow for the passage of light. The copper bands create a Faraday cage that protects the delicate equipment inside the building. They are similar to a giant transformer, wrapped with thin metal windings: a sculpture at the urban scale that could easily be a work of Minimalism or Pop Art, depending upon whether we look at it as a pure volume or an objet trouvé.

The result is that complexity is once again avoided: the banality of the composition, as in the field of conceptual art or Minimalist sculpture, serves to exalt the materials, textures and relationships that would otherwise risk fading into the background. Between 1993 and 1994, Herzog & de Meuron began exploring a more involving spatial research. We can mention, for example, the Koechlin house in Riehen, Switzerland (1993–4) that relates to the undulating terrain and, at the same time, is organised around a central patio, deftly playing with double-height spaces. There is also the caricature museum in St Alban Vorstadt, Basel, Switzerland (1994–6) where the small available space is multiplied by using an enlivened path, rendered interesting by the transparent and reflective qualities of glass. Their research into spatial qualities and the skin of the building come together in the project for the Dominus Winery in Yountville, California (1995–7) where the walls of the building are made of gabion baskets. The building simultaneously appears to be fragile and massive, ancient and contemporary. On the interior light filters between the stones, filling the space with suggestive contrasts of chiaroscuro. Less successful, on the other hand, is the project for the creation of the Tate Modern in London (1994–2000). However it was this project – consisting of the reuse of a gigantic industrial building by Sir Giles Gilbert Scott – which, due to the importance and visibility of the commission, launched the duo on the international scene.

2.7 Minimalisms

Barcelona. On 30 September 1996 the show entitled ‘Monolithic Architecture’ opened in Pittsburgh, Pennsylvania, curated by Rodolfo Machado and Rodolphe elkhoury. All the same, as is often the case, the more one investigates a theme, the greater the difficulty in clearly identifying the precise objective of the research: in this case, Minimalism in architecture.

This can be seen, for example, in the introduction to the catalogue of the ‘Less Is More’ exhibition, where the two curators, Vittorio E Savi and Josep Maria Montaner, list eight characteristics that can be found – individually, or as a collection – in the buildings that belong to this trend. They are: a taste for pared-down, simple and traditional forms; geometric rigour; the ethics of repetition; technical precision combined with a love of matter; the search for unity and simplicity; a leap in scale; the formal predominance of structure; and a pure expression that renounces historical or expressive allusions. Thus, in line with these premises, the catalogue illustrations included famous buildings, such as the Farnsworth House by Mies van der Rohe, or more recent examples, such as Nouvel’s Fondation Cartier and the signal tower in Basel by Herzog & de Meuron, in addition to many others from varying periods in the history of 20th-century architecture. However, if this was a true representation of the situation, it was clear that the term Minimalism ran the risk of becoming generic and losing its meaning in order to express, in the best manner possible, only the need – particularly felt in these years by a growing number of architects – to purify the language of architecture of formal excesses by focusing attention more on the envelope than on the design of complex formal and spatial dynamics.

2.8 Questions of Perception

In 1994 the Japanese magazine A+U published a special edition entitled ‘Questions of Perception’. The issue was guest-edited by Steven Holl, Alberto Pérez-Gómez and Juhani Pallasmaa. Pallasmaa, with an emblematic essay entitled ‘An Architecture of the Seven Senses’, denounced the particular danger of an architecture that privileged visual aspects over the other senses. This leads to a loss of sensuality, a ‘drift towards a distancing, a kind of chilling, desseasonalisation and de-eroticisation of the human relation to reality’.

How can we avoid this danger? By recovering, as the central part of the issue claims, 11 distinct ‘phenomenal zones’: where the figure and the ground coexist; where perspectival perception is the source of continual surprises; where colour is employed; where effects of light and shadow are considered; where the building is conceived in terms of its nocturnal appearance; where perception implies a concept of duration, where water plays a role; where sound contributes to giving quality to space; where plays of tactility of surfaces are employed; where concepts
of scale and proportion are used; and where an idea connects architecture to its context.

The result is a captivating architecture, though in some cases excessively loaded with impressionistic effects. This is undoubtedly different from the work of Herzog & de Meuron, whose use of materials is more detached, though intellectually more involving.

Completed in 1997, the Chapel of St Ignatius in Seattle, Washington (1995–7) is perhaps one of Steven Holl’s most successful projects due to the tactile qualities of the materials employed: concrete, zinc, plaster and coloured glass. There is also the ingenious method of using large, prefabricated panels, not to mention the complex volumetric moves based on the multiple lighting effects, though fundamentally the result of a very simple, rectangular plan.

However, the most ‘phenomenological’ and critically successful work is by Peter Zumthor, making it, by default, the building that most exalts the values of perception and tactility: the Thermal Bath Complex in Vals, Switzerland (1994–6). Built of overlapping layers of stone and reinforced concrete, using a technique inspired by local traditions, the baths owe much of their fascination to the sober and rigorous pool that is obsessively and minutely detailed. The project is articulated in ample spaces that alternate with cubicles that are as suggestive as they are small, each of which has its own effects of light, colour, acoustic and, as a result of the use of various perfumes, distinct smell. What most impresses, however, is the ability with which the architect managed to unite the values of an architecture of the past with contemporary geometries, a love for extreme precision and the essential nature of the whole. In the words of Friedrich Achleitner: ‘While it is possible to capture the various landscapes that define the project and the enormous effort behind each detail, at first sight it remains a mystery as to how such weight can translate into lightness and the spatial envelope produce such a clear sensation of freedom as in this work by Zumthor.’

A similar line of research was being pursed in the United States by Tod Williams and Billie Tsien. In 1995 they completed the Neurosciences Institute in La Jolla, California. Three buildings define a public square that gives unity to the entire complex. Light and materials are the focus of the architects’ attention, clearly visible in the auditorium with its delicate origami folds.

**2.9 Koolhaas: Euralille**

It is difficult to think of an architect who is less Minimalist and more inclusive that Rem Koolhaas. ‘Architecture,’ he states, ‘is by definition a chaotic adventure,’
adding that ‘[c]oherence imposed on an architect’s work is either cosmetic or the result of self-censorship.’

During the 1990s Koolhaas was already widely known, though his definitive international consecration took place in 1996, following the publication of his 1,345-page tome entitled _S,M,L,XL_ (Small, Medium, Large and Extra Large), a book-manifesto that met with extraordinary success, also thanks to the innovative graphic design by Bruce Mau. _S,M,L,XL_ abandons typological and morphological distinctions. ‘Small’ deals with the display pavilion and ‘Medium’ the building, while the neighbourhood is ‘Large’ and urban planning ‘Extra Large’. In addition to his projects the book contains numerous essays that, in the words of the author, are autonomous episodes and not to be seen as elements of interconnection.

The objective is that of giving life to what Koolhaas calls ‘a new realism’. It consists of a disenchanted vision that adheres to things as they are forecast by the society in which we live: a metropolitan reality that is no longer founded on the ordered development of the city, but on the chaotic localisation of urban agglomerates and networks of connection. What is the destiny of architecture – Koolhaas asks – within this context? We cannot avoid seeing it as an obstacle to change, as the chain around the ankle of a prisoner, robbed of the ability to move as he wishes. The best building is thus that which does not exist: it is the space in which no wall hinders or directs the body. What inspires Koolhaas is surely the almost nothing of Mies, a master to whom the Dutch architect has always made reference, though it is not difficult to see in these reflections a personal re-elaboration of the problems of Minimalism that, during this period, were capturing the attention of architectural research.

The year 1996 was also the year that Euralille, the first large masterplan entrusted to Koolhaas, began to take form. This design opportunity was made possible when the city of Lille, which found itself at the centre of new important axes of European mobility thanks to the construction of new high-speed rail lines, decided to convert itself into a centre of metropolitan attraction. The project, which covers some 120 hectares, is centred on the new TGV station located approximately 200 metres from the old station, to which it is connected by a road artery emblematically named Rue Le Corbusier. The project called for the construction of numerous commercial and business premises, awarded to different architects: Koolhaas was responsible for the Congreexpo; the TGV station was designed by Jean-Marie Duthilleul; the shopping centre by Jean Nouvel; the Crédit Lyonnais tower by Christian de Portzamparc; and the World Trade Centre by Claude Vasconi.

Euralille contains all of the design techniques honed by Koolhaas in his previous projects: assembly by strips and layers; design by nodes and networks; the dramatisation of movement; and the dialectic between the needle and the globe.
Assembly by strips and layers is the result of the meeting of two different systems: the infrastructural and the architectural. This occurs in the station, which is overlapped, a posteriori, by the office tower and the commercial building. There is a dominance of the poetic of the list, of overlapping, of encounter-confrontation: for example, the Congrexpo, where three different buildings, each with its own architecture and logic, come together to form a single building with an elliptical plan.

Conceived of as a collection of nodes linked to various systems of networks (automotive, railway, pedestrian), Euralille is animated by a succession of dynamic spaces: the only open-air plaza is triangular in form and, in any case, represents a moment of transition from the shopping centre to the TGV station. The remaining public spaces are all located inside the buildings, in large cavities from which depart paths of all types. Movement becomes a generating principle of form. The traffic that runs along the Rue Le Corbusier cuts the TGV station in two; the elevation of the Congrexpo changes if looked at from a distance and at different speeds; signage and indications acquire predominance over the facades; the buildings are articulated in order that they open towards the spaces of movement of automobiles, trains and other vehicles in movement. Finally, Koolhaas invents a large, void space at the point of connection between the TGV, the parking structure and the highway. It is a new espace piranesien that testifies to the fact that movement – the form of events – is the sublime of our era, that which spellbinds us and terrorises us: the driving force of a new aesthetic.

### 2.10 The Poetics of the Electronic: Between the Blob and the Metaphor

Blob architecture (or Blobitecture) was launched in 1995 by Greg Lynn. It consists of amoeba-like buildings generated and controlled by special software that, on par with complex natural forms, are the result of the transformation of simpler objects, caused by the concomitant action of external and internal forces. Using extremely sophisticated technologies Lynn pursues a recurring objective in the history of architecture: copying nature in order to cancel any box-like appearance of the built work, rendering them integral with the environment that surrounds them, using common forms, histories and processes. This led to references to the work of the early-20th-century biologist D’Arcy Thompson, to whom we owe studies on the morphological evolution of organisms.

In 1995 Charles Jencks published *The Architecture of the Jumping Universe*. The essay expresses the urgency of returning to the study of the complex forms of nature, ensuring the coexistence of ecological and cybernetic forms. Jencks cites Ilya Prigogine and, as Lynn had done in the issue of *Architectural Design* dedicated
to folding, the School of Santa Fe and Thom’s theory of catastrophes. The universe, according to the model posited by these scholars, is a complex system that evolves by leaps and bounds (hence the title), the latest of which has led to the current situation, characterised by enormous ecological and demographic problems, in addition to important opportunities. The objects of our era, in fact, are humanised and, at the same time, man is transformed into an object in what is, undoubtedly, a positive process. The refinement of these machines corresponds with the roughness of an architecture based on the formative concepts of a pseudo-rationalist era that makes no consideration of the fact that new technologies are able to be developed because science, having reached a post-modern state, has conquered the four legendary terms of determinism, mechanism, reductionism and materialism; it has thus begun to look at the world as a system with life and an ability for self-regulation, similar to an organism that seeks a progressively better equilibrium through continual changes of state.

How can architecture render this process visible? By acquiring a spiritual dimension and mutating the nature of the forms of its development. This leads Jencks to become interested in organic configurations, fractals and structures that curve and move like the waves of an atom and in anything that represents the spiritual side of mankind, whose role is that of leading the universe towards self-recognition as part of an uncovering of the idea, similar to Hegel’s dialectical process. This also generates an interest in blob architecture, Greg Lynn and, above all, Eisenman, who begins to move towards the neo-organic and the neo-Baroque.

Launched by such culturally authoritative sponsors, blob research, especially in schools of architecture, was extraordinarily popular, though actual built examples are rare. Notwithstanding the efforts of Lynn and many others, focused on the digitalisation of the process through to construction, it is particularly difficult to obtain a convincing result. The construction of complex forms using traditional materials requires a vast and unacceptable amount of labour and the use of numerically controlled machinery to produce complex components. The process is economically unviable for an industry such as that of construction, which is technologically less advanced than other industrial sectors.

In 1997 Kolatan/MacDonald designed a blob for the addition to the Raybould House in Fairfield Corner, Connecticut. They called for a skeleton in wood that recalls a traditional boat hull, the difference being that the wooden ‘ribs’ were cut by numerically controlled machinery. The same year Jakob + MacFarlane won an invited competition for the design of a new rooftop bar at the Centre Pompidou in Paris with a project based on four computer-generated, aluminium-clad blobs, each of a different colour. The project was completed in 2000. In 1997 the Dutch group NOX completed the Water Pavilion for Delta Expo ‘Waterland’ in Zeeland,
Holland. The interior, the result of the succession of 14 ellipses, recalls the stomach of a whale. It is rendered particularly interesting by the use of interactive lighting, sounds and projections. The neo-organic is transformed into the neo-Baroque. The seal on this new aesthetic came with the Staten Island Institute of Arts (1997) by Peter Eisenman. Its wrapping, curved forms are the result of the digital manipulation of pedestrian and automotive paths.

While this passion for complex forms raged, Toyo Ito was pursuing an aesthetic that sought to unite Minimalism with electronics. In 1997 the architectural magazine 2G published his projects together with an essay entitled ‘Tarzans in the Media Forest’. In the essay Ito refers to Marshall McLuhan’s theory whereby the visual society that preceded us has been overtaken by a tactile one. The first manages quantity, forces and weights, while the second works with flows, interrelations and immaterial values.

Let us look – Ito says – at a young boy from our present day and age. It would appear that he cannot live without a cellular phone and other electronic gadgets. These instruments, which wrap him like clothing, are indispensable to him for remaining in contact with the world around him: they keep him within a loop. However, the same need to be a part of and interact with context can also be found in buildings and cities. For example, we can compare a traditional building with a contemporary one. The first is defined by its mass, the organisation of solids and voids, colours, patterns, the system of construction and functional organisation. The second surprises us, instead, because of how it interacts with the surrounding environment: the way in which it captures light and relates to external and internal climatic conditions, placing us in relationship with sounds, smells and colours and ensuring our comfort. If we wish to compare it to a body, we could speak of perceptive and self-regulating systems.

However – Ito continues – if architecture is like an antenna that places us in relation with the external world, ‘it must function as a highly effective sensor to detect the flow of electrons’.

Man, having reacquired this renewed natural dimension, like a new Tarzan can move through a world that has finally been reunified: a world of integral communication and a forest of media.

The metaphor of new architecture is the fluid and, in particular, water – the water in which Mies’s Barcelona Pavilion appears to hover, in which ancient Japanese philosophers saw the principle of life and in which the electronic images on computer screens seem to float. Water is the material that this Japanese architect chooses as the inspiration for his masterpiece: the Sendai Mediatheque, about which more will be said in the next chapter.
2.11 Eco-Tech

According to the critic Catherine Slessor, there are six aspects that define Eco-Tech. Firstly there is the design of expressive structures, resulting from the influx of genial consultants, such as Peter Rice of Ove Arup or engineer-architects like Santiago Calatrava, who do not hesitate to abandon the coldness of High Tech in order to puruse more complex, and even organic, principles. This is followed by the desire to model space with light and play with transparency, something permitted by innovations in glazing technology (larger sheet sizes, structural glass, etc). The third aspect relates to the increased awareness of energy savings, using new materials and products and renewable and natural sources of energy. The fourth characteristic is an attention to context, in order to obtain buildings that are both inviting spaces of urban aggregation and avoiding an appearance that is extraneous to their environment. There is also an attention to interconnections, with traffic networks and systems that manage flows dedicated to the exchange of information. Finally there is an attempt to transform buildings into symbols of society, non-rhetorical monuments, conceived of at the urban scale as public landmarks.

In 1993 the British Government under John Major authorised the extension of the Jubilee Line, the underground railway infrastructure that connects the centre of London with the Docklands. The stations were awarded to: Michael Hopkins (Westminster); Ian Ritchie Architects (Jamaica Road); Norman Foster (Canary Warf); Will Alsop (North Greenwich); and MacCormac Jamieson Prichard (Southwark).

1993 was also the year of the completion of another important infrastructure: the Waterloo International Terminal, designed by Nicholas Grimshaw. It is the English terminal of the high-speed rail line that crosses the Eurotunnel, connecting Paris and London. Grimshaw later inaugurated the Regional Control Centre in Bristol, a building with a studied elegance, in 1994.

During this period Foster completed the Carré d’Art in Nîmes (1984–93), the Cambridge Law Faculty (1990–5) and the Microelectronics Park in Duisburg (1988–96), all of which demonstrate a desire to find a classical scale, while later this architect – perhaps influenced by the digital neo-Baroque aesthetic – would be tempted by curvilinear forms.

Rogers completed the Channel Four Headquarters in London (1990–4) and the European Court of Human Rights (1989–95), using forms that are more faithful to the original language of High Tech, composed of exposed building systems and glass and steel.
In 1993 Will Alsop completed the Hôtel du Département des Bouches-du-Rhône, known as the Grand Bleu, a work that, in the light of the lesson of Cedric Price, declines technology in a fantastic and often playful manner, an approach akin to Pop Art.

A progressively greater tribute to structure can be found in the neo-organic work of Santiago Calatrava. His more important works from this period include the BCE Place Gallery in Toronto (1987–93); the project for the dome of the Reichstag, which opened in four pieces, in Berlin (1995); and the Lyons TGV station (1989–94), with its unsettling organic appearance. His bridges remain his more elegant and essential works, such as the Trinità in Salford (1993–5), supported by a single, inclined pylon and slender steel cables.

Another important work from this decade, though only partially related to the world of High Tech, is the Tokyo International Forum (1989–96) by Rafael Viñoly: an imposing conference and exhibition centre – so much so that it quickly became an urban landmark – containing a gigantic and scenographic plaza with a glass canopy supported by fusiform beams.

2.12 Renzo Piano’s Soft-Tech

In 1997 the Centre Pompidou, only 20 years after its inauguration, was closed for renovations, the result of its immense success: a daily flow of 25,000 visitors, instead of the forecast 5,000. The project called for a renovation of decaying elements and an addition to the existing 70,000 square metres of another 8,000, to be used for cultural activities and services. The project prepared by Piano, for whom High Tech was now a distant memory, did not hesitate to question some of the ideological presuppositions of the original building: he transformed the hall on the ground floor, originally conceived of as a large, covered plaza, into an elegant commercial space; he closed the exterior escalator connection to the first two floors; he limited access to the terraces, now open only to paying customers; he compromised the flexibility of the interior spaces by introducing new elevators. In short, he thwarted two of the guiding concepts that informed the philosophy behind the building, designed in 1971 together with Richard Rogers and Gianfranco Franchini: total public permeability and unlimited transformation.

What is more, the work produced by the office of this Genoese architect was progressively more extraneous to the formal harshness typical of avant-garde research. With the completion of the Kansai Airport in Japan (1988–94), perhaps his masterpiece, Piano definitively earned a place in the firmament of the Star System. He was also on the cusp of obtaining new commissions from important clients, attracted by his innovative, through non-radical research, that was attentive to the psychological comfort of its users, nature and traditional
technologies. The Kansai project features an elegant, double-curving roof, whose interior spaces make use of traditional Japanese colours.

In the project for the Beyeler Foundation Museum in Basel, Switzerland (1991–7), the contrast between two different technologies – a heavy and material system of stone walls and an airy and light glazed roof – is attenuated by the brilliant idea of inserting a dematerialising reflecting pool, inhabited by nymphs, and the decomposition of the volume into planes. Furthermore, the dynamism suggested by the cantilevered roof is contrasted on the interior by square rooms that allow for the ordered distribution of the works of art.

His subsequent works follow the same approach. For example, the Jean-Marie Tjibaou Cultural Center in Noumea, New Caledonia (1991–8) and the project for the Potsdamer Platz in Berlin (1992–2000). The centre, dedicated to the Kanak culture, is characterised by the happy invention of wooden apses that recall historical local structures and which vibrate in the wind, integrating the building within its natural surroundings. Unfortunately, with respect to the original design that called for an internal space surrounded by a cluster of these structures, the final project is a linear slab that is much more banal, though still faultless. In the Potsdamer Platz, Piano manages to reconstruct a fragment of the European city, with its typical urban spaces, avoiding both the excessive rigour of the nearby project by the Italian Giorgio Grassi and the chaos, similar to a shopping mall, of the project by Helmut Jahn for the adjacent Sony Centre. Piano’s project also has the merit of maintaining the unity of a complex that, other than the blocks designed by his office, also features buildings by architects as diverse as Richard Rogers, Rafael Moneo, Hans Kollhoff and Arata Isozaki.

2.13 PAYS-BAS_perspectives

The September 1996 issue of *L’architecture d’aujourd’hui* was entitled ‘PAYS-BAS_perspectives’, dedicated to Dutch architects, and presented by Bart Lootsma, who stated: ‘they take advantage of the current climate of international exchange generated in the eighties, but their ideas, their plans and their buildings can all be described without any qualifications as being original. They relate more to the theoretical developments that have taken place in the Architectural Association in London and American architecture faculties, like those of Cooper Union, Columbia, Princeton and Harvard.’

The issue featured a list of emerging talents who would later become the protagonists of one of the most important architectural phenomena of the late 1990s. They were the architects educated in the wake of Rem Koolhaas, a figure whose intellectual provocations made him an intellectual reference, while his international success made him a professional one. The issue featured Wiel Arets,
van Berkel & Bos, Adriaan Geuze & West 8, MVRDV, NOX, Koen van Velsen and Ton Venhoeven CS.

Wiel Arets came to the public’s attention for his pared-down and schematic works, precise like mathematical calculations, and a prelude to a research oriented towards Minimalism.

Van Berkel & Bos had just completed the Erasmus Bridge in Rotterdam, Holland (1990–6), an urban landmark that, while perhaps too reminiscent of Calatrava’s work, had an important impact on the skyline of the city. They are also the architects of the Villa Wilbrink in Amersfoort (1993–4), a single-family residence in which they successfully applied a design method based on diagrams: the transposition of a functional programme into a geometric scheme that, in turn, was translated into architectural form. This method was later applied in the Möbius House in Het Gooi, Holland (1993–8). This single-family dwelling is organised like a Möbius strip in order to optimise relations between the spaces of work and dwelling.

Adriaan Geuze, with West 8, pursues a form of experimentation with the themes of the natural and artificial landscape, seen no longer as alternatives but as strictly interrelated systems, open to the changing needs of those who inhabit them. One example of this approach is the Schouwburgplein in Rotterdam, Holland (1990–6), a flexible public square capable of hosting numerous events, also made possible by a system of lighting mounted on moveable steel structures that can be adjusted at will, in theory even by local citizens.

MVRDV are moved by the constant search for a rational base upon which to found their projects. However, it is a rationality that, as per the teachings of Koolhaas, always leads to complex buildings that are spatially interesting and substantially anti-classical. This is the case of the De Hoge Veluwe Park in Holland (1994–5), where the apparently traditional entry pavilions are obtained by deforming and re-adjusting, in a Modernist key, the archetypal model of the house-parallelepiped with its double-pitched roof.

Of the work of NOX, L’ architecture d’aujourd’hui chose to present the Water Pavilion for Delta Expo ‘Waterland’ in Zeeland, Holland, which has already been mentioned. Koen van Velsen’s firm were represented by their Megabioscoop in Rotterdam, Holland (1992–6), the cinema built beside the Schouwburgplein, designed based on the principles of diagrammatic architecture. Finally, Ton Venhoeven was presented in two photomontages that demonstrated the numerous spatial themes found in even the most banal buildings.

Though very different from one another, these Dutch architects share common forms of research: an interest in a rational method that justifies the project, an
attention to the relationship between architecture and its context and the landscape, an articulated spatiality capable of containing complex events, the use of poor and industrially produced materials, and a purposefully Calvinist and brutalist approach, with a resulting lack of attention to the precious nature of finishes and detailing. These are the preferences that would allow them to escape on the one hand from the excessive complexity of the hyper-organic nature of digital architecture and, on the other, from the pure surfaces of post-Minimalism. The result is a formidable contribution to the phenomenon of landscape architecture, which we will discuss in the next chapter.

2.14 Pro and Versus a New Architecture

Shaken by new fermentations – blobby forms, the use of new materials, facades covered with large projection screens, dematerialisation, superficial effects – the academic world reacted: often randomly, accusing the new of being nothing other than the product of a civilisation continually more interested in ephemeral trends, in other cases with more even-tempered and reasonable considerations. This is the case with Harvard Design Magazine that, in 1997, dedicated a monographic issue to the theme of ‘Durability and Ephemerality’. Kenneth Frampton, Luis Fernández-Galiano, Henry Petroski and Gavin Stamp sounded the alarm: the danger for new architecture was the loss of consistency, of solidity. The lack of interest in tectonic values, the use of facades separated from buildings, the transformation of facades into projection screens and the wilful application of short-lived materials appeared to confirm this.

Traditional materials, such as brick, stone and wood, Frampton states, were used to create structures that were built to last. For example, the Villa Mairea by Aalto that, after almost seventy years, was still an exemplary construction in which nature and culture, present and past, interact to the point where they almost overlap.

The problem of the duration of materials is, Frampton concluded, a problem of architecture, with its roots in the 1930s, when Le Corbusier dedicated himself to vernacular forms and traditional materials. There are also later examples, such as the research of the Greek architect Dimitris Pikionis, the Italian neo-rationalists and, finally, the Spaniards, led by Rafael Moneo.

An equally traditionalist position was held by Luis Fernández-Galiano who cited Loos, for whom if art is revolutionary, architecture is conservative. Too many designers, Fernández-Galiano claimed, were theorising an ephemeral architecture, preferring the concept of *venustas* to that of *firmitas*. They transform buildings into icons, admired and revered, in the hope that society will care for them in the
long term, independently of any maintenance and management costs, using the example of the Aronoff Center by Eisenman.

For Gavin Stamp many buildings by Stirling, Foster and Rogers revealed themselves to be failures. However, thanks to the architects’ superstar status, the press kept silent about the defects, preferring instead to cover them with exaggerated praise.

A different opinion was held by Ellen Dunham-Jones and Botond Bognar. For the former the problem of durability, beyond any architectural consideration, was now directly connected with production and thus it made little sense to design imperishable buildings. The latter was in full agreement, making reference to the Japanese situation: the Nomad Restaurant designed by Toyo Ito in 1986 was demolished in 1989; the U House, also by Ito was demolished in 1986; a house in Yokohama designed by Kazuo Shinohara in 1984 was substituted in 1994; the Tokyo City Hall by Kenzo Tange, completed in 1952, was demolished in 1992. Not to mention the Imperial Hotel by Wright that was demolished in 1960 to make way for a local branch of an international chain of hotels. Rather than mourning the loss of monumentality and durability, it would be well to assume, as part of one’s poetic, the sign of precariousness, above all if this allows the building to fluctuate through the use of new, sensitive and transparent materials, within an ever more immaterial and dynamic metropolitan reality. Kazuyo Sejima, Kazuo Shinohara, Itsuko Hasegawa, Hiroshi Hara, Riken Yamamoto and, above all, Toyo Ito, demonstrate that it is possible to build masterpieces without being reactionary or conservative, even in the best possible Loosian understanding of the term.

The same theme was also confronted by Domus in a monographic issue entitled ‘Durability’, published the same year. There are articles in favour, for example that of Gregotti. However, the conclusions, in the end, agree with the thesis put forth by Botond Bognar: ‘history – affirms the director of the magazine, François Burkardt – is an unstoppable process and there is no way to turn it back around’; durability is not, in and of itself, a value. For Pierre Restany it was the society founded on the eternal that was obsessed with the values of permanence and materiality; today, instead, we share the understanding, matured from the 1960s onwards, that what is real is not eternal. We can look, for example, at Allan Kaprow, who reduced artistic practice to the spontaneous and volatile action of happenings and performances. Or Christo and Jeanne-Claude, whose works were destined to last for a mere fifteen days. We could also mention artists from the world of Body Art and, in particular, the extraordinary investigator of relationships between the body and space Marina Abramovic; or Yves Klein and his living brushes, the blue revolution and the imaginary flights that intensely rendered man’s need for lightness and immateriality; or Arte Povera, with its use of simple,
perishable and consumable materials. Finally we can look at the landscapes that were made to resonate by the genius of Robert Smithson, or anthropicised and conceptualised by Richard Long and the artists of Land Art. The danger for contemporary culture is not the freshness of the image, its here and now, but rather its freezing, mummifying it in a form that remains immutable over time. The obstinate hope for perennial monuments in the end testifies to a headstrong obtuseness, that we drag behind us since the time of the Egyptians, and which consists of wanting, at all costs, to exorcise death and refuse the deeper meaning of life, which is precisely that of mutability.

2.15 The MoMA Extension

In 1997, some of the world’s leading architects confronted one another in a highly symbolic competition: the addition to the Museum of Modern Art in New York, resulting from the acquisition of new spaces required to give breathing room to another structure that was at the limit of collapse due to its popularity. Ten internationally famous architects between the ages of 40 and 50 were invited: four Europeans – Rem Koolhaas, Wiel Arets, Dominique Perrault and Herzog & de Meuron; four Americans – Bernard Tschumi, Steven Holl, Tod Williams & Billie Tsien and Rafael Viñoly; and two Japanese – Yoshio Taniguchi and Toyo Ito. In June of the same year three finalists were selected, one from each continent: Tschumi (American by adoption); Herzog & de Meuron (Switzerland) and the Yoshio Taniguchi (Japan).

The winning project was announced in December. Unexpectedly it was Taniguchi’s. While a very elegant project, it was conceptually inferior to expectations, and admittedly a balance between nostalgia for the traditions of Modernism and cautious explorations of the new.

The other projects were much more interesting. Koolhaas’ entry was presented, as per the Dutch habit, in theoretical terms. What is the form of a museum for mass society? In what way should we move through its interior spaces? What role is played by storage spaces and vaults with respect to the display spaces? What is the proper lighting for a museum? The answers provided by Koolhaas are offered in two keys: individuality and kinetic effects. Individuality in the sense that the museum – unlike other spaces so intensely used by the public, such as shopping malls or amusement parks – is a space that must create a private relationship with the works of art in individual spaces, almost micro-cells, one for each visitor. Kinetic Effects in the sense that the landscape of the museum, totally artificial, must make use of mechanical devices, lights and other equipment to guarantee the high-speed mobility of users and the works on display. The result was a new Otis elevator that allowed flows of visitors to move, not only vertically, but also
horizontally, along sloping surfaces. The project also explored the virtual, in all its simulatory possibilities, in order to expand the experience of the visitor and transform the museum into a film set, with continually changing stage sets for the paying public.

A similar approach was taken by Bernard Tschumi. The keyword of his research is the term ‘interconnection’ that – as he suggests in the project description – is to be understood in both spatial and conceptual terms. For example, through a sequence of closed and open spaces along paths that alternate environments for art and encounter; a spectacular hanging garden, above, visible from the street, that represents an element of attraction; and finally, by creating interconnections between the permanent and the temporary, the collections of painting and sculpture, between the latter and other departments, between the public space and the spaces of education, between the galleries and the theatre.

For Toyo Ito the museum is also a metaphor of the city – in particular, a metropolis like New York, supported by a hierarchical logic: the succession of skyscrapers, the floors of buildings piled atop one another to infinity, rooms that repeat along the same plane. The new museum could be a lying-down skyscraper, a skyscraper with no centre, that develops horizontally, composed of spaces that follow one another in order to ensure the maximum freedom of use, exactly like a bar code, composed of lines of different thicknesses that follow no predetermined geometrical design.

Finally, for Herzog & de Meuron, a museum is not Disneyland, or a shopping mall, or a media centre. It is a sequence of open and closed spaces, offering different levels of transparency. There are few special effects, no futurist space, but simply a collection of rooms based on a consideration of the artists to be displayed and their sensibilities, not to be mortified by the preponderant ego of the architect. The position of the two Swiss architects is clear. They take note of the discontent for the egocentric approach of the architect, always ready to sacrifice the needs of the user in order to conserve disciplinary values that are often incomprehensible. However, paradoxically, this justifies the choice made by the MoMA curators who, having to choose between Tschumi, Herzog & de Meuron and Taniguchi, in the end opted for the latter, who guaranteed a professionally unquestionable project, inaugurated on schedule, in 2004, in a city that was blanketed with posters declaring: New York is Modern Again.

### 2.16 The Beginnings of a New Season

The controversy between blobs and the almost nothing, in short between the Baroque and the Minimalist that characterised the period between 1993 and 1997, allowed for a completion of the work begun by Deconstructivism. This process
consisted of erasing those architectural trends, for example neo-historicism and Post-Modernism, that focused on what was referred to as autonomy: the design of buildings based on the correct rules of composition, passed down and evolved throughout the lengthy history of the discipline.

In fact, notwithstanding their significant differences, both Blobitecture and Minimalism tended to negate the architectural object – the former in order to transform it into a fragment of nature, the latter to dissolve it entirely.

The freedom from any regulation – which led to forms that ranged from neo-Baroque curves to the transparency of glass boxes – allowed for experiments, in perfect and never-before-seen liberty, with unusual materials, envelope/skins of all types, and unexpected relationships. It also allowed for the introduction within architectural debate of a different notion of the landscape, where architecture and nature play equal roles, to the point where they become confused with one another.

What is more, thanks to new technologies, even the most complex spatial organisations could now be realised. This made it possible to complete projects that would have previously been considered avant-garde utopias, destined to remain on paper. Freed of the esoteric and abstract rules of composition, and closer to the sensibilities of a vaster public, these buildings met with significant success. This success in turn led to the emergence of a new generation of architects, and the beginnings of a new season for contemporary architecture.

3.1 The Guggenheim in Bilbao by Frank O. Gehry

The inauguration of the Guggenheim Museum in Bilbao, Spain on 18 October 1997 was the first in a series of events that signalled the beginning of a period which, from 1998 onwards, would be witness to the completion of numerous works of extraordinary architectural interest. Designed by Frank O. Gehry, the building forced a reconsideration of the very idea of the museum; something that neither the bland renovation of the Centre Pompidou nor the sanitised addition to the MoMA had been able to do. The success of Gehry's building exceeded all expectations: in terms of the flow of visitors – during the first year ticket sales tripled the forecast figure of 500,000; and in terms of publicity – for the media, the building in Bilbao was the building of the century, a cathedral to art capable of competing with the Guggenheim in New York designed by Frank Lloyd Wright.

The success of the Bilbao Guggenheim was further assisted by the voices of dissent, transforming the work into a building-symbol, emblematic of the mutations taking place in the way of designing, financing, building and advertising architecture. One of its most authoritative critics was Peter Eisenman. While he did not attack the building directly, he saw it as an example of the excessive spectacularisation of the practice of architecture. For Rafael Moneo, Gehry’s work was the ultimate example of an aesthetic of individualism and fragmentation, while the Basque anthropologist Joseba Zulaika, in his Crónica de una seducción, spoke of the building as the epitome of cultural imperialism, the indication of a society of images and spectacle, of deception hiding in the shadows of consumerism.

Though opinion may vary on the success or otherwise of the design itself, it cannot be denied that the operation behind the creation of the new museum was an amazing one. Primarily for the choice made by the director of the Solomon R Guggenheim Foundation, Thomas Krens, to propose a franchise of the museum, the same technique used by McDonald’s or Pizza Hut to grant licences for fast-food chains around the globe. Secondly for the fact that the City Government was able to sidestep – in a location such as Bilbao, afflicted by serious financial and productive-economic issues – traditional policies related to the creation of employment in industry, and to choose to build, instead, a museum that would act as a catalyst for immaterial goods – in this case publicity and culture.

There is also the miracle of having given form to a one-of-a-kind sculpture, composed of thousands of components, each different from the next. Rumour has it that the building was designed by Gehry’s office using computerised scanners to transfer information from study models directly into working drawings and from
the latter to machinery that automatically produced the pieces of the building (in reality the process made use of much more traditional techniques). ‘To build the unbuildable’ was the term used by Catherine Slessor in *The Architectural Review*, while Joseph Giovannini wrote in *Architecture* that ‘the computer that has made clouds, waves, and mountains scientifically intelligible, and chaos science possible, is the same instrument that made Gehry’s tumult practicable. The building exemplifies the shift from mechanics to the electronics of our post-industrial age.’

The Guggenheim has both all the fascination and all the volatility of a high-powered image. When asked to describe it, we cannot help but make recourse to a metaphor – perhaps an arbitrary or imperfect one, but in any case one that transcends the materiality of the architectural object: it is a fish, a flower, a phantom ship, a cauliflower, a cloud, a body in movement. It could not be otherwise in a world of architecture that seemed to have suspended the rules of composition, where the exterior no longer reflected the interior – where there is no longer an immediately recognisable correspondence between form and function, or any reference to tectonics, to structural coherence, to the very logic of building.

However, the ease with which the building accepts these images is what guaranteed its success. In reality it is the building, and not the works on display, that attracts the public, making it possible for the Guggenheim Foundation to renounce, without deluding the paying public, the presentation of Pablo Picasso’s *Guernica*, as originally promised.

Bilbao thus became a symbol of an architectural renaissance. The sign that an architectural language – fragmented, complex, non-linear, and with a strong sensual impact – could finally renew a relationship between the public and the work of art. For others, as mentioned, it was proof of a definitive defeat: the collapse of formal values into the meat grinder of the Star System. However, as the building was turned into an emblematic work, used to prove the aforementioned theories, the real Guggenheim slowly disappeared from all discussion, only to be replaced by clichés.

Let us take a look at a few:

One: the Guggenheim is a monument to excess. In fact, the 120-million-dollar cost of the museum remained in line with the original budget, franchising licence included. The cost per square metre was less than that of other museums, and many times lower than that of the Getty Museum built by Richard Meier in Los Angeles.

Two: Bilbao is the first building of the twenty-first century, a masterpiece of the electronic age. This is false: the potentials of the computer are to be found elsewhere and buildings with complex forms were already being completed before
the arrival of the computer age. If we wish to speak of the electronic paradigm, it is only to speak of a new, anti-serial attitude managed by the use of the computer.

Three: for Gehry the sign is more important than reason and the arbitrary takes precedence over the logical. These are inconsistent theses. Bilbao is the result of a specific rationale – which can seldom be reduced to a simplified formula – where each decision was evaluated in relation to external context, to the formal structure of the building, to the choice of materials, to the control of dimensions.

At least four elements of the project are influenced by its context.

The first is the Puente de la Salve, an intrusive and graceless highway infrastructure that crosses the site. Gehry embraced it, building around it and transforming it into a structuring axis of the composition: the bridge acquires the fascination of a colourful and dynamic Pop insertion, while the museum, otherwise located along only one bank of the river, appears to occupy both sides, taking on a territorial scale. The second element is the Nervión River. Gehry extends the building, such that it appears to by lying down along the watercourse. The river facade contains most of the free forms covered with titanium scales: while allusions to the metaphor of the fish or the boat are possible, the primary reason for this decision was to take advantage of the reflections of the metal surfaces on the water. The work appears to grow out of the geography of the site, exalting its luminous qualities. The third landscape invention made by Gehry is the tower, a 60-metre-high object with no real function that wraps the Puente de la Salve, creating a landmark that can be seen from the public square in front of the City Hall: it is both a focal point and an urban landmark.

The fourth contextual move has to do with the integration of the consolidated city, made possible by the two wings that open to embrace the city, defining an urban space.

If we look at the building’s interior spaces we note that circulation passes through 19 display halls, which radiate from a central atrium that, at 50 metres in height (the atrium at the Guggenheim in New York is 35 metres high) becomes the fulcrum of the composition. To further exalt this space Gehry places the entrance to the museum one storey below, with the anti-rhetorical effect that, in order to access the museum, visitors must move down and not up, creating a spiral whose ascending motif is enriched by the intersection, cutting and overlapping of volumes: this is what generates the recurring metaphor of the flower, or the artichoke. For Gehry the error to be avoided was that made in Pei’s expansion of the Louvre, where the entry hall is more akin to the lobby of a luxury hotel. More suitable references for Gehry’s work would be the spatiality of Fritz Lang’s Metropolis, the Merzbau of Kurt Schwitters or Wright’s spiral-shaped Guggenheim
in New York, all of which allude to a level of urban complexity – the same objective, though with very different results, that inspired Bernard Tschumi, Rem Koolhaas and Toyo Ito in the competition for the addition to the MoMA. Here it is also used to justify the pluralism of spatial solutions and the diversity of functional choices, such as, for example, the three different typologies of display spaces of the 19 galleries radiating from the atrium: classical spaces with a traditional form for the permanent collection; non-conventional spaces for ad hoc artistic commissions; and a gigantic loft for temporary exhibitions.

Another important aspect of the project can be found in the materials of which it is made. Practical choices justified the use of the small titanium scales for the cladding of the complex forms. Stone is generally used for regular surfaces, with glazing mediating the joints between the two, otherwise impossible to resolve. The result is that each construction detail, even in such a complex structure, is easy to realise. This ensures a perfect level of finishing that valorises the formal decisions made. We can mention here, as an example, the disappointing finishing of the Groningen Museum in the portion designed by Coop Himmelb(l)au, which runs the risk of losing the dialectic of spaces imagined by the Austrian group in a confused, misshapen collection of forms.

In Bilbao, the titanium finish shines, above all along the river, while the stone, used in those areas that face the city, guarantees continuity with the urban structure. The blue-coloured volume differentiates the administrative functions and is entrusted with the role of enriching and enlivening the public space in front of the museum. The building contains a new synthesis in the work of Gehry, whose previous projects oscillated between simple, static forms, distinct from one another in terms of materials, colours and patterns, and complex and dynamic forms clad with a single material.

Lastly, there is the element of scale. Gehry, following the lessons of Frank Lloyd Wright, compresses and then explodes the spaces of the building; and, to create a perception of the large scale, he articulates them. This is why so many of the spaces that surround the atrium, including the entrance area, are small. This also explains the placement of the large sculpture by Richard Serra, which interrupts the otherwise excessively longitudinal development of the space dedicated to temporary exhibitions.

3.2 The House in Floriac by Rem Koolhaas

A second work of extraordinary interest from the late 1990s is the house in Floriac, near Bordeaux, France (1994–98) designed by Rem Koolhaas. The house belongs to the set of projects in which the Dutch architect confronts the work of Mies van der Rohe. The debt to Mies is clearly revealed in the external appearance of the
building – the long perimeter wall that supports the house and the loggia overlooking the landscape are crowned and surmounted by a cumbersome masonry mass, reminiscent of the Riehl House designed in 1907 by the young Mies near Potsdam, Germany. However, the debt is both more stringent and less restrictive than the eclectic Dutch architect wishes to let on.

The Floriac house was designed for an enlightened couple of art collectors who also required spaces suitable for the reduced mobility of one of the two, confined to a wheelchair.

Faithful to his modus operandi, which includes a theoretical approach to any design issue, Koolhaas created a project-manifesto – perhaps his best synthesis of the theme of the dwelling.

The Floriac house oscillates between the polarity of the private and the un-private, respectively representing the enclosed and restricted space of the interior, and the transparent and free space of the exterior. If we look at the courtyard, or the upper floor that contains the bedrooms, bordered by a massive masonry wall perforated by small ‘portholes’, the house appears to close in on itself. If, on the other hand, we shift our attention to the living room, a glass box that looks out over the landscape, we can observe two distinct references. The first is the model of the glasshouse and, in particular, the Farnsworth House, once again by Mies. The second is the work of the radical architects of Superstudio and Archizoom Associati who, during the late 1960s and early ’70s, pursued the creation of isotropic and open spaces in which the body, free of any constrictions – unrestricted by walls, divisions or impediments of any sort – could move freely through space.

Mies, Archizoom and Superstudio: however, as the extremes of a dialectic of opposites – the open and the closed, the compressed and the exploded, the transparent and the opaque – easy to find in all of the previous projects by this Dutch architect, for example: the Villa Dall’Ava in Paris (1984–91), where the glazed walls of the living room contrast with the compressed volumes of the bedrooms above; the Nexus World Housing complex in Fukuoka, Japan (1988–91), where a dark, rusticated wall protects the privacy of the patio houses that, thanks to the projecting and undulating roofs, appear to float freely as transparent volumes; and the housing projects in Rotterdam, Holland (1984–88) and nearby Amsterdam (1992–3), where the private spaces are gathered around introverted patios, one of which is even protected by a sort of drawbridge, while the public spaces open entirely towards the exterior.

In Floriac, the three levels of the house differ greatly from one another. In fact they are almost irreconcilable: the lower floor, with its underground spaces carved
into the hill, is reminiscent of the spaces of a cave; the middle level, half covered and half open, affirms, as we have seen, the principle of the priority of the void and transparency over the solid and the opaque; finally, the upper level is a world of fragmented spaces, separated from one another by dividing walls that are, in turn, based on two opposing strategies – implosion in the central nucleus of the parent’s apartment and a spiralling explosion in the children’s apartment.

The play of opposites – in this case between stability and precariousness – can also be found in the structure. The house is striking for its technical virtuosity: the significant cantilever and the imposing volume of the third floor suggest the use of a large, reinforced concrete beam. These strong signs are juxtaposed against some unsettling details: the floors are slightly offset with respect to one another, resulting in the sensation of a disarticulated whole that appears almost to be disconnected; the use of different types of columns (double T, round, rectangular), one of which lands in the middle of the garden; a tension rod that pulls the building towards the earth, as if it wishes to take flight.

In order to further the use of differences and opposites, Koolhaas uses aluminium, resins and exposed concrete for ceilings and floors, while the walls are clad using materials with different colours and patterns.

There is also the difference between the stair that leads to the children’s apartment and the elevating platform that connects the lower two floors with the parents’ apartment. The circular stair is obviously impossible for someone in a wheelchair to use, almost an attempt to underline the autonomy of the couple’s children. The square elevating platform, on the other hand, ensures access to all parts of the house: clearly oversized and little more than a simple element of vertical connection, it is also a room that allows the owner of the house to occupy a moving office that can be stopped, as necessary, near the kitchen, the living room or the sleeping area. However, in this case, the elevator is more than a piece of technology. It is a machine that guarantees the co-penetration of continually changing points of view. It is an element of spatial liberty and, simultaneously, a multiplier of perception whose movement constantly changes the architecture of the house.

Koolhaas’ choice to place a mechanism of movement at the centre of an otherwise static space has numerous precedents, including the structures designed by Archigram, whom he met at the Architectural Association in London. It is also no secret that Koolhaas was widely influenced by the first project for the Centre Pompidou designed by Gianfranco Franchini, Renzo Piano and Richard Rogers, which called for an entirely flexible structure and moving floors.
The debt to Archigram does not end with the invention of the room-elevator. We can also find it in the design of specific technical apparatus, which enriches the liveability of the house.

Nothing, suggests Koolhaas, can be taken for granted. Every desire can become the pretext for a formal invention. This is the case with the electrical rails used to hang paintings that can be slid out onto the terrace and contemplated *en plein air*, or the motorised glass door on the north facade that is over eight metres long and which travels more than 11 metres.

In the Floriace house, as in all of Koolhaas’ work, there is also an understanding that one form, as consolidated as it may be, can be replaced by another, and even more unusual one, if it represents the correct solution to a problem. The use of portholes instead of traditional windows does not affect the compactness of the wall and, at the same time, due to their being placed in strategic positions, they guarantee perspectival and visual perforations. Instead of the typical structural system of beams and columns, there is a preference for a more complex system of counterweights that, by channelling forces to the central part of the structure and the exterior of the built volume, drastically reduce the number of columns required inside the living room.

It is not difficult, in this play of formal inventions, to trace a repertory of references. The round, rectangular and T sections refer to the columns used by the protagonists of the Modern Movement; the electric track is an evident homage to the Maison de Verre by Pierre Chareau; the motorised glass wall is reminiscent of the Tugendhat House by Mies van der Rohe; the ‘Swiss cheese’ wall, with its sequence of portholes, in some cases angled, can be traced back to the New Babylon House by Constant Nieuwenhuis, alluding to the Modernist myth of transatlantic ships and, simultaneously, to the Post-Rationalist and Brutalist openings in Ronchamp, in this case organised according to the logic of the strip window.

Intensely programmatic, the Floriace house makes no concessions to the sentiments and myths of domesticity. Aesthetics, Koolhaas suggests, have little to do with psychology in its intimate definition. It is the relationships between space and the body and the interrelations between interior and exterior that ensure the functioning of the object. ‘This house,’ the client stated, ‘has been my liberation.’

**3.3 The Jewish Museum in Berlin by Daniel Libeskind**

On 24 January 1999, little more than a year after the opening of the Guggenheim, the Jewish Museum by Daniel Libeskind was inaugurated in Berlin. The impressions generated by the work were in no way inferior to those of Gehry’s museum.
Crowds of visitors flocked to the building, once again more important than the exhibits on display (what is more, there was not enough time to properly set them up before the inauguration). A palpable sense of euphoria permeated the global architectural community. After the terrible 1970s and 1980s, they were now witnessing a particularly golden period for architecture, marked by the projects of what would become a new cultural and sociological phenomenon: the Star System, composed of such figures as Foster, Koolhaas, Hadid, Rogers, Piano, Nouvel, Fuksas, Calatrava and Herzog & de Meuron.

The history of the Jewish Museum project dates back to 1988. The ten years that passed between the preparation of the project and its completion only slightly tempered the novelty of the proposal, certainly antagonistic with respect to contemporary cultural choices being made in Berlin. Designed in the same year that Libeskind was invited to participate in the Deconstructivist Architecture show, the museum is a product of this climate: disarticulated geometries, fragmented spaces, strident detailing and industrially produced materials. It is a Deconstructivist approach that alludes to the title ‘Between the Lines’, a reference to the motif of a snaking line intersected by a straight one. The first corresponds to the zigzag form of the display spaces, while the second is a longitudinal cut that cars into the others, creating inaccessible interior courtyards that symbolically represent the voids left by the Holocaust. The building is flanked by a concrete structure, the Holocaust Tower, another void, and an artificial garden – the Garden of Exile – composed of 49 sloping concrete prisms containing an equal number of trees.

Highly rhetorical, the work is built on a series of axes that translate the themes, symbols, geographies and vicissitudes of the Jewish faith into a spatial language and, in particular, the history of the Berlin community, prior to its extermination at the hands of the Nazis.

First and foremost there is a correspondence between the forms of the project and the home of Jewish intellectuals in Berlin. There is a reference to Moses und Aron by Arnold Schönberg and the theme of the impossibility of the spoken word. There are also intersections between the project and the list of deportees recorded in the Gedenkbuch, the book containing the alphabetical lists of names, dates of birth, dates of deportation and places of extermination. Finally, there are correspondences with the Berlin evoked by Walter Benjamin in his book Einbahnstrasse [One-Way Street].

All of these intersections, hermetically described in the writings and drawings that accompanied the presentation of the project, are at best obscure. However, this is precisely the fascination and secret of the game. We know that Libeskind, like a shaman, has revealed – or perhaps it would be better to say constructed –
correspondences. We know that these correspondences between addresses, Schönberg, Benjamin and the Star of David are arbitrary to common sense but, at the same time, necessary for the poetic imagination. It is precisely for this reason that we are fascinated, accepting the de-structuring of the categories of the intellect in order to prefigure a more complex physical and metaphysical universe that we feel, or hope to intuit, as our own.

We are reminded of the reflections of Carl Gustav Jung on synchronicity – man’s ability to connect, in a single discourse, diverse phenomena, not tied to one another by any nexus of apparent causality, but in reality simultaneously present in the profound structure of history and our Id. There are also the poetic lessons of the masters chosen by Libeskind: from John Hejduk, his professor at Cooper Union, and Aldo Rossi, with his ability to order poignant and disarticulated fragments through memory, to Peter Eisenman, the incurable mystic of an Absence – the way in which, based on a certain religious and philosophical tradition, man is allowed to enter into contact with a Higher Being – rediscovered by emptying forms of their traditional meanings. Finally there are the writings of Jeffrey Kipnis on the ‘Forms of Irrationality’, theorising the overlapping of universes of diverse discourses as escape routes from the banal rhetoric of building.

However, if the Jewish Museum is a masterpiece, this is not only a result of the esoteric correspondences between symbols and events; it is a masterpiece primarily for having synthesised the theme of the Holocaust in the unusual image of a building-fortress whose interior contains continuous paths, with no spaces of rest, forcing one to proceed without stopping, almost creating a labyrinth, where only the spaces-corridors of the upper floors actually display anything. This attitude differs greatly from that experimented with by Gehry in Bilbao, which hinges on the wrapping, though strident centrality of the atrium. Here space is a metaphor not of the city, but of the importance of a race of people: a symbolical allusion to the pilgrimage of mankind, of his very existential condition – that of being a part of history.

The ‘raum’ (room), the space of rest and dwelling in the words of Heidegger, no longer exists. It has given way to the ‘mauer’ (the wall) that delimits a path, predetermining a trajectory and prefiguring a condition of nomadism.

In Libeskind’s museum these concepts are not accentuated or resolved through allegories. They are translated into a spatial experience that involves the senses – primarily sight, touch and hearing. They are forced, in the passage from light to dark, from hot to cold, from bustling noise to total silence, to confront our existential condition. In this way we experience what appears to be only a mental construction as a bodily experience.
3.4 The KKL in Lucerne by Jean Nouvel

In 2000, the year after the opening of Libeskind’s Jewish Museum, Nouvel completed the Culture and Convention Centre (KKL) in Lucerne, Switzerland, a project that he won in a 1989 competition.

The building is characterised by its projecting roof of over 12,000 square metres, set some 23 metres above the lake which it overlooks. The roof, which cantilevers out over 45 metres on the lake side, has the primary function of underlining the landscape qualities of the building, placed along the horizon line. At the same time it creates a visual unity for the different volumes that contain the functional programme: a 1,840-seat concert hall, an auditorium, a museum and numerous spaces for dining. Built in copper, the underside of the roof is clad in aluminium panels; it is also a screen that reflects the lake, creating a dematerialising effect that vaguely recalls the Fondation Cartier in Paris while simultaneously perfectly defining a large space below, the Europlatz, populated by various open-air activities.

In fact the building, even while presenting itself as a collection of interior spaces, is conceived of as an exterior: an object so strongly rooted to its context that it should actually have been built atop the lake. Faced with a refusal of permission to proceed in this manner by Swiss authorities, Nouvel opted to bring water – and thus its luminous reflections – inside the building in channels designed to define its various functional parts that, based on a design that is as simple as possible, are placed one after the other, following the logic of addition theorised by Koolhaas on more than one occasion.

What makes the building complex is not the functional programme, so much as the material differences of the spaces, with specific colours and patterns that vary from steel-grey grilles for service areas to blue and flame-red panels in the concert hall. Designed as a fragment of the ecological-metropolitan landscape – its form appears to have been devised to be observed from ad hoc points of view within the urban landscape of Lucerne – the interior of the building opens towards the lake with a large panoramic terrace that overlooks the entire region. A sign that, even in this era of the artificial, it is possible to creatively engage the natural world.

3.5 The Un-Private House

In July 1999 the MoMA in New York inaugurated the exhibition entitled ‘The Un-Private House’. The show presented 26 houses by 26 architects, some of whom were already famous (Rem Koolhaas, Bernard Tschumi, van Berkel & Bos, Herzog & de Meuron and Steven Holl), while others were already on their way (including
MVRDV, Guthrie + Buresh, Hariri & Hariri, Preston Scott Cohen and Shigeru Ban). The exhibition focused on the theme of the private residence, a choice explained by the show’s curator, Terence Riley, in the introductory essay to the catalogue: it is often individual owners who, when building their own home, entrust the work to innovative designers, anticipating and experimenting with changes that will later take place in society.

It is thus easy to foresee that an analysis of 26 houses will reveal trends which, if nothing else, are in the phase of development. Which ones? Primarily the re-evaluation of the traditional idea of the house, understood as a private realm, an island of tranquillity, the antithesis of the chaotic nature of urban space. On the contrary, the projects presented appeared to focus on the creation of an organism that was permeable to the forces of the external world. This mixture, above all visual, is assisted by large glazed surfaces. Up to this point, there is nothing really new: we need only mention the glasshouses of Pierre Chareau, Mies van der Rohe and Philip Johnson, or the evanescent apartment buildings by Connell, Ward and Lucas, criticised by their inhabitants in the 1930s for being too transparent.

There was also a complex involvement of media elements that projected external events onto the interior walls of domestic spaces, transforming the building into a transmitter-receiver capable of producing events itself. This is the case in the work of Hariri & Hariri, who introduced virtual presences – whether they be chefs downloaded from the internet who help prepare a meal, or guests for an evening – while cladding the exteriors of their buildings with liquid crystal display panels to project computer-generated images. Or, in the work of Frank Lupo and Daniel Rowen, television screens can be seen from any point in the house, allowing its inhabitants, who work in the world of finance, constantly to monitor global markets. There is also the unsettling project by Diller + Scofidio where an external video camera captures a landscape that can be projected on virtual windows. Finally, Herzog & de Meuron presented a villa for a media art collector, in which almost all of the walls lost their materiality, becoming projection screens.

Together with the use of creative media, there was also an accentuated process of typological desegregation, with permeable and non-segmented environments. There was thus a reduction in the subdivision of internal spaces into separate rooms for specific functions, or for the clear distinction between private and public zones. In urban terms this represented a total abandonment of the monofunctional approach typical of the ideology of zoning, with the introduction within the dwelling of zones for work and production.

Four phenomena of social relevance led to the development of the un-private house:
One: a culture that was less worried about the idea of transparency. While Frank Lloyd Wright – Terence Riley states – never ceased to remind us of the importance of privacy, George Orwell warned of the dangers of Big Brother and Edith Farnsworth suffered in Mies van der Rohe’s glasshouse, today we inhabit a world where the presentation of one’s private existence is both accepted and in some cases desired. We need only mention the tranquillity with which we speak of private facts in public spaces on the telephone, or the success of transmissions that publicly present private, even intimate facts, or the idea of observing and being observed as we walk down the street, sit in a public square or visit a shopping mall. Voyeurism and narcissism appear to be new dimensions of metropolitan man and are surely one aspect, not necessarily negative, to be considered in the design of spaces, even residential ones.

Two: the traditional family – two parents and at least two children – was now a minority; the number of singles and atypical families was on the rise: couples without children, those with only one child, common-law spouses, homosexual couples. For these new social nuclei, with their increasingly informal and often dynamic lifestyles, more projected towards the exterior world, it made little sense to consider the hierarchical and cubicle-like subdivision of space. In the words of one of the 26 designers, Mack Scogin: ‘There are no rooms, just situations.’ Consequently, the most appropriate typology appeared to be that of the loft, a single environment separated by moveable partitions. Even in those cases when distribution was still based on the identification of specific environments, they co-penetrated one another, creating a continuum: the watchwords of this new architecture were blurring, a term found elsewhere in this text, and flexibility.

Three: the introduction, at the vast scale and thanks to new technologies, of work-at-home situations. If the professional whose office was beside/inside their home was once a rarity, personal computers and internet connections now made it possible to transform any desk into a branch office. This generated an interest in working from home and proposals whose objective, as demonstrated by some of the houses presented in the exhibition, was the improvement of the quality of one’s microenvironment and the management, within the dwelling, of complex work-related activities.

Four: a reduced level of attention to the symbolic nature of the house, understood as a refuge that offers protection from the external world. There was also a certain instability of the rhetoric of the hearth, which led architects to a programmatic brutalism that included a declared insensitivity to the psychological and functional aspects of the new concept of domesticity. For the citric Herbert Muschamp, it was now perhaps necessary to design ‘a shelter from shelter’, a refuge that protected us from the idea of the house-shelter. This led to a return to a tradition that has its
precedents in the sanitised formal ideology of a portion of the Modern Movement but which, as part of its exclusive snobbism, found an undeniable reference in Peter Eisenman’s House VI in Cornwall, Connecticut (1972–75), where the sublime nature of the spaces is directly proportional to their scarce usability. This is also the case, for example, with the houses of Shigeru Ban, one of which was presented at the MoMA. Furnishings were almost entirely eliminated, walls disappeared and even the sanitary services were exposed, all in the name of the openness and freedom of contemporary dwelling.

### 3.6 The Möbius House

In formal terms, as affirmed by Riley in the introduction to the catalogue, there is a face-off between two trends: one focuses on blobby forms, the other on boxes. If we wish to divide the group into two teams, on one side we could place Peter Eisenman, van Berkel & Bos, Greg Lynn, Stephen Perrella and Foreign Office Architects; the other team would be composed of Rem Koolhaas, Toyo Ito, Waro Kishy, Kazuyo Sejima, Bernard Tschumi and Shigeru Ban.

The former work with plastic surfaces, managing structurally ambiguous forms in which it is difficult to separate the interior from the exterior, above from below, the volumes from the surfaces. Their work privileges interconnections, rather than clear spatial distinctions. For this group architecture is a continuous, wrapping and sensitive skin that will eventually be rendered intelligent using electronic sensors. It may also – and here we can mention the work of Greg Lynn – be industrially produced, varying its form in relationship to the desires of the client, in the same way that it was now possible to purchase a custom-designed pair of Nike shoes in an interactive, on-line store.

The second trend moves within the box and is not extraneous to neo-Modernist and Minimalist trends, perhaps revisited by experimenting with new building materials.

The first trend can be found in the Möbius House (1993–98) by van Berkel & Bos (UNStudio), already mentioned in the previous chapter. It is a dwelling near Amsterdam, designed for a couple of professionals who also use the home for their work. Their requests were very specific: primarily the insertion of the house within the natural environment, of exceptional value above all in consideration of its proximity to a forest and a watercourse. Their request was for a home with a traditional nucleus composed of a living room and bedrooms; two separate offices, one for each member of the couple; a self-sufficient and fully independent apartment for guests; and finally, a two-car garage. Lastly, the office was asked to provide sufficient space for the couple’s art collection, primarily paintings by the CoBrA group.
The working method adopted by Ben van Berkel and Caroline Bos to meet the client’s needs was the same as that used in previous projects, a theory based on considerations of Gilles Deleuze’s reflections on Abstract Machines. It consists of an a priori refusal of traditionally consolidated models or typologies. Instead, they proceeded by organising a rather complex diagram of the functions and interactions requested, creating an ad hoc form, with a highly metaphorical value, that spatially represented the particular nature of the problem being analysed.

In this case it was the Möbius strip – a folded, figure-of-eight form. This is both an enclosed volume and an open surface, interior and exterior, a delimited object that is also a collection of spaces which almost follow one another in a sequence – immediately making clear, through its image, the desire for an interrelationship between domestic space and the natural environment, the autonomy of the couple and an ordering of the flows of functions that follow one another inside the house, throughout a 24-hour period.

The Möbius House generated immediate interest. Bart Lootsma, writing for Domus, was so impressed by the method used by van Berkel & Bos that he compared it to that of Koolhaas: the diagrammatic approach of the former would allow for the exposure of the particular qualities of each single case, while the typological approach of the latter would inevitably lead to the production of serial objects. L’architecture d’aujourd’hui presented the conceptual presuppositions in a lengthy article by Axel Sowa: a sign that the diagrammatic method was looked at with growing interest, even by those outside of Holland.

However, it must be noted that, notwithstanding the novelty of such a complex geometry as the Möbius strip, in reality UNStudio simplified the curvilinear and continuous form into a sharp-edged design that moves away from the logic of hypersurfaces. The final result is closer to the fragmented forms of Deconstructivism. Connie Van Cleef, writing for The Architectural Review, picked up on this contradiction and expressed her perplexities: ‘Although the interlocking edges of the Möbius strip suggest the formal organisation of the building, the mathematical model is not literally transferred to the architecture. The angular, jutting geometries bear little physical resemblance to the smooth Möbius curves … Its complex, fragmented form has more in common with an inhabitable sculpture or Expressionist film set and its stark materiality and spatial perversions do not conform to conventional notions of gentle, informal domesticity.’

Joseph Giovannini was of a different opinion. For him the house was a work of architecture of significant poetic intensity: ‘Van Berkel & Bos simultaneously creates complexity and difference within a unifying gesture.’ He continues: ‘The firm is thus taking a philosophical stand at the edge of current theoretical debates:
The world is complex, yes, and perhaps even beyond comprehension, but there is an underlying order.’

3.7 A Dutchness in the State of Architecture

In 1998 the Architectural Association held a symposium entitled ‘Is There a Dutchness in the State of Architecture?’. The title is emblematic of the growing interest for what was by then being called the ‘Dutch Phenomenon’, a condition stimulated by a particularly favourable economic situation and the political desire to valorise new talent, creativity and youthful energy. It was also a phenomenon that, since its initial presentation in 1996 in *L’architecture d’aujourd’hui*, could now boast a number of high-quality built works in Holland that had a notable influence on international architectural debate, including, to mention a few: the Möbius House by van Berkel & Bos, which we have just discussed; the Minnaert Building in Utrecht (1994–97) by Neutelings Riedijk Architecten; the Delft Polytechnic Library (1993–98) by Mecanoo; the Police Station in Boxtel (1994–97) by Wiel Arets; the WOZOCO apartments for the elderly in Amsterdam (1994–97) and Villa VPRO in Hilversum (1993–97) by MVRDV.

For Bart Lootsma, the Dutch success was the result of an ability to operate in harmony with the second modernity that resulted from the organisation of the world during the era of globalisation. This meant, on the one hand, abandoning the romantic myth of the architect-genius who wishes to control the process from the first sketch to the last detail and, on the other, the introduction of flexible instruments that make it possible to provide a satisfying response to the requests made by the numerous subjects involved in the construction of a project: from politicians to builders, from clients to users.

Form, as per the precedent set by Koolhaas, is never the presupposition, but rather the final product that finds its justification only in the logical reasoning – as paradoxical as we wish – that substantiated it. This is what we find in the diagrammatic architecture of van Berkel & Bos or MVRDV, whose design process involves organising large amounts of data in two- and three-dimensional geometric figures called ‘datascapes’.

The resulting architecture produces innovative images that are often anything but banal in geometric terms and, while they make direct reference to the theory of complexity and systems, they are not always inspired by the aesthetic of the fold and the blob.

On the contrary, in many cases the objective is a certain formal reduction that has more than a few points of contact with the new international style that was being delineated in many other Western situations, beginning with the rediscovery and
re-elaboration of Minimalism in the early 1990s. This is the theory proposed by, for example, Hans Ibelings, in the book in which he describes Supermodernism, characterised by the overcoming of the symbolist romanticism of Post-Modernism and Deconstructivism. The architects who can be said to belong to this trend do not propose hidden meanings, using strong imagery to hide concepts that are extraneous to the world of architecture. Rather they seek to work with the existing, ‘at the service of modernisation, which is currently most visible in the process of globalisation’, and in this they resemble ‘the last phase of Modernism, during the 1950s and ’60s, when there was a strong tendency to accept prevailing conditions as inescapable facts’. This leads to logical and effective forms and a realistic attitude that in turn leads to the acceptance of the complex metropolitan realities that define our era, no longer seen as stimuli for stylistic revolutions, but as concrete situations to be improved through specific interventions.

If the Dutch approach involved, on the one hand, what would later be defined by Ibelings using the term ‘extreme logic’, on the other it represented a method of designing that led to the creation of an ‘artificial landscape’, cancelling the divisions between nature and artifice, between the object and the surrounding context. At the roots of this approach there is a culture that has always seen the landscape as the result of man’s actions (design) and thus – unlike others, where construction is seen as act of violence towards nature – has never considered the two terms to be antithetical. There is also another condition by which the Dutch live within their landscape as if it were a single metropolitan reality, perceiving it as a fragmented space of sudden passages from the city to the countryside – in the words of Adriaan Geuze, ‘as an addictive sequence of events’. Finally, what generates the ‘artificial landscape’ is the logical method of designing, where form does not have an object-based, but rather a relational, value. It thus avoids self-referential sculptural objects, in order to join, as part of a single formal organism, all of the factors at play and connect, primarily, the building with its context. Of the most successful examples of artificial landscape we can mention the Delft Polytechnic Library, the roof of which is a sloping, grass-covered surface where students can study outside; or the Dutch Pavilion for Expo 2000 in Hanover, Germany by MVRDV (2000), where trees and shrubs invade the various floors of the building; or the Secret Garden in Malmö, Sweden (1999–2001) by West 8, where vegetation is organised based on the principles of multistorey construction.

Another group that moves along the same lines of Dutch landscape architecture is Foreign Office Architects (FOA), run, as mentioned above, by Alejandro Zaera Polo and Farshid Moussavi. Their masterpiece, the International Port Terminal in Yokohama, Japan (1995–2002), is an over-100-metre-long, three-storey structure – roof, terminal and parking – that does not emerge from its context, but
connects, almost without any interruption, to the urban fabric, offering the city, at the level of the roof, an enchanting artificial plane from which to observe the port. The interior, thanks to an obsessive study of the sections and structures (they designed over 100, each different from the next), is a welcoming and articulated space, with more than a few elements of Catalan inspiration.

### 3.8 New Landscapes, New Languages

In September 1997 Bruno Zevi investigated the formal implications of a renewed relationship with nature in a conference entitled 'Paesaggistica e linguaggio grado zero dell’architettura’. For this Italian critic, when architecture becomes landscape it must free itself of the rhetoric of pre-codified artistic languages in order to draw upon what Roland Barthes, since the 1950s, had been calling Degree Zero – a non-artificial and essential way of speaking, devoid of any unnecessary use of adjectives.

Whether this actually took place in the following years is difficult to judge. What is certain is that the late 1990s witnessed the emergence of a significant plurality of proposals for the construction of a new landscape, many of which led to the development of research that we have already seen arise in previous years, and six of which appear to be of interest here.

#### A: The Organic Landscape

For James Cutler it was necessary to return to a traditional ecological attitude of ‘first nature, then architecture’. This approach generated horizontal buildings, covered by grass and built of natural materials, primarily wood, based on the indications provided earlier by architects such as Obie Bowman, the designer of the Brunsell Residence in Sea Ranch, California (1987), a fascinating house that blends into its context.

Less mimetic, though no less organic, are the investigations into the integration between architecture and the landscape made by the Australians Glenn Murcutt and Sean Godsell and the American William Bruder.

The designer of refined and lightweight single-family dwellings with a Modernist flavour, Murcutt was awarded the Pritzker Prize in 2002 for his essential structures, designed to enter into osmosis with the exuberant Australian landscape. When working on larger projects, such as the Arthur & Yvonne Boyd Education Centre in West Cambewarra, New South Wales, Australia (1999), he proceeds by ensuring the minimum impact on the local ecosystem, moving along the contour lines of the site, using natural materials, carefully controlling the building details and never losing the correct relationship with scale that unites the building, the user and the surrounding space. A similar approach is taken by Godsell who, to enable his
projects to harmonise with their context, eliminates the rigid divisions between interior and exterior, using wood or rusted steel grates – as, for example, in the Kew House, Melbourne, Australia (1996–97) and the Carter/Tucker House in Breamlea, Victoria, Australia (1998–2000).

Also the designer of refined, single-family dwellings, Bruder revives the organic tradition, using contemporary forms and materials. His Central Library in Phoenix, Arizona, completed in 1996, enters into a dialogue with the Monument Valley thanks to the giant, copper-clad walls that curve in one direction and undulate in the other. His other library, the Teton County Library in Jackson, Wyoming (completed in 1998) and the Museum of Contemporary Art in Scottsdale, Arizona (completed in 1999) are two projects that, without renouncing their presence, blend into the Western American landscape, partially as a result of their primarily horizontal appearance.

B. The Post-Organic Landscape

There is another approach that results from organic and expressionist matrixes, drawing upon modern technologies and their formal image. Developed primarily in Germany, this movement, typified by the work of Thomas Herzog, does not hesitate to use new building materials and/or to re-engineer traditional building systems. The work of this Munich-based architect is characterised, as noted by Peter Buchanan, by the understanding that ‘in sustainable architecture form owes more to architects who question accepted practices and reorient their work using scientific knowledge, than to the fireworks of self-appointed avantgardists who disguise old technology in spectacular new clothes’. In 1996 Herzog published the book *Solar Energy in Architecture and Urban Planning*.

Herzog’s more interesting projects include the German Pavilion for Expo 2000 in Hanover (1999–2000), a structure supported by slender, organic columns that embody the principle of ‘performance form’ – a conformation that is not determined by preconceived notions, but which develops from the logical response to issues raised by design and context, above all when it is natural.

We can also mention the work of Günter Behnisch & Partner, the other important German office investigating themes of sustainability. Their work presents the logical development of an activity that, back in the 1970s – in the Olympiapark in Munich (1972), designed with Frei Otto for the Olympic Games – led Behnisch to begin experimenting with lightweight and innovative structures. In the 1980s he anticipated, in order to better articulate his buildings within their natural context, the aesthetic of Deconstruction and Californian landform architecture in his library for the Catholic University in Eichstätt, Germany (1985–87). This approach led to what Behnisch calls ‘situational architecture’: a method of building that adheres to
the task, time and site that, similar to the ‘performance form’ posited by Herzog, shares the need of protecting the design activity from the dangers of arbitrariness and formalism. This method was successfully applied in the New Bonn Parliament (completed in 1992) and the Geschwister-Scholl-Schule in Römerstadt, Germany (1992–4), together with numerous other projects begun by the office in the late 1990s, beginning with the Schleswig-Holstein Regional Insurance Centre in Lubecca, Germany (1992–97). All of these feature open structured plans that are inserted into the surrounding landscape and large, glazed internal spaces that allow for micro-climatic conditioning and optimum environments, enabling them to compete, in terms of the quality of light and spatial variety, with the natural environment. Lastly we can mention the IBN Institute for Forestry and Nature Research in Wageningen, Holland (1992–98) where the exterior landscape, rendered more luxuriant by a well-managed plan for the planting of new species, enters into contact with the building’s interior, also rich with natural vegetation, through the insertion of a large glass wall. ‘We imagine,’ the office stated when presenting the project, ‘that over time the building will help the landscape become more intricate, varied and autonomous than that which presently exists.’

The buildings by the French duo Françoise-Hélène Jourda and Gilles Perraudin are also focused on reconciling new technologies with the search for a new, sustainable landscape.

In 1998 they completed the Law Courts in Melun, France, a building endowed on its exterior with a canopy supported by tree-like columns. On the interior a garden helps to avoid the unpleasant and barracks-like aspect of legal buildings. Their Training Academy in Herne-Sodingen, Germany (1992–99) is a transparent greenhouse that contains various buildings and public spaces. A ‘solar field’ of over 1,000 square metres of photovoltaic cells transforms the complex into a power plant that produces 1 megawatt of energy.

After dissolving the partnership with Jourda, Perraudin continued his activity, focusing on the recovery of the quality of an ancient material such as stone – industrialising its extraction, transportation and installation in an attempt to reduce the costs of manual labour, based on the assumption that traditional construction methods have ecological potentials that it would be foolish to lose simply because we are now unable to insert them within the logic of contemporary building processes.

C. The Technological Landscape

In Great Britain, the designers of High Tech – or Eco-Tech as we called it in the previous chapter – began to focus, with progressively more effort, on research into environmental topics, seeking to reconcile innovation with energy savings and
definitively shaking off a label that referred to them as anti-ecological builders of steel and glass boxes which consumed great quantities of natural resources. One clear example is the project for the renovation of the Reichstag in Berlin by Foster & Partners (1992–99) where the destroyed dome of the German Parliament was reconstructed and transformed into a panoramic glazed structure with a shading mechanism that rotates 360 degrees, following the movement of the sun. The organic forms of nature become the inspiration for curved and wrapping shapes.

This is the case with two projects by Foster’s office that changed the skyline of the city of London: the Swiss Re Insurance Tower (1997–2004) whose unusual shape, determined by bioclimatic studies, has led to its baptism as the ‘Gherkin’; and the new City Hall (1998–2002), home to the offices of the Mayor of London and the Greater London Authority (GLA). The exterior of the latter is has a complex curvilinear form, while the interior is filled with lightweight spiral ramps that rise up towards the sky without any apparent supports.

We must also mention the fascinating project by Nicholas Grimshaw, a revisitation of the truss structures of Buckminster Fuller, for the Eden Project in Cornwall, Great Britain (1995–2001). It is proof of the uninterrupted connection that joins research during this period, above all in the field of High Tech, with the intuitions of the radical culture of the 1960s and ’70s.

There is also the house in Pembrokeshire, Wales (1994–97) designed by Future Systems, which is rendered almost invisible within its stupendous natural context, without in any way renouncing a modern form. So much so that, as Marcus Field points out, the shell could have been entirely prefabricated in a shop – the fulfilment of a dream for Archigram.

D. Soft-Tech Contextualism

Between 1997 and 2001 Renzo Piano completed four projects with a significant impact on the landscape, and was about to finish a fifth: the renovation of the historical port in Genoa, Italy (1988–2001); the Jean-Marie Tjibaou Cultural Center in Noumea, New Caledonia (1991–98); the reconstruction of the Potsdamer Platz in Berlin (1992–2000); the Aurora Place Office and Residential Buildings in Sydney, Australia (1996–2000); and the Parco della Musica Auditorium in Rome (1994–2002).

As proof of the fact that this Italian architect follows no single strategy, but rather an empirical and pragmatic method that allows him to calibrate his response in relationship to specific contextual conditions, the five works are very different from one another. In Genoa the technological choices make reference to the nautical world: a tensile structure reminiscent of the sails of a boat, and a panoramic elevator supported by steel spars. In New Caledonia, where nature remains
uncontaminated and the traces of local culture can still be felt, Piano designed a complex of 10 wooden apses of differing heights, inspired by local, historical cabin structures. Built of wooden slats, they are inserted within their context, vibrating when hit by the ocean winds and producing a sound similar to that of wind in the trees. In Berlin, where the objective was that of creating a piece of the city, Piano proposed the construction of an Italian-style neighbourhood, designed at the scale of man, with an articulated fabric of streets and public squares, flanked by terracotta-clad buildings. In Sydney, with its vertically developed downtown, Piano works to humanise the theme of the skyscraper, rendered energy-efficient by a natural ventilation system that also improves the urban landscape. Finally, in the Auditorium in Rome, the three shells of the concert halls, designed like the resonating cavity of a musical instrument are clad with lead sheeting, creating a dialogue with the domes of the city’s churches. They are organised around a central open-air theatre (the cavea). Their organic and blob-like forms ensure a contemporary presence that avoids being over-powering, within the Flaminio neighbourhood, a part of Rome in which residential structures alternate with parks.

E. The Metaphorical and Metaphysical Landscape

A less pragmatic and more poetic and abstract approach is that taken by the Japanese architect Toyo Ito, who completed the Sendai Mediatheque in 2001. For Ito the new landscape is the result of the synthesis of nature and technology and has the force of a simple and effective image, both ancient and modern: that of running water. In fact, water has always been related to the idea of life and movement, so much so that it was evoked by the Greek philosopher Heracles in the image of the current of the river, always different and always the same. Furthermore, the liquid element, as a result of its ability to acquire almost any form, is highly suitable to representing the flows of the electronic society.

As a result, the Mediatheque is designed like an aquarium, the floors of which are connected by circular wells: they allow light to filter in from above, contain the vertical connections and the fibreoptic cables that carry flows of information. The wells are transformed into focal points of the composition by steel columns that recall bamboo stands along the river banks, while artificial lighting is used to create the effects of water: for example, the garage is lit with an azure that recalls the ocean.

The patterns etched onto the glass facade modulate sunlight, while the varying floor-to-floor heights, designed with a studied and Oriental imbalance, give rhythm to what would otherwise be a simple glass box.
During this period even Herzog & de Meuron began to demonstrate, and to a growing degree, a sensitivity towards the theme of the landscape. This was achieved by questioning the very concepts of nature and artifice. On the one hand they demonstrated the artificiality of that which appears to be natural: for example, the use of stone or wood in unusual ways that exalt their geometric and abstract qualities. Or, vice versa, the naturalness of what seems to be artificial: for example the patterns of thermal insulating materials, in some cases exposed behind exterior glazing panels. The result is a physical world that is simultaneously metaphysical, made up of continuous surprises that leave us amazed at the richness of the infinite and unexpected relationships that exist between things, their forms and their structures. This can be seen, for example, in the Dominus Winery in Yountville, California (1995–97) where the walls of the building are made of gabion baskets. The building simultaneously appears to be fragile and massive, ancient and contemporary. On the interior light filters between the stones, filling the space with suggestive contrasts of chiaroscuro. In the Pharmaceutical Research Centre for the Basel Hospital, Switzerland (1995–99), what from a distance appears as an elegant, though cold and anonymous, building with a glass facade, reveals itself, up close and thanks to the skilful use of transparencies, to be a universe composed of complex fractal geometries, the basic element that organises the most fragmented natural landscapes.

Less successful, on the other hand, is the project for the creation of the Tate Modern in London (1994–2000). However it was this project – consisting of the reuse of a gigantic industrial building by Sir Giles Gilbert Scott – which, due to the importance and visibility of the commission, launched the duo on the international scene.

F. Dis-Architecture

If for Ito nature is to be sublimated, through metaphorical re-elaboration, in the abstract forms of architecture, for Emilio Ambasz and James Wines the problem is the inverse: it is architecture that must bend to meet the whims of nature, return to a natural state, even at the cost of losing its artificial aspect.

For some time both architects, who can boast a militant role in the Radical movements of the 1960s and '70s, had been developing and presenting their post-architectural theories under the headings of ‘dis-architecture’ or ‘an-architecture’. However, it is only during the period in question – also the result of the experiments being made by younger architects working on the theme, such as Edouard François and, for certain aspects, François Roche – that their work, previously snubbed or scarcely considered by critics, was re-evaluated.
The ACROS Building in Fukuoka, Japan (1990–95) by Ambasz is a conference centre designed to disappear, transforming itself, as its vegetal covering grows, into a sequence of hanging gardens. The only emerging element is the cut that marks the entrance, whose form alludes to the symbolism of archaic architecture and, simultaneously, the inhabitation of a grotto.

After completing the promenade and the Arabian Pavilion at the Seville Expo in Spain (1992) and a park in Chattanooga, Tennessee the same year, James Wines went on to complete numerous other projects of significant environmental interest, though they remained on paper: particularly notable are the Museum of Islamic Arts in Doha, Qatar (1997) and the United States’ Pavilion for Expo ’98 in Hanover. In 2000 he published *Green Architecture* and was busy working on two projects in Italy, one of which – the sculpture garden in Carate, Brianza – was completed in 2006. Both projects demonstrate a progressively more decisive ecological approach, where the construction of architecture becomes an integral part of the organisation of the landscape – so much so that, in the end, the two elements are almost indistinguishable from one another. It would not be out of place to state that nature is the new building material, also because, as Wines himself states, ‘glass curtain walls are hardly avant-garde icons any more – in fact they have become the ultimate right wing symbol’.

**G. A Sculptural Approach and Landform Architecture**

Moving in an opposite direction with respect to that proposed by Ambasz and Wines, we find those architects who wish to create a new landscape, beginning with the construction of sculptural objects or, as in the case of landform architecture, by materialising in one work, with strong lines of plastic energy, the flows and forms of the surrounding context.

The projects of the Spanish architect and engineer Santiago Calatrava, as we have mentioned elsewhere, are the result of an observation of structural principles that generate natural forms. During this period he completed the elegant Ponte Bianco, a pedestrian bridge over the Nervión River, near the Guggenheim Museum in Bilbao (1990–97); the City of the Arts and Sciences in Valencia, also in Spain (completed in 2006); and the addition to the Milwaukee Art Museum in Wisconsin (1994–2001). These buildings and spaces are reminiscent of gothic forests or living hybrid structures, suspended between the distant and Palaeolithic past and an imaginary future worthy of science fiction. However, there is an excess of invention that never leads to a simplification of the structural forms – for example removing material and weight – but rather a process that makes them much more complex. The result is that – and this can be seen above all in Valencia – the works capture attention and generate curiosity, while tiring one’s eyes with a
continual play of references, with the end result that they are perceived as being redundant.

The year 2000 was witness to the tragic death of Enric Miralles, an architect destined to become – as demonstrated in the previous chapters – one of the protagonists of the new millennium. His best projects, balanced between an organic Expressionism and Deconstructivism, were posthumously completed by Benedetta Tagliabue. They are characterised by a formidable tension with the landscape, the creative use of rough materials and a decidedly chromatic approach. Examples include the new Scottish Parliament in Edinburgh (1998–2004) or the renovation of the Santa Caterina Market in Barcelona, Spain (1999–2004), the latter of which features a striking ceramic tile-clad roof whose coloured surface transforms what is usually a forgotten part of any building into a fascinating artificial landscape.

The Landesgartenschau, a pavilion designed by Zaha Hadid in Weil am Rhein and completed in 1999 to host events related to a gardening show, represents a decisive shift, one could even say naturalistic and environmentalist, towards the construction of new landscapes. The building is tied to its site by curving lines that hint at both the paths that cross the park and the fluid lines of nature. At the same time, through the dynamic architectural decomposition of the building, Hadid charges the site with a plastic energy that was otherwise lacking. A similar method is also employed in her successful 1998 competition-winning entry for the new Contemporary Arts Centre in Rome. This time the theme is that of a cultural machine, located on a 3-hectare site in the Flaminio neighbourhood (the same that hosts Renzo Piano’s Auditorium) that will be home to a museum for temporary exhibitions, experimental multimedia spaces, an educational wing and independent and extra-institutional activities. Hadid proposed a building whose form is the result of different generating lines, this time tied to existing urban realities. The objective was that of creating a living system, conceived of as a field of forces, navigated by visitors attracted by the varying distribution of points of density inside the structure. The elements of vertical circulation and oblique volumes are located at points of confluence, interference and turbulence. The building is a system with multiple directions, filled by an uninterrupted flow of energy, where architecture loses its consistency as an object, becoming a piece of the urban landscape.

### 3.9 New Landscape: The West and East Coast

A similar sensitivity, sculptural and vital to the relationships between architecture and the environment, was developed, in particular, by architects working in Los Angeles.
Frank O. Gehry’s Experience Music Project in Seattle, Washington (1995–2000) demonstrates a new, and surprising, declination of the theme of the building-landscape. The museum further develops the design principles employed in Bilbao, consisting of the creation of sculptural masses clad with metal panels. However, here he complicates the process by introducing colour and abandoning the contextualism of a Baroque matrix (the two wings embracing the city, the obelisk-like tower, etc) that characterises the Guggenheim. The museum, returning to the pop imagery of the building-icon tested in the entrance to the Chiat/Day offices, is reminiscent of Jimi Hendrix’s broken guitar, to whom the museum is dedicated. It is precisely this clearly declared extraneousness to the urban context, and the involving energy of its masses, somewhat strident and blobby, that creates a project that was immediately accepted by the city. The public was attracted by the digital instruments that transform the environment into an interactive experience, complemented by the fluid flow of the building’s interior spaces.

Though obliged to follow the rigid rules imposed by the head architect of the city of Berlin, Hans Stimmann – the alignment of the street and the use of the same materials as in other buildings in the city – Gehry managed to create another surprising work with the DZ Bank Building (1995–2001). The closed exterior volume, ordered by a sequence of openings that are plastically carved into the facade, is juxtaposed against the fascinating interior spaces, illuminated by a glass skylight and enlivened by the presence of pavilion-sculpture, the form of which vaguely recalls a horse’s head – a motif that, together with the fish, belongs to the architect’s figurative imagery.

No less fascinating is the approach to landform architecture pursued by Morphosis. In Los Angeles, at the time home to the recently completed and imposing complex of the Getty Center designed by Richard Meier, Morphosis were demonstrating that it was possible to develop a more decisive and energetic attitude. As mentioned previously, the work of Morphosis is based on two recurring aspects: a gestural approach and relations. The first produces dynamic volumes that are both intense and almost violent, as if generated more by nature than by the ordered composition of masses. The second questions the categories of interior and exterior, and the relationship between the body and architecture. In 2000 Thom Mayne completed two works that resulted in his receiving the Pritzker Prize in 2005: the Diamond Ranch High School in Pomona, California (1993–2000) and the Hypo Alpe Adria Centre in Klagenfurt, Austria (1996–2000). The horizontality of the former enables it to blend into the landscape, which is further enhanced by the open-air space-path where ‘cantilevered volumes project dramatically into space, rooffscapes fold and bend like shifting geological plates’. The second project ‘gives voice to ... conflicting forces, harnessing the dynamism of global connectivity and
anchoring it to an activated land surface; its charged forms break the earth’s crust, while they also maintain a dialogue with the rural countryscape.

Even more intense is the work of Eric Owen Moss, the third protagonist of the Los Angeles architectural scene, who pushes the limits of research in projects such as the parking structure and offices of the Wedgewood Holly Complex in Culver City, Los Angeles (1999) or the Mariinsky Cultural Centre in St Petersburg, Russia (2001). In both projects the architectural image appears to slip away, assuming the precarious aspect of natural forms when they are subjected to intense, dynamic tensions, for example during an earthquake.

One architect inspired by the work of Mayne and Moss is Michele Saee. In his work the lessons of Deconstructivism and landform architecture coexist with formal exuberances and plays of light and matter deriving from his Iranian origins, together with a refined spatiality resulting from a period of study in Italy, where he came into contact with the Florentine avant-garde.

Less sculptural and more intellectual is the approach taken by the architects of the East Coast, spearheaded by Philip Johnson.

After working with Gehry on the design of the Lewis House in Cleveland, Ohio (1989–95), a villa where kitsch and pop come together, Johnson sought to develop his own brand of postmodern Deconstructivism that was not extraneous to his passion for curved forms and new digital trends. The results, as demonstrated by the project completed with Alan Ritchie for the Children’s Museum in Guadalajara, Mexico (1999) are refined sculptures that have little to do with the digital experiments being made by the latest generation for whom complex forms are not preconceived – as if they were Platonic forms – but the result of interrelations involving the user and context.

During this period Peter Eisenman, undoubtedly influenced by the work of Greg Lynn, was attempting to identify new techniques of design based on a reflection on the instruments offered by the digital revolution. In his projects for the United Nations Library in Geneva (1995) and the Virtual House (1997), Eisenman defined a method in which the architect does not act directly to create form, but manipulates the parameters that determine it. To this end, using a grid that is later deformed, he activated a fixed number of external forces, or attractors, each of which, in turn, can be related to context – for example the force of the wind, the importance of a certain exposure or a line of communication. By varying the influence of the attractors – it does not matter if this is based on scientific reasoning, symbolism or an entirely arbitrary approach – he modifies the form of the building that is thus determined completely by these external factors and no longer by internal principles of function.
What is more, by using an approach that makes little distinction between the natural and metropolitan landscape, Eisenman continues to experiment with techniques of composition borrowed from digital culture, such as layering (working in overlapping layers), scaling (working with shifts in scale), folding, warping and morphing (the deformation of surfaces and volumes). This process led to the design of numerous interesting projects, one of the most significant being the cultural centre in Santiago de Compostela, Spain, begun in 1999. The building is designed at the scale of the landscape, almost mixing with the contour lines based on an articulation of geometries that result from a reading of the site.

Finally, this line of research is flanked by the neo-phenomenological work of Steven Holl who, during this period, began to move in a clearly naturalistic direction. After the Kiasma Museum in Helsinki (1993–98), whose form is based on a metaphor suggested by the human body – the inversion of optical nerves that overlap one another to reach the opposite hemisphere of the brain – in the Sarphatistraat Offices in Amsterdam (1996–2000) he uses a perforated metal screen to cover the concrete finish, which is also treated with blocks of different colours and chromatic intensity. The resulting building shimmers in the light and produces a sensation of visual instability, reminiscent of Impressionist paintings from the second half of the nineteenth century and the early twentieth century, in particular the *Waterlilies* by Claude Monet. The use of light and colour ensures that the building becomes an integral part of its surrounding environment.

### 3.10 A New Avant-Garde

Thanks to the projects completed at the end of the last century, the research of more innovative architects began to respond to the perplexities of conservative critics, meeting with an almost unlimited success, reinforced by the growing attention of magazines.

It is the realm of digital and blob architecture – or, in the acute irony of Kurt Andersen, ‘post-Bilbao blobitecture’ – that appears to generate the most important novelties. In particular the experiments of Greg Lynn who, unlike so many other architects fascinated by new forms, independently of their structural coherence, attempted to use the computer to retrace the dynamic forms of living organisms.

Despite the disappointing results of the Presbyterian Church of New York (1995–99), a building he designed in long-distance collaboration with Michael McInturf and Douglas Garofalo, the approach taken by Lynn appeared fertile enough that a 2000 issue of *Time* magazine listed him as one of 100 possible innovators of the future. To support his design hypotheses he produced numerous fascinating installations and publications, illustrated by his captivating renderings.
In 2000 Lynn, together with Asymptote, was invited to represent the United States at the Venice Biennale. For the occasion he proposed a laboratory involving students from Columbia University, to define what he called the Embryological House. The idea was that of creating a dwelling based on the same criteria used to produce Nike shoes or Ford automobiles: ‘The trend in many industries,’ Lynn explained, ‘is to use flexible manufacturing in which computerised machines can make a range of components.’ The house was constructed using double-curved aluminium panels, supported by a steel and aluminium structure. The fact that the panels could vary in terms of form and dimensions made it possible for the house to assume different shapes, as if it were a moving or growing organism. Lynn went on to say: ‘If you design a seed, you can grow endless variations from it. But all of the information needed for any variation is encoded in the original.’ However, the objective revealed itself to be too complicated and the house, based on the prototype and planned for 2003, was never put into production.

The work of Asymptote can be placed along a cyber-platonic line, focused on the creation of forms in which the virtual and the real come together. We can mention, as an example, the Virtual Guggenheim Project (1999), where the information available on-line is rendered concrete, spatially represented in the form of architectural images while, vice versa, the real spaces of the museums managed by the Foundation were converted into virtual, on-line models. The group also designed the Technology Culture Museum located on the East River’s Piers 9 and 11 in Manhattan, a project with wrapping forms and an interior filled with ramps that offer views of the works on display from unusual vantage points. Unlike a traditional structure, this museum is interactive and spatially flexible, both in plan and elevation: the floor of the exhibition area, for example, can disappear, revealing a large pool of water, while the ramp above can be reconfigured.

Other American protagonists, both native and by adoption, who began to work with the blob or, in any case, with complex geometries include Kolatan/Mac Donald Studio, Karl S Chu, Nonchi Wang, Reiser + Umemoto, Preston Scott Cohen and Ammar Eloueini. The latter produced projects enlivened by a play of light filtered through subtle screens. Given that these installations were located in protected environments, such as theatres, commercial spaces or museums, they were built of lightweight and ephemeral materials that well describe, in figurative terms, the tension between the immateriality – of light, design and movement in space – and the concrete qualities of the body.

To complete the panorama, we can briefly mention the work of the trans-national offices OCEAN NORTH and UFO. They represent a new and interesting phenomenon that is the result of the aggregation of young professionals who met their partners while attending foreign study programmes at such schools as the
Architectural Association in London, the Berlage Institute in Rotterdam or New York’s Columbia University. One of the members of OCEAN NORTH is Kivi Sotamaa, a Finnish architect whose work varies between the search for new geometries and the organic inheritances of Alvar Aalto. UFO, with its offices in London, Korea and Italy, gained attention with its competition-winning entry for the new Sarajevo Concert Hall in Bosnia-Herzegovina (1999). The fluid interiors of the project are almost entirely below ground, in order to respect the morphology of the site.

3.11 Landscapes or Aesthetic Objects?

For many architects a reflection on the theme of the landscape does not necessarily lead to a new aesthetic of innovative and complex forms. In reality, many architects, who still feel strong ties to the Modern Movement and a distance from the experiments of the avant-garde, see the research into the integration between architecture and the landscape, urban or rural, as the antidote to an excessive aestheticisation of the practice of architecture and, above all, as the means to avoiding the creation of sculptural objects that are extraneous to their context.

This, for example, is the critical view taken by Kenneth Frampton who, in an interview with Günther Uhlig, has this to say: ‘I think perhaps that landscape is of greater importance than architecture. I personally think that the landscape should be given greater emphasis in architecture schools. Architecture as the cultivation of the landscape seems to me what ought to be about at the end of the century and not the creation of endless aesthetics objects.’ When asked about the success of the ‘Un-Private House’, he juxtaposes the issues faced by the architects invited to participate in the MoMA exhibition against ‘the concerns of critical architects such as Alvaro Siza or Tadao Ando who are by no means deluded about continuing the project of the Enlightenment but who at the same time assume a certain responsibility for the cultivation of the landscape and the integration of their works to the ground.’

The relationship pursued by Álvaro Siza with the landscape is the result of a decomposition resulting from a plastic reflection on Cubism – Siza is also a sculptor – and a reflection on the necessity of offering sites a lasting and non-ephemeral sign and, finally, a rereading of the organic tradition, in particular the work of Alvar Aalto. The difference is that while the latter refers to the Nordic atmosphere and its materials, first and foremost wood, Siza seeks instead to capture that of the Mediterranean. This results in a prevalence of white plaster and a more defensive approach to sunlight – which, in Southern Europe, is decidedly more intense. Siza’s University Library in Aveiro, Portugal (1988–94) hints at the lessons of the Finnish master in the slight curve of the volume and the spatial
qualities of the multistorey reading room, lit from above by skylights. Traces can also be found in two other important works – the Serralves Foundation in Porto, Portugal (1991–99) and the Faculty of Science and Information in Santiago de Compostela, Spain (1993–99), both of which play with a plastic articulation of the exterior volumes and the dynamic qualities of the interior spaces: the former with a compact plan that frays at the edges, opening towards a complex internal patio, while the latter is based on a comb-like plan that opens towards the surrounding landscape. The Portuguese Pavilion at Expo ’98 in Lisbon, with its monumental forms that recall the architecture of the Fascist period, is partially offset by the lightness of the roof that covers the open-air plaza. The significant engineering issues raised by its 60 x 85-metre span were resolved in collaboration with Arup Engineering (the interiors of the pavilion were entrusted to Eduardo Souto de Moura). An openness towards the landscape can also be found in the Santa Maria Church in the Marco de Canavezes district of Porto, Portugal (1990–97), where the long window creates a relationship between the external and natural world and the interior space dedicated to prayer. We can also mention the anachronistic – for its forms that recall colonial architecture – University Rectorate in Alicante, Spain (1995–98), with its courtyard of porticoes reminiscent of some historical parade ground.

Even the Japanese architect Tadao Ando raises some opposition to the kaleidoscope of images of new architecture and metropolitan chaos by proposing a cold, though intense, Minimalism based on the contrast between nature, matter (with a preference for concrete) and light that very closely resembles the poetics of silence of Louis Kahn. The resulting works of architecture are not very welcoming or inhabitable and comfort is replaced by contemplation. The projects play, by creating a precarious equilibrium, with couples of opposites, such as the relationship between interior and exterior, between abstraction and figuration, part and whole, and simplicity and complexity. Ando has stated that his primary sources of inspiration are Piranesi and Albers, citing two antithetical figures: the first was attracted by the glories and remnants of history, inspiring a concept of the landscape obsessed with the memory of classicism, while the second extends towards geometric abstraction and simplification.

This Minimalist rigour is clearly displayed in the new headquarters for Giorgio Armani, the Teatro Armani in Milan, Italy, completed in 2001.

The landscape dimension of Piranesi can be found, instead, in the Benetton Research Centre in Treviso, also in Italy (1992–2000), where Ando is overtaken by a nostalgia for classicism, demonstrated in sequential rows of columns in reinforced concrete, evocative of archaeological remains.
The neo-Piranesian search for geometries that decompose as part of a convulsive dialectic which oscillates between order and disorder can be found in the Awaji-Yumebutai International Conference Center in Tsuna-gun, Hyogo, Japan, completed in 2001. This modern Hadrian’s Villa hangs in the balance between the abstraction of forms and the citation of exotic works of architecture, with its fascinating play of terraces topped by flowers that vaguely recall the atmospheres of India.

Working along lines similar to those pursued by Álvaro Siza we find the work of Rafael Moneo, the designer of the National Museum of Roman Art in Mérida, Spain (1980–86) mentioned elsewhere in this text, a building that does not hesitate to refer to themes of Roman spatiality, wrapping them with flat, brick-clad arches. The master of many contemporary Spanish architects, whom he shared a golden era in late-1980s Spain, and professor at many important universities – from Lausanne to Harvard, where he was Chairman of the Architecture Department from 1985 to 1990 – Moneo has always managed to avoid the opposition between experimentation and tradition. He has done this in the name of an aesthetic tied to the inheritances of Modernism, though open to and accepting of new input. This leads to the denial of any personal approach and the search for a design quality that goes beyond the power of the image. There is also a certain eclecticism, not without its nostalgia for the architecture of the past, that leads him to design very different buildings. His more contextual works include the block that contains the House of Culture in Don Benito (1991–97) and the Murcia City Hall (1991–98), both in Spain. The first features a brilliant corner resolution, the play of openings and changes in colour. The second is notable for its elevations: the main facade is clad in rhythmically perforated local stone, vaguely reminiscent of the Italian constructions of the Fascist period. A more contemporary image can be found in the Auditorium and Conference Centre in San Sebastian, Spain (1990–9), two irregular and transparent sloping volumes, which perhaps owe something to the work of Herzog & de Meuron. His Moderna Museet (museum for modern art) in Stockholm (1990–98) is a successful insertion within a landscape marked by the presence of natural and historical elements, and the Gregorio Marañón Hospital in Madrid (1996–2003), a block dropped into the urban structure of the Spanish capital, likewise demonstrates Moneo’s ability to work with context. His Museum of Fine Arts in Houston, Texas (1992–2000), a box enlivened by a few well-placed cuts, and the Cathedral of Our Lady of the Angels in Los Angeles (1996–2002), a rhetorical and out-of-scale structure, demonstrate the limits of an attitude that often approaches the urban landscape in a monumental and classicist manner.
3.12 Aesthetics, Ethics and Mutations

The direction of the seventh Venice Architecture Biennale was entrusted to Massimiliano Fuksas, who chose the provocative title ‘Less Aesthetics, More Ethics’. To underline the marginal role played by architecture in contemporary urban phenomena, as well as the danger of its definitive shelving, he prepared a giant megascreen for the event that displayed, in a sequence of images as chaotic as it was effective, the countless problems faced by a global metropolis. For Fuksas: ‘Self-referential works of architecture, with their gaze permanently on the past, are no longer of any interest: we all live along a borderline, with continuous crossings and incursions.’ In such a difficult and contradictory world, it no longer made any sense to imagine a resolution to problems that made recourse to formalisms, attractive styles or sophisticated architectural languages.

What was necessary, instead, was a new aesthetic that, overcoming nostalgias and classicisms, is capable of looking at phenomena as they are, capturing their energy and unexpressed potential, and accepting their contradictions. ‘The URBAN MILITARY MODEL, with its plan and planning, cannot resist against the energy of a magma in continuous mutation. Any rigid structure will explode into a thousand pieces: only those who have the intelligence to change together will survive. Drawing energy, and emitting it.’ This results in the acceptance of experimentation and innovation, against tradition and the academic approach. Using this key, we can examine the exclusion of numerous architects from the exhibition and the euphoria of those invited to participate, above all the younger generation; a euphoria that could also be found in the national pavilions of those countries that shared the choices made by the exhibition’s Italian director. First and foremost there were the Americans who, as we have seen, called upon two young professors from Columbia University, Hani Rashid and Greg Lynn, entrusting them with the responsibility of running an experimental workshop to examine new technologies.

By highlighting the contradictions and, together, the opportunities offered by metropolitan realities, Fuksas focused attention on a theme that had been interesting a growing number of critics and architects for some time. If it is true, as Kurt Andersen observed, that many architects from the newest generation proved themselves to be allergic to social and political involvement, it is also true that during this time, and in many places, we acquired an understanding of the fact that the city had been transformed and that if we wished to act within it, it must be studied and analysed from new and more effective points of view.

On 24 November 2000, the Arc en rêve centre d’architecture in Bordeaux inaugurated an exhibition emblematically entitled ‘Mutations’. The show was
curated by, amongst others, Rem Koolhaas, Stefano Boeri and Sanford Kwinter. The first presented the work that he had been carrying out for some years with his students at the Harvard Design School, focusing on urban realities in China and Nigeria, in addition to the impact of shopping on the contemporary city. Stefano Boeri presented the work of the Multiplicity in USE (Uncertain States of Europe) research group, investigating the profound changes that globalisation is causing in cities as different as Mazara del Vallo, Belgrade, Pristina and San Marino. Stanford Kwinter dealt with changes to American cities and, in particular, Houston, a metropolis that was historically averse to constrictions of urban planning.

The images that accompanied the exhibition were primarily statistics, diagrams and a significant number of photographs by well-known photographers, including the Italian Francesco Jodice. The objective was that of demonstrating that the world – as stated on the last page of the exhibition catalogue, covered with the large text WORLD=CITY – will tend more and more to resemble a city. Numerous clichés keep us from seeing it as it really is and understanding its development. This results in the necessity of organising alternative and targeted strategies, even if they are programmatically partial, focused on substituting the traditional urban masterplan with bigness, the urban landscape, diagrammatic techniques and other instruments defined by recent architectural research.

3.13 The Eleventh of September Two Thousand and One

Both ‘Less Aesthetics, More Ethics’ and ‘Mutations’, even if still far from the hyper-problematic and often pessimistic attitude that would plague the years to come, marked an inversion in the trend with respect to the first and second halves of the 1990s, when the complexity of the world was counterbalanced by an almost unlimited faith in the liberating powers of art, science and the digital revolution. It was still a time when the experience of Bilbao – a city on the verge of bankruptcy saved by the regenerative powers of cultural innovation in the name of globalisation – appeared to be the exemplification of a method that could be easily copied.

This cycle ended with an economic crisis, following the collapse of the bubble created on the stock market by the listing of shares in new economies – companies that bet everything on the Internet – many of which lost over 90 per cent of their listed value. This was the end of a golden era that, supported by financial markets in the midst of a speculative boom, pushed along the economies of the Western world and stimulated, with levels of growth in the double digits, those of emerging countries – India and China in particular.

A series of scandals shook the world’s faith in the system when it was discovered that many companies had falsified their budgets, listing, with the complicity of
banking institutions, junk titles that fooled many investors. At the same time journalistic investigations began to reveal that globalisation concealed new and intolerable forms of slavery, implemented through the delocalisation of manufacturing to parts of the world whose labour forces were not governed by any union rules.

Technology – fostered by the Internet, low-cost flights and real-time communications, one of the primary motors of development and change – was now looked upon with fear. The warnings of a growing climate of suspicion towards the digital world was the panic – which turned out to be unfounded – of a collapse of the information system caused by the so-called Millennium Bug (the anticipated failure of a computer’s internal clock to process the number 2000). There was also a call for the ‘slow’, required by the senses to mitigate against the ‘fast’, imposed by electronic interaction. Finally, there was the success of apocalyptic writers and thinkers, such as the architect and philosopher Paul Virilio, who looked at progress in catastrophic terms.

The definitive blow to the entire system of values came on 11 September 2001 when two aeroplanes were hijacked and piloted by Islamic terrorists in a suicide attack against the Twin Towers in New York, which were completely destroyed. A third aeroplane hit another building-symbol: The Pentagon.

Markets around the globe, for months on the downturn, had such a violent reaction that the entire world, only a few days after the attacks, held its breath and waited for the reopening of the New York Stock Exchange, fearing that, together with a collapse in shares, they would be witnessing the collapse of the entire Western economy.

Faith in globalisation, in the creative and problem-solving power of innovation seemed to have definitively disappeared. We discovered, after years of hope and optimism, that not only was the world a complex place, but it was also impervious to reason, or at least this is how it appeared. It also became clear that Western culture was not so easy to export and that, while the tools of the digital revolution were capable of reducing the number of problems, by speeding up processes they generated new ones, multiplying them and creating, above all, immense levels of resentment in those who were excluded. Further complicating this situation was the extreme reaction of the Americans, who declared war on terrorism in Afghanistan and, successively, in Iraq. A phase of expansion was replaced by a phase of implosion, where the new technologies that were to have liberated mankind were progressively used for military and repressive functions. This could not help but provoke reconsiderations and new questions, even in the field of architectural research. The warnings – not without a certain aesthetic self-indulgence – launched by ‘Less Aesthetics, More Ethics’ and ‘Mutations’, now
appeared to be prophetic, if for nothing else, for having indicated the need for a radical change in direction.

3.14 Starting Over

The years between 1998 and 2001 present an interesting parallel with those between 1926 and 1932. Both can be referred to as heroic periods in the history of architecture that produced works of extraordinary interest, not to mention a considerable number of true masterpieces. Each of these periods was directed by architects working within avant-garde movements, crowning over a decade of research and investigation. Their creativity was stimulated by a fervid social and cultural context, in burning acceleration and driven, in one case, by the mechanical revolution and, in the other, by its digital counterpart. In short, the imperative of the standard and that of the individual.

The completion, during both periods, of formally mature and technically convincing works contributed to the success not only of their authors, who became the recognised protagonists of an international movement, but of the very movement that they represented. This had immediate repercussions, in terms of emulation, on the younger generations, resulting in the diffusion of a new aesthetic approach. However, this success also marked the end of the heroic period, and the beginnings of a stylistic routine that did not hesitate to make use of a-critical repetition and pre-packaged formulas. In fact, the baptism of the International Style in 1932 finds a parallel in the beginning of the Star System in 2001. In both cases the aesthetic certainties acquired were placed in a state of crisis by historical events – for the former by the rise and/or consolidation of important dictatorships (Hitler, Stalin and Mussolini), and for the latter by the global turbulence (the wars in Afghanistan and Iraq) that followed in the wake of the attacks on 11 September 2001. Euphoria was replaced by anxiety, exposing the contradictions, retreats and setbacks. At the same time we were witness to the discovery of original and unexplored fields of research.

How should we start over? Undoubtedly – as we will see in the next chapter – we can refer to the new ethical awareness that emerged from the ruins of the attacks and wars, together with a new relationship with nature, convincingly defined between 1998 and 2001 from an important plurality of viewpoints and within the most vital fields of research.
Part 4 Chapter 4. Trends: 2002–7

4.1 The World Trade Center

‘Let me put my cards on the table. It’s important to me that the spire is shaped in a way that recalls the Statue of Liberty. And I want the tower to be 1,776 feet high, so the building stands for something substantive, the Declaration of Independence. In the end, this is what matters to me.’

With these words, as he tells us in his biography, Daniel Libeskind, recently named the winner of the competition for the masterplan for the World Trade Center, defended his project in front of David M Childs, the director of SOM, that architect selected by the developer Larry Silverstein, and the figure responsible for Libeskind’s removal from the job. It is interesting to note that by underlining the symbolic aspects of his architectural design, Libeskind manages to exposes Childs’ simpler, and more commercial, concerns.

The symbolic nature of the terrorist attack on the Twin Towers must be countered with an equally symbolic, though less forceful, gesture, something that can be achieved only by focusing on the higher values of American civilisation: its openness towards foreigners in search of a better future and the culture of freedom.

Of the various participants in the competition for the reconstruction of the World Trade Center, Libeskind was most successful in translating this concept into form, as demonstrated in a rendering of the new Liberty Tower, a twin sister for the Statue of Liberty, the first image encountered by immigrants arriving in America.

The competition, held in September 2002, was anything but simple, due to the complexity of the related themes: an emotional and symbolic component, significant economic interests, the intricacy of such a delicate urban area in the heart of Manhattan, and considerations related to the future and issues of security. Of the over 400 aspiring participants, the other selected participants were: Foster & Partners; THINK group, directed by Rafael Viñoly; United Architects; Peterson/Littenberg Architecture; Skidmore, Owings and Merrill (SOM); and, finally, an association between Richard Meier, Peter Eisenman, Charles Gwathmey and Steven Holl, baptised by some as the Dream Team, and by others as the New York 4.

The choice of the seven design teams – made by New Visions, a group of 21 architects, engineers, urban planners and landscape experts – was a very balanced representation of architectural trends: one exponent of Deconstructivism (Libeskind) and one of High Tech (Foster); top architects from the New York scene (The Dream Team); representatives of the new ‘blob’ generation (United...
Architects); two important professional groups (SOM and THINK); and, finally, architects sensitive to New Urbanism and the theories of Leon Krier and Prince Charles (Peterson/Littenberg).

The projects were presented to the public from December 2002 to February 2003 in the Winter Garden of the World Financial Center, drawing over 80,000 visitors, who left over 10,000 comments. The website set up by the Lower Manhattan Development Corporation (LMDC) received over 8 million hits. The popular imagination went into overdrive in attempting to give each project a nickname: ‘The Kissing One’ (Foster), ‘Tic-Tac-Toe’ (the Dream Team), ‘The Skeletons’ (THINK) and ‘The One with the Circle’ (Libeskind). This resulted in an unintentional and pitiless level of rhetoric, combined with a certain formal self-indulgence that the competing architects should have been careful to avoid. The greatest weakness was to be found in the projects by the groups pursuing a more linguistic research: United Architects and the Dream Team.

The project submitted by United Architects featured a semicircle of towers, joined on five floors, separating as they moved upwards. One of them was to have become the world’s tallest building. The point of union, which began at the 60th floor, created a ‘City in the Sky’, destined to host commercial activities, cultural and recreational spaces and parks. However, the final result was excessive, oversized and cumbersome, in addition to being difficult to build because it could not be separated into phases.

The Dream Team proposed five towers, each 1,111 feet high, connected by a series of horizontal structures: a monumental grid that, dense with symbolism and references – first and foremost the grid of Manhattan – was, with a great deal of irony, interpreted by many as a net for capturing aircraft.

A more successful project is that submitted by Foster, who chose to make reference to the Twin Towers by proposing two structures, each 1,764 feet high, which came together at three points, creating panoramic public spaces to be used for exhibitions and recreational activities. The spaces were to have been planted with trees, making them suspended parks used to purify the air and provide natural ventilation. To justify his courageous decision to concentrate the building volume in only two structures, Foster cited the possibility of freeing up space at ground level for public use.

Of the three proposals presented by THINK, the most successful was that composed of two empty cages – the Towers of Culture – that recalled the Twin Towers. These void structures contained free-floating spaces for cultural activities: the memorial, the museum, the open-air amphitheatre, the conference centre and
a panoramic viewing platform. The building programme was located in nine lower buildings.

The project submitted by Daniel Libeskind, as mentioned, focused on the metaphorical values of the soaring Freedom Tower, in addition to the impact of the overall project, created by introducing four smaller towers: ‘This wasn’t a stand-alone tower singing solo,’ he stated, ‘but part of a symphony with the four other towers.’ This is partially the result of their placement, designed to allow the passage of light to create a suggestive effect that would commemorate the tragic event every year on 11 September.

Setting aside the project by Foster – the most innovative in urban planning and environmental terms, though difficult to build because it could not be broken down into various phases – we are left with the projects by THINK and Libeskind. In fact, the jury selected these two projects on 1 February 2003. This was followed by two weeks of burning controversy, the taking up of positions, below-the-belt strikes and the unexplainable turncoat actions of a few critics. However, in the end, partially assisted by an event that should not have had any bearing on a purely architectural decision, the project was awarded to Libeskind, who had successfully obtained the support of Governor George Pataki. The jury’s decision is a recognition of the clearest project, undoubtedly the most effective in terms of its ability to communicate. There was no shortage of disgruntlement amongst architectural intellectuals, whose primary grudge had to do with the fact that the winning architect was considered, for many reasons, to be an outsider. This, as Paul Goldberger was quick to point out, led to a paradoxical situation: ‘Although Libeskind has spent most of his career as an academic, he was now positioned as a populist figure. This may be why, despite his background as an avant-garde architect, he didn’t get as much support among the city’s artistic and intellectual community as Viñoly did, even though Viñoly, paradoxically, has always been much more a corporate architect.’

Without the support of his most authoritative colleagues and faced with the diktats of the developer Larry Silverstein – who favoured, over the intellectual with little experience, an office with proven operative skills, such as SOM – the project was almost immediately compromised. The new Freedom Tower, designed jointly and not without conflict by the members of the new ‘team’, was presented in December 2003. Visibly heavier in its proportions, it progressively resembled the corporate buildings designed by large, professional offices around the globe. The myth of the American dream, already found in the rhetoric of the original project, was reinforced by the date chosen for the laying of the cornerstone: 4 July 2004, the feast day of American Independence.
4.2 Clouds and Monoliths

Of the numerous pavilions built for the Swiss Expo in 2002, three particular buildings stand out as result of their ability to bring new issues of discussion to the sphere of architecture. They are: the Blur Building, designed by the American duo Diller + Scofidio; the Monolith by Jean Nouvel; and the steel towers by the Austrian architects Coop Himmelb(l)au.

The Blur Building undoubtedly captured the majority of the public and press attention, becoming the symbol of the Expo. This steel structure was placed some 20 metres above the level of the lake, and composed of a 100-metre-long by 60-metre-wide platform with no function other than that of producing vapour, using a system of 29,000 nozzles that atomised the lake water. The result was a giant cloud, a pure piece of scenography that could be admired from the river’s edge, as well as from the inside, by raincoat-clad visitors. ‘It’s incredible,’ Ricardo Scofidio exclaimed, ‘the structure that’s required to make this nothing.’ To build the platform, which cantilevers out from four slender columns, it was necessary to create a steel skeleton based on the principles of ‘tensegrity’ (tensional integrity) defined by Buckminster Fuller; to realise the cloud and the lighting effects it was necessary to employ complex electronic programs capable of calibrating the emission of water vapour in relation to climatic conditions and the desired effect.

It would be easy to dismiss this project as a one-off event: ‘a building that represents nothing, but a spectacular nothing’. However, this was not the case for many critics, who interpreted this sui generis work as an anticipation of the potential of a form of research that combined nature and technology, interaction and the scale of the landscape, and the poetics of dematerialisation – blurring – that, for some time, was being pursued by many young architects of the digital generation, as well as others, such as Toyo Ito, Peter Eisenman and Coop Himmelb(l)au. At the same time the project also explored new dimensions in the relationship between the body and space: ‘entering Blur will be like walking into a habitable medium – one that is featureless, depthless, scaleless, spaceless, massless, surfaceless and contextless. Disorientation is structured into the experience.’

If Diller + Scofidio focused on sensorial disorientation and the dematerialisation of space, or what Ned Cramer un-ironically referred to as ‘Gas Architecture’, Jean Nouvel, on the other hand, was more interested in the Monolith: a gigantic cube clad in cor-ten steel set in the middle of the lake.

It would not be risky to state that the choice made by this French architect – beyond the simple expedient of juxtaposing a monolith and a cloud – represents a precise declaration: an attention to the physical world, the concrete, the tactile,
and a distancing from digital interaction and transparency – themes that, furthermore, Nouvel himself had already explored in the Institut du Monde Arabe and the Fondation Cartier. This also required a certain distancing from the research of the avant-garde, coupled with an attitude that, rather than creating problems for the sciences of complexity and non-Euclidian geometries, listened to the ways in which man interacts with the world of objects: using the senses, as part of a physical relationship that is both instinctive and tied to the natural world. In this way Nouvel opposes technological advancement against the inexorable richness of matter, and the impossibility of translating it into binary code.

The towers designed by Coop Himmelb(l)au for the Arteplage in Biel demonstrated the extraordinary plastic skill that had become their hallmark, though without the force – even obtuse and unattractive – that characterised the previous work of this Austrian duo, such as the attic on the Falkestrasse (1983–9). On the one hand this change led to a growing acceptance by the public of architectural compositions once judged unacceptable and, on the other, to the progressive reduction of what was once avant-garde research, to mere formal play.

4.3 The Star System

While Kenneth Frampton had already noticed, back in 1993, that ‘today there exist media architects who divide the most interesting share of projects’, from 1997 onwards many governments, in the wake of the success of the Bilbao Guggenheim, made increasingly frequent recourse to the Star System, aware of the significant benefits, in terms of popularity, of the construction of a building by a famous, brand-name architect.

In truth, their highly iconic buildings have become magnets for tourism and the regeneration of urban areas in serious states of decay, such as abandoned industrial areas, docklands and port areas. We need only mention three examples: Libeskind’s Imperial War Museum North (1997–2001) and Michael Wilford’s The Lowry (1992–2000), both in Salford Quays, near Manchester, Great Britain; the numerous projects for the requalification of waterfronts in Barcelona, Spain; and, finally, Zaha Hadid’s new maritime station and David Chipperfield’s judicial buildings in Salerno, Italy (in course of construction).

This led to the creation of an elite group of architects competing for progressively more important projects. As with all elite groups and new markets, it also generated numerous conflicts and cheap shots, for those trying to enter the market, and those trying to remain part of it.

For the disenchanted, it is not difficult to imagine that the production of numerous theoretical texts, critical declarations and philosophical references simply
concealed brilliant strategies employed by young, and not-so-young, architects who wished to gain access to this restricted circle of professionals, now constantly in the public eye.

Furthermore, the competition for increasingly more important commissions was responsible for the super-production of ‘effect-generating’ projects and works of architecture-sculpture that tended to stand out from the contexts in which they were built. As Peter Davey pointed out: ‘We live in a world permeated by the cult of celebrity and dominated by the electronic media, which demand constant novelty. The more unusual the gesture, the more enhanced an architect’s brand. The cult of celebrity has been so successful that most of the limited international competitions are open only to a small group of celebrated architects – perhaps no more than 100 – who are almost forced to become increasingly demonstrative and outré to ensure that they retain their place in the hierarchy of the celebrated.’

The result – similar to that which takes place in the world of automotive design or fashion, where it is becoming more and more difficult to distinguish between an entry-level Fiat or Renault, or a pair of jeans by Dolce & Gabbana or Armani – is that the Star System is responsible for the growing similarity between products. For example, the addition to the Mariinsky Theatre in St Petersburg, Russia (2003), designed by the Minimalist architect Dominique Perrault, recalls previous experiments with complex geometries made by others. Renzo Piano’s KPN Telecom Tower in Rotterdam, Holland (1997–2000) experiments with electronic pixels. Herzog & de Meuron’s Laban Centre in Deptford, London (1997–2003) integrates their research into materials with an investigation of space that owes much to Rem Koolhaas; while the tectonic Rafael Moneo, in his Kursaal in San Sebastian, Spain (1990–9), explores transparent architecture.

The similarity between the final products, other than being imposed by a market that tends to reiterate a repertoire held to be successful, is also the result of the growing role played by the back office. The stars, pressed by obligations of publicity and promotion, dedicate less and less time to designing: in some cases limiting themselves to the development of the concept, carrying out only the most generic control. The resulting projects are, in reality, the work of partners or, even more often, young assistants trained in university and post-university faculties, imbied with an eclectic sprit and invited to come and design ‘in the manner of ...’. The final works, even those of the highest quality, cannot help but suffer from this growing de-personalisation.

The popularity of the stars, furthermore, inevitably leads to an ambiguous and, in some cases, elusive attitude towards experimentation. The protagonists of architectural debate, in fact, are well aware that without innovation they will soon be superseded by new trends. However, at the same time, they also know that
innovation, in order to be commercially successful, must be more form than substance, more spoken than real. In short, it must find space within the general rhetoric of novelty that renders a product commercially viable. Thus their projects tend to express, using a concept, a lifestyle philosophy that is often more aesthetic than concretely pursuable. It becomes a metaphorical projection, a dream, wishful thinking. Their work focuses on the aspects of communication rather than – as in the Modern Movement – on aspects of technique, function and social value.

This dynamic not only applies to architecture but, as highlighted by Yves Michaud in his book *L’art à l’état gazeux*, also affects the other arts. So much so that today it is difficult to distinguish between performances by different artists – for example Maurizio Cattelan, Vanessa Beecroft, Damien Hirst or Pipilotti Rist – and television advertising. This is also part of a more general process in which various disciplines abandon the traditional know-how that tended to generate well-defined objects, in order to access a universe of reciprocal contaminations, predominated by pure relational values and guided by techniques of communication that, in turn, base their effectiveness on special effects and surprises. In short: fashion.

What led the world of architecture towards these dynamics was the progressively closer ties between architects and fashion designers: the latter often invited the former to design their showrooms or head offices, to prepare marketing strategies and, if we look at Koolhaas and Prada, to develop alternative ways of conceiving of the relationship between shopping and urban space.

In fact, Miuccia Prada presented her new stores as an opportunity to redefine contemporary culture and interpret the idea of shopping in an innovative and experimental way. This was echoed by Koolhaas who affirmed that the new spaces offered people the possibility not to shop and to access private spaces designed for the public, in order to balance the ever more aggressive appropriation of a city’s public space by stores and shopping malls.

What is more, the fact that fashion designers and architects do not focus their marketing strategies on the intrinsic nature of the quality of their products, but on lifestyle philosophies suggested by them, renders the historical separations of commodity economics obsolete. Fendi and Armani design kitchens and lines of furniture, opening stores that sell books and food; while Piano, Meier, Rogers and Lynn have no trouble designing door handles, household appliances, watches, tea sets and coffee makers, or lending their faces and names to advertising, for example Fuksas for Renault and Foster for Rolex.

However, if an architect sells a lifestyle model, within which the public manages to recognise itself – no more or no less than that which takes place with a brand of jeans or a luxury automobile – the very organisation of an architectural office’s
production must change, focusing less on objects and more on the market: building designers are suddenly flanked by marketing and image specialists. Or, based on Koolhaas’ intuitions when he founded AMO, it is necessary to create a new structure to accompany the existing technical one. Thus, ‘while OMA remains dedicated to the realisation of architectural projects, AMO applies architectural thinking in its pure form, to questions of organisation, identity, culture and program, and defines ways – from the conceptual to the operative – to address the full potential of the contemporary condition.’ Consequently the architect is no longer, as he once was, the technician who gives form to a programme, dictated by a potentially public client, but – as part of the same system used by those who produce consumer goods for the general market – he is now the figure who, beginning with the input resulting from his own analyses, creates new needs, in order to satisfy them.

4.4 The Crisis of the Star System

For the eighth Venice Architecture Biennale, held in 2002, Deyan Sudjic, the show’s director, avoided taking sides. Rather than siding with one or another of current architectural trends, he asked leading architectural offices to simply present their current projects, based on the hypothesis that many years pass between the phase of design and construction and that, undoubtedly, of the many projects being designed at the time, two or three would be important for the future of architecture. ‘If the next five years reveal a project with the popular impact of the Bilbao Guggenheim, we can be sure that the drawings have already been completed, or that there is a virtual representation or one or two models. Obviously it is not yet complete. Perhaps construction has not yet begun. Perhaps its designers are still evaluating the possibility of building it out of steel or concrete. In any case, the project already exists as an idea. If there is to be another debut building with the impact of the Jewish Museum in Berlin, its architect has surely already been awarded the commission.’

As a result, Sudjic chose to organise the exhibition according to typological containers: the dwelling, work, stores, religious buildings and spaces of representation. His intention was to let the public select the masterpieces from amongst the works presented – should they so wish, and if they were truly to be found. This apparently neutral choice actually raises two relevant questions. In the first instance it denounces the difficulty faced by critics in carrying out their work, that of orienting the future through theoretical choices. The destiny of a project, Sudjic appears to imply, is increasingly more difficult to grasp and guided by extra-disciplinary factors – fashion, communication, public impact and large, commercial strategies – that are no longer the object of reflection. Secondly, the show
presents, almost becoming its apotheosis, the conspicuous production of high-quality work by the Star System. This work undoubtedly meets with public approval – so much so that the number of visitors to Sudjic’s Biennale far exceeded previous editions – even though it is increasingly difficult to identify a true ability to affect social phenomena. There were many museums, many luxurious single-family residences, though only a few programmes capable of changing cities, above all the poorer and more degraded ones. However, that Sudjic’s Biennale, by ignoring them, raised relevant issues, was made clear in the two successive Biennales: 2004, directed by the historian Kurt Forster, and 2006, directed by Richard Burdett. The former can be read as a response to the role of the critic, the latter to the effects of the Star System within the more complex metropolitan phenomena that define the current century.

For Forster, who entitled his Biennale ‘Metamorph’, it was essential to rediscover, within new works of architecture, those trajectories that considered the transformations taking place. He chose to identify them by returning to the 1980s, a period of four approaches: two successful approaches focused on the future, and two failures, attracted by the past. The first were employed by Frank O. Gehry and Peter Eisenman, the latter by Aldo Rossi and James Stirling: ‘Aldo Rossi’s melancholy isolation of buildings beyond scale and site stands in contrast to James Stirling’s uninhibited contamination of Modernist and Constructivist ideas. Eisenman and Gehry deliberately looked beyond building as we know it, in order to develop architecture ex machina by the former, or, with the bold introduction of fish (among other creatures) ex natura by the latter. At these crossroads of 1980, the trap was set, but it snared only the Postmodernists.’

In order to orient visitors within contemporary processes of metamorphosis, Forster abandoned the typological containers adopted by his predecessor, organising others structured according to keywords: Transformations, Topography, The Nature of Artifice, Surfaces, Atmosphere and Hyper-Projects. However, the show was confusing, primarily because the projects presented in one category could easily have belonged to others: for example, the number of works that, as Forster himself admitted, ‘appear to draw on virtually all our previous categories: they conjoin site and structural frameworks into new topographies, creating variegated atmospheres by means of spaces and conduits which are fashioned from materials that unfold the impression of cyclical time.’

What emerged, in any case, was a growing interest in the territorial and geographic dimension that Bruno Zevi had already identified as nodal conditions during his ‘Landscape and the Zero Degree Of Architectural Language’ conference, held in September 1997.
This is the direction that may lead to a new key to interpretation, reconstructing scales of values capable of orienting critical research. However, the choice made by Richard Burdett in 2006 was that of cancelling any discussions of form to focus on an analysis of urban problems. The exhibition, entitled ‘Città: Architettura e società’ [Cities: Architecture and Society] highlighted the transformations of contemporary metropolitan realities: primarily those of the Third and Fourth World. However, by doing so, Burdett also highlighted precisely what Sudjic sought to ignore: faced with the impetuous changes of social and economic forces, brand-name architecture – which fills the pages of architectural magazines and about which critics write such a great deal – is, in the end, entirely insignificant.

4.5 The Crisis of Architectural Criticism

Suspicious, on the one hand, of the optimism of the Star System, which steps back from more structurally relevant problems, and shaken, on the other, by sociological reflections that highlighted the limits of this aestheticising approach, critics had trouble identifying new operative hypotheses. Evidence of this can be found in the reduced production of relevant theoretical texts from 2001 onwards, and their even scarcer effects on the market, above all if compared to those published during the previous decade. What made this separation even harder to swallow was, finally, the growing number of coffee-table books, where images take precedence over words and the critical aspect is intentionally ignored, in favour of a more apologetic approach. This crisis also affected architectural magazines, one of the privileged instruments during the 1980s and ’90s for the communication of architectural ideas.

The slow agony of Architecture – a magazine with a glorious past, partially the result of its having absorbed Progressive Architecture in 1996 – is emblematic of a more general condition of distress.

For many the cause was to be attributed to the Internet which, through the rapid and free diffusion of information and images, robbed traditional publishing of its role as the privileged instrument for the diffusion of architectural ideas and, as a result, readers and publicity. However, beyond the Internet, there was also a growing difficulty in defining and characterising an authoritative voice. The choice ranged between avoiding the pitfalls of becoming refined publications, useful only for the promotion of things that are already public knowledge and filled with magnificent photographs selected and paid for by the protagonists of the architectural scene, or falling back into generic sociological, cultural or political reflections. This is what happened, for example, with Domus magazine. In September 2000 it passed under the direction of Deyan Sudjic, who turned it into a brilliant instrument for the presentation of the new. In a sudden and drastic
shift, in January 2004 the magazine was placed in the hands of Stefano Boeri, who drastically reduced the number of architectural projects presented in each issue to make way for surveys, philosophical writings, geo-political interventions and investigations of the status of the contemporary metropolis.

One example of a radical rethinking of the role and function of the architectural magazine can be found in the metamorphosis of Archis. In 2005 the magazine’s director, Ole Bouman, changed the title of the magazine to Volume. He enlarged the editorial board – devising the slogan ‘To Beyond or not to Be’ – to include AMO, the research half of OMA, and C-LAB, The Columbia Laboratory for Architectural Broadcasting, directed by Mark Wigley. Archis, even more drastically than Boeri’s Domus, abolished the presentation of projects in order to confront the themes that determine the physical form of the planet: wars and catastrophes included. In 2007 the magazine published a special issue dedicated to Dubai, the Disneyland-city that is home to some of the most emblematic transformations of the new way of building the contemporary city. It is a city that attracts Rem Koolhaas who, together with Bouman and Wigley, is one of the magazine’s Project Founders. However, the sensation is that Volume is more suited to a restricted minority of intellectuals, and subscriptions – primarily amongst architects interested in the real production of buildings – are on the wane. This fluctuating market also affects magazines with a more traditional approach, such that some have had to cease publication, including L’architettura: cronache e storia, which published its last issue in 2005, five years after the death of its founder, Bruno Zevi.

Others – despite the lack of official data – manage to survive with reduced editorial staff, less pages, and economies of any nature. Many attempt to renew themselves by continually changing directors.

Equally, in the wake of the intelligent decision made by Architectural Design, some have chosen to offer a monographic approach that allows the magazine to preserve its interest, long after its date of publication. Two other examples that, while following different approaches, manage to go against the grain are The Architect’s Newspaper and A10. By using new methods of communication, both magazines lay claim to an interest in what takes place outside the sphere of the Star System – the former by investigating the problems of the metropolitan area of New York in journalistic and theoretical terms; the latter by seeking to understand what actually takes place in Europe and, in particular, in its peripheries, spaces that are now – thanks to new forms of communication – part of an interesting dimension that allows for the mixing, generating new syntheses, of local and global issues.
4.6 The End of the Star System?

The generation of innovative architects that emerged from the crisis of Post-Modernism and found a moment of coagulation in the ‘Deconstructivist Architecture’ show later went on to give life, in the 1990s, to a new season of creativity – a season that, however, as of the symbolic date of 11 September 2001, seems to have exhausted itself in the Star System.

This led to a cycle that, in as much as it is marked by peculiar characteristics, is also a recurrence in the history of architecture: the birth of a movement, initially a minority and viewed with suspicion, if not contested, that, later, is accepted to the point that it becomes dominant. However, this acceptance also brings with it a loss of originality and innovative force.

The consequence is a growing fatigue in finding new working hypotheses. Not only because – as we have already seen – it is the same architects who standardise themselves by becoming eclectic, but also because the system, assimilating them and rendering them banal, tempers the more innovative positions, above all those that more vigorously placed themselves in explicitly antagonistic positions with respect to dominant culture.

In this light we can read the book by Rafael Moneo, *Inquietud teórica y estrategia proyectual en la obra de ocho arquitectos contemporáneos*, perhaps one of the more important works of architectural publishing in recent years. The book examines works by Venturi & Scott Brown, Stirling, Rossi, Eisenman, Siza, Gehry, Koolhaas and Herzog & de Meuron. However, the analysis avoids going beyond form and arriving at the deep-seated differences that are at the foundations, touching on an ideological aspect. Seeing these differences as simple alternative strategies to confronting the problem of form, Moneo runs the risk of endorsing the misunderstanding that created the Star System: the hypothesis that architects are nothing other than brilliant creators of unusual and refined images and that, precisely for this reason, they are substantially interchangeable, exactly like fashion designers – Armani or Versace, Siza or Gehry.

Fortunately, as much as the Star System tends to homogenise, it still contains significant differentiations not only related to style, but also more relevant cultural and existential aspects. While it is not difficult to find architects who adopt formalist or rearguard positions, and others whose works clearly demonstrate creative fatigue, it is not rare to find others who continue to operate with theoretical intelligence, asking new questions. Of the numerous projects of notable interest realised from 2002 onwards, the following section presents 10 works, which will be used to discuss two other phenomena, in a certain sense lateral to the Star System: super-creativity and ultra-minimalism.
4.7 Ten Projects

After initial experiments, oriented towards a more rigorist approach, we have seen how the work of Herzog & de Meuron began to focus on a more active use of space, though not always with convincing results. The Laban Dance Centre in Deptford, London (1997–2003) marks a decisive turning point, immediately evident in the entrance, the arrival point of two ramps and a theatrical circular stair. Organised on two floors, the building is conceived, alla Koolhaas, as a promenade architecturale that winds, uninterrupted, along slightly irregularly shaped corridors. These spaces overlook others used for various activities, as well as offering views of the exterior panorama and glimpses of interior courtyards, guaranteeing natural interior lighting and a view of the sky overhead. There is also an attractive use of colours and materials. What dominates is the contrast between the shocking pink and pea green, perhaps a homage to the last works of James Stirling. There is also no shortage of black, with the tar-like effects used by Koolhaas in Fukuoka or Euralille. Many materials have been left exposed, for example the concrete of the ceilings and the ductwork, part of an approach that is a little bit Calvinist and a little bit radical chic, the duo’s claim to fame. On the exterior, thanks to the use of polycarbonate panels with a rainbow finish that ranges from yellow to pink to light green, the building assumes reflections of colour that vary throughout the day. This generates an evanescence that contrasts with the concrete materiality of the lawn, with its geometric designs.

The Laban demonstrates all the possibilities of an experimentation that involves space, envelope, colours and materials. Herzog & de Meuron continue to pursue this approach in an ever-growing number of commissions. Here we can briefly mention – for the creative use of perforated metal, producing a vaguely Wrightian work of architecture – the De Young Museum in San Francisco, California (1999–2005); and – for the close correspondence between skin, structure, use of materials and interior spatiality – the Prada Aoyama Epicentre in Tokyo (2000–03). There are also the projects for the Allianz Arena in Munich, Germany (2000–05), which transforms into a giant and colourful light sculpture, and the new Olympic Stadium in Beijing (2002–08), designed like a giant concrete basket. While the latter is not without its formal self-indulgences, it undoubtedly represents an abandonment of the dichotomy between skin and structure.

Toyo Ito, Tod’s Omotesando Building, Tokyo, 2002–04

Toyo Ito’s Tod’s Omotesando Building in Tokyo (2002–04) is a building in which structure and skin coincide. Coherent with his organic approach, Ito interweaves
columns and beams as if they were the branches of a tree. However, in order to subtract concrete of its weight, he places the glass flush with the facade, exposing the concrete only on the exterior while painting the rest of the facades white. In this way, when seen from the street, the structure appears like a thin, grey-silver sheet that dialogues with the lights of the metropolis. Even concrete – Ito seems to say – can vibrate, losing the monumental weight that characterises the work of his rival, Tadao Ando. However, as Wakato Onishi was quick to point out, the Omotesando lacks a sufficient interior spatiality – something that can be found in Herzog & de Meuron’s Prada building, only a few blocks away. This is most probably the result of commercial decisions made by Tod’s, who imposed the division of the building into a lower part, to be used as a store, and an upper part, which contains the offices.

Other projects completed by Ando in this period are based on a more convincing spatial dynamic. The Green Green, I-Project in Fukuoka, Japan (2002–05), for example, is a pleasurable promenade through interior spaces and of discovery, wandering along undulated roofs covered with natural vegetation. Finally, there are works that experiment with new directions of research, such as the Mikimoto, Ginza 2 in Tokyo (2004–07), a tower whose pearl finish (Mikimoto specialises in the sale of pearls) and openings in its non-geometric facade make it resemble a toy, found by chance in one of the most competitive and efficient cities in the world.

Rem Koolhaas/OMA, Central Library, Washington, USA, 1999–2004

The Seattle Central Library in Seattle, Washington (1999–2004) attempts to answer two questions: what is the role of public space today? and how can a library function in a society that now has so many other media, besides the printed page?

To respond to both questions, Koolhaas avoids pursuing the approaches experimented with in the unexecuted competition designs for the Bibliothèque Nationale de France, Paris (1989) and the Jussieu Library, Paris (1992) – the ‘Swiss cheese’ building, where the mass that contained the books was perforated by the spaces containing other activities; and the project with the continuous ramp that connected the floors of the building. In this case he opts for an intermediate approach. On the one hand the specialised platforms that satisfy the library’s technical functions: the offices, the storage spaces, the classrooms and parking. On the other, the in-between spaces that become public plazas: a living room on the first floor (a covered plaza that recalls the famous Centre Pompidou in Paris), a ‘mixing chamber’ where users are placed in contact with other media and, finally, the reading rooms on the upper levels. The entire structure of platforms and public
plazas is wrapped by a net-like envelope that defines a volume, unlike many of the other building blocks in Seattle, with a decisively non-prismatic form. In fact, the platforms are not placed in precise correspondence with one another, but are slightly offset to guarantee the possibility of interesting connections, even visual, between one platform and another and between one public space and another. This dynamic articulation can be appreciated from the exterior through the transparent mesh skin that envelopes the building – above all at night.

Coherent with his paranoid/functionalist approach, Koolhaas’ project also presents a perfect correspondence between form and function, even if the result is an unsettling and unusual object. Similarly unsettling and unusual, though once again the result of coherent design strategies, are the Casa da Musica in Porto, Portugal (1999–2005) and the China Central Television (CCTV) Headquarters in Beijing, China (begun in 2002). The first is a monolithic building, whose interior is carved out by a sequence of interconnected spaces; the second is composed of a pair of skyscrapers joined at the base and the summit to create a unitary, ring-like form.

Thom Mayne/Morphosis, New Offices for Caltrans, Los Angeles, USA, 2002–04

In this case, the investigation of public space – located outside the building – is undertaken by Thom Mayne in the new Caltrans offices in Los Angeles, California (2004). The building, located in the heart of the downtown, is clearly different from two others located in the same area: the Walt Disney Concert Hall by Gehry and Rafael Moneo’s Roman Catholic Cathedral. Unlike the first, Mayne’s building is square; unlike the second, it is rich with invention. The parti chosen by Mayne is, in reality, very simple: a tall, linear volume, to which a lower building is perpendicularly attached, forming an L and leaving a quadrant open for use as public space. Mayne stated: ‘We are not making an object, but a space.’ This objective also underlies the choice of operating by making grand gestures.

The main building is clad on the long sides with steel sheeting, similar to that used for the Sun Tower in Seoul and the Hypo Alpe Adria Centre in Austria, which – other than guaranteeing a vibrant visual and metallic effect, typical of the work of Morphosis – also helps to reduce solar heat gain. The northern facade is fully glazed, while the south facade is covered with photovoltaic panels. The result is a building that is fragmented into horizontal planes. The vitality of the public square is guaranteed by commercial activities, macro-graphics (for example the building number written in large, block numbers) and a neon light installation by the artist Keith Sonnier, the primary function of which is to highlight the joint between the two volumes. Finally, the interior spaces feature an elevator lobby every three floors, lit by natural light wells and visible from the various departments.
Morphosis demonstrates a reduced interest in the creation of the precious, Deconstructivist details that were present in their early work, in favour of a new operative strategy that combines art, public space, ecology and light. This strategy was also pursued in the Science Center School in Los Angeles (1989–2004) and the US Federal Building in San Francisco (1999–2006), both in California.

Massimiliano Fuksas, Milan Trade Fair, Milan, Italy, 2002–05

Built in record time – 24 months of construction – with respect to endless Italian schedules, the Milan Trade Fair complex in Milan, Italy (2002–05) is undoubtedly Massimiliano Fuksas’ most important project: over 210,000 square metres of space, with 2,000 parking spaces. The structure features a giant, elevated walkway that is more than 1.5 kilometres in length. The overall effect is one of great complexity and simple and clear rationality. The initial impression is given by the glazed roof that covers the walkway, a clear investigation of blob geometries. This element is, in turn, counterbalanced by the fact that the spatial organisation of the complex’s interior spaces is very simple: a central, rectilinear axis flanked perpendicularly by eight, almost identical, functional ‘blocks’, each of which contains four types of buildings – the large display pavilions; restaurants; conference rooms; and, finally, office space. There is also one atypical block that contains the Service Centre and the Auditorium.

On more than one occasion Fuksas has referred to the idea of a cinematic sequence. This is particularly true in this complex, where the visitor, carried along by moving walkways that lead from one end of the circulation axis to the other, watches as the various images of architectural space unfold before his/her eyes, like scenes in a film. What renders this experience even more captivating is the studied intervals that separate the points of primary formal interest of the roof structure, the rhythmic alternation of the blocks and, on their interior, the choice of the buildings’ forms – opaque or transparent boxes, mixed with lightweight ‘flying saucers’. Finally there is the use of colour, the choice of materials and the scenic effects of landscaping, which – through the use of water and plantings – soften the impact of the architecture – all of which is further enhanced by the decision to separate the various building volumes by inserting a series of voids.

Richard Rogers, Madrid Barajas Airport Terminal, Madrid, Spain, 1997–2006

If the Milan Trade Fair complex demonstrates that even blob structures can, without a great deal of problems, be inserted within high-quality building projects located in the world’s major metropolises, the Madrid Barajas Airport Terminal in Spain (1997–2006), designed by Richard Rogers, attempts a synthesis between
what were, up until this time, the three branches of High Tech: technology, perception and symbolism. The objective here is to produce a building with rigour, humanity and narrative ability.

To achieve this synthesis, Rogers uses a structural module of significant formal interest, with a roof, crowned by a gentle curve, alluding to images typical of local traditions: from the hills of the Spanish landscape to the image of the bull’s head, synthetically represented by Picasso’s gestural sketch. The imposing and efficient technological image of the slender, inclined and brightly coloured steel columns is balanced by the cladding of the ceiling vaults in thin strips of bamboo. This choice, in addition to improving acoustic performance, also renders the interiors warm and welcoming, tempering the artificial aspect by inserting a hint of nature.

Zaha Hadid, Phaeno Science Centre, Wolfsburg, Germany, 2000–06

The Phaeno Science Centre in Wolfsburg, Germany (2000–06), a commission awarded to Zaha Hadid in an international competition, is the first large project completed by this Anglo-Iraqi architect, after a series of smaller projects such as the Vitra Fire Station or the Landesgartenschau. The project is notable for its inventive structural system: upside-down pylon-cones in reinforced concrete that contain specific functions. This allows for an open plane below the building, while the upper storeys are progressively occupied by the conical elements that pass through them and function as enclaves. Thus, while the ground floor is used as a public plaza that, thanks to the design of its undulating surface, can be referred to as an ‘artificial topography’, the upper levels are organised into thematic areas, located inside the enclaves. The result is a complex whose organisation in clusters makes it both polycentric and dynamic, enlivened by the relations that even manage to connect various levels inside the building.

What unites the entire organism – the interior of which recalls the complex geography of an urban space, or a multi-polar system for the production of energy – is the compact concrete walls, whose impact is lightened by the insertion of windows and inclined cuts. The choice of exposed concrete, as we have seen in the fire station in Vitra, was probably dictated by the desire to avoid any further complications – for example using chromatic effects – of what is already a complex spatial machine. It is also the result of the desire to confront the city by inserting a unitary mass. This sculptural, and in many ways monumental, sign can be compared to Herzog & de Meuron’s Forum 2004 building in Barcelona (2000–04) or the monoliths of Rem Koolhaas.
Diller Scofidio + Renfro, Institute of Contemporary Art, Boston, Massachusetts, 2000–06

Diller + Scofidio, although active since 1978, are unable to boast a relevant list of built works; in fact their only built projects are the Brasserie Restaurant in the Seagram Building in New York (2000) and the Slither Housing in Gifu, Japan (2000). All the same, the office does boast a significant level of international recognition, the result of both their Blur project for the 2002 Swiss Expo and their performances, which investigate the relationship between physical and virtual space, between the body and the mind, between perception and new technologies.

The Institute of Contemporary Art in Boston, USA (2000–06), designed together with Charles Renfro, is the first non-ephemeral project of a certain importance produced by the office. Designed to overlook the body of water in the port, it does so with a courageous cantilever that allows for the positioning of display spaces on the upper levels, freeing up the ground plane for use as a public platform facing the water. The auditorium and media library also face in this direction. The latter is perhaps the most distinctive element of the exterior of the museum: it protrudes from the cantilever like a downward-sloping telescope. In fact, the interior space concludes with a glass wall-screen that frames the sea, transforming it into an immense, abstract image. The same framing is repeated by the computer screensavers located in rows on long tables. The result is a space, suspended between reality and artificiality, in which images multiply in a play of reflections, where boundaries between spaces are lost. This is the same effect generated by Blur, demonstrating that the difference between ephemeral architecture and that which is not considered architecture at all, is much more flexible than we may care to admit.

Gehry Partners, IAC/InterActiveCorp Building, New York, 2007

Of the various archi-stars, Gehry is undoubtedly the most internationally well known. So much so that – and this is a singular example in the history of cinema – he is the only living protagonist of a commercially released film dedicated entirely to his work. After completing the Walt Disney Concert Hall in 2003, Gehry demonstrated that his strategy of relating to context was more solid than a traditionalist approach, such that the building quickly became a landmark in downtown Los Angeles. All the same, the many projects that followed, spread across the globe, reveal a level of creative fatigue. The use of metal scales appears self-referential and the Marqués de Riscal Winery in Elciego, Spain, completed in 2006, is shocking for its decorative excesses and almost mannerist auto-celebration. A more convincing project is the Office Headquarters in New York, completed in 2007. Here Gehry abandons the research that tended towards
the composition of various articulated volumes – the line that connects the Vitra Design Museum to the Walt Disney Concert Hall to the Bilbao Guggenheim – in order to return, stripping it of its Baroque excesses, to the research into torsion defined with the Fred & Ginger building in Prague. The result is a building complex that confronts the themes imposed by the New York City block, and a rediscovery of the pleasure of a game that balances simplicity and complexity.


With his Musée du Quai Branly in Paris (1999–2007), Jean Nouvel erases the traditional relationship that exists between the street and the building. Instead of being aligned, as one would have expected, along the street front, the building pulls back, leaving space at the centre of the site for a garden designed by the landscape architect Gilles Clément. It would appear that Nouvel wishes to tell us that it is nature that must reclaim space from architecture. This position is further underlined by the choice to cover some of the museum’s walls with natural growth, in homage to the French tradition of green walls, and the dis-architecture of Ambasz. However, unlike the latter, who submerges his buildings in nature, Nouvel does not abandon the compact masses, the coloured metal panels, or the no less colourful boxes that protrude from the facade (the few spaces that, requiring a moment of concentration and rest, are physically removed from the circulation through the museum).

The interior spaces are less successful. Here Nouvel’s idea was to create a ‘fictional map’ that reproduces the continuity of the surface of the Earth, represented by sloping and interrupted path. It is a brilliant concept – something that we have already seen, for example, in the work of Koolhaas – but it transforms the exposition of some 3,500 objects from the world’s primitive cultures into a bazaar of chaotic relics, in many cases creating confusion.

4.8 Super-Creativity and Ultra-Minimalism

The phenomenon of Super-Creativity runs parallel to that of the Star System. It consists of the production of architectural objects with a significant level of scenographic impact. For example, Future Systems’ project in Birmingham, Great Britain, for the new Selfridges department store, completed in 2003: a large amoeba-like form, covered with circular aluminium discs. The building generated no shortage of perplexities, above all for its insertion into the surrounding context.

A no less decisive impact was generated by the Mediacentre in Hilversum, Holland (2006) by Neutelings Riedijk. In this case the strangeness of the building is
justified by the transposition, obtained using the diagrammatic method, of a complex programme.

By following a more instinctive strategy, the artist Vito Acconci tends to produce out-of-scale sculptural objects, though not without some form of environmental value – such as, for example, the Performing Arts Centre in Seoul, Korea (2005).

One of the most notable demonstrations of Super-Creativity can be found in the Kunsthaus in Graz, Austria (2000–03), designed by Peter Cook and Colin Fournier. The object, another blob, is happily inserted within its Baroque context, both an ectoplastic ‘friendly alien’ reminiscent of 1960s Pop culture – of which Cook, one of the members of Archigram, was a protagonist – and, at the same time, belonging to the most recent season of blob architecture. The exterior is covered by electronically controlled round fluorescent lights. The friendly alien is thus transformed into a low-resolution screen for the projection of messages. Inside the building moving walkways allow visitors to cross the spaces, enjoying them, as in Fuxas’ fairgrounds, as if they were part of a cinematographic sequence.

Another work of significant impact is the addition to the Ontario College of Art & Design in Toronto, Canada by Will Alsop, completed in 2004. The building, over 6,000 square metres of study space and classrooms, is suspended in mid-air to avoid compromising the unbuilt space and existing buildings below. Resting on twelve 25-metre-high slender steel columns, each painted a different colour, the building is an aluminium box-sculpture, whose white background is covered by numerous randomly placed black squares and windows that are transformed into a motif which is more pictorial than architectural.

In opposition to Super-Creativity we find Ultra-Minimalism. The chaos and formal exuberance of modern society is opposed by an ordered aesthetic, which is aseptic, abstract, immaterial, anti-hierarchical, monochrome and inflexible. The primary exponent of this trend is the Japanese architect Kazuyo Sejima who, together with her partner Ryue Nishizawa, has for many years been pursuing, with more rigour, the diagrammatic Minimalism that characterised her early work, which we have discussed in a previous chapter.

Sejima and Nishizawa’s most important work from this period is the Contemporary Art Museum in Kanazawa, Japan (1999–2004). The building is a circular space, defined by transparent glass walls, which wrap boxes of varying heights, widths and lengths. With its highly refined proportions and absolutely simple organisation – the boxes are placed according to the most banal orthogonal grid – the museum allows for no flexibility, the exact antithesis of the complex display machines of the High Tech movement. The tiny steel columns, barely 10 centimetres in diameter,
communicate the idea of dematerialised perfection: beyond the Platonic, beyond Minimalism, beyond Calvinism, and close to anorexia.

When asked about her design method, Sejima stated: ‘We never start from a simple base, even in the schematic design phase. We seem to start from very complicated things that gradually become simple.’ In this case ‘simple’ is to be understood as ‘elementary’ because, in the end, what resists the process of reduction is only those units that cannot be subdivided any further.

This can be seen in the House in a Plum Grove, Tokyo (2003), designed by Sejima (on her own), where the reduced building volume is subdivided into primary residential functions: eating, studying, sleeping, entertaining, washing. This generates the thickness, little more than a centimetre, of the steel dividing partitions; the extremely reduced space of the rooms, some little over a metre; and the decision, to keep them from becoming too narrow and suffocating, that they be placed in communication with one another via internal perforations. The consequence is that the inhabitants of the house, from any point inside it, have the sensation of living in a grid that is the result of a pure and, simultaneously, sophisticated conceptional operation.

Obviously an architecture of this type, in order that it maintain its ideal aspect, leaves little room for the realities and disorder of everyday life, including dirt and time. Perhaps its success is to be found precisely in this abstraction of the materiality of the body and a laic asceticism that refutes the values of consumerist society, even if at the same time it pursues them by searching for an extreme level of refinement. This can be compared to the proposals being made by new Japanese design, for example the Muji chain of stores, theorising a return to a few elementary objects of basic needs, sold at rather exorbitant prices.

In fact, as can easily be observed by the failure of the low-cost housing projects designed by Sejima herself – for example the Gifu Kitagata Apartment Building in Motosu, Gifu Prefecture, Japan (1994–98) – ultra-Minimalist asceticism functions perfectly in luxurious single-family dwellings and the spaces of intellect and culture, though to a lesser degree when dealing with simpler and less researched activities.

4.9 Back to Basics

Even though they do not come close to the ultra-Minimalism of Sejima-Nishizawa, there are numerous other architects, mostly Japanese, who have focused on a return to the essential: this ‘back to basics’ approach, a term used by The Architectural Review, is pursued by, amongst others, Kengo Kuma and Shigeru Ban. Kengo Kuma focuses his research on primary relationships and nature:
through the tactile qualities of materials, the relationship with light, water and the landscape. This can be seen, for example, in the LVMH Headquarters in Omotesando, Tokyo, Japan (2005) and the Z58 Offices and Showroom in Shanghai, China (2006). Despite the fact that both are located in difficult metropolitan contexts, Kuma has designed enchanting spaces, suspended between nature and artifice. He has managed to obtain vibrant effects of chiaroscuro using vertical and horizontal diaphragms, constructed of slender fins or, as in Shanghai, with a wall of horizontally separated planting boxes.

Of a more experimental temperament, Shigeru Ban earned his fame in the 1990s for his inventive cardboard structures, put to the test after the Kobe earthquake of 1995 in the construction of a 170-square-metre church that was built using tubes measuring 5 metres in diameter, with a thickness of 16 millimetres. Ban also designed 21 shelters, once again in cardboard, that can be assembled in six hours. The shelters are covered with a Teflon fabric and tied to the ground by sand-filled plastic crates. The project raised the interest of the United Nations High Commission for Refugees; a great deal of interest was also expressed by the world of architecture and Ban’s clients, such that he was awarded the design of the Japanese Pavilion for Expo 2000 in Hanover and a demonstrative pavilion in the MoMA gardens (2000). Both structures were built using thin, recycled and recyclable cardboard cartons. The former – designed and calculated with Frei Otto and Buro Happold – was composed of three domes tied together to create a 72 x 35 metre space, with a height of over 15 metres.

Stimulated by the objective of designing a more ingenious and simpler life, Ban is also the author of numerous experiments in the field of residential design, of which we mention here the House in Kawagoe, Japan (2001), known as the ‘Naked House’, a large, indifferent interior space filled with wooden boxes on wheels used as bedrooms. This design choice allows for the simplest flexibility of living space.

Of Ban’s most recent work, other than the new Pompidou Centre in Metz – designed in collaboration with Jean de Gastines and employing the tensile technologies normally used for circus tents – we can mention the Nomadic Museum, a prefabricated, itinerant gallery for exhibitions of the naturalist documents of Gregory Colbert. It was designed by uniting 152 shipping containers, stacked to create four floors and set in four rows. Other materials employed include cardboard columns, standard hollow-core panels and plastic sheeting for the roof that, however, is to be substituted by a solar cloth, to increase energy efficiency. The museum can be ‘built’ in 10 weeks, and has already stopped in numerous cities, including New York and Santa Monica.

The work of Shigeru Ban raises the issue of an architecture that focuses on invention, creativity and an economy of means, rather than the creation of
figurative icons. As Paul Finch points out: ‘In a world with the same distinctive icons everywhere, none of them will be distinctive in any meaningful way, instead becoming icons in the old sense of the word, that is to say similar representations of the same thing, the same thing being architecture itself.’

A champion of the art of frugality is represented by Rural Studio, a programme launched by Samuel Mockbee with the Auburn University and, after his death, taken over by Andrew Freear. The programme consists of letting final-year architectural students work in pilot programmes in poor parts of the country, using recycled materials and equipment donated by sponsors. For the students it represents a chance to learn how to set aside the stylistic and formalist fixations that they have learned in previous years at school. For the local population it is an important assistance that, since 1994, has led to the realisation of some sixty projects, including Lucy’s House in Mason Bend, Alabama (2001–02). Instead of using traditional techniques, the walls were built by overlapping carpet tiles donated by a sponsor to create a neo-Expressionist red tower, or the Fire Station in Newbern, Alabama (2003–05), built entirely in wood and polycarbonate.

In England, of the recent works that unite creativity with cheap and/or recycled materials, the House in Islington, London (1998–2002) designed by Sarah Wigglesworth is particularly worthy of note. The project uses numerous materials with a great deal of fantasy: from sandbags to hay, used as insulating materials. For Peter Davey it is ‘the most sexy and witty building I have seen for years: fetishist, full of clever inventions, happy with overlapping story telling, wild yet tender, ever open to change … We all live in a house like that in our imagination.’

In Holland, NL Architects designed the Basket Bar in Utrecht (2003), where the playing field is intelligently realised to make space at ground level for public functions, including a cafeteria and an open square, used for social activities.

SeARCH’s Theehuis Pavilion in Veluwezoom National Park in Rheden, Holland (1998–2002) is a very refined project that combines natural and artificial materials to re-invent the anything-but-simple typology of the display pavilion.

In Denmark, PLOT were responsible for the Maritime Youth House in Copenhagen (2004). The project demonstrates that it is possible to create continuous spaces, rendering them attractive through the use of wood.

Finally, we can look at the Octospider Cafeteria in Bangkok, Thailand (2001–04) by Exposure Architects. Designed to improve the labour conditions of workers in the adjacent textile factory, the cafeteria is raised above ground, creating a pleasant relationship with the surrounding landscape. Even the form, which recalls the open fingers of a hand, is the result of the desire to allow a decent view from each table. The pond over which the structure is built was created by recycling the
water used in the washing of the fabrics. The circular ramp transforms the passage along the route that unites the spaces of work and the cafeteria into a daily event.

4.10 The Next Stop
What direction will architecture take in the near future?

It would not be out of line to imagine that the Star System will continue to dominate, reinforced by new commissions, above all from emerging countries: China, India and the Persian Gulf, primarily Dubai, now the centre of significant economic and financial interest. Of these new projects, many will undoubtedly be of great poetic and formal interest. In fact, it is difficult to imagine that creative figures such as Gehry, Hadid and Koolhaas will continue tirelessly to repeat themselves, accepting the banal and easy success that celebrity can generate.

On the other hand, what we can expect from emerging architects is undoubtedly an ambivalent approach. Some will seek to become part of the Star System, while others will choose to set themselves apart. In the first case this will generate the diffusion of what will, sooner or later, develop into a style, not unlike what took place with the International Style. In the second case, we will be witness to the emergence of new tensions, restlessness and design ideas that are no less interesting than those that, some twenty years ago, provoked the important changes in the world of architecture whose fruits we now enjoy.

There is no doubt that many of these changes are already under way, and it is only as a result of far-sightedness that we critics, who know how best to read the past with respect to what we now observe, are unable to identify and decipher them. This is the same mistake made by those of the previous generation who, back in 1980, ignored the eccentric contributions of such architects as Gehry and Koolhaas to the otherwise Post-Modern Strada Nuovissima presented at the Venice Biennale or, even earlier, in 1978, when they were unable to forecast the novelties announced by the addition to a house in Santa Monica, once again by Gehry.

At present we are witness to the development of three new directions.
The first consists of the growing importance of context, to the detriment of the object. Architecture continues more and more to deal with the territorial dimension and, given that there no longer exist any clear lines of demarcation, nature enters into it with progressively more force, in many cases as a building material. Other than energy savings and sustainability, the next frontier will be the new relationship with that which surrounds us. This is what has led to the refusal of a-contextual works of architecture-sculpture, in addition to the scarce interest in well-proportioned tectonic compositions – in the end, also designed as sculptural objects, autonomous with respect to the landscape.
The second direction will tend to re-examine the relationship between High Tech and Low Tech, overcoming the excessive enthusiasm of the 1990s for the digital, as well as the fear, after the collapse of the Twin Towers, of all things technological. Obviously this is not to be read as a banal balance, defined by middle-of-the-road choices, but rather as passionate encounters and confrontations – between the simple and the complex, the slow and the fast, the digital and the mechanical, automatic and manual, light and heavy, transparent and opaque, abstract and concrete, etc – many of which, as we have already seen, are already being defined in the projects designed by the younger generation of architects.

The third direction places architecture in the realm of desires. This means overcoming the phase of elementary needs and standards, and facing up to complex requirements, new lifestyles. Communication and rhetoric are predominant here: as with fashion and art, both less and less involved in object-oriented research, and progressively more in relational dynamics. At this point it will be up to architects to decide whether they wish to use the mystifying techniques of the former, or the much less acquiescent ones of the latter.