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Modern urban culture: not a style but a “method of functional analysis”

Introduction

Le Corbusier a connu de grands rivaux, dont quelques-uns nous font l'honneur d'être présents, et les autres sont morts. Mais aucun n'a signifié avec une telle force la révolution de l'architecture, parce qu'aucun n'a été si longtemps, si patiemment insulté.¹

André Malraux

In order to present a clear understanding of the Modern architecture, its purposes and the urban-scale applications of the new architectural syntax, we can dare, in the wake of Leonardo Benevolo's studies, to give an overall dating between 1919 and 1989. In 1919 Walter Gropius founded the Bauhaus school in Weimar, which combined craft, fine arts and an approach to design with the idea of creating a “total work of art” (Gesamtkunstwerk)² in which all the renewed arts would have contributed together, “without distinction of class which raises an arrogant barrier between craftsmanship and artist,”³ to create the “new building of future.”⁴ The program of the school, published in 1919 with an Expressionist cover drawn by Feininger (FIG.1), albeit with prophetic tones, openly declared “the ultimate aim of all visual arts is the

¹ Malraux, A. “Oraison funèbre à Le Corbusier - Hommage à Le Corbusier, le 1^{er} septembre 1965.” Site littéraire André Malraux. <http://malraux.org/d1965-09-01-andre-malraux-oraison-funebre-a-corbusier/>

² Millington, B. “Gesamtkunstwerk.” Oxford Music Online. <http://www.oxfordmusiconline.com/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-5000011027?rskey=3BXrEj&result=1>

³ *Programm des staatlichen Bauhauses in Weimar* (1919), quoted in Benevolo, L. *Storia dell'architettura moderna*. Roma: Laterza, 2003, p. 419

⁴ *Programm des staatlichen Bauhauses in Weimar* (1919), quoted in Benevolo, *Storia dell'architettura moderna*.

complete building” and urged architects, sculptures and painters to “recognise a unitary entity in the composite character of building.”⁵ The end of Modern architecture is conventionally dated to 1989 with the fall of all ideologies and a renewed freedom of planning.⁶

However, the Modern movement is not simply definable as a style, that is a formal changing in visual forms, it was instead a revolutionary experience which interrupted and transformed the past of cultural heritage through “repeated actions of rupture.”⁷ After the middle of the 18th century, in continuity with the previous formal experiences, social, economic and technological changes came to the foreground, “the relations between architect and society began to change radically”⁸ and showed the inadequacy of tradition in solving problems generated by industrial culture. The different experiences, which confronted each other from this moment onwards, can be summarised in three groups: academics, eclectics and rationalists.

The academics carried on traditional construction systems in the wake of the *ancien régime* characterised by the alternation of styles. The eclectics names all those who mixed a variety of historical styles from different sources and combined them in a single work of art.⁹ In both cases, superficial formal problems focused again on the style and did not take charge to architecture for economic, political or structural problems that posed the birth of the industrial city. The so-called rationalists, by contrast, were constituted by different schools of thought, ranging from the socialism of William Morris for “an art made by the people and for the people, as a happiness to the maker and the user [...] these virtues are honesty, and simplicity of life,”¹⁰ and the Gothic Revival of Eugène Viollet-le-Duc for his theories of rational architectural

⁵ Benevolo, L. *Storia dell'architettura moderna*. p.419

⁶ Benevolo, L., p.1042

⁷ Ibidem, p.4

⁸ Ibidem, p.3

⁹ Muthesius, S. “Eclecticism.” Oxford Art Online.

<http://www.oxfordartonline.com/groveart/view/10.1093/gao/9781884446054.001.0001/oao-9781884446054-e-7000024845>

¹⁰ Morris, W. “Hope and Fears for Art.” Marxists.org.

<https://www.marxists.org/archive/morris/works/1882/hopes/chapters/chapter2.htm>

design,¹¹ to the sizeable group of engineers, designers and inventors. The latter, though lacking an academic preparation and perhaps for this reason, had a strong accumulated wisdom and a vision devoid of prejudices with respect to the innovations that industrialization was achieving. This allowed them, from the Industrial Revolution onwards, to use and experiment with the technological innovations of the time and researches on materials, without feeling the weight of the cultural debate and focusing on methods and results.

The Modern movement is thus deeply rooted in European cultural tradition and connected to the past through a gradual succession of experiences and strong contrasts. The passage from “the legacy of past architectonic movements”¹² to new construction methods involved both the material structure of building and their formal appearance, both objectives and planning methods. The proposal of a style linked to efficiency and rationality though neutral, diffusible and daily values underlines the will to “a structure of choices different from the current one.”¹³ What did it mean then (and today) to make ‘different choices’? It meant rethinking the relationship between ‘style and motivations,’¹⁴ in a framework in which stylistic research was autonomous in its artistic choices, without, however, affecting the underlying motivations, which were an outcome of egalitarian aspirations of 19th century thinking.

¹¹ “Eugène-Emmanuel Viollet-le-Duc.” Encyclopaedia Britannica.

<https://www.britannica.com/biography/Eugene-Emmanuel-Viollet-le-Duc>

¹² Benevolo, L. *Storia dell'architettura moderna*. p. 4

¹³ Ibidem, p.1038

¹⁴ Ibidem



FIG.1 Cathedral (1919), Manifesto and programme of the State Bauhaus, Feininger. Available from https://www.bauhaus.de/en/das_bauhaus/

Modernism: a debate between tradition and innovation

In the second decade of the 20th century, Modernists reaped all these past experiences, engendered into the industrial society, with the aim of overcoming the discriminations produced by traditional urban management, founded by liberal-bourgeois state, and to objectively interpret, through scientific research, the needs of all citizens.¹⁵ I would suggest at this point two research lines through the concepts of formal and structural, which can help us to discern between examples of modern architecture and those which adopted one or more features of Modernism without, however, gathering them in unity. If even one of these

¹⁵ Benevolo, L., p.927

characteristics is missing, it is no longer possible to talk about Modernism, a movement circumscribed in space and time, because the basic characters of it would be lacking.

The formal one is represented by European and American masters such as Berlage, Wagner and Richardson, who adhered to classicism or medievalism and, through it, manipulated such repertoires progressively reducing the most decorative aspects.¹⁶ In this we can see the efforts of architects to keep up with contemporary formal research in painting. The structural line, instead, deals with adapting analytical and rational methods, scientific and critical analysis of problems and technological research to architecture. These two orientations represent the huge effort to reconstitute the traditional separation of art, science and technique into unity, which finds comparisons only with the Italian Renaissance for its innovative charge. If the Renaissance had three pioneers such as Brunelleschi, Masaccio and Donatello, the pioneers of Modernism are Le Corbusier, Walter Gropius and Mies van der Rohe. The accusation of elitism is, therefore, false and tendentious, because always revolutions are “minority experiences, innovative, suggestive and open to the future.”¹⁷ Modernist avant-garde did “not seek the new but the rational and appropriate,”¹⁸ did “not want to impress but to convince”¹⁹ by “engaging in the present to solve contemporary problems.”²⁰

Leonardo Benevolo suggested an analogy between the life and works of Le Corbusier and those of Brunelleschi.²¹ The comparison is compelling in so far as both the innovations of the Renaissance and the system of methodical rules and ideas of Modernism have taken over a century to assert themselves in all their significance. Roberto Longhi called the partial and diversified receptions of the Renaissance innovations, which showed a kind of interpretation

¹⁶ Benevolo, L., p.1038

¹⁷ Ibidem, p.1037

¹⁸ Ibidem

¹⁹ Ibidem

²⁰ Ibidem

²¹ Ibidem, p.838 and p.840

more emotional than rational, “umbratile Renaissance”²² or according to Federico Zeri “Pseudo-Renaissance.”²³ Therefore, we can call *Pseudo-Modernism* or *umbratile Modernism* all those manifestations which also accept only one of its characteristics without grasping its underlying spirit. The debate on Postmodernist architecture fails because those architectures are not *post* but *pseudo*, that is, they express an eclectic or emotional interpretation of the original characteristics of Modernism, in short, they are a return to chaos. What are these characters? Let us try to define them more precisely.

First, renewed and transmissible methods of design, in which each formal element has an objective functional or psychological justification, an early example of this is the interior design of Van de Velde at the turn of the 20th century (FIG.2). From this comes the need for simple, transmissible and functional forms, in contrast to the pervasive decorativism of industrial products of the time and a functional organization and division of spaces. As Benevolo rightly claimed, art can fulfil its regulatory function in society only if it controls the root methods of production and distribution of objects of use, that is, if it acts as a principle of planning.²⁴

Method of rational analysis to break down architecture into its elementary components and divide the design into a succession of times.²⁵ This method together with economy of means for realization, through series production and prefabrication, meets both criteria of industrial products and economy of thought in planning. Because it allows to distribute intellectual efforts placing each decision in time and on appropriate scale.²⁶ From this derives an analytical methodology, which is assumed to be scientific, which, with experimental scruple, seeks an objective validation of its results. According to Benevolo, this is a tradition of thought which

²² Cassanelli, R. *L'arte. Critica e Conservazione*. Milano: Jaka Book, 1993, p.298

²³ Cassanelli, R. *L'arte. Critica e Conservazione*. p.298

²⁴ Benevolo, L., p.286

²⁵ Ibidem, p.508

²⁶ Ibidem

come from the great analysts of the mid-nineteenth century, such as Comte, Darwin and Marx.²⁷

A collaborative spirit both among all the arts and among artists themselves, which is reconnected to the Medieval artistic tradition such as the great sites of cathedrals of the 12th and 13th centuries. These, indeed, were a social microcosm²⁸ where economy, technology, artistic knowledge converged to build a building with a high symbolic and political value. The Bauhaus' cover program (FIG.1), with its cathedral of light, is a visual example of this purpose.

A democratic vocation born in the revolutionary tradition, based on the collective utopias of the early 19th century: romantic, innovative, protesting; which moves problems forward, forcing the present towards the future.²⁹

The idea of balanced and appropriate has also social and cultural implications such as the research for a harmonised relationship between man and nature, in the wake of Goethe's tradition.³⁰ Modernists, indeed, tried to solve harmoniously the long-standing problem between nature, culture and technology through the search for minimum standards that can solve problems of healthiness and hygiene produced by high-density of population in the metropolis. A precedent can be found in the city-garden movement of Howard at the turn of 20th century. This combines the utopian tradition of the first half of the 19th century with a coherent theory, and a practical application of its principles, that reasonably discerns the aspects of urban life which can be collectivized from those which can be left to private initiative.³¹

²⁷ Benevolo, L., p.1038

²⁸ De Michele, S. "La cattedrale e il cantiere medievale: microcosmo della società." *RestaurArs Dalla parte dell'arte*. Accessed 9th November 2015. <https://restaurars.altervista.org/la-cattedrale-e-il-cantiere-medievale-microcosmo-della-societa/>

²⁹ Benevolo, L., p.1037-1038

³⁰ Anker, P. "Graphic Language: Herbert Bayer's Environmental Design," *Environmental History* 12 (April 2007): pp. 254-78

³¹ Ibidem, p.367

These general methodologies based on natural laws and on those of human mind try to find a balance between thought and action, material and spiritual needs,³² quality and quantity³³ through a moral coherence³⁴ that transforms the surrounding environment taking into account continuously changing circumstances.³⁵ From the relationship with productive system was born thus a new architectural synthesis through modes of procedure which arise both within and beyond the traditional limits. Finally, the atrocities of the war have shown the precariousness of the limit between civilization and incivility calling for a communal agreement plan in which the only fix point was the trust in human being.³⁶ The humanistic spirit of Modernists is mainly exemplified by the figure of Le Corbusier, here is what he wrote in 1964 about his planning of *Ville Radieuse*:

*“Well, Mr. Le Corbu, congratulations! You have posed the problems of forty years of future, twenty years ago! And they served you an abundant and continuous ration of kicks in the ass! [...] You, lords of the “No,” have never thought that in these plans there was the total and disinterested passion of a man who in his life dealt with ‘his brother man’, in a brotherly way.”*³⁷

This statement shows how Modernism intended to be a project of brotherhood underpinned by a profound understanding of human being, made by a visionary man who was ostracised throughout all his life. Most of his theoretical models were rejected before they were tested,³⁸ he was excluded from public housing programs until the second post-war period,³⁹ the only significant town planning assignment was that for Chandigarh, in India, at the age of 63 years. He will die before seeing his work finished.⁴⁰

³² Benevolo, L., p.419

³³ Ibidem, p.438

³⁴ Ibidem, p.471

³⁵ Ibidem, p.434

³⁶ Ibidem, p.405-406

³⁷ Ibidem, p.843

³⁸ Ibidem, p.840

³⁹ Ibidem, p.839

⁴⁰ Ibidem, p.840



FIG.2 Writing desk (1899), Van de Velde. Available from <http://www.idesign.wiki/henry-van-de-velde-belgian-painter-architect-and-interior-designer-1863-1957/>

City living and urban planning

A central premise of urban planning is a definition of building types according to their function, in line with the functional redefinition of all visible space: from objects to the internal spaces' distribution, from neighborhoods to the city, which is conceived as an aggregate of neighborhoods. These are grouped into groups or group of groups according to the function hierarchy.⁴¹ A key topic of Modernist reflections is living, because:

*The advent of the machinist era has provoked immense disturbances in the conduct of men, in the patterns of their distribution over the earth's surface and in their undertakings: an unchecked trend, propelled by mechanized speeds, toward concentration in the cities, a precipitate and world-wide evolution without precedent in history. Chaos has entered the cities.*⁴²

To regulate metropolitan chaos through planning is, according to Le Corbusier and CIAM, the only solution to recover the lost wellness determined by the uncontrolled expansion of the

⁴¹ Benevolo, L., p.508

⁴² CIAM's "The Athens Charter" (1933). Modernist architecture. A Database of Modernist Architectural Theory <https://modernistarchitecture.wordpress.com/2010/11/03/ciam's-‘the-athens-charter’-1933/>

city. In this regard, Athens Charter, a 1933 document about urban planning published anonymously in 1941 by Le Corbusier, is quite clear:

*The more the city expands, the less the “conditions of nature” are respected within it. By “conditions of nature” we mean the presence, in sufficient proportions, of certain elements that are indispensable to living beings: sun, space, and verdure. An uncontrolled expansion has deprived the cities of these fundamental nourishments, which are of a psychological as well as physiological order. The individual who loses contact with nature is diminished as a result, and pays dearly, through illness and moral decay, for a rupture that weakens his body and ruins his sensibility, as it becomes corrupted by the illusory pleasures of the city. In this regard, all bounds have been exceeded in the course of these last hundred years, and this is not the least cause of the malaise with which the world is burdened at the present time.*⁴³

Sun, space, air and verdure are thus at the core of Modernists’ interests because they produce physiological and psychological wellness. To achieve this goal, Athens Charter introduces the important concept of “zoning resolution”, namely, an operation of “differentiations between the various human activity each of which requires its own specific space: residential quarters, industrial or commercial centres, halls or grounds intended for leisure hours.”⁴⁴ Although the idea of dividing the city into zones, according to the function, has somehow been overcome in favour of a polycentric organization⁴⁵ of the city, it remains important because these analyses will later flow into minimum standards to be applied in Europe and elsewhere. Let us give an example to understand the extent of these standard.

Each area has a series of services such as school, medical centre, police station, green areas etc. at a certain distance and there is no need to cross the whole city to get a health service. This is the concept of zoning which, through a scientific analysis of the citizens’ needs, organises the territory rationally. Urban planning thus becomes a science, such as sociology or economy, which uses geography, topography, economy, statistics, sociology and so on to

⁴³ CIAM’s “The Athens Charter” (1933).

⁴⁴ Benevolo, L., p.508

⁴⁵ Duncan Smith, A. “Polycentric Cities and Sustainable Development: A Multi-Scale GIS Approach to Analysing Urban Form.” SlideShare.
<https://www.slideshare.net/DuncanSmith/polycentric-cities-and-sustainable-development>

govern the evolutionary process of environmental transformation dynamically but rationally, according to the scientific laws.

Athens Charter is, moreover, a document which produces *Observations*, that is, analyses and *Requirements*, namely, propose general principles which, although abstract, have a precise political meaning:

*But while the force of circumstances differentiates the wealthy residence from the modest dwelling, no one has the right to transgress rules that ought to be inviolable by allowing only the favoured few to benefit from the conditions required for a healthy and well-ordered life. It is urgently necessary to modify certain practices. An implacable legislation is needed to ensure that a certain quality of well-being is accessible to everyone, regardless of monetary considerations. It is necessary that precisely defined urban regulations forbid, once and for all, the practice of depriving entire households of light, air, and space.*⁴⁶

If the “quality of well-being” has to be accessible “to everyone, regardless of monetary considerations,” it is obvious the implicit democratic value of this statement. The theoretical nature of this writing, a few years before the Second World War, makes it the manifesto of the modern city. This is not an improvement of current one but a real alternative⁴⁷ with a different political aspiration:

*The pre-eminence of private initiatives, motivated by self-interest and by the lure of profit, is at the root of this deplorable state of affairs. Not one authority, conscious of the nature and the importance of the machinist movement, has yet taken any step to avoid the damage for which no one can actually be held accountable. For a hundred years, every enterprise was left to chance. Housing and factories were constructed, roads laid out, waterways and railroads cut and graded, everything multiplied in haste and in a climate of individual violence that left no room for any preconceived plan or premeditation. Today, the damage has been done. The cities are inhuman; the ferociousness of a few private interests has given rise to the suffering of countless individuals.*⁴⁸

⁴⁶ CIAM’s “The Athens Charter” (1933).

⁴⁷ Benevolo, L., p.537

⁴⁸ CIAM’s “The Athens Charter” (1933).

The modern metropolis must, therefore, be rethought to eliminate the distortions of fierce private interests, which:

*provokes a disastrous upset in the balance between the thrust of economic forces on the one hand and the weakness of administrative control and the powerlessness of social solidarity on the other. The sense of administrative responsibility and of social solidarity is daily driven to the breaking point by the keen and continually renewed forces of private interest. These diverse sources of energy are in perpetual conflict, and when one attacks, the other defends itself, in this unhappily uneven struggle it is generally the private interests that triumph, ensuring the success of the strong at the expense of the weak. But good sometimes comes from the very excess of evil, and the immense material and moral disorder of the modern city may ultimately result in the formation of new legislation for the city, a legislation supported by strong administrative responsibility, which will establish the regulations indispensable to the protection of human wellbeing and dignity.*⁴⁹

Lastly, it is legislation, administrative responsibility and human solidarity that can eliminate these distortions still present in our society. As Benevolo suggested, the Athens Charter proposed “a city which works for everyone, and shares the benefit of possible improvements equally among citizens.”⁵⁰

*Life flourishes only to the extent of accord between the two contradictory principles that govern the human personality: the individual and the collective. [...] For the architect occupied with the tasks of urbanism, the measuring rod will be the human scale.*⁵¹

The Athens Charter raises many questions, it suggests: rigorous analyses, housing as a basic core of urban planning, from which will be established all the rest of the relationships between housing, workplace and place of leisure; to subordinate private interest to public interest, to divide traffic network from pedestrian network, to protect the inhabitants from acoustic noise of the runways, to build buildings detached from each other to improve healthiness. All these suggestions have been partially accepted by the current urban planning and they retain a basic normative value from which to start for further improvements.

⁴⁹ CIAM's “The Athens Charter” (1933).

⁵⁰ Benevolo, L., p.536

⁵¹ CIAM's “The Athens Charter” (1933).

Urban planning became the main concern of Modernists above all from the 1930s onwards, after the “architectural revolution”⁵² of the new machinist civilization was completed in the decade between 1919 and 1929. After the crisis of 1929, indeed, many of proposals of the avant-garde operating since 1914 prove ineffective,⁵³ because the urban interventions did not grow to the same extent as those of public buildings. The urban planning provisions remained optional and did not imply implementation commitments.⁵⁴ Athens Charter will, instead, be an obligation to implementation for all the countries which will put it into law.

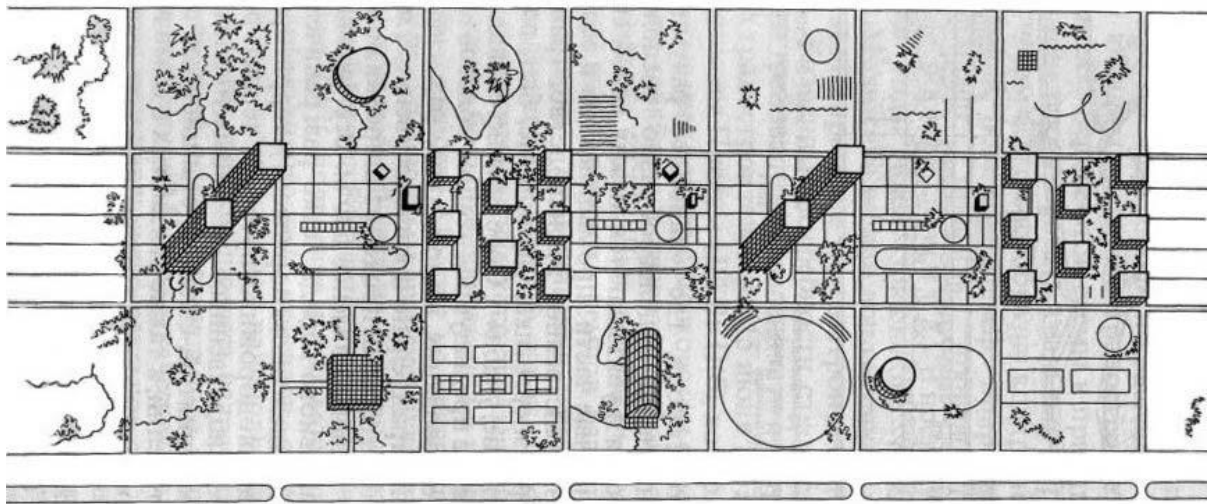


FIG.3 Project for Magnitogorsk (1930), Ivan Leonidov. Available from <http://socks-studio.com/2016/04/12/ivan-leonidovs-competition-proposal-for-the-town-of-magnitogorsk-1930/>

⁵² Benevolo, L., p.527

⁵³ Ibidem, p.508

⁵⁴ Ibidem

The main debate on social housing was focused on “high building,” in areas of high population density, and on single-family house: advantages and disadvantages for both these types, where and to what extent to use them, to define standards for “high building” type, such as the number of floors and what kind of services to be include in it. In this regard, the most interesting projects will be carried out by the Russian architects of the group OSA.⁵⁵ Their theoretical projects for “linear city”⁵⁶ come to two conclusions: first, enlarge and complicate the dwelling unit to make it coincide with the city; second, to spread the units in the territory.⁵⁷

The opportunity of urban decentralization is discussed through “The Green City” projects⁵⁸ of Leonidov (FIG.3). Russian debate took place until the beginning of 1932, when all free associations of architecture were dissolved and their members incorporated into a State association which had a precise political direction to support traditional urban plans. However, the importance of Russian research lies in the fact that it captured the urban planning problem at its root and placed an alternative between “hierarchical centralised distribution and linear egalitarian distribution”.⁵⁹ Today’s urban projects, based on poly-functional and poly-social concepts, are certainly rooted in these experiences.

Throughout the 20th century Europe will be involved in the conflict between democratic aspirations of art and hierarchical political guide, it happened primarily on urbanistic choices, that is “structural,” rather than stylistic one, that is “formal”. Stalin’s dictatorship is emblematic of this: it again opts for urban centralization rather than decentralization, this structural choice has also implications for formal choices. Stalinist architecture, indeed, although it uses a

⁵⁵ Benevolo, L., pp.540-552

⁵⁶ “The garden city. THE LINEAR CITY: A MODEL OF A SUSTAINABLE CITY?” SlideShare. <https://www.slideshare.net/rosacomenius/the-garden-city>

⁵⁷ Benevolo, L., p.548

⁵⁸ Fabrizi, M. “Ivan Leonidov’s Competition Proposal for the Town of Magnitogorsk (1930)”. SOCKS-Studio. Accessed April 12, 2016. <http://socks-studio.com/2016/04/12/ivan-leonidovs-competition-proposal-for-the-town-of-magnitogorsk-1930/>

⁵⁹ Benevolo, L., p.549

pedantic Modernist language, is ultimately an expression of hierarchical and regressive structural choices.



FIG.4 Moscow Master Plan (1935) Available from <https://www.thepolisblog.org/2010/01/urbanism-under-stalin.html>

Moscow urban planning of 1935 (FIG.4) proves this assumption. Its master plan is an interesting and remarkable example of zoning and abundant green areas. However, it is “afflicted by academic formalisms”⁶⁰ such as the monumental axis of over 20 miles, which connects the Red Square to the Lenin’s hills, full of squares and immense palaces.⁶¹ Monumentality expresses by Moscow State University (FIG. 5-6), for example, is opposite to Modernist principles of harmony, rationality and appropriateness. It is engendered, instead, by

⁶⁰ Benevolo, L., p.552

⁶¹ Ibidem

a rigid and pedantic use of a formal style without grasping it in its essence. This is exactly what distinguish the innovators from their emulators, such as Caravaggio and the Caravaggisti.⁶² Caravaggio (FIG.7) brought a new formal style accompanied by values and innovations that found in him a new unity, his followers (FIG.8), instead, used part of his innovations and his style without to grasp the underlying spirit: pauperism and erudition united to a constant search for the sacred in everyday life.

In addition, centralised planning emphasises this monumentality and hierarchy, which is articulated in a series of times through squares and buildings. As a solemn medieval procession towards the centre, no longer of the church but of the metropolis, the monumental axis of over 20 miles guides this itinerary. Its centre, though, has nothing sacred any more, it expresses a blind hierarchy, a desire for power end in itself. There is no balance, no utopia or innovation, therefore, it is not possible to define it modern, because it does not gather in unity all those principles that we have previously mentioned.



FIG.5 Moscow State University today. Available from <https://www.thepolisblog.org/2010/01/urbanism-under-stalin.html>

⁶² “Caravaggisti”. Wikipedia. <https://en.wikipedia.org/wiki/Caravaggisti>

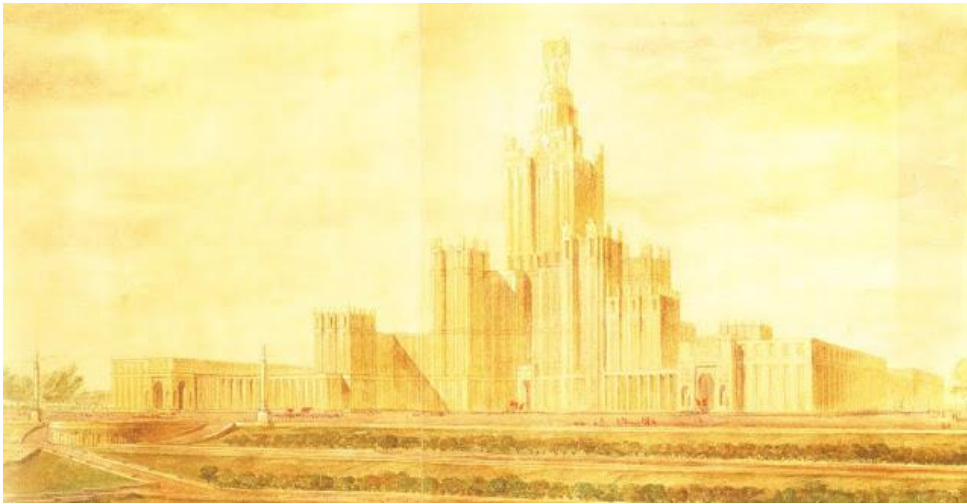


FIG.6 Moscow State University plan (1949). Available from <https://www.thepolisblog.org/2010/01/urbanism-under-stalin.html>

In the 1930s Stalin started out plans for the industrialisation of rural Russia planning the foundation of several new settlements based on a unique industrial activity located in inhabited areas of the country.⁶³ OSA group in 1930 proposed a master plan called “The Green City” projects, that is, the idea to block the centralised organization of Moscow by placing new inhabitants in continuous strips of low house along communication roads.⁶⁴ Their team leader was Ivan Leonidov,⁶⁵ who dealt with the urban planning of Magnitogorsk (FIG.3-9-10-11), a new city in the south of the Ural mountain range. All the plans of “The Green City” projects were based on the concept of linear city.

Ivan Leonidov’s project for Magnitogorsk was one of the most important and ambitious, it focused the city on a stretch of 15 miles in which a communication route led from the industrial hub to the state farms, managing all the services within a complex square grid pattern.⁶⁶ Low

⁶³ Fabrizi, M. “Ivan Leonidov’s Competition Proposal for the Town of Magnitogorsk (1930)”

⁶⁴ Benevolo, L., p. 549

⁶⁵ “Ivan Leonidov: Artist, dreamer, poet”. The Charnel-House. FROM BAUHAUS TO BEINHAUS. <https://thecharnelhouse.org/2015/08/25/ivan-leonidov-artist-dreamer-poet/>

⁶⁶ Fabrizi, M.

and high houses were alternated creating a pattern more dynamic, in which landscape and urbanisation were reconciled through these variations.⁶⁷ All the built functions were located in a natural setting of low density and dispersed across the territory, a straight reference to disurbanist theories.⁶⁸ The central strip of the city displayed residential glass towers buildings interchanged with low-rise structures situated in a “green belt,” all detached each other so as to provide maximum access to air and light.⁶⁹ In a side strip are located public buildings and spaces for leisure freely distributed, which take diverse forms and are placed in every square of the grid. On the other side, beyond the residential strip, are positioned educational buildings, kids’ areas, parks and farmlands.⁷⁰ Two-storey houses, or cell cubes, designed for sixteen people each,⁷¹ present a large common service space by means of a central cross. The private rooms are situated in the corners in groups of two (FIG.9-10-11).⁷²

The geometric principle of this plan is the square, which organizes all the design, from the city plan to the arrangement of single rooms.⁷³ Square and circle construct the whole city planning and suggest the logic of potential expansions which can be augmented adding other elements, making it an open system (FIG.10-11).⁷⁴ The metropolis thus can be dissolved without losing its value as a place of production and exchange.⁷⁵

Open system planning is the most mature and ambitious result of Modernism, which could only come from a generation of idealist and intransigent men, a small group of pioneers who believed tenaciously in the “objective search of truth,”⁷⁶ against every hierarchy and

⁶⁷ Fabrizi, M.

⁶⁸ Lucarelli, F. “Mikhail Okhitovich and the Disurbanism.” SOCKS-Studio. Accessed July 14, 2012. <http://socks-studio.com/2012/07/14/mikhail-okhitovich-and-the-disurbanism/>

⁶⁹ Fabrizi, M.

⁷⁰ Ibidem

⁷¹ Ibidem

⁷² Ibidem

⁷³ Ibidem

⁷⁴ Ibidem

⁷⁵ Benevolo, L., p.549

⁷⁶ Ibidem, p.1040

constituted power. Their aims and researches aspired to democratic principles, which would have questioned the root of all inequality, namely, the mechanism of the post-liberal bourgeois city inherited from the previous society.

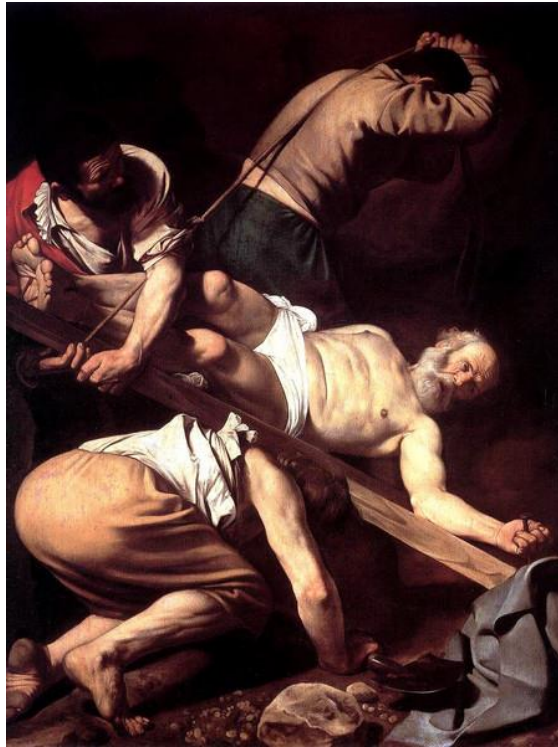


FIG.7 Crucifixion of Saint Peter (1600-1601), Caravaggio. Santa Maria del Popolo, Rome. Available from [https://en.wikipedia.org/wiki/Crucifixion_of_Saint_Peter_\(Caravaggio\)](https://en.wikipedia.org/wiki/Crucifixion_of_Saint_Peter_(Caravaggio))



FIG.8 Adoration of the Christ Child (1619-1621), Gerard van Honthorst. Uffizi Gallery, Florence. Available from [https://en.wikipedia.org/wiki/Adoration_of_the_Christ_Child_\(Honthorst\)](https://en.wikipedia.org/wiki/Adoration_of_the_Christ_Child_(Honthorst))

However, resistance of economic interests and institutions, based on traditional management, delayed or prevented the application of Modernist theoretical researches.⁷⁷ For this reason, it remains complex to make a judgment on Modernist urban planning because it has never been fully applied, and, therefore, it is not possible to see it at the trial of the facts. The partial successes hitherto obtained, as to Amsterdam and the English *new towns* in the second post-war, are obscured by the preponderance of failures: the huge abusive and irregular suburbs.⁷⁸ Advocacy planning or participatory models planning, very fashionable nowadays, move on a consolidated basis of pre-established rules that Modernists tried with difficulty to establish in the years between the two world wars.

⁷⁷ Benevolo, L., p. 927

⁷⁸ Ibidem, p.1041

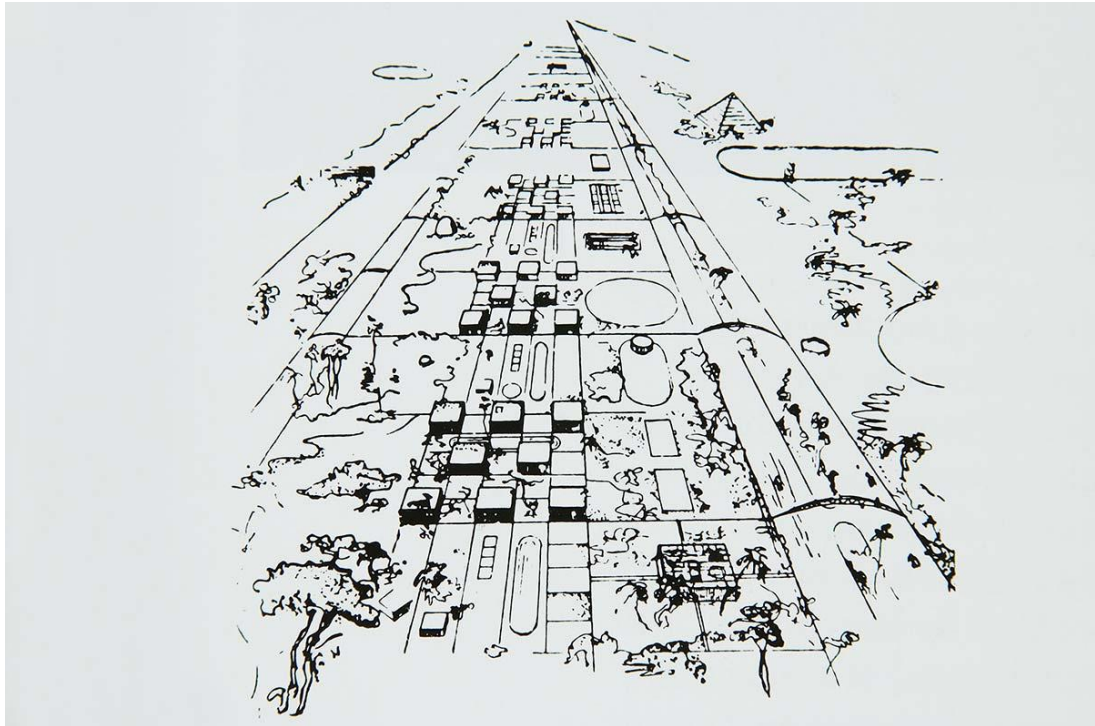


FIG.9 Project for Magnitogorsk (1930), Ivan Leonidov. Available from <http://socks-studio.com/2016/04/12/ivan-leonidovs-competition-proposal-for-the-town-of-magnitogorsk-1930/>

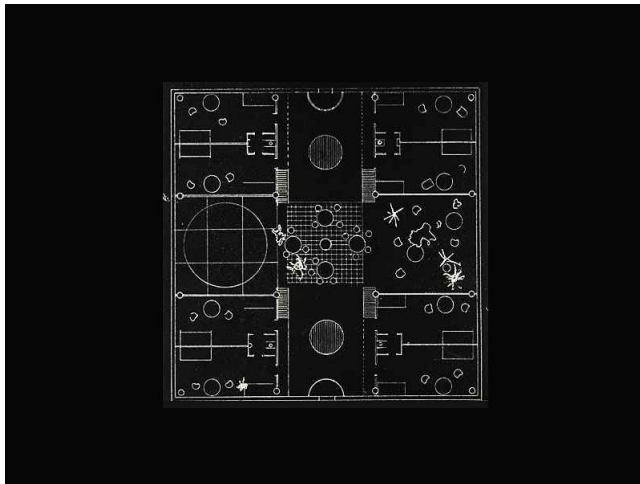


FIG.10 Project for Magnitogorsk - square grid pattern (1930), Ivan Leonidov. Available from <http://socks-studio.com/2016/04/12/ivan-leonidovs-competition-proposal-for-the-town-of-magnitogorsk-1930/>

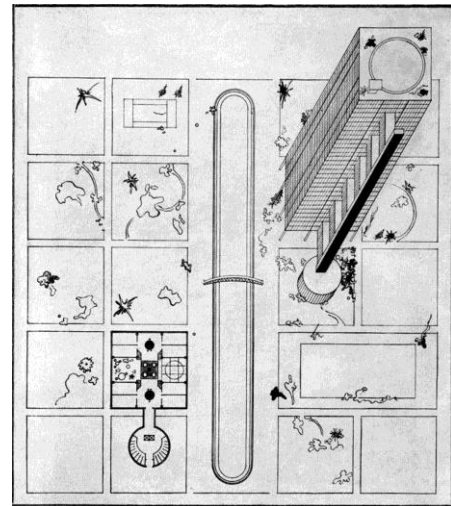


FIG.11 Project for Magnitogorsk – square grid pattern (1930), Ivan Leonidov. Available from <http://socks-studio.com/2016/04/12/ivan-leonidovs-competition-proposal-for-the-town-of-magnitogorsk-1930/>

Conclusion

The legacy of Modernist urban culture is thus in its “principle of objectivity,”⁷⁹ experimental verification of analyses, integrated planning⁸⁰ and a system of communicable forms.⁸¹ Their aim was the invention of a different city independent from the past limitations,⁸² the research of new *standards* for organizing the functions of the city, changing these *standard* to adapt them to ongoing transformations.⁸³ Their rational proposal of objective research is still valuable and communicate the sense of an uncompromised relationship with the life and work ethic. An individual responsibility towards the community from which no one should exempt himself. Walter Gropius was firmly convinced of this when he asserted “the solution depends on a change of the individual disposition towards the work, not from the improvement of external circumstances.”⁸⁴

Modernism is thus a new Renaissance no longer on a national scale, as the Italian Renaissance, but on continental basis, given the collaborative efforts of its promoters. It aspired to dynamically regulate the city life according its paces to physiological and psychological human needs. Polemics, arouse on Modernism, are above all related to the works of the second post-war period, such as Le Corbusier’s Chapelle Notre-Dame du Haut at Ronchamp in 1955 (FIG.12). It is the most controversial of his works, Bruno Zevi asserted to this regard that “it expressed the collapse of all Modernists’ hope to redeem the world with reason.”⁸⁵

⁷⁹ Benevolo, L., p.1041

⁸⁰ Ibidem

⁸¹ Ibidem, p.1039

⁸² Ibidem, p.838

⁸³ Ibidem

⁸⁴ Benevolo, L., p.426

⁸⁵ Zevi, B. *Storia dell’architettura moderna – Volume I – Da William Morris ad Alvar Aalto: la ricerca spazio-temporale*, Torino: Einaudi, 2010



FIG.12 Chapelle Notre-Dame du Haut (1955), Le Corbusier, Ronchamp. Available from <https://carminevolpe.wordpress.com/2016/02/01/notre-dame-du-haut/>

Here Le Corbusier refuses all the five principles of his architectural poetics, clear volumes and surfaces to build an Expressionist style building,⁸⁶ with a looming roof and grazing light which filters through disproportionate windows. In 1910, he wrote on the Acropolis of Athens: “Faced with the intensity of these ruins, it opens up like an abyss, ever deeper, between the soul which perceives and the spirit which measure.”⁸⁷ The spirit which measure is here jeopardised by the horrors of war, which leave no more space to trust in the human being, although it was his greatest concern throughout his life.

⁸⁶ Zevi, B. *Storia dell'architettura moderna*.

⁸⁷ Suma, S. *Le Corbusier. L'architettura. I protagonisti*. Biblioteca di Repubblica-L'Espresso vol. 2, Milano: Motta, 2007, p.95

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