

"THE MAXIMUM ARCHITECTURE CAN DO":  
ARCHITECTURE AND URBANISM  
FROM LE CORBUSIER TO REM KOOLHAAS

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Approval of the Graduate School of Natural and Applied Sciences

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## **ABSTRACT**

“THE MAXIMUM ARCHITECTURE CAN DO”:  
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As from the beginning of the 20<sup>th</sup> century, there has been a shift in the scale of architectural production as an outcome of advanced construction technologies, new range of building materials, automation of building services and progressive infrastructural networks. The increased physical capacity -the deeper and taller buildings- not only increased the scale of the architectural practice in relation with urban planning, but also presented architecture the possibility to offer a wider social programming for the reorganization of the urban territory. The increase in the scale of architectural production, this study would argue, has given rise to a critical tension between the fields of architecture and urbanism.

The aim of this study is to understand alternative positions towards the relationship between architecture and urbanism in the production of the city through a cross-reading of the architectural-urban theories of Le Corbusier and Rem Koolhaas.

At a very preliminary investigation, the urban thinking of Le Corbusier represents the modernist ideal in architecture that is after the rational and linear architectural production of the city with all its social, cultural and economic components. The theory generated by Rem Koolhaas, on the other hand, represents the end of the modernist ideal on the city, since it refuses the possibility of imposing a rigid, definitive and stable program on the city through the mediation of architecture. What separates these two positions is the turning point in the social and cultural structure that was experienced in 1960's, but what makes possible a continuous reading is the both architect's attempt to radicalize the scale of the architectural production, with diverse approaches towards its programming.

The study is an attempt to make this comparative analysis in order to understand what has changed from one to another in terms of their understanding of form, scale, program and context in architectural production, as well as their position towards social programming of the urban organization.

Keywords: Le Corbusier, Rem Koolhaas, Architecture versus Urbanism, Architectural Scale, Bigness, Architectural Program

## ÖZ

“MİMARLIĞIN ULAŞABİLECEĞİ SON NOKTA”:  
LE CORBUSIER'DEN REM KOOLHAAS'A  
MİMARLIK VE KENT PLANLAMA

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20. yüzyılın başlarından itibaren, yapım teknolojilerinin gelişmesi, yapı malzemelerinin çeşitlenmesi, bina içi hizmetlerin otomatikleşmesi ve altyapı ağlarının karmaşıklaşması sonucu olarak mimari üretimin ölçeğinde bir kayma yaşanmıştır. Mimari üretimin artan fiziksel kapasitesi –daha derin ve daha yüksek yapılar- mimarlık uygulamalarının ölçeğini kentsel planlama boyutuna taşımakla kalmamış, aynı zamanda mimarlığa kentsel alanları daha geniş bir sosyal programla dönüştürme olanağı da sunmuştur. Bu tez, mimari üretimin daha büyük ölçeklerde gerçekleştirilebilmesinin, mimarlık ve kent planlama alanları arasında kritik bir gerilim yarattığını savunmaktadır.

Çalışmanın amacı, kentin üretiminde mimarlığın kent planlama ile kurabileceği ilişkiye yönelik alternatif duruşları, Le Corbusier ve Rem Koolhaas tarafından geliştirilen mimarlık-kent kuramları üzerinden anlamaktır.

Genel bir bakışla, Le Corbusier'nin kentsel düşünceleri, kentin ve tüm sosyal, kültürel ve ekonomik bileşenlerinin rasyonel ve doğrusal bir mimari üretimle gerçekleştirilebileceğini öngören bir modernist ideal üzerine kuruludur. Rem Koolhaas tarafından geliştirilen kuramsal çerçeve ise tam tersine, kente mimarlık aracılığıyla katı, belirleyici ve sabit bir program dayatılmayacağını savunur ve böylece kent üzerindeki modernist idealin bitişini temsil eder. Bu iki duruşu birbirinden ayıran, 1960'lı yıllarda sosyal ve kültürel yapıda görülen değişimin ortaya çıkardığı dönüm noktasıdır. Aralarında sürekli bir okumayı mümkün kılan ise, her iki mimarın da, arkaplandaki sosyal kurgu farklı olsa bile, mimari üretimin ölçeğini radikalleştirme çabasıdır.

Bu çalışma, karşılaştırmalı bir çözümleme yoluyla, bir duruştan diğerine mimari üretimde biçim, ölçek, program ve bağlam anlayışları açısından neler değiştiğini ve bu değişimlerin kentsel düzenlemede öngörülen sosyal programa nasıl yansıdığını değerlendirmektedir.

Anahtar Kelimeler: Le Corbusier, Rem Koolhaas, Mimarlık ve Kent Planlama, Mimari Ölçek, Büyüklük, Mimari Program

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## **CHAPTER 1**

### **INTRODUCTION**

The aim of this study is to understand alternative positions towards the relationship between architecture and urbanism in the production of the city through a cross-reading of the architectural-urban theories of Le Corbusier and Rem Koolhaas.

At a very preliminary investigation, the urban thinking of Le Corbusier represents the modernist ideal in architecture that is after the rational and linear architectural production of the city with all its social, cultural and economic components. The theory generated by Rem Koolhaas, on the other hand, represents the end of the modernist ideal on the city, since it refuses the possibility of imposing a rigid, definitive and stable program on the city through the mediation of architecture. What separates these two positions is the turning point in the social and cultural structure that was experienced in 1960's, but what makes possible a continuous reading is both architects' attempt to radicalize the scale of architectural production, with diverse approaches towards its programming.

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As from the beginning of the 20<sup>th</sup> century, there has been a shift in the scale of architectural production as an outcome of advanced construction technologies, new range of building materials, automation of building services and progressive infrastructural networks. The increased physical capacity -the deeper and taller buildings- not only increased the scale of architectural practice in relation to urban planning, but also presented architecture the possibility to offer a wider social programming for the reorganization of urban territory. The increase in the scale of architectural production, this study would argue, has given rise to a critical tension between the fields of architecture and urbanism.

From a cultural point of view, the city has always been the object of architectural desire with the “reduction of the physical-spatial reality of the city to the status of the architectural building: the city as an object of architectural desire is the city as building”.<sup>1</sup> However, the reality of the city as a constantly changing social, political and economic process has always resisted to “its reduction to the status of building that is, to the spatiality and totalizing nature of the object implied by the architectural urban practice”.<sup>2</sup> On the other hand, the permanent structure of architecture has also resisted to the temporality of urban processes: “Architecture is too slow or too fast, it rebuilds the past or projects an impossible future, but it can never insert itself into the contingency of the urban present”.<sup>3</sup> It is by this way any architectural attempt to take control of the social, political and economic forces of the city by imposing a rational order becomes problematical.

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<sup>1</sup> Mario Gandelsonas, “The City as the Object of Architecture”, *Assemblage* 37, 1998, p. 130. This study does not intend to go deeper into a cultural reading, but it will focus on a social point of view. For a detailed cultural reading of architecture's position in “metropolis” through the work of Rem Koolhaas from a historical perspective, see: Emre Altürk, *XXL, Metropolis as the Object of Architecture*, Unpublished M. Arch Thesis, March 2004, METU.

<sup>2</sup> Ibid., p.131.

<sup>3</sup> Ibid.

Taking the problem from another perspective, Manfredo Tafuri shows that it is possible to analyze the course of modern movement as an ideological instrument of capital, which resulted in a failure. Building the city as the biggest architectural production and at the same time protecting the permanent institutionalized framework of architectural practice is impossible: “Architecture, at least according to the traditional notion, is a stable structure, which gives form to permanent values and consolidates an urban morphology”, says Tafuri, “Those who may wish to shatter this traditional notion and link architecture with the destiny of the city, can only conceive of the city itself as the specific site of technological production and as a technological product in itself, thereby reducing architecture to a mere moment in the chain of production”.<sup>4</sup>

Both the social and cultural criticism of architecture’s relation with the city marks 1960’s as a turning point –which is the essential breaking point between the historical periods of Le Corbusier and Rem Koolhaas. These years witnessed a series of influential writing, each of them looking from different perspectives that took critical positions towards the modernist ideal of the architectural production of the city. Jane Jacobs, in her book “The Death and Life of Great American Cities” published in 1961, severely criticized the orthodoxy of modern planning principles imposing a pre-defined set of social relations and urban order, especially exemplifying the problematic through the figure of Le Corbusier.<sup>5</sup> With a more theoretical approach, Aldo Rossi, in his book “The Architecture of the City” published in 1966, was criticizing the “naïve functionalism” of the modern architecture and his urban theory was based on the development of the city through the themes of historical continuity: “consciousness”, “memory” and “persistence” that were acquired in time by the “urban artifacts”.<sup>6</sup> Robert

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<sup>4</sup> Manfredo Tafuri, “Toward a Critique of Architectural Ideology”, *Architecture Theory Since 1968*, ed. by Michael Hays, Columbia University, New York, 1998, p. 14.

<sup>5</sup> Jane Jacobs, *The Death and Life of Great American Cities*, Random House, New York, 1961.

<sup>6</sup> Aldo Rossi, *The Architecture of the City*, Oppositions Books, MIT Press, Massachusetts, 1988. (First published in Italian 1966)

Venturi, who published the book “Complexity and Contradiction in Architecture” in 1966, was proposing a new perspective towards social and cultural context, through symbolism and the celebration of popular and legible forms in architecture.<sup>7</sup>

These different critical positions showed their influence in the architectural production of the 1970's onwards and, as Gandelsonas describes, “this major restructuring of the theory and practice of architecture is produced by the displacement in architectural production from designing and ‘writing’ a new city to reading a ‘ready-made’ city”.<sup>8</sup>

It is in this context that we should consider the development of the theory of Koolhaas, which is based on the “retroactive manifesto” of Manhattan’s architecture.<sup>9</sup> In the manifesto, Manhattan represents the ultimate metropolitan condition, which is interpreted by Koolhaas as the necessary condition in today’s cities under the influence of simultaneous explosion of population density and invasion of new technologies. The architectural processes undergoing in such a context were taken as a departure point for the generation of a new theory. The main reason for the constitution of a new theory, for Koolhaas, is the increase in the scale of architectural production, which beyond a certain scale –that gains the properties of “Bigness”- can not be limited with defined functions, established set of relations and linear programming, but rather it should have the potential of containing a proliferation of events that can continuously transform under changing conditions in the social and cultural context. Architecture, when conceived as a permanent and definitive process, says Koolhaas, loses its operative mechanism within the instability of the metropolitan dynamics and takes upon the status of a decor for the illusions of history and memory.

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<sup>7</sup> Robert Venturi, *Complexity and Contradiction in Architecture*, 2<sup>nd</sup> Edition, The Museum of Modern Art, New York, 1977. (First published in 1966)

<sup>8</sup> Mario Gandelsonas, “The City as the Object of Architecture”, *Assemblage* 37, op. cit., p. 134.

<sup>9</sup> Rem Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan*, The Monacelli Press, New York, 1994.

The “retroactive manifesto” and the “theory of Bigness” mark a very important shift after Le Corbusier, in terms of the role of architecture in the urban production and its social programming. It is a total deviation from Le Corbusier’s principles, which foresee a rational and linear process for the reorganization of the densities and functions of the city through the mediation of architecture. This shift finds its reflection also in the form, scale, program and context of the architectural production. The cross-reading of these two positions will be a means to get a deeper understanding of their theories and practice. It will be an opportunity to remember the objectives and contradictions of the modernist ideals on the architectural production of the city and their dispersal to pave way for a new discourse on the architectural-urban program.

It should be noted that, rather than following a historical course between the two bodies of work, this investigation more intends to evaluate the two positions within their diverse historical, social and cultural contexts to understand which continuities and discontinuities can be detected. The aim is to widen the perspective through which we look at the interface between architecture and urbanism under the influence of socioeconomic processes.

With these objectives, it will be a more productive reading to understand the principles of Koolhaas’s theory first, and to examine the theory of Le Corbusier in a retrospective manner. By understanding the alternative architectural processes proposed by Koolhaas as a reaction to the modernist discourse on the city, it will be possible to look at Le Corbusier’s city plans through a different perspective. The aim of the discussions will be to see “the maximum architecture can do” in the city, which is the main target behind Koolhaas’s generation of a theory on Bigness.<sup>10</sup>

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<sup>10</sup> “The absence of a theory of Bigness –what is the maximum architecture can do?- is architecture’s most debilitating weakness. Without a theory on Bigness, architects are in a position of Frankenstein’s creators: instigators of a partly successful experiment whose results are running amok and are therefore discredited”. Rem Koolhaas, “Bigness or the Problem of Large”, *S, M, L, XL*, The Monacelli Press, New York, 1995, p. 509.

Before proceeding for discussions, a brief note on the historical scope of the study should be added.

Both in terms of architectural integration and social engagement of urban organization, Le Corbusier's works from 1920's (when he made public his earliest city plan, Contemporary City for 3 Million People) up until 1945's (when the *Unité d'Habitation* was built in Marseille) contains the most characteristic city plans for the aims of this study. The *Plan Voisin* for Paris (1925), Radiant City (1930) and master plans for Rio de Janeiro (1929), Algiers (1930) and Nemours (1934) fall in the scope of this historical interval. All these plans were conceived in such a way to maximize the urban density with the integration of architectural production. In this framework, the plan for the city of Chandigarh realized at a later date (1951-1964) remains out of scope for it was not a case dealing with the infrastructural necessities that will solve the problems of maximum density, but it was rather aimed to serve as an administrative city –rather than an industrial city- with “precise function and precise quality of inhabitants”.<sup>11</sup>

In the discussion of Rem Koolhaas, the study will focus on his Retroactive Manifesto for Manhattan, which was compiled around 1972, to understand the theoretical foundations derived from the “reading” of the city. The massive catalogue of works Small, Medium, Large, Extra-Large (S, M, L, XL) published in 1995 will afterwards present a larger perspective about how this reading finds its reflection on the projects.

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<sup>11</sup> “Chandigarh is a Government city with a precise function and, consequently, a precise quality of inhabitants. On this presumption, the city is not to be a big city (metropolis) –it must not lose its definition. Some people say that life must come in the city from other sources of activity, especially industry-but an industrial city is not the same as an administrative city. One must not mix the two.” The extract is from the document of Le Corbusier's description for the use of the Chandigarh plan, quoted in: Mahdu Sarin, “Chandigarh as a Place to Live in”, *The Open Hand: Essays on Le Corbusier*, ed. by Russell Walden, MIT Press, Cambridge, 1977, p. 375.

Chapter 2 should be read as a short prologue to establish the general framework of the discussion by meeting the theories of Le Corbusier and Rem Koolhaas at a common point, Manhattan-New York. Le Corbusier, who visited the city in 1935, had explained his position by every means as its antithesis. Rem Koolhaas, who carried out studies on Manhattan in 1972, builds up his theory on Manhattan. So, Manhattan becomes a meeting point in terms of the two architectural-urban theories.

Chapter 3 tries to understand the essentials of Koolhaas's theory. The point of departure for the examination of the theory is twofold: The first and the foremost important question is the *scale* of architectural production that creates an interface between architecture and urbanism and the second is a consequent need for a new *programmation* of architecture. The main themes of discussion will be *Bigness*, *Schism*, *Lobotomy*, *Grid* and *Tabula Rasa*. Although a variety of concepts generated in different projects will take place throughout the discussions, the Large project of Congrexpo and the Extra-Large project of Euralille, which epitomize these concepts, will be the final focus of the discussion.

Chapter 4 consists of a retrospective reading of Le Corbusier's urban thinking and the discussion will be shuttling between the positions of Le Corbusier and Rem Koolhaas. The main themes are the social background, urban program and hierarchical scale understanding in Le Corbusier's plans. The Algiers plan, which will be a focus of interest in the final part, aims to make concluding remarks.

Chapter 5 consists of the conclusions drawn from the discussion of the main themes of the study.

## CHAPTER 2

### ARCHITECTURE VERSUS URBANISM: A PROLOGUE

#### 2.1. Anti-Manhattan

Le Corbusier paid his first visit to New York in 1935. The significance of Le Corbusier's visit to New York comes from his critical relationship with the city, which he found "at once so disturbing and yet so admirable". Expressing this contradictory notions in one of his articles to the American journal *T-Square* three years before the visit, Le Corbusier says that New York is both an *admirable* "epic hero that stands on the edge of the world" for the decision and energy displayed in the act of building a new order, and when considered in architectural terms, a *disturbing* "mighty storm, tornado and cataclysm that is so utterly devoid of harmony".<sup>12</sup>

The explosive energy and fantastic urge of modern times, for Le Corbusier, makes the United States "adolescent of the contemporary world", and New York "her expression of ardor, juvenility, rashness, enterprise, pride and vanity".<sup>13</sup> According to him, the condition in New York proclaims the necessity of taking action for the creation of a new order also in Europe, where in the people there is lack of that "spiritual urge to build".<sup>14</sup>

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<sup>12</sup> Le Corbusier, "We Are Entering upon a New Era", *T-Square*, vol: 2, No: 2, February 1932. (FLC X1-11-176), pp. 14-15.

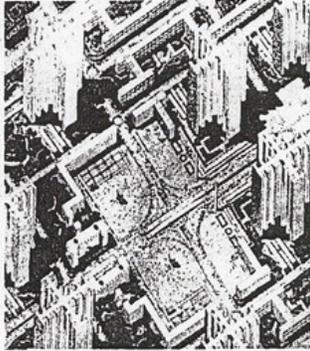
<sup>13</sup> *Ibid.* p. 16.

<sup>14</sup> *Ibid.* p. 14.

"Le Corbusier scans Gotham's towers. The French architect, on a tour, finds the city violently alive, a wilderness of experiment toward a new order" H. I. Brock

# LE CORBUSIER SCANS GOTHAM'S TOWERS

## The French Architect, on a Tour, Finds the City Violently Alive, a Wilderness of Experiment Toward a New Order



The City of the Future as Le Corbusier Envisions It.

By H. I. BROOK

THE cities of the French Republic who is known as Le Corbusier—he was born Jeanneret and his given name is Charles-Edouard—is just now paying his first visit to America and has had his first eyeful of the man-made miracle which is New York. In circles where disputing about art is a major sport, Le Corbusier is identified as the founder and public exponent of the mood in architecture which has been labeled the International Style and which certain stiff conservatives insist does not look like architecture at all.

The basic principle of this style is to regard the architect's function as primarily one of household efficiency engineering. His job is to furnish human creatures with a convenient "machines for living in." As stated, the principle applies specifically to the family dwelling, but it applies also to the multiple arrangement of buildings which takes care of the composite employments and the complex human activities of a city where great numbers of people must live and most of them attend to business.

Since the modern dwelling and the modern city have each new demands to meet, since each has at command a service of machinery and materials which no dwelling and no city has ever had before, Le Corbusier and his school begin by discarding traditions and dismissing prejudices which would perpetuate formulas of building evolved from conditions of life that have ceased to exist.

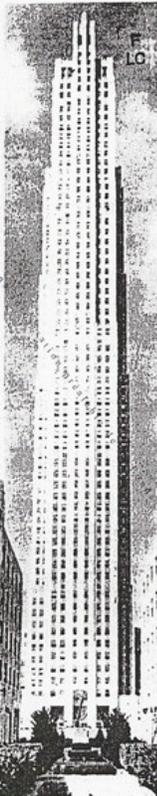
velaine engaged in distributing the quality-production output or moving these millions of people about, back and forth between home and business, and generally where they want to go, creating in the process no end of traffic tangles and even seriously endangering to life and limb those who still have to get about on their own feet.

Le Corbusier has built in France and other European countries machines for living in—machines also for doing business in. Whether these machines are, in fact, more efficient than the houses other architects build is a question which will not be argued here. But it is true that, at three years short of 50, he is more famous as the articulator



Too Small!—Yes, Says Le Corbusier; Too Narrow for Free, Efficient Circulation.

voice of the new architecture than as the executor of its projects. He represents a vision of the future rather than a proved practice of the present.



appalled by the brutality of the great masses—the "sauvagerie"—the wild barbarity of the stupendous, disorderly accumulation of towers, trampling the living city under their heavy feet, like a herd of mastodons.

As the ship moved up the river and he got the city broadside on, as the cluster of bunched towers of the skyscrapers of finance tilted out and other towers began to stand out separate, gleaming in the sunlight in the open space above their lower neighbors, his despondency abated. Hope revived for the future which the first height vision had seemed to embody. That vision might not, after all, be a mirage.

LATER, while touring the city in the company of the writer, he stood at the base of the steep sheer cliff of Raymond Hood's stat in Rockefeller Center and said that it was good, then began restfully to rub the crick out of the back of his neck that was the result of trying to look up to the very top of anything so tall and uncomprehendingly perpendicular.

He found the smaller buildings on the Fifth Avenue front—dedicated to France and the British Empire—out of scale, both with the upreared mass and the human beings walking about the central plaza. That plaza itself, all bare (as it is apt to be when the tourist season is on the wane), struck him as decidedly dull—in spite of Proudhon's and his fountain.

Then he was shot in an elevator (at the rate of 1,200 feet a minute) to the very top of the big stat—the deck under which harks the Rainy Room—and looked out upon the map of the city, by that time half veiled in a soft gray mist, which cut off the horizons far short of the two extremes of our narrow island but revealed the bounding ribbons of water on either side.

skyscrapers nevertheless stood out boldly. Now and again the sun thrust through the thin clouds and bathed their faces in a brief glory of high light or gilded the fancy tops which some of them have borrowed from all the styles—unimportant to M. Le Corbusier—that came before the steel skeleton revolutionized large-scale building. It was excellent theatre—spectacular drama.

BUT the modern architect was not particularly impressed. He was looking for architecture, not theatre, and sky, besides, of succumbing to drama so undramatic. Moreover, he was looking for architecture in his own sense of the word—in this case, the city that is a machine for living in—not merely righteously expensive scenery built to knock the beholder's eye out.

"They are too small," he said, looking straight at the Empire State Building, tallest in all the world of filing cases for men and standing on one of the biggest pieces of ground devoted to that purpose in the city.

Somebody pointed out a building with "modern" horizontal lines, better continuous windows about it, down by the Hudson, and a building with "modern" vertical lines, stacking up windows in parallel slots, over toward the East River.

"I am not interested," said Le Corbusier. "In that sort of thing—both sets of lines are all right as expressing the idea of horizontal and vertical circulation respectively. But what counts is the actual existence in the building of the two kinds of circulation and their efficient coordination. That is the combination which creates adequate machines for business for awares of people—human beings—if it is joined, of course, with free circulation among the buildings."

The skyscrapers that thrust up North, south, east and west, the

(Continued on Page 23)



Figure 2.1.1 Le Corbusier in New York, New York Times Magazine, 3 November 1935. (FLC X1-12-129)

“By thrusting forward and pushing upward, at whatever cost of blasting through, New York has come to be what it is. It is overwhelming, amazing, exciting, violently alive –a wilderness of stupendous experiment toward the new order”.<sup>15</sup>

New York’s energy in responding to changing times is appraisable for Le Corbusier, but he puts a severe criticism to the way this energy is canalized and the method the density is organized in architectural terms. At this historical turning point, he marks his own mode of urban thinking as a new beginning. Refusing to admit that Manhattan possesses the architecture and urbanism of modern times, he compares the silhouette of his Radiant City with that of New York. The American skyscrapers do not exist in terms of architecture, he believes, because of the arbitrary and individual process of growth from the fixed size of plots and lack of the authority of architect as the *organizer* of the overall plan. According to him, everything in New York is paradox and disorder, where individual liberty destroys collective liberty and where there is a lack of discipline. Le Corbusier introduces a new theory of urbanism explicable in an *antithetical* manner against New York.

“In place of a porcupine and a vision of Dante’s Inferno, we propose an organized, serene, forceful, airy, ordered entity... I insist on this notion of order because it is my answer to the deformed and caricatured lyricism of those ‘preachers on behalf of life’ for whom *life* is no more than accident. For me, life means something brought to perfection, not something botched. It is mastery, not an abortive chaos. It is fecundity (the total splendor of a lucid conception) and not sterility (the dungheap into which we have been plunged by all those thoughtless admirers of the miseries now existing in our great cities)”.<sup>16</sup>

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<sup>15</sup> “Le Corbusier Scans Gotham’s Towers”, *The New York Times Magazine*, 3 November 1935 (FLC X1-12-129).

<sup>16</sup> *Ibid.*, p. 134.



**Figure 2.1.2** Manhattan versus Le Corbusier's Contemporary City.

## **2.2. Manhattanism**

Rem Koolhaas, who studied in New York after a scholarship he received in 1972, attempts to re-write Manhattan's architectural and urban history in his book "Delirious New York: A Retroactive Manifesto for Manhattan" published in 1994.<sup>17</sup> The retroactive manifesto was the first public appearance of a new theory on urbanism derived from the potentials of Manhattan's architecture, namely the metropolitan condition *par excellence*. The manifesto marks a very important turn after Le Corbusier, in terms of the role of architecture in the urban production and its social programming.

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<sup>17</sup> Rem Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan*, op. cit.

In the context of Manhattan, the retroactive manifesto demonstrates the emergence of a new type of architecture and urbanism as influenced by a new culture, namely the *metropolitan culture* that showed its existence by the beginning of the 20<sup>th</sup> century. The book, which includes the histories of a series of buildings and unrealized projects that are of prime importance in the urban development of New York, aims to present the possibilities offered by the metropolitan culture to architectural production.

Manhattan's architecture is interpreted by Rem Koolhaas as the product of an unformulated theory called *Manhattanism*, whose program pushes the consequences of metropolitan condition to extremes. The theory is based on the paradoxical nature of the encounter between the permanence of architecture and transience of metropolitan condition. In Manhattan, this paradox is resolved by the development of a specialized architecture taking its givens from the changing dynamics of the metropolitan condition.

The metropolitan condition necessitates a redefinition of form, scale, program and context in architecture, namely a new definition of architectural production process in the urban territory. This was the case both for Le Corbusier in the beginning of the century, and for Koolhaas at the turn of the century, but their response differs according to their interpretation of the metropolitan condition. According to Le Corbusier, the metropolitan condition is a chaos that should be taken under control by the imposition of a rational order that is the necessity of the modern times, while for Koolhaas the chaotic nature of the metropolitan condition is a potential that should be radicalized in the architectural processes so as to reclaim architecture's role as a vehicle of modernization.

### **2.3. Critique**

In the retroactive re-writing of Manhattan's history, Rem Koolhaas shows interest in Le Corbusier's visit to the city. According to Koolhaas, Le Corbusier's antagonist attitude towards New York disregards the possibilities offered by the metropolitan culture to architectural production.

And moreover, for him, Le Corbusier's criticism against New York was shaped with paranoia, in which "each fact event, force observation is caught in one system of speculation and 'understood' by the afflicted individual in such a way that it absolutely confirms and reinforces his thesis".<sup>18</sup>

Koolhaas says, "Le Corbusier dismantles New York, smuggles it back to Europe, makes it unrecognizable and stores it for future reconstruction".<sup>19</sup> The fact becomes understandable when one returns to the figures comparing the Radiant City with Manhattan. If the Radiant City takes the functions and densities of the metropolitan condition in Manhattan together with its high density blocks, it passes them through a filter to reorganize them in a rational order. This reading is only possible through a glance on the *appearance* of the two cities; their inner *performance* can only be compared through a cross-examination of their program, which is the main target of the following chapters.

Moreover, the cross-reading of the two positions aims to show that, as much as Le Corbusier defines his position as anti-Manhattan, Rem Koolhaas strengthens his theory by explaining it in opposite terms to Le Corbusier's urban thinking.

The study will follow an inverse reading of these two positions. By keeping in mind the theories, projects and problematical issues inherent in Le Corbusier's position that has the historical precedence, the investigation will firstly focus on the current field of architectural thinking and operation as prompted by Rem Koolhaas. The method aims to provide alternative readings that would go beyond a simple cause and effect relationship.

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<sup>18</sup> Ibid., p. 238.

<sup>19</sup> Ibid., p.25.

## CHAPTER 3

### REM KOOLHAAS: UNDERSTANDING PRINCIPLES

#### 3.1. Theory

The theory of Rem Koolhaas redefines the elements, principles and processes of architecture in direct relation with a new definition of urbanism, in order to make it operable in the metropolitan territory under the rapid development of technologies, high rate of demographic increase and ever-changing dynamics of contemporary politics, economy and globalization. The theory emerges at a moment of *crisis* when urbanism as a profession, conceived as a control mechanism for the city, has disappeared after the failure of modernist planning that attempted to take control of the city and its culture through architectural mediation. As a counter reaction, the theory makes a new definition of *scale* and *program* for architecture in order to relieve it from the responsibility of rationalizing the urban processes.

In this respect, the point of departure for the examination of the theory will be a twofold discussion on the *scale* and *program* of architectural production.

The essential source for the discussion of *scale* is Rem Koolhaas's influential book "Small, Medium, Large, Extra-Large" published in 1995. The book includes the architectural works produced by Koolhaas's Office for Metropolitan Architecture-OMA over the past twenty years from its publication, with accompanying essays, manifestoes and observations on contemporary architecture and city. The material in the book is organized

according to the size of the architectural intervention made by each project. The episodes of the book that fall into the scope of this study is those containing the “Large” and “Extra-Large” projects, the latter exploring the *maximum* possible architectural intervention in the city, while the former investigating the transformations in the architectural conception of site, program, form and technology so as to redefine this maximum. The major text in the book is the Theory of Bigness, which foresees a transformation in architectural processes as an outcome of the increase in the scale.

To understand the new architectural *programmation*, the additional source will be the book “Delirious New York: A Retroactive Manifesto for Manhattan”, which was published a year before the “S, M, L, XL” –the manifesto is based on a research even much earlier, around 20 years. The former examines a specialized type of architecture generated under the metropolitan condition in Manhattan and a close reading will show that it lays the entire foundations for a new architecture presented in the latter. From the reading of Manhattan, the retroactive manifesto concludes that the new programming of architecture will be advanced as much as it conforms to the indeterminate and instable nature of the metropolitan condition. “Architecture is no longer a patient transaction between known quantities that share cultures”, says Koolhaas, “No longer the manipulation of established possibilities, no longer a possible judgment in rational terms of investment and return, no longer something experienced in person –by the public or critics”.<sup>20</sup> The new theory can be interpreted as a reaction to the rational and linear programming of architecture that draws a framework for stable configurations, definitive forms, limits and boundaries. Instead, its very basis is the organization of relationships between independent parts, hybridizations, proximities, frictions, overlaps and superpositions to enhance flexibility of the program and to expose the potentials of the territories for continuous transformation.

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<sup>20</sup> Rem Koolhaas, “Globalization”, *S, M, L, XL*, op. cit., p. 367.

The major aim of the reading of Koolhaas's work in a deeper theoretical background is to provide a wider framework for reconsidering Le Corbusier's position. How the scale and the consequent critical relation between architecture and urbanism is conceived and with this conception how the programming of architecture is transformed will be the main issues for the cross reading. Therefore, a deeper understanding of the key concepts to be elaborated in the coming pages is essential.

The Theory of *Bigness*, which is the elaboration of the properties that architecture acquires beyond a certain scale, will be the first sub-theme to understand the new relation between architecture and urbanism. The discussion points on the concepts of *Schism*, *Lobotomy*, *Grid and Tabula Rasa* will take a closer look at the transformed program of the new architecture and urbanism. Finally, how these concepts are implicated in the architectural production will be examined by two intertwined projects selected from OMA's catalogue of works; Large project Congrexpo building and Extra-Large project Euralille.

### **3.2. Bigness: L and XL**

The increase in the scale of architectural production, as from the beginning of the 20<sup>th</sup> century, has enabled architecture to exploit the complex set of relationships it can establish with the urban territory and therefore to offer a richer social programming. During the first half of the century, this potential of social programming was first of all used as an opportunity for the realization of architectural desires on the production of the city. The theory of Bigness, on the contrary, has no claim to have a control on the city.

“Beyond a certain critical mass, a building becomes a Big Building”, says the Theory of Bigness, “Such a mass can no longer be controlled by a single architectural gesture or even by any combination of architectural gestures”.<sup>21</sup>

The statement informs about a transformation in the definition of architectural space and in the architectural processes used in its production. With the increase in scale, the classical repertoire of architecture is no more valid for undertaking these processes for the production of architectural space, because Bigness –“*the maximum architecture can do*” as Koolhaas explains it– is actually an urban condition enveloped by the boundaries of architectural production.

Being defined as the production of urban space within the boundaries of architecture, the condition of Bigness should have a position towards the social and cultural context. In this respect, the Theory of Bigness attempts to reconcile the processes of architectural production with the social and cultural forces of the city. The theory is established on such a position that the architectural production beyond a certain scale –that gains the properties of Bigness- can not be limited with defined functions, established set of relations and linear programming, but rather it should have the potential of containing a proliferation of events that can continuously transform under changing conditions in the social and cultural context. Thus, the main idea is to increase possibilities for change, transformation and mutation in the course of time. The envelope that defines the boundaries of urban space becomes the main stabilizing element of architectural intervention.

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<sup>21</sup> Rem Koolhaas, “Bigness: or the Problem of Large”, *S, M, L, XL*, op. cit., p. 499.

“Bigness is where architecture becomes both most and least architectural: most because of the enormity of the object; least through the loss of autonomy –it becomes instrument of other forces, it *depends*”.<sup>22</sup>

The dependence of urban space –as *enveloped* by architectural production– on the changing conditions means that the activity field of architects should also be related with other related disciplines, especially to the technological support of engineers and others like, for example, contractors, material producers, manufacturers, politicians and economists. In this respect, the field of responsibility for the architect, it can be argued, becomes closer to the role of the urban planner, who has been dealing with a wider range of disciplines to overcome the complexity of the urban mechanisms.

Thus, Bigness can be defined as a condition that is an outcome of the severance of the relation between architecture and urbanism. Architectural processes deal with an urban condition within the boundaries of architectural production and the city becomes a collection of these dynamic processes.

The following discussions will be an attempt to understand the programmatic principles for the new definition of architecture and urbanism, with respect to the change in the scale of architectural production.

### **3.3. Program: Schism, Lobotomy**

The Retroactive Manifesto for Manhattan gives the first clues for the Theory of Bigness, both in terms of the understanding of scale and program. Koolhaas draws the main lines of his architectural theory in the manifesto. For the aims of this study, it is possible to borrow some of the discussions that took place in the manifesto about the American skyscraper, which was

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<sup>22</sup> Ibid., p. 513.

one of the earliest prototypes for the “taller” and “larger” buildings that necessitated a new understanding of scale and program in architecture.

This necessity is illustrated in one of the best ways in a cartoon published in the *Retroactive Manifesto for Manhattan*. (Fig. 3.3.1) The illustration depicts the skyscraper as a device for the multiplication of the ground space. The skyscraper, with the possibilities it offers for the multiplication of horizontal ground space in the vertical dimension, can be interpreted as the “reproduction of the world”.<sup>23</sup>

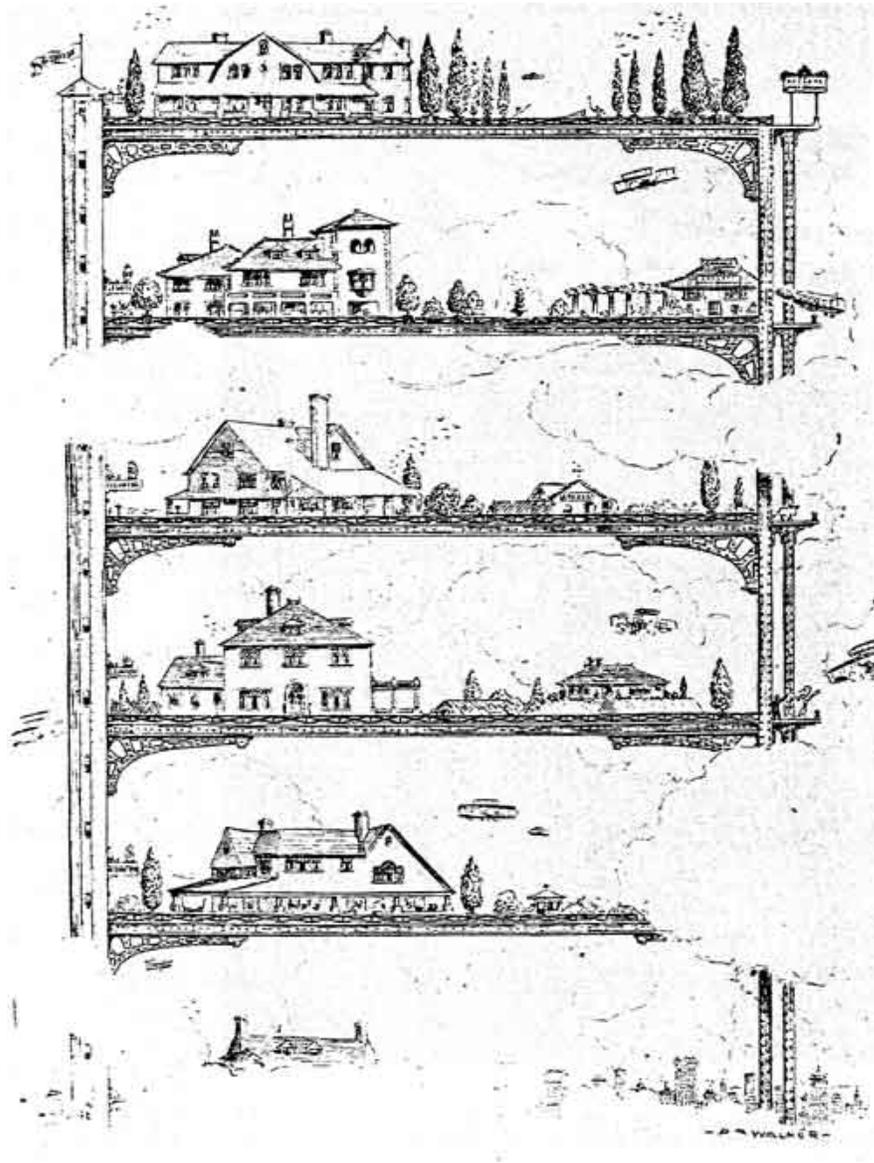
The skyscraper depicted in the cartoon consists of 84 platforms, five of which are visible in the frame. Each platform multiplies the size of the original site by means of the rising steel construction, resulting with the “unlimited creation of virgin sites on a single urban location”.<sup>24</sup> With the exaggeration of scale, the “ideal performance of the skyscraper” becomes to serve as a framework for a series of independent horizontal platforms, each of them having the potential to represent different social layers, cultural and stylistic concerns and ideological functions. The platforms are conceived as a whole only by the connecting structural framework and elevator system, but in terms of the content they operate individually and they do not have to function under a single program. The change in the program of separate platforms does not influence the overall framework.

The cartoon is a very significant example to understand the essentials of the radical shift in terms of the missions and responsibilities of architecture. To understand this shift, it is possible to make a cross-reading of the cartoon with one of the skyscrapers, The Downtown Athletic Club, the section of which represents the essence of the *Retroactive Manifesto*. (Fig. 3.3.2)

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<sup>23</sup> Rem Koolhaas, *Delirious New York*, p. 82.

<sup>24</sup> *Ibid.*, p. 87.



**Figure 3.3.1** Cartoon of a skyscraper, 1909, from the Retroactive Manifesto for Manhattan.



The Downtown Athletic Club, a multi-purpose building that contains a very diverse program of athletic, social and dining facilities, consists of 38 superimposed platforms interconnected by 13 elevators. The section reveals the programmatic layering: the lowest floors are allocated to conventional athletic facilities -billiards, squash, handball, golf, gymnasium-, the 9<sup>th</sup> floor contains the lockers room, 10<sup>th</sup> floor the medical baths, 12<sup>th</sup> floor the swimming pool, the next five floors allocated to “eating, resting and socializing” -dining rooms, kitchens, lounges and library- and from the 20<sup>th</sup> floor to the 35<sup>th</sup> the section holds the bedrooms.

Just with the cross-examination of the section of the Club with the cartoon depicting the ideal performance of skyscraper as the multiplication of the site, it is possible to come to certain conclusions about the role of architecture, which is stripped of the duties of defining strict functions for specific forms. Instead, architectural activity includes the organization of a framework in such a way to create potentials for an endless combination of programs.

The examination of the section is not sufficient to understand the new programming in its three-dimensional entirety; the characteristics of the plan should also be scrutinized. In the section, the only permanent elements in the background of endless number of programmatic possibilities stacked on each other are the elements of the structure, circulation, service and envelope. If one takes the plans and the section of Downtown Athletic Club to extremes so that the only traces of architectural intervention becomes the existence of columns, elevators, service cores and external envelope in the plan, then this minimum presence of the elements in the horizontal section constitutes the *Typical Plan*. The plan is typical and neutral because it has no unique organization or specific function that will endanger the potential for continuous programmatic transformation: “You can only *be* in Typical Plan, not sleep, eat, make love”.<sup>25</sup>

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<sup>25</sup> Rem Koolhaas, “Typical Plan”, *S, M, L, XL*, op. cit., pp. 338-341.

The section of programmatic layering and the typical plan constitute the two essential principles of the architectural strategies inherent in the new theory. The first is the *superimposition* of different programs in the section without any other connection but the columns, elevators, service cores and the external envelope –*Vertical Schism*. The second is the *disconnection between* the interior and exterior of the building so as to allow the continuous transformation of the program in the interior without influencing the permanent character in the envelope –*Lobotomy*.<sup>26</sup>

The paradox between the *permanence* of architecture and *instability* of the metropolitan condition is resolved through the development of a new type of architecture, in which the interior, *programmatic performance* becomes independent from the exterior, *monumental appearance*. The permanence of architecture is kept intact through the envelope, while the sustainability of the operative mechanism is as well assured by the instability of the program. The split between form and function –*appearance* and *performance*– in the architectural production can be taken as an initial action of a shift in the production of the city. It can be interpreted, at the same time, as a reaction to the modernist planning that strictly linked the formal configuration to the functional diagram.

Urban planning is now defined as a random, but meaningful organization of individual architectural elements, each containing aleatory programmatic processes. The Grid, which represents the neutral fragmentation of the urban territory, in which architectural intervention becomes limited with the boundaries of each island, is the third constituting element of the theory after Schism and Lobotomy borrowed from Manhattan. The separation between the architectural intervention's field of action and the city means a separation between architecture and urban planning.

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<sup>26</sup> Lobotomy is a medical term that corresponds to "the surgical severance of the connection between the frontal lobes and the rest of the brain to relieve some mental disorders by disconnecting thought processes from emotions". Rem Koolhaas, *Delirious New York*, op. cit., p. 100.

“In terms of urbanism, this indeterminacy means that a particular site can no longer be matched with any single predetermined purpose. From now on each metropolitan lot accommodates –in theory at least- an unforeseeable and unstable combination of simultaneous activities, which makes architecture less an act of foresight than before and planning an act of only limited prediction. It has become impossible to ‘plot’ culture”.<sup>27</sup>

The separation of architecture from urban planning puts an end to the architectural desires on the city and its social, cultural and economic entity. To understand how the city would be planned outside the control of architectural gestures and how the Grid could be used as an operative and conceptual framework is the subject of the following discussion.

### **3.4. Tabula Rasa**

OMA’s competition project for the extension of La Défense in Paris<sup>28</sup> shows the ultimate condition of *tabula rasa* for the redevelopment of the city through the principles of the new theory. The project foresees the demolition of every building in the entire territory that is older than 25 years in five year increments so that the site will be cleaned in the next 25 years, except for the buildings that have historical value and except for the new business center around the Grand Arch. (Fig. 3.4.1)

For the development of the project, which has to replace the erased amount of programs through a new urban system, an inventory of contemporary typologies for city planning is made, which include the following data: Urban islands: Barcelona, Manhattan, New Cities, Radiant City; Housing Typologies: villa, unité, perimeter blocks, housing tower; Office Typologies: linear, shaped, interior courtyard, office tower. (Fig. 3.4.2)

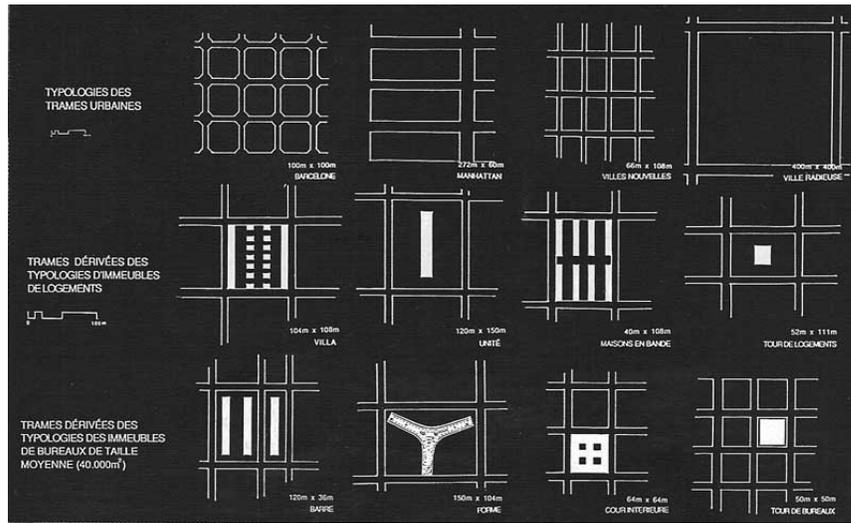
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<sup>27</sup> Rem Koolhaas, *Delirious New York*, op. cit., p.85

<sup>28</sup> The date of the competition is 1991. Rem Koolhaas, “Tabula Rasa Revisited”, *S, M, L, XL*, op. cit., pp. 1091-1135.



**Figure 3.4.1** Gradual erasure of the site, La Défense, Paris, OMA, competition project, 1991.



**Figure 3.4.2** Inventory of contemporary typologies for city planning, La Défense, Paris, OMA, competition project, 1991.



**Figure 3.4.3** The redevelopment project, La Défense, Paris, OMA, competition, 1991.

As a framework for redevelopment, the Manhattan grid was chosen to be projected on the site as a "two dimensional discipline and an almost independent potential freedom of expression in the third dimension".<sup>29</sup> To replace the program erased through demolition with a new one including further functions and higher densities, all the housing and office typologies are distributed to the site in a random, yet interrelated, order. The project becomes a statement, a critical act. (Fig. 3.4.3)

"We have used this competition to generate a critical mass of urban renewal, to imagine an anti-utopian strategy that would transform, beyond the tabula-rasa, the most banal economic givens into a utilitarian polemic, to interpret the extension of La Défense as the gradual, progressive transformation of this chaotic 'beyond' into a new urban system".<sup>30</sup>

The project is the ultimate point of radicalization of the utilitarian production based on the most banal economic givens of the erased program. The tabula rasa, then, becomes a critical architectural act revealing the ideological contradictions of urbanism, conceived as a simple outcome of the economic forces.

### **3.5. The Case of Euralille**

In 1994, the first stage of Euralille city center, the terminal point for the TGV (*train à grand vitesse*), was completed under the directorship of Rem Koolhaas, providing an extraordinary transportation infrastructure extending through Europe along with a series of buildings holding various services. The new city-center, being a cross-border project based on the transportation networks of Northern Europe, initiated a wide discussion on contemporary city. It is the realization of the theoretical ideas of Koolhaas on new architecture and urbanism.

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<sup>29</sup> Ibid., p.1123.

<sup>30</sup> Ibid., p.1132.

The book of the exhibition “Euralille: Poser, Exposer” of 1995 includes wide information on Euralille, from the preliminary studies to its construction phase:

“The methodological approach can be broken into two major components. The first consists of ‘diagnosing the situation’, by undertaking a ‘lucid’ interpretation of ‘the assets and liabilities of the ‘metropolis’ particularly in economic terms, followed by defining the project’s ‘dominant purpose’. The second, more traditional, undertook to analyze the spatial elements of the site, and then to highlight the ‘lines of force’. The findings that resulted from this would first lead to polishing the initial design bases, from which the ‘masterplan’ and a ‘standard spatial diagram’ would be defined”.<sup>31</sup>

The two preliminary targets of the project are clear: to compose a program based on the social and economic necessities of the project and then to investigate the main lines of action of the site to build up a general framework for the distribution of the architectural program. Finally, the components determined by the program based on economic terms of the center were: Lille Grand Palais, Lille Europe Station, Europe Tower, Credit Lyonnais Tower, Hotel Tower, Stations Triangle, Le Corbusier Viaduct and City Park, all designed by various architects, and organized by Rem Koolhaas as the chief architect and master planner. (Fig. 3.5.1) The Euralille has become a group of objects “tightly linked, yet absolutely singular”.<sup>32</sup>

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<sup>31</sup> Euralille: The Making of a New City Center, ed. by Espace Croise, trans. by Sarah Parsons, Birkhauser: Basel, 1996. Originally published in French as “Euralille: Poser, exposer” in 1995, Lille.

<sup>32</sup> “The urban project itself highlights the large scale aspect at work, where different groups of components confront one another, paradoxically both free and enchained. Tightly linked, yet absolutely singular, the triangle, TGV gallery, and the towers are contaminated by the overlapping of functions and facilities; like Congrexpo, they form the experimental field of metropolitan instability”. Ibid.



**Figure 3.5.1** Sequence of Large architectural elements (see in the center of the overall city plan), Euralille, Urban Level Plan, 1994.

There is a common understanding of the urban system between the two Extra-Large projects; Euralille and the competition project for La Défense as discussed in the preceding pages:

“What we are interested in is the development of new urban models; in the wake of the urbanism of the eighties and nineties, we should now be focusing on the discovery of a new type of urbanism which opposes the concept of the city as an ordered series of objects; we should be promoting form which are rarely expressed and which have no architectural relation whatsoever with one another”.<sup>33</sup>

One of the Large projects in the Euralille is OMA's Congrexpo building<sup>34</sup> that is clearly visible on the urban level plan with its round form and giant scale, located just on the cross-roads of transportation lines. The three main components of the Congrexpo (auditoriums, congress halls and exhibition halls) are organized side by side in the simple elliptical form of the building and between them doors are located so that in certain events they can be opened to allow the use of the whole building as a single volume. (Fig.3.5.2) The double disconnection of Schism and Lobotomy provides the flexible programming of the architectural production, which acquires the properties of urban condition. Rather than the architectural form, the programmatic conditions gain significance.<sup>35</sup> The architectural plans, which extend the limits of conventional architectural drawings and become another medium for the planning of urban condition, are

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<sup>33</sup> Rem Koolhaas, Finding Freedoms. Conversations with Rem Koolhaas”, *El Croquis*, 1992, pp. 6-31.

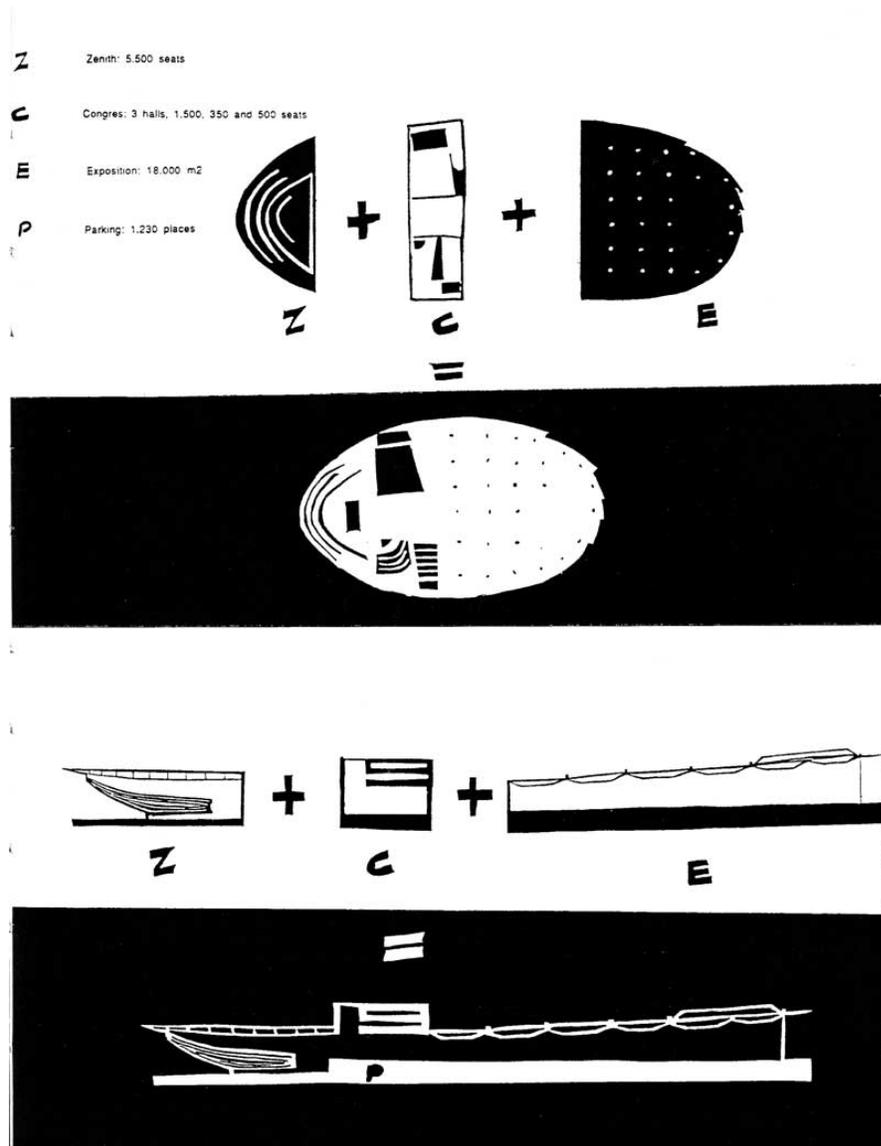
<sup>34</sup> The program of the Congrexpo building consists of exhibition and trade fair halls (20.000 m<sup>2</sup>); congress space consisting of three major auditoriums (18.000 m<sup>2</sup>); the Zenith auditorium (5.500 seats).

<sup>35</sup> “There is an event planned for 1996: All the Mazda dealers of Europe in Zenith; the doors are closed. The new model is driven through Expo; the doors open and it comes into the auditorium. The doors close; the dealers descend to the arena and throng around the car. In the meantime, the entire space of Expo is filled with 5,000 new Mazdas. The doors open; the dealers are guided to their own Mazdas and drive out of building. That event will take place in the space of 30 minutes”.

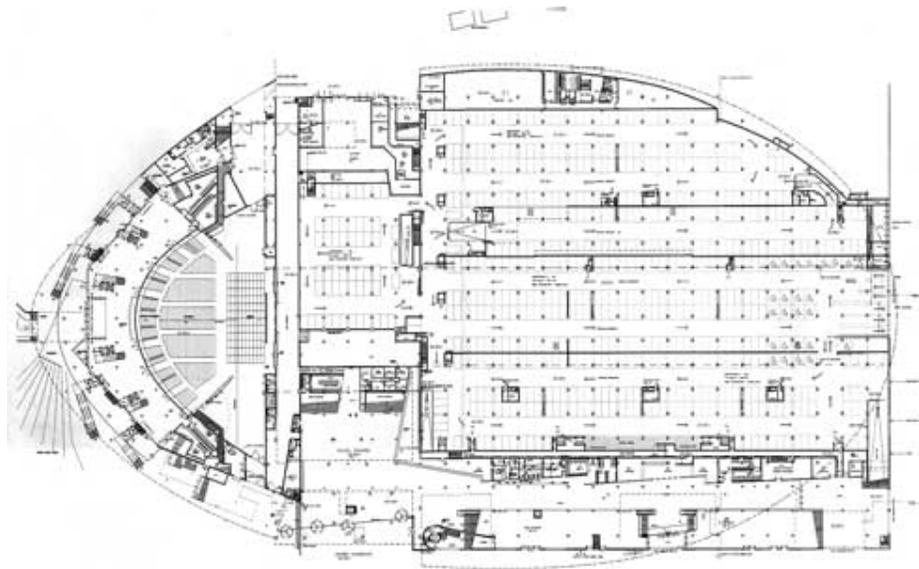
Rem Koolhaas, “Quantum Leap: Euralille”, *S, M, L, XL*, op. cit., p. 1204.

characteristically Typical Plans, in which the architectural intervention is minimized to extremes. (Fig. 3.5.2., 3.5.3)

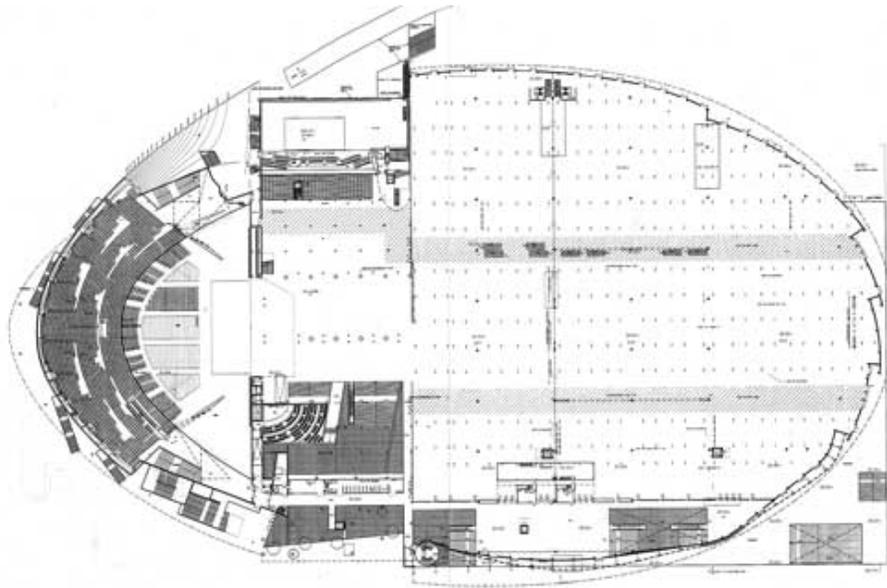
As a final word, the unconscious architectural production in Manhattan is advanced and became a conscious action in the works of OMA. In these projects, urbanism is not defined as an activity of drawing the boundaries of social and cultural structure, but rather, as an open field of transformation under these structural forces. However, this does not mean surrendering to these forces, in an inactive position. Rather, the densities and functions of the city, which means the utilitarian program that is based on the social and economic inputs, are taken as givens and reorganized through a new urban system. In this urban system, the program is projected on a neutral territory with random organization. In doing so, the city is no more a production of architecture, its largest building, but it becomes the collection of buildings, each of them having an internal program. Architectural processes are redefined to produce urban conditions within the boundaries of architectural production, with rich possibilities of social programming.



**Figure 3.5.2** Sketch of Congrexpo, Euralille, OMA.



**Figure 3.5.3** Congrexpo, Euralille, Ground Entrance Level.



**Figure 3.5.4** Congrexpo, Euralille, Second Level.



**Figure 3.5.5** Lille Europe Station (Jean-Marie Duthilleul) and Credit Lyonnais Tower (Christian de Portzamparc), Euralille, 1995.



**Figure 3.5.6** Lille Europe Station, Euralille, 1995.



**Figure 3.5.7** Connection with highway, Lille Europe Station, Euralille, 1995.



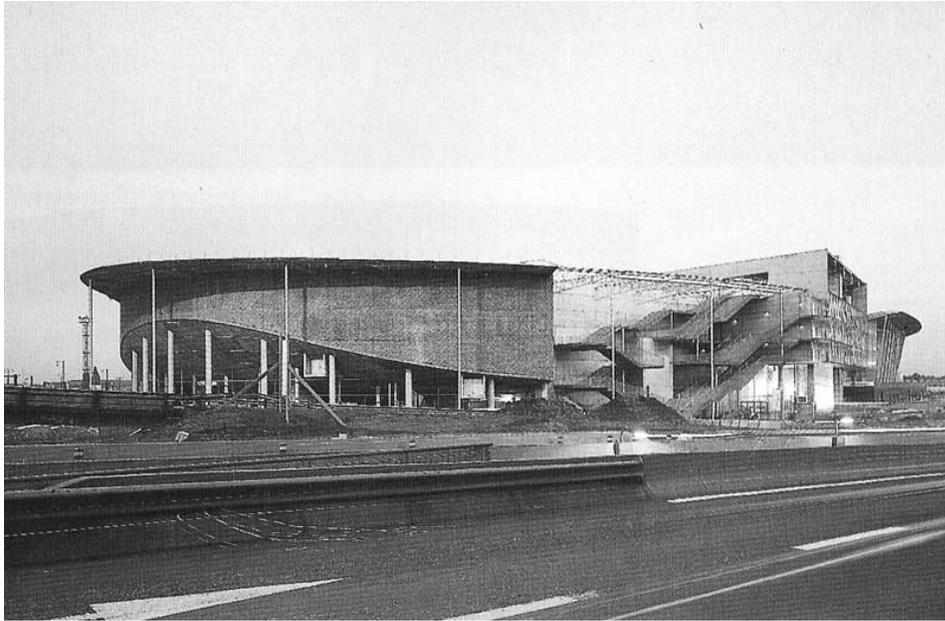
**Figure 3.5.8** Lille Europe Station, Euralille, 1995.



**Figure 3.5.9** Piranesi space, OMA, Euralille, 1995.



**Figure 3.5.10** Office blocks (Jean Nouvel) and the old station, Euralille, 1995.



**Figure 3.5.11** Congrexpo, Euralille, OMA, 1995.

## CHAPTER 4

### LE CORBUSIER: A RETROSPECTIVE READING

#### 4.1. Doctrine

Le Corbusier developed his urban thinking at a moment of *crisis*, when “the gigantic overflowing of the first machine age cycle brought the cities to their point of congestion”.<sup>36</sup> This *congestion*, in the way Le Corbusier conceives it, was an outcome of the disorder in urban organization caused by the double effect of population density and vehicular movement, which should be *decongested* with the rational reorganization of densities and programs of the city.

The reorganization of the social content of the city is equaled, by Le Corbusier, to the spatial reorganization of the urban territory through a “three-dimensional city planning”.<sup>37</sup> By this way, the new definition of urbanism is integrated with the tools of architecture, which means that the urban plans will not only consist of a conceptual overall plan with its social, cultural and economic concerns, but it will also propose a spatial organization in its three dimensional entirety.

By this way, the maximum field of control for architecture is extended to the boundaries of the whole city and the city becomes the “largest building of architecture”.

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<sup>36</sup> Le Corbusier, *Manière de Penser l'Urbanisme*, Editions de l'Architecture d'Aujourd'hui, Paris, 1946. (Published in English as *Looking at City Planning*, Grossman Publishers, New York, 1971)

<sup>37</sup> Le Corbusier, *The Radiant City*, op. cit., p. 204.

Just at this point, the retrospective reading of Le Corbusier becomes meaningful, especially after understanding the principles of the new type of architectural intervention that Rem Koolhaas theorizes by introducing the tools of urbanism into architectural production. In the theory of Koolhaas, the city is no more conceived as the “largest building of architecture”, but architecture becomes the “Largest” building in the urban territory. The definition of architectural space is transformed so as to achieve urban characteristics and the maximum field of control for architecture is limited, but diversified as well, within this space. The city in Le Corbusier’s work, on the other hand, becomes a “three-dimensional science” under the control of architecture. The essential background of the cross-reading should explain, in this framework, how urban space is conceived in relation with the architectural production and how social mechanisms are integrated with this urban organization through the mediation of architecture, in these two positions.

It is vital to clarify that this study does not conceive the two positions in direct opposition to each other, and therefore the cross-reading is based on the idea that certain connections, as well as oppositions, can be observed in the theories, in terms of the social programming of the urban space, the conception of the scale of architectural production and the status of architecture in the production of urban space. In this respect, this chapter will make a close reading of Le Corbusier’s urban thinking in parallel to the themes of the preceding chapter, with an aim to make a cross-examination of these interrelations. By this way we can grasp at what points these two positions can contribute to our understanding of the critical interface between architecture and urbanism that has been radicalized with the increase in the scale of architectural production and became one of the major issues of the 20<sup>th</sup> century architecture.

The investigation into the urban thinking by Le Corbusier should first start with the reading of the social background of the urban plans and how the social transformation is conceptualized as an activity inseparable from the architectural production of the city. Then, the investigation will proceed with the reflection of the social transformation idea on the reorganization of the elements and functions of the city through a rational and linear *programmation*. As much important as the *programmation* is the hierarchical understanding of *scale* that makes the city the “largest building of architecture”, which will be the final theme of examination.

#### 4.2. Social Plan

One of the articles by Le Corbusier published in the syndicalist journal *Plans* in 1932, entitled “Spectacle de la Vie Moderne”, gives significant clues about his understanding of the modern condition and his idea of social *programmation* through architecture and urbanism.<sup>38</sup> In the article, he describes the modern life as consisting of “defined means but undefined ends, which causes a loss of orientation for the modern man”. For him, in the industrial world, money is becoming the mere target of life and the lack of leisure activities in the daily life of people passing between home and office is an indication of a “disinterest on man’s passions”. However, he says, it is necessary to liberate the energy and the passion dormant inside human race to yield fruits from the human labor and this could be done by organizing the labor by determining clear and creative targets. With a quite provocative language, he calls for a new order, in which the workers will be a part of the whole organization of their work:

“Tell us who we are, to whom we serve, why we work.  
Give us the plans, show us the plans, explain us the  
plans. Give back our interdependency. Talk to us.  
Aren’t we all one, in a serenely hierarchised  
organization?”<sup>39</sup>

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<sup>38</sup> Le Corbusier, “Spectacle de la Vie Moderne”, *Plans*, 13, March 1932. (FLC X1-12-323)

<sup>39</sup> *Ibid.*

In the following paragraphs, he goes on saying, “With the establishment of a plan, modern epoch can appear within its general ends. The machine, which is actually immense, can come back to its rank, obeying rather than commanding, working rather than oppressing, unifying rather than breaking, constructing rather than destructing”.<sup>40</sup>

It is in the final part of the article where he relates this grand social plan with architecture and urbanism by putting forward three main actions that must be implemented to achieve this revolution. First, it is necessary to find “another symphonious, logical and rich way to divide up our solar day of 24 hours”, which means the reorganization of the daily life of people so as to provide a more efficient use of time for leisure activities as well as work. For him, this could only be realized with the reorganization of the urban environment. And therefore as a second action, in order to pave way for this overall reorganization, the political authority should issue “an extensive decree which will permit the etude of the plan: the mobilization of the territory”. And as the third action, this building process to be executed for the reorganization of the urban environment should utilize the “means provided by the development in the industry”.

Thus, a direct relation between territorial reorganization and social programming is established. At the same time, the moment of crisis is turned into an opportunity to open new territories for the practice of architecture -an architecture that will reproduce itself with the outputs of the socioeconomic processes.<sup>41</sup> In this respect, the relation of architecture with the social domain in Le Corbusier’s plans should not be interpreted as a one way flow that foresees the authority of the architectural activity on

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<sup>40</sup> Ibid.

<sup>41</sup> “...the crisis that is now bringing the first cycle of the machine age to an end. Products of disorder: self-indulgence and a flood of useless consumer goods. Products of order: a lucid program and the manufacture of useful consumer goods. There will be new production goals: properly equipped cities, new housing, and the countryside (at last!) accessible to the wind of spiritual change that we have taken as the standard of all our efforts”.

Le Corbusier, *The Radiant City*, op. cit., p. 177

social processes, but as well, an interaction that leaves traces on the architectural domain –architectural production processes are also transformed.

Before proceeding towards the transformation in architectural production processes proposed by Le Corbusier's work, it is vital to note in what ways Le Corbusier, as a prominent representative of the modernist urban thinking on the city, can be evaluated at a common theoretical plane with Koolhaas in terms of the response to the social, economic and political realities of the city.

The urban discourse of Le Corbusier has strong revolutionary overtones, evidently observed in the above quoted provocative words on the social plan. He calls for a new order, in which the workers would be a part of the whole organization of their work and where their living conditions would be carried to an ideal condition. But, at the same time, he defines the architectural production processes in such a way to reproduce the production and consumption mechanisms of economy, which is evident also in the functional organization of the city plans that maximize the rational efficiency of the system. Le Corbusier's twofold position can be described probably in the best way as a "tide that emphasizes 'transformation' through revolutionary discourses and 'reproduction' through a conservative discourse".<sup>42</sup> The revolutionary discourses were used by Le Corbusier as a way to take a stand at a critical distance to market conditions, but at the same time, the architectural production of the city proposed by him was to rationalize the production and consumption mechanisms of the economy. The city, by this way, would be able to operate within these mechanisms, but the new praxis of life to be

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<sup>42</sup> My understanding and discussions on the twofold nature of Le Corbusier's social and political position owes much to: Güven Arif Sargın, "Devrim ve Tutucu Söylence'ye Dair", *Sanat Dünyamız*, no: 87, Spring 2003, pp. 189-197.

introduced by the reorganization of urban territory would offer a sterilized domain to save the society from their complications.<sup>43</sup>

The reflection of this twofold nature of Le Corbusier's position to his architectural production of the city is open for diverse retrospective readings –and to make one is the main objective of this study. The establishment of a theoretical framework, in which the positions of Le Corbusier and Koolhaas can be seen in a wider perspective, is essential for such a retrospective reading. It is necessary to be aware of the distinct cultural backgrounds of the positions, as well as social transformations that were experienced throughout their historical periods. The cross-reading of the two positions is in no way to be assessed as an outcome of a simple cause-and-effect relationship.

In a historical glance at the two cultural positions, the most critical threshold that can be observed is the crisis in the ideological function of modern architecture, which simultaneously drags into crisis the modernist project of architectural building of the city. This critical threshold -at which the modernist ideology based on the rationalization of the production and consumption relations through the reorganization of the urban territory has also come to a crisis- found its most radical interpretation in the influential criticism of Manfredo Tafuri.<sup>44</sup>

The modernist ideal, says Tafuri, by charging architecture with the responsibility of a grand social, political and economic project (which Le Corbusier himself calls the Plan), has placed the seeds of its own crisis:

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<sup>43</sup> The central position of the "home" in Le Corbusier's plans, for example, can be the major example of this understanding.

<sup>44</sup> Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, MIT Press, Cambridge, 1980.

“Architecture, therefore, insofar as it was directly linked to the reality of production, was not only the first discipline to accept, with rigorous lucidity, the consequences of its already realized commodification. Starting from problems specific to itself, modern architecture, as a whole, was able to create, even before the mechanisms and theories of Political Economy had created the instruments for it, an ideological climate for fully integrating design, at all levels, into a comprehensive Project aimed at the reorganization of production, distribution and consumption within the capitalist city”.<sup>45</sup>

In Tafuri’s words, the exhaustion of the ideological function of modern architecture has its beginnings around 1930’s, with “the international reorganization of capital and the establishment of anti-cyclical planning systems” and the “architecture as the *ideology of the Plan* is swept away by the *reality of the Plan* the moment the plan came down from the utopian level and became an operant mechanism”.<sup>46</sup>

The aim here is not to go much deeper into the social and cultural criticism of urban theories, but to understand what type of a social and cultural background has influenced the transformation of architecture’s relation with urbanism. The architectural production of the city, in the way it is conceived as a means for the rationalization of the social plan, lost its bearings and is no more accepted as a viable method for architecture’s taking role in the mobilization of the urban territory. “Architecture, at least according to the traditional notion, is a stable structure, which gives form to permanent values and consolidates an urban morphology”, says Tafuri, “Those who may wish to shatter this traditional notion and link architecture with the destiny of the city, can only conceive of the city itself as the specific site of

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<sup>45</sup> Manfredo Tafuri, “Toward a Critique of Architectural Ideology”, *Architecture Theory Since 1968*, ed. by Michael Hays, Columbia University, New York, 1998, p.15.

<sup>46</sup> *Ibid.*, p. 28

technological production and as a technological product in itself, thereby reducing architecture to a mere moment in the chain of production".<sup>47</sup>

The crisis in the ideology of modern architecture is a significant threshold, the beginnings of which can be examined also in Le Corbusier's urban thinking. However, Le Corbusier has a distinct position that is significant for the aims of this study. His plans had a certain balance between the idea of transforming the social background –resistance- and reproducing architectural production processes –adaptation. In Le Corbusier's new definition of architecture, however, the individualistic and artistic articulations, as well as revolutionary overtones, were never non-existent that his architectural production processes can not be reduced to a mere adaptation to the existing order. In this respect, although the crisis of the ideology has made the realization of his plans impossible, it is worth to make a retrospective reading of his theory on the relation between architecture and urbanism –in terms of scale and program- to understand in what ways he may have influenced the future ideas -and in what ways these ideas could be articulated for more productive solutions. It is in this context the retrospective reading should be considered.

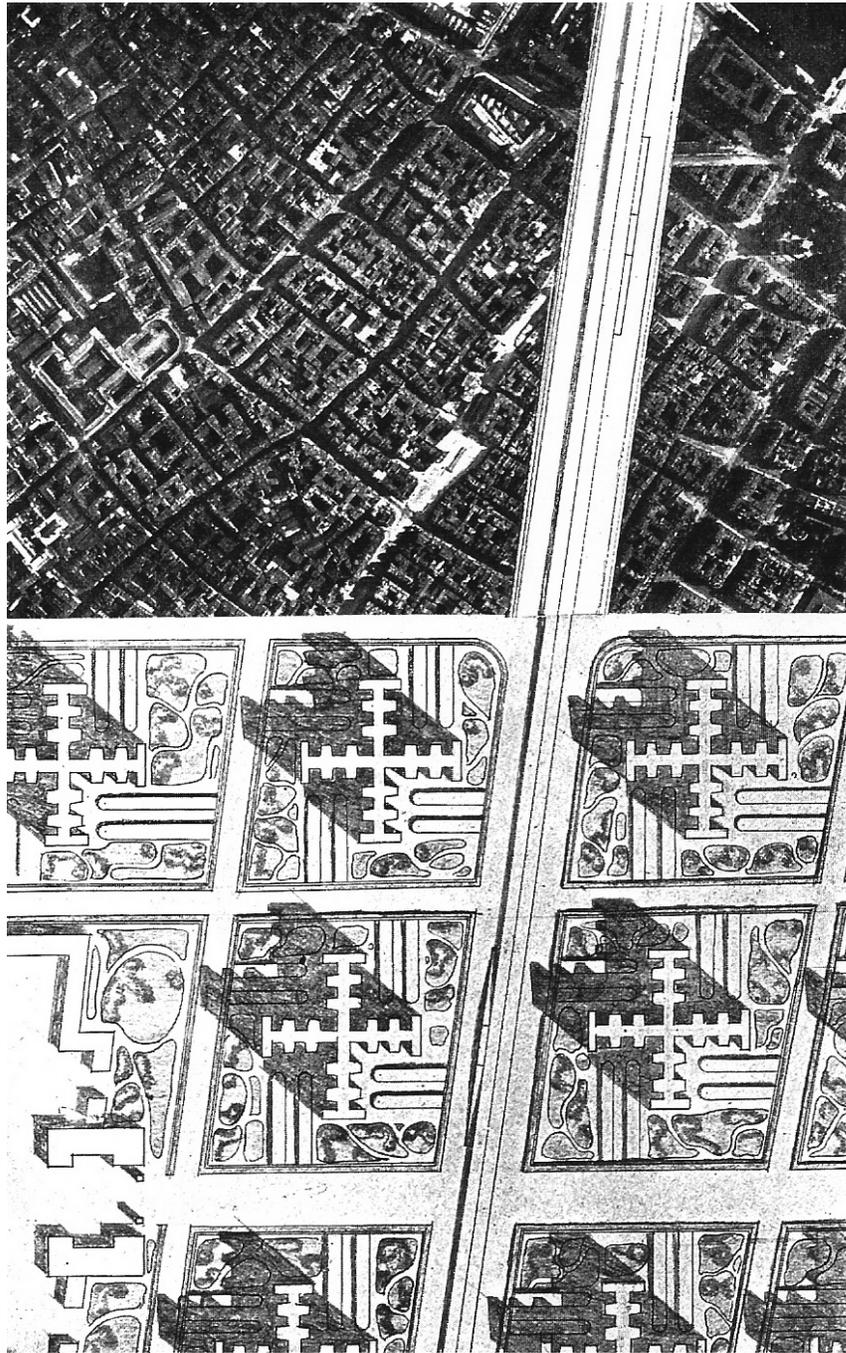
### **4.3. Urban Program**

Le Corbusier's urban program<sup>48</sup> foresees a rational and linear process for the reorganization of the densities and functions of the city on an empty territorial plane that is to be entirely made available for redevelopment. Each time a new program is to be implemented on the urban territory in the case of different city plans; there comes the notion of a new beginning –a *tabula rasa* both on the horizontal *plan* and the vertical *section*.

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<sup>47</sup> Ibid., p.14

<sup>48</sup> The urban program equals to architectural program in Le Corbusier's work, in which the city is conceived as an architectural production. Urbanism becomes a "three-dimensional science", quoting from Le Corbusier, as much as it assures its practice with the tools of architecture.



**Figure 4.3.1** Tabula rasa on the horizontal territorial plane, Le Corbusier's Voisin Plan for Paris, 1925.

The tabula rasa in the plan is pushed to its extremes, for example by the Voisin Plan for Paris, where the new program is implemented on a territory that is to be made available by the removal of a part of the historical texture in the city. All the densities and functions of the city are reorganized to create a new order, with totally new relationships. (Fig. 4.3.1)

The tabula rasa is also evident in the vertical section, which introduces a new relationship between the urban densities and the ground by elevation of buildings on pilotis. The ground is allocated to vehicular and pedestrian circulations, together with a background of continuous nature, while the elevated floor spaces multiplied in the vertical section introduce a totally new, well-ordered program of densities and functions. Departing from these observations, the urban program should be more closely examined, first in terms of the horizontal *plan*, and then, in terms of the vertical *section*.

To understand the underlying principles in the *plan*, it is possible to take a look at the general layouts of the two successive city plans, the Contemporary City for Three Million Inhabitants and the Radiant City.

The Contemporary City of 1922 was the earliest city plan that was made public by Le Corbusier.<sup>49</sup> (Fig. 4.3.2) At the center of the city, there are twenty four cruciform glass office towers, which hold the units of industry, finance, science and humanities in the center and municipal, administrative and educational buildings in the periphery. The circulation system, which includes highways, transit roads, parks, stores and cafes, pass through the business center. Beside the business center and the transportation axis, residential quarters are distributed around the center, in two types of houses: *immeuble villas* (villa apartments) and *bloc à redents* (linear blocks with setbacks). These two housing types include collective functions as well as individual residential functions. With a new arrangement in plots and

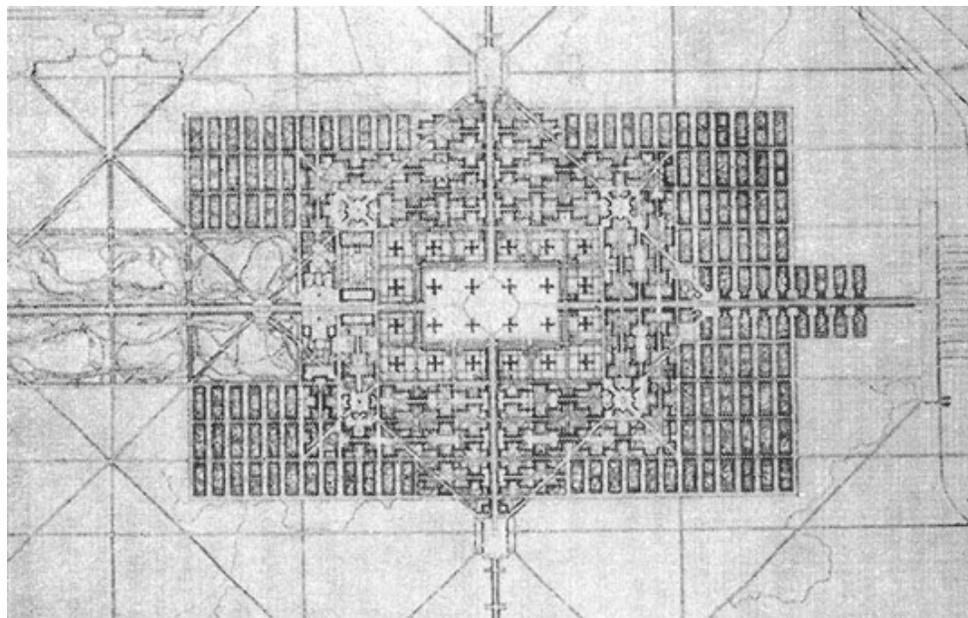
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<sup>49</sup> "Urbanisme : Les travaux de Le Corbusier ", *Le Monde Nouveau*, 1922. (FLC X1-2-101)

"Le Salon d'Automne. L'urbanisme", *Crapouillot*, 1922. (FLC X1-2-102)

transforming the rental system into ownership, Le Corbusier foresaw that the occupants of the buildings would join the production processes in the land allocated for each of the block. This organization is an outcome of Le Corbusier's emphasis both on the individuality of the occupants and the community they participated in. In the Contemporary City, Le Corbusier placed the houses for the elite around the office towers at the heart of the city. The workers were, on the other hand, housed in satellite cities at the outskirts.

This housing organization, which allocated the central location to the elite including the intellectuals as well as the leaders of politics, finance and industry, and which located the workers in the outskirts, represented the emphasis on central administration, hierarchical organization and classified society.



**Figure 4.3.2** Contemporary City, Le Corbusier, 1922

The Radiant City of 1930, based on the “modern planning principles” adopted by CIAM<sup>50</sup>, is a more radicalized version of the Contemporary City’s program. (Fig. 4.3.3) It is designed with similar architectural and urban principles, however, while in the latter the high-rise office blocks are located at the center and the residential quarters are organized around them, the organization of the former is rather based on various layers of zoning according to housing, working, recreation and transportation functions. On the other hand, the centralization still continues with the transportation system connecting all the zones to each other through the central axis. Another shift in Le Corbusier’s view between the two city plans is related with the classification of inhabitants. In the Contemporary City, the residential quarters of the upper-class elites and intellectuals were located just in the center of the city, around the office towers, while the workers were placed at the outskirts. However, in the Radiant City, this social division is abandoned and all the people are provided houses in the same zone.<sup>51</sup>

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<sup>50</sup> The *Congres Internationaux d’Architecture Moderne* (CIAM), which was founded by Hélène de Mandrot, Sigfried Giedion and Le Corbusier with an inauguration congress held in the Spanish city La Sarraz in 1928, became a major instrument for the legitimization of Le Corbusier’s architectural and urban ideals as the ‘modern planning principles’. The successive congresses held by the CIAM group urged for the necessity of a common order in planning to overcome the crisis in the city organization, saying that, “The city is only one element within an economic, social and political complex which constitutes the region. Hence the rationale governing the development of cities is subject to continual change”. The main rationale to govern the development of the modern city, as declared by the CIAM group, was mainly the zoning of four different functions in the city planning: habitation, leisure, work and circulation. The CIAM declarations issued after the congresses were also calling for extensive city plans to rehabilitate the social condition and the deteriorated urban environment, and for large-scale residential projects to solve the severe housing problem.

Le Corbusier, *The Athens Charter*, Grossman Publishers, New York, 1973. (Originally published in French as *La Charte d’Athènes*, La Librairie Plon, 1943)

<sup>51</sup> This shift from social division to social neutrality is noted as one of the evidences of Le Corbusier’s hesitancy between revolutionary and conservative discourses. Güven Arif Sargin, “Devrim ve Tutucu Söylence’ye Dair”, *Sanat Dünyamız*, op. cit.

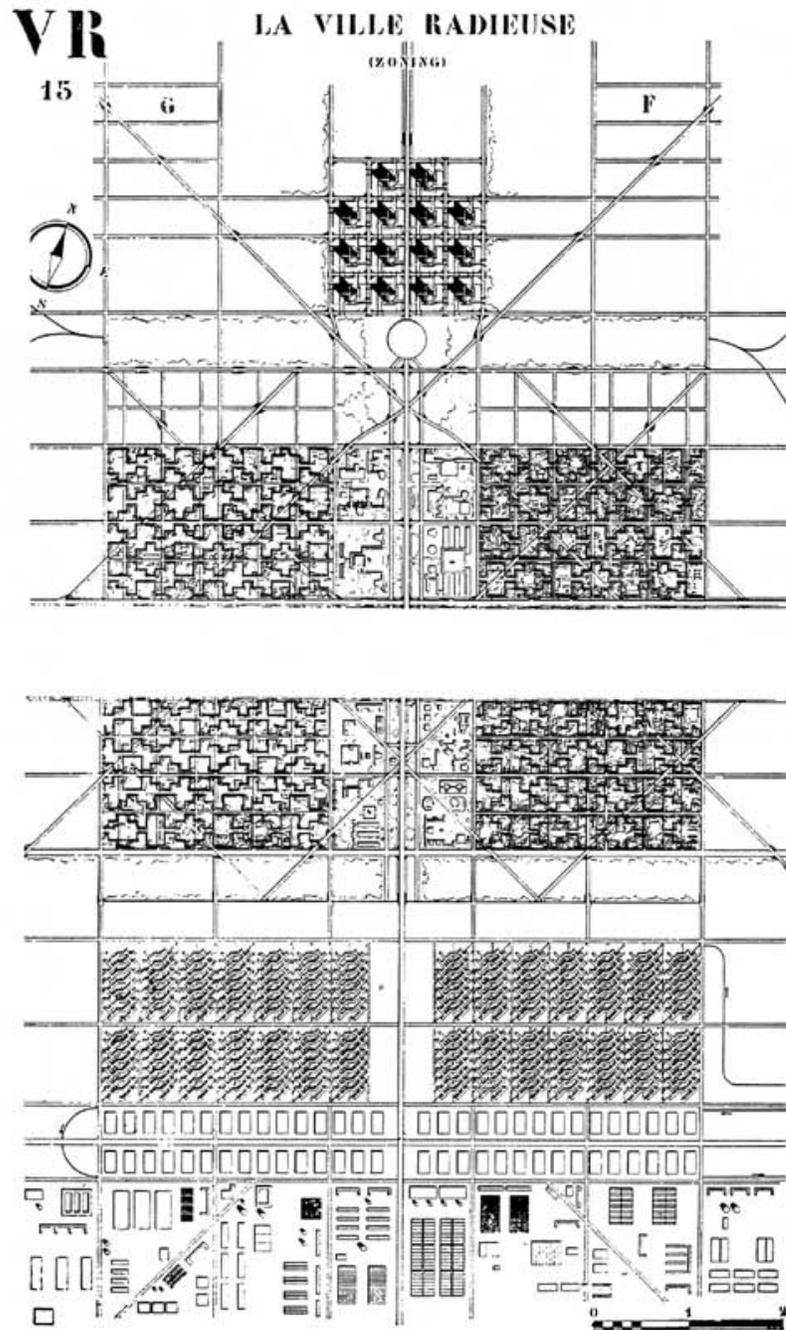


Figure 4.3.3 Radiant City, Le Corbusier, 1930.

In both cases, the horizontal urban program is mostly based on a resolved tension between office functions contained in the skyscrapers and residential functions in the high-density blocks organized in a highly rational and rigidly geometrical grid. The Cartesian skyscraper and the housing block constitute the two major poles of the plan; the former represents a rational organization for administration of industries and business affairs, while the latter represents the residential functions sterilized from the complications of the industrial world. The Cartesian skyscraper never lost its centrality in the urban plans of Le Corbusier, but the housing block is always the main constituting element.

To conclude the horizontal examination of the plans, it is possible to say that the distribution of the functions in the horizontal program mainly depends on two decisions: first, how the interrelations among different functions of the city will be established, and second, which functions will be given priority, and therefore be located in a central position –this is also valid for social segregation, when exists, in the residential zones. The decisions lead to a rational and linear programming process, in which all relations among different functions and densities are determined, taken under control and *stabilized* through the architectural production of the city.

The stabilization of the urban program through architectural production can be more clearly understood through a recent categorization made by Rem Koolhaas: *master plan* and *master program*. The “master plan” is composed of a rigid organization of functions and densities, whose operation is based on fixed relationships. The “master program”, on the other hand, foresees “programmatically accumulations that generate new, more flexible urban conditions outside the rigidity of a master plan, in the form of continuous urban development”.<sup>52</sup> In this respect, the master

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<sup>52</sup> Koolhaas looks at alternative program and scale definitions –that produce “master program” rather than “master plan”- in the works of Team X and Japanese architect Fumihiko Maki.

Rem Koolhaas, “Singapore Songlines: Portrait of a Potemkin Metropolis...or Thirty Years of Tabula Rasa”, *S, M, L, XL*, op. cit., pp. 1009-1089.

program offers the city a “pattern of events” more than “composition of objects”.<sup>53</sup> The boundaries between the “master plan” and “master program” draw the demarcation lines between the urban theories of Le Corbusier and Rem Koolhaas.

In the plans of Le Corbusier, the rational and linear process for the reorganization of the densities and functions stabilizes the urban program. The stability of the program can also be interpreted as a resistance to the transient nature of the market conditions, referring to the discussion on the social plan. The central position in the urban program is allocated to residential functions, which are articulated as sterilized environments for the protection of the society from the complications of the industrial world –it also gives clues that the central position of home will be a resistance for a likely erosion to be caused by series of new consuming habits.<sup>54</sup>

In the urban theory of Koolhaas, on the other hand, the instability becomes the main ideology of the urban program that generates new, more flexible urban conditions. The urban program can no more be described as “resistant”, it is rather “permeable” to transience. To radicalize architecture’s position in relation to the instability of the new social and cultural system, the focus of interest in the urban program is shifted to alternative functions and densities of the city -the objects of this continuous reproduction.<sup>55</sup>

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<sup>53</sup> Ibid., p. 1049.

<sup>54</sup> “During these last decades we have witnessed the frenzied multiplication of substitutes invented to fill up the aching void in the lives of badly housed people –the Press, in fact the whole newspaper racket; the café, the great refuge from slummy homes; and those marvelous escapist devices, the cinema and radio, which can as easily debase man as uplift him”.

Le Corbusier, *l'Unité d'Habitation de Marseille*, Le Point, Paris, 1950. (Published in English as *The Marseilles Block*, The Harvill Press, London, 1953, trans. by Geoffrey Sainsbury) (Translation from the English edition)

<sup>55</sup> The Large and Extra-Large projects of OMA consists of the aforementioned alternative building types such as city hall, terminal, library, art and media center, exposition, exhibition and congress hall, business center, transportation exchange center, etc. See; Rem Koolhaas, *S, M, L, XL*, op. cit.

How the shift from “master plan” to “master program” influenced the relation of architecture with urbanism and its position towards the contemporary social and cultural system is one of the conclusions aimed by this study. To return back to the retrospective reading of Le Corbusier’s urban program, it is necessary to continue with how the stabilization of the program is epitomized in the *section*.

The demarcation between the “master plan” and “master program” is as much evident in the section as in the plan. The position mainly depends on how the *congestion* in the existing city is interpreted and what type of a radical solution is proposed.

The congestion, for Le Corbusier, is directly related with the disorder in the densities and functions, which increases traveling distances and which consequently causes a chaos both in the pedestrian and vehicular traffic. The solution is, according to him, to reorganize the functions and densities so as to achieve *decongestion*, which means “to reserve the ground-level of the city in its entirety to traffic of all kinds; to create an entirely new relation between the new population densities and the ground surface necessary for efficient traffic systems”.<sup>56</sup> The purpose of the skyscrapers and high-density blocks is, then, “to decongest the center of the city by increasing the population density in order to diminish internal distances”.<sup>57</sup>

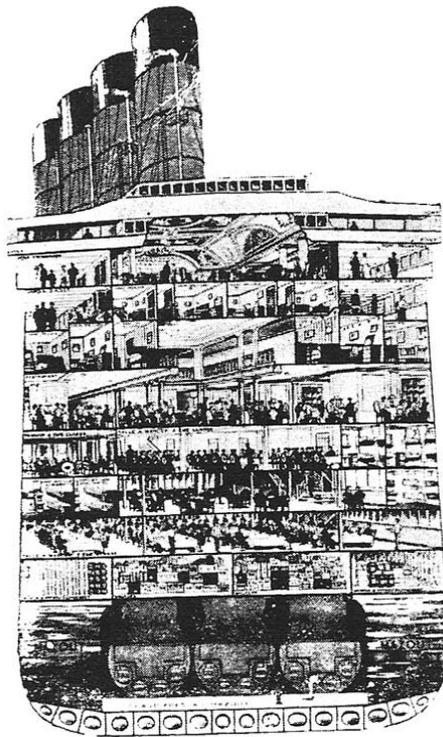
In this respect, the skyscrapers and high-density blocks, which are elevated from ground, become the major containers of the urban density. The ultimate representation for this reorganization of diverse urban density within a single container can be found in the ocean liner analogy. The ocean liner, which contains all the social and cultural activities, as well as daily services, needed by a certain amount of passenger density, was taken as a model by Le Corbusier in his creation of the elevated high density

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<sup>56</sup> Le Corbusier, *The Radiant City*, op. cit., p. 128.

<sup>57</sup> Ibid.

housing blocks.<sup>58</sup> (Fig. 4.3.4) The blocks, organized through this analogy, consist of residential cells connected to each other with elevated streets and include diverse social and cultural facilities, as well as service units. All the components of the program are precisely calculated in terms of their capacities, organized in a strictly relational manner and therefore *stabilized* in programmatic terms.



**Figure 4.3.4** Ocean liner, section

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<sup>58</sup> "Inside this floating city where all ought to be confusion and chaos, everything functions, on the contrary with amazing discipline. The four main services (A. Engineers; B. Crew; C. Stores; D. Catering) are all separately located. Why should a city apartment house not attempt to provide us with the same comfort as a ship?"

ibid., p. 118.

The analogy of ocean liner, which was reflected to the organization of the housing blocks by Le Corbusier through a rational and linear organization process, would have been definitely radicalized towards another direction, if it had been confronted by Koolhaas. This distinction between the two positions is deeply rooted in their approach to *congestion*. For Koolhaas, the congestion is an outcome of the “people drawn close by a multitude of related activities” and rather than a negative aspect to be decongested through rationalizing mechanisms, as Le Corbusier does, it is a characteristic condition of the contemporary culture that should be exploited to the extremes.<sup>59</sup> Departing from this definition, stratification of the facilities in the section of the ocean liner would have been radicalized through the double implementation of schism and lobotomy “by separating exterior and interior architecture and developing the latter in small installments”.<sup>60</sup>

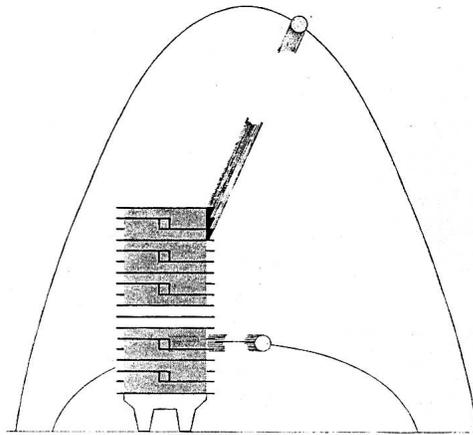
Both Le Corbusier and Koolhaas describe the architectural production containing the urban program as a “city within the city”. However, in their cross-reading, a sharp programmatic distinction emerges. Koolhaas limits the maximum architectural control with the single block, whose function is independent of its form. The city becomes an “archipelago of Cities within Cities”, where the change is contained in each “island”, and therefore the “system will never have to be revised”.<sup>61</sup> In Le Corbusier’s plans, on the other hand, the city becomes the largest building of architecture –therefore the field of maximum control for the architect. Each block undertakes a specific function within the whole system. The function is directly related with the form and each block produces its own inner relations according to the stable functions it contains –the specification of each block in terms of its function is clearly visible at a quick glance at the sections of the housing block and the skyscraper. (Fig. 4.3.5, 4.3.6)

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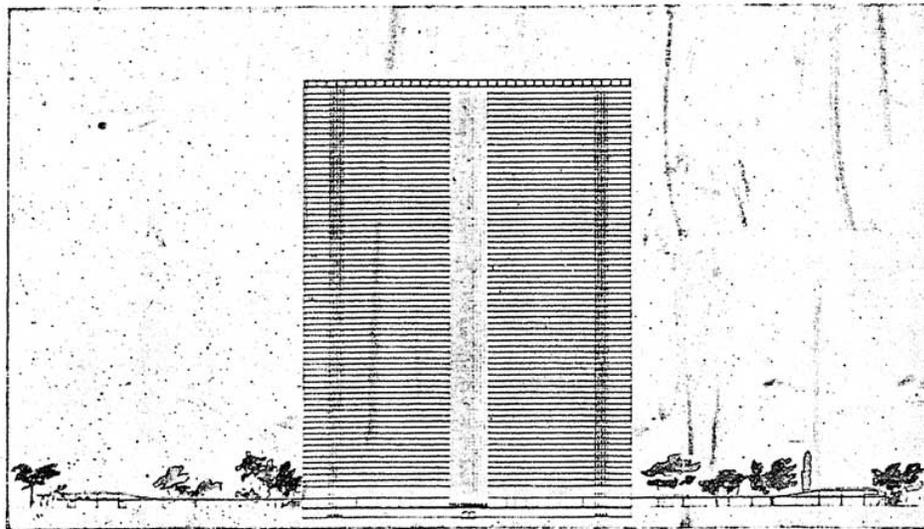
<sup>59</sup> Rem Koolhaas, “Singapore Songlines: Portrait of a Potemkin Metropolis...or Thirty Years of Tabula Rasa”, *S, M, L, XL*, op. cit., p. 1057.

<sup>60</sup> The discussion is further elaborated in the Chapter 3.  
Rem Koolhaas, *Delirious New York*, op. cit., p.296.

<sup>61</sup> *Ibid.*, p.296.



**Figure 4.3.5** High-density housing block, Le Corbusier, section



**Figure 4.3.6** Cartesian skyscraper for business only, Le Corbusier, section

In these “cities within the cities”, how the notion of scale in relation with the maximum control of architecture is conceived, will be the final point of the retrospective reading.

#### **4.4. Scale: Cell, Block, City**

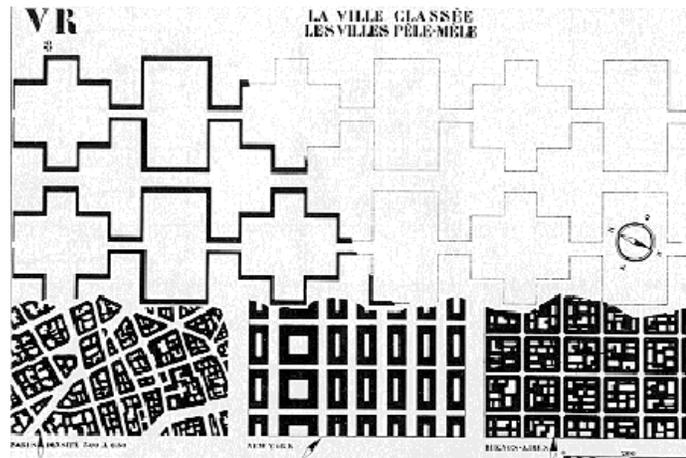
“We have noted, haven’t we, that the construction industry should harmonize its methods with the spirit of the machine age by giving up small private constructions”, Le Corbusier says, “Dwellings should not be made in meters, but in kilometers”.<sup>62</sup> The understanding of scale is, thus, bound to the increase in the construction depth and height by means of the development in the construction technologies. In Le Corbusier’s plans, with the increase in the scale of the architectural production, the city becomes the biggest building of architecture, in terms of both physical and social organization. Urbanism becomes a three-dimensional science that can be described as a territorial mobilization, “which would indissolubly link the equipment of home (furniture) to architecture (the space inhabited, the dwelling), and to town planning (the conditions of life of a society)”.<sup>63</sup>

The architectural production of the city is based on a hierarchical order of scales that successively produce: cell (housing unit), block and city. The central position of the housing unit in the urban plans of Le Corbusier can be read in parallel with the rising social housing concern of the time as a response to the increasing demand of housing in the European cities damaged by the wars. However, the central position of the housing unit in his plans is not limited only with this need; the house eventually becomes an indispensable architectural element directly linked with the social transformation idea underlying the urban plan.

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<sup>62</sup> Le Corbusier, *Precisions*, op. cit., p.103.

<sup>63</sup> Le Corbusier, *L’Esprit Nouveau Articles*, Architectural Press, London, 1998. The book consists of Le Corbusier’s books: “Towards a New Architecture”, “The City of Tomorrow” and “The Decorative Art Today”. FLC library owns original issues of the L’Esprit Nouveau Review.



**Figure 4.4.1** Scale of construction, Plans of Radiant City versus Paris, New York and Buenos Aires

The housing unit becomes the nucleus of the overall social pattern and it becomes the field of seclusion from the complications of the industrial world –the factor of resistance, as discussed in the preceding pages.<sup>64</sup>

“The city, it’s the home. The rest is nothing but corollary: offices, factories, education places and recreation places, etc... Home is also the foundation of the society. If home conforms to the natural needs of the man, the society is balanced. If home is contrary to the free development of the natural human necessities, the society is threatened”.<sup>65</sup>

<sup>64</sup> Richard Sennett explains the central position of “home” in urban planning with the arrival of the Industrial Revolution as the shift of a cultural change. The spiritual refuge to sanctuaries is replaced with the secular refuge to home, which means “the geography of safety shifted from sanctuary in the urban center to the domestic interior”. Richard Sennett, *The Conscience of the Eye: The Design and Social Life of Cities*, W. W. Norton & Company, New York, 1990, p.21.

<sup>65</sup> “LE LOGIS : La ville, c’est le logis. La reste n’est que corollaire : bureaux, usines, lieux d’études et lieux de divertissements, etc... Le logis est le fondement même de la société. Si le logis est conforme aux besoins naturels de l’homme, la société est équilibrée. Si le logis est contraire au libre développement des nécessités naturelles humaines, la société est menacée”. Le Corbusier, “Chapitre 2: Les Besoins Collectifs et les Arts de l’Espace”, *l’Encyclopédie Française*, Octobre 1935. (AFLC)

According to Manfredo Tafuri this tripartite organization is actually an “assemblage”, where “each piece tends to disappear or to formally dissolve in the whole”, and that “it is no longer the objects that are offered to judgment, but a process to be lived and used as such”.<sup>66</sup> This means, the architectural production in hierarchical scales (with the housing unit in the central position) is used as a means to control the social process through architectural mediation.

There is a connecting thread from Le Corbusier to Koolhaas, that both of them attempt to radicalize the *scale* of architectural production to extremes, however their distinct approaches in terms of the urban program, are also reflected in their method of dealing with the deeper and taller buildings.

“Beyond a certain critical mass, a building becomes a Big Building”, says Rem Koolhaas in the Theory of Bigness, “Such a mass can no longer be controlled by a single architectural gesture or even by any combination of architectural gestures”.<sup>67</sup> The theory is established on such a position that the architectural production beyond a certain scale –that gains the properties of Bigness- can not be limited with defined functions, established set of relations and linear programming, but rather it should have the potential of containing a proliferation of events that can continuously transform under changing conditions in the social and cultural context. Thus, the urban program is beyond architect’s control; “it has become impossible to plot culture”.<sup>68</sup>

To conclude, while Le Corbusier pushes the potentials to extremes by the radicalization of the architectural control on the urban program through hierarchical scales of intervention, Rem Koolhaas defines a new type of architectural intervention, whose control is confined to the boundaries of the single block, but in which, the architectural space acquires urban

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<sup>66</sup> Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, op. cit., pp. 104-124.

<sup>67</sup> Rem Koolhaas, “Bigness: or the Problem of Large”, *S, M, L, XL*, op. cit., p. 499.

<sup>68</sup> Rem Koolhaas, *Delirious New York*, op. cit., p.85.

characteristics. The former produces a “master plan” for the city under the authority of the architect, while the latter proposes a “master program” that consists of separate “islands” of architectural control. One of Le Corbusier’s plans, the Obus Plan for Algiers has the potential to be an object of discussion, for the concluding remarks of the retrospective reading of Le Corbusier’s position.

#### **4.5. The Case of Algiers**

The Obus Plan for Algiers that was prepared in the years 1932-1942 is one of the later city projects of Le Corbusier that shows certain shifts from the earlier Radiant City and Contemporary City proposals in terms of the patterns of urban organization. The overall pattern of the city plan, which was achieved in the Radiant City by a cartesian organization of high-rise blocks and the highways connecting them, in Algiers consisted of a business center in the *Quartier de la Marine*, housing for political and administrative classes in the hills of *Fort-L'Empereur*, and mass housing units placed within the curvilinear coastal viaducts influenced by the geographical characteristics. (Fig. 4.5.1) Therefore, as the earlier city plans, it was a grand project including the economic aspects, social organization, political power, as well as the spatial organization. In addition to these common characteristics, the Algiers plan pushes the scale of architectural production to extremes and gives the clues for adaptability and flexibility in its program.

The placement of the housing units in the superstructure of elevated highways, first of all, necessitates a new scale in both the conception and production of architecture. The scales of working drawings reach up to 1:1000 and 1:500, which are generally the scales for the largest architectural productions and smallest urban planning proposals. (Fig. 4.5.2) However, this understanding of increase in scale can not be understood in terms of the big architectural scale theorized by Koolhaas, because Le Corbusier’s plans strictly protect the human scale by the hierarchical understanding of organization.



**Figure 4.5.1** General view of Obus Plan, Algiers, Le Corbusier, 1932.

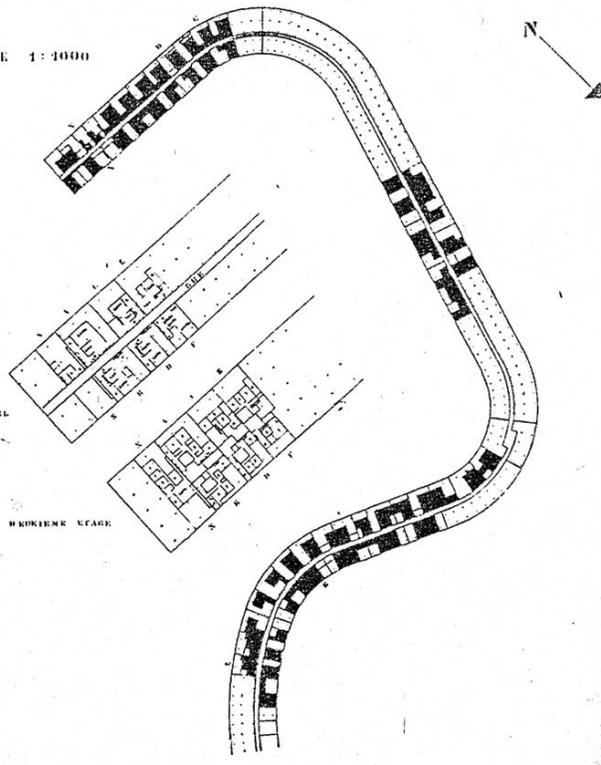
AL 3059

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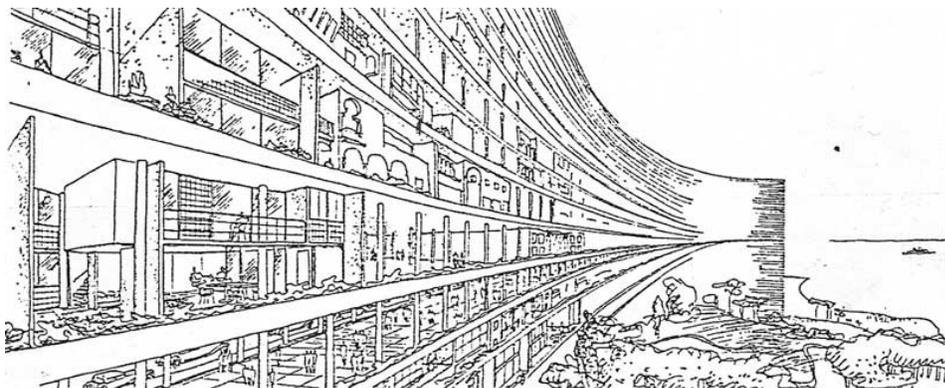
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**Figure 4.5.2** Plans, Housing units integrated with the elevated highway, Algiers, Le Corbusier, 1932.



**Figure 4.5.3** Sketch, housing viaducts, Algiers, Le Corbusier, 1932

In terms of the flexibility and adaptability in the program, one of his sketches from the Algiers project delineating the housing units within the superstructure of elevated highways is significant. (Fig. 4.5.3) In the sketch, Le Corbusier shows that the regeneration of local styles will be allowed so that each occupant can build his own house in any style and organization he prefers. It is by this way “the most absolute diversity, within unity” would be achieved.<sup>69</sup> As the sketch reflects, the curvilinear block consists of housing units, which are free in style and organization, becomes an “endless infrastructure with random infill”<sup>70</sup>. The infrastructure multiplies the ground space in the vertical dimension and it has the capacity for the “reproduction of the world”.<sup>71</sup> By the very definition of Bigness, the structure could serve as a framework for a series of independent horizontal platforms, each having the potential to represent different social layers, cultural and stylistic concerns and ideological functions.

However, the flexibility and adaptability of the Algiers scheme remained at more physical than ideological level, since the overall urban plan has already reorganized the densities and functions of the city through a rational procedure: the segregation of residential areas, the general framework drawn by the infrastructure, the production and consumption cycles set by the organization of office blocks and commercial activities in the city center and the residential quarters placed in the peripheral location to feed the commercial center. Thus, the diversity is limited with various stylistic combinations of a single function, the housing.

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<sup>69</sup> Ibid. p. 247.

<sup>70</sup> Alan Colquhoun, “From Le Corbusier to Megastructures”, *Modern Architecture*, Oxford University Press, New York, 2002.

<sup>71</sup> Rem Koolhaas, *Delirious New York*, op. cit., p. 82.

As a matter of fact, diversity in the social programming of architecture, in the way we can understand from the theory of Koolhaas, has never been a desirable outcome for Le Corbusier. Rather than a series of final words, a series of images from the *unité d'habitation*, the ever constructed model that represents Le Corbusier's social plan, urban program and hierarchical scale, will clarify on what type of an outcome he has built up his consistent position. (Fig. 4.5.4 - 4.5.13)



**Figures 4.5.4, 4.5.5., 4.5.6** Approach and entrance, *Unité d'Habitation* in Marseille, Le Corbusier, 1952.



**Figures 4.5.7, 4.5.8, 4.5.9** Modulor, *Unité d'Habitation* in Marseille.



**Figures 4.5.10, 4.5.11** Urban program inscribed on stone, *Unité d'Habitation* in Marseille.



**Figures 4.5.12, 4.5.13** The elevated streets (residential and commercial) set in the human scale, *Unité d'Habitation* in Marseille.

## **CHAPTER 5**

### **CONCLUSION**

The relation between architecture and urbanism is continuously being redefined under the influence of the developments in construction technologies that resulted with an increase in the scale of architectural production and according to the course of social, cultural and economic aspirations on the city that necessitates alternative urban programs. The cross-reading of the theories and practices of Le Corbusier and Rem Koolhaas revealed one of these moments, in which such a shift in the architectural-urban discourse can be explained in relation to a social and cultural turning point.

Le Corbusier's position represents the architectural desire on the city, not only to build its physical-spatial reality, but also to control its social and economic processes. The architectural form becomes the determiner of the functions and relations referring to the whole social plan. The architectural scale is conceived in hierarchical order from inside to outside as a regulator of the whole process. The urban program becomes the reorganization and stabilization of densities and functions of the city through rational and linear architectural processes. In doing so, the tools and the targets of architecture and urbanism are unified, and the city becomes a building that is outcome of architectural practice.

With the exhaustion of the ideological function of modernist ideals on the city, modern architecture has lost bearings to establish any connection with the urban processes. Remained without an ideology on the city, architecture could only take a few stands: it would either return to itself for autonomous architectural processes or completely surrender to the consumption of the structural forces of the city.<sup>72</sup>

What Rem Koolhaas brings about contemporary architecture and urbanism can be interpreted as a third alternative, which utilizes the existing urban condition as a given for the development of a new theory –a theory that will put an end to the architectural desire of the production of the city, but at the same time that will define a new critical stand against the underlying system.

“What if we simply declare that there is no crisis - redefine our relationship with the city not as its makers but as its mere subjects, as its supporters? More than ever, the city is all we have”.<sup>73</sup>

As much as Le Corbusier’s plans are critical to the classical city, Koolhaas’s theory is critical towards the totalizing attempts on the postindustrial landscape. If Le Corbusier pushes the potential of architectural production of the city to the extremes, then Rem Koolhaas reverses the process, enters into the order it criticizes, by this way maintaining the power of critical architectural intervention. Thus, for him, architecture can no more lead a grand project that aims to rationalize the structural forces of the city. Instead, he believes -at the ultimate point of radicalization- the utilitarian production based on even the most banal economic givens can become a

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<sup>72</sup> Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, op. cit.

<sup>73</sup> Rem Koolhaas, “What Ever Happened to Urbanism?”, *S, M, L, XL*. op. cit., p. 971.

critical architectural act revealing the ideological contradictions of urbanism.<sup>74</sup>

“Now we are left with a world without urbanism, only architecture, ever more architecture... Redefined, urbanism will not only, or mostly, be a profession, but a way of thinking, an ideology: to accept what exists. We were making sand castles. Now we swim in the sea that swept them away”.<sup>75</sup>

Departing from the cross-reading of their theories, it is possible to conclude that Koolhaas has built this critical position as an antithesis to Le Corbusier’s urban thinking.

In Koolhaas’s definition of the architectural processes, the architectural form is relieved from the functions and relations it contains. The increase in the architectural scale no more implies a linear connection to a larger urban system, but it introduces new relations and processes within the boundaries of the architectural production. The unity between architecture and urbanism, which was pushed to extremes in Le Corbusier’s plans, is broken. Only with the separation of architecture and urbanism “can architecture dissociate itself from the exhausted artistic/ideological movements of modernism and formalism to regain its instrumentality as vehicle of modernization”.<sup>76</sup> By this way, architecture and urbanism’s double mission of controlling the city comes to an end; architecture can only control its own “island”, while the city becomes a random, yet interrelated collection of these islands. The concept of the city as “an ordered series of objects” is rejected.<sup>77</sup>

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<sup>74</sup> This especially refers to the competition project for La Défense.

<sup>75</sup> Rem Koolhaas, “Bigness: or the Problem of Large”, *S, M, L, XL*, op. cit., p. 970-971.

<sup>76</sup> Rem Koolhaas, “Bigness: or the Problem of Large”, *Theories and Manifestoes of Contemporary Architecture*, ed. by Charles Jencks and Karl Kropf, Academy Editions, New York, 1997, p.309.

<sup>77</sup> Rem Koolhaas, Finding Freedoms. Conversations with Rem Koolhaas”, *El Croquis*, 1992, pp. 6-31.

In the plans of Le Corbusier, the rational and linear process for the reorganization of the densities and functions stabilizes the urban program. The stability of the program can also be interpreted as a resistance to the transient nature of the market conditions, referring to the discussion on the social plan. The central position in the urban program is allocated to residential functions, which are articulated as sterilized environments for the protection of the society from the complications of the industrial world.

In the urban theory of Koolhaas, on the other hand, the instability becomes the main ideology of the urban program that generates new, more flexible urban conditions. The urban program can no more be described as “resistant”, but rather “permeable” to transience. To radicalize architecture’s position in relation to the instability of the new social and cultural system, the focus of interest in the urban program is shifted to alternative functions and densities of the city -the objects of this continuous reproduction.

The shift in the program and increase in the scale is followed by the definition of alternative roles for the architect. The failure of the grand projects under the direction of a single heroic architect, the limitation of architectural control within the boundaries of “island” and the creation of the city as a random, yet interrelated collection of these islands refers to a “post-heroic” status for the architect.<sup>78</sup> In terms of urbanism, contemporary urban plans carried out by various architects under a chief planner drawing the general framework of the plan may be one of the consequences of a cultural shift from the rational and uniform urban order to diversity and complexity. In terms of architectural production, the architect has to “cooperate with engineers, contractors, manufacturers; to politics; to others”.<sup>79</sup>

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<sup>78</sup> Rem Koolhaas, “Bigness: or the Problem of Large”, *S, M, L, XL*, op. cit., p. 515.

<sup>79</sup> *Ibid.*

Le Corbusier and Rem Koolhaas become the opposite faces of a coin. The maximum architecture can do, for Le Corbusier, was to take control of the city together with its social and cultural entity, for Koolhaas it is to create conditions for the proliferation of events that can continuously transform under changing conditions in the social and cultural context.

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