STRATEGIC WAY OF DESIGN
IN REM KOOLHAAS' PARC DE LA VILLETTE PROJECT

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ABSTRACT

STRATEGIC WAY OF DESIGN
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M. Arch., Department of Architecture

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It is inevitable to observe that, in an urban field any architectural enterprise is subject to changing political, financial, technological and cultural demands. The pressure of these ever-changing forces attempts to modify and replace the initial program and the activities associated with the architectural product. The lifespan and the success of the resulting edifice depend on its ability to respond to such changes. Nevertheless, these ever-changing forces are naturally ambiguous and unpredictable so that architectural program becomes indeterminate. This thesis claims that in order to deal with the programmatic indeterminacy in an urban context, a strategic approach should be employed throughout the design process. Therefore, the thesis critically analyzes the strategic way of design to understand its working principles via examining the *Parc de la Villette* competition project of Rem Koolhaas/OMA. The mechanism of strategic way of design, how it works, and how it is constructed are the main focus of the thesis.

Keywords: Rem Koolhaas, *Parc de la Villette*, Ivan Leonidov, strategy and tactics, culture of congestion, social condenser.

ÖZ

REM KOOLHAAS'IN PARC DE LA VILLETTE PROJESİNDE STRATEJİK TASARIM YAKLAŞIMI

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Kentsel bağlamda, bir mimari ürünün, değişken politik, ekonomik, teknolojik ve kültürel taleplerin etkisinde kalması kaçınılmazdır. Durmaksızın değişen bu etkiler, mimari ürünü, bu ürünün çıkış programını ve mevcut kurgusunu dönüştürmeye ve yeniden yapılandırmaya zorlar. Bir mimari ürünün başarısı ve varoluş süresi söz konusu değişkenlere yanıt verebilme kapasitesine bağlıdır. Ancak esas nokta bu değişkenlerin doğal olarak belirsiz ve öngörülemez olmasıdır. Bu tez, kentsel bağlamdaki bu programatik belirlenemezliğin üstesinden gelebilmek için mimari tasarım sürecine yaklaşımın stratejik olmasını öne sürer. Tezin ana amacı da stratejik tasarım yollarını analiz etmek ve bu tasarım biçiminin çalışma prensiplerini anlamaktır. Bu amaçla, Rem Koolhaas/ OMA tarafından *Parc de la Villette* yarışması için hazırlanan proje incelenmiştir. Stratejik tasarımın mekanizması, bu mekanizmanın nasıl çalıştığı ve kurgulandığı tezin ana odak noktasını oluşturmaktadır.

Anahtar Sözcükler: Rem Koolhaas, *Parc de la Villette*, Ivan Leonidov, strateji ve taktikler, kültürel konjesyon, toplumsal yoğunlaştırıcı.

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INTRODUCTION

1.1. Arising the Question

In an urban context, changing political, financial, technological or cultural forces attempt to modify and replace initial program and existing activities of an architectural product. The lifespan and the success of the architectural product depend on its capacity of replying these changes. Here, it is crucial to point that, these ever-changing forces are naturally ambiguous and unpredictable. Even if the architectural program is essential to design the capacity of architectural product to absorb future modifications should be taken into account in advance. Therefore, each architectural work not only should be able to provide practical solutions to certain programmatic needs but also guarantees to be flexible against *programmatic indeterminacy.*

Therefore, how to deal with programmatic indeterminacy in a complex and unforeseeable urban condition is the starting point of the thesis. The questions of the thesis arise from the search for the way of organizing a design mechanism, which responds to indeterminate conditions of an urban context.

1.2. Aim of the Thesis

The thesis claims that in order to deal with the programmatic indeterminacy in an urban context, the approach to the design process should be strategic. Then, the main aim of the thesis is to analyze the strategic way of design and to understand how it works. In order to analyze the reciprocal relationship between strategic way of design and the indeterminate conditions of the context and program, the thesis will search for how this mechanism works by taking into consideration the interconnections among the architectural problem, program, and strategy and tactics. Here, the thesis will discuss and study these terms and their role in strategic way of design by focusing on the competition project by Rem

Koolhaas/OMA[1] for *Parc de La Villette*[2] in Paris (1982-1983). Then, depending on the analysis of the *La Villette* project, the thesis will construct the mechanism of strategic way of design.

1.3. Definition of "Strategy"

How the thesis approaches the term "strategy" needs to be defined in order to clarify further discussions in the thesis. Here, the term "strategy" refers to generic architectural concept that frames operational tools and implementation of tactics. It is a productive apparatus that operates the mode of action throughout the design process. The thesis will make use of the term strategy as an understanding of conceptual framework that has the potential of yielding tactical tools against the problems of ever-changing conditions in an urban context.

Here, it is suitable to start with Michel de Certeau's notions of strategy in his book *The Practice of Everyday Life.* Although the book is mainly related with the analysis of "modes of production and action" of "amateur producers" and "active consumers" within a socio-cultural structure, it is an important reference for understanding the role of strategy. It is important because of the fact that in order to clarify what strategy is, he introduces the second term *tactics* into circulation, and emphasizes the mutual relationship between strategy and tactics. He defines the terms strategy and tactics with the special emphasis on the "ways of operations" that formulate rules or codes for production and action.[3] The ways of operation are able to manipulate or reproduce these codes and rules in practice. He differentiates strategy and tactics by stating that, "*strategies are able to produce, tabulate, and impose*" spaces on which they operate, "*whereas tactics*

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[1] Rem Koolhaas, together with his partners, founded The Office for Metropolitan Architecture (OMA) in 1975. Throughout this thesis, discussions on the architectural edifices of Rem Koolhaas refers to his co-operate works with OMA.

[2] An international architectural competition of Parc de La Villette took place for the rehabilitation of the former slaughterhouses of Paris. The competition program required the design of 50 hectare area including restaurants, workshops, pavilions, recreational facilities in addition to hard and soft landscaping. 470 projects had been submitted to the competition secretary among which, the project by the architect Bernard Tschumi won the first price. For further information please see Bernard Tschumi, Event-Cities 2, The MIT Press, Cambridge, Massachusetts, 2000.

[3] Michel de Certeau. The Practice of Everyday Life. Berkeley: University of California Press, c1984, pp.xi-xiii.

can only use, manipulate, and divert" spaces. He establishes an analogy with linguistics that if we take the "*established language"* or "*syntax"* as a strategy, "*the act of speaking*" can be the tactic.[4] If Certeau's reflections on the terms strategy and tactics can be transformed to the architectural debates, established language or syntax can be seen as an analogy of structural framework, or general organization in the process of design. Simultaneously, the act of speaking can be connected to the tools of actions that are implemented within the design process according to the general framework.

Therefore, in reference to Certeau's discussions, the thesis points out that strategy is mainly an index of governing principles, and defines *what* we do, whereas tactics are actions of operational logic (that is strategy), and define *how* we realize what will be done. This mutual, diachronic and interactive relationship between strategy and tactics constructs the mechanism of *strategic way of design*, and produces, reproduces, manipulates and controls the operational tools to cope with the programmatic indeterminacy in an unstable urban context.

It is admitted to say that Rem Koolhaas is *strategist*, and formulates his works as a matter of strategy. As Rafael Moneo states "Koolhaas has always been interested in the analysis of production."[5] That is to say that, rather than focusing on designing an architectural object, Koolhaas concentrates upon discovering the latent structure in the process of design, and how to manipulate this structure.[6] In his works, he not only produces practical solutions to a definite problem, but also formulates this problem with generic architectural concepts. He clearly asserts that "I think that we are more and more producers of concepts, not executors of program,"[7] and in the magazine *Content,* he addresses the key for conceptual production: "a building was no longer an issue of architecture, but of *strategy*."[8] In

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[4] Ibid, p. 30.

[5] José Rafael Moneo. Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects, Cambridge, Mass; London: MIT Press, 2004, p315.

[6] Ibid, p.325

[7] Rem Koolhaas, Sarah Whiting. Spot Check: A Conversation between Rem Koolhaas and Sarah Whiting, *Assemblage.* No: 40, December 1999, pp 36-55.

[8] Rem Koolhaas, OMA, Brendan McGetrick, "Goodbye to Hollywood", Content. Taschen, 2003, p118. (Emphasis mine)

addition to this, as Frederic Jameson states the most distinctive feature of Koolhaas' works is "the way […he] builds an enormous envelope for all kinds of unprogrammed but differentiated activities."[9] Here, it is the strategy, which produces operational tools so as to develop the "enormous envelope", under which different *architectural tactics* can be facilitated. Consequently, in the thesis, the *Parc de La Villette* project of Koolhaas will be analyzed to explicate mechanism of strategic approach, which is a generic way of thinking that shapes the structure of enormous envelope.

1.4. Subject of the Thesis: Rem Koolhaas' *Parc de La Villette* Project

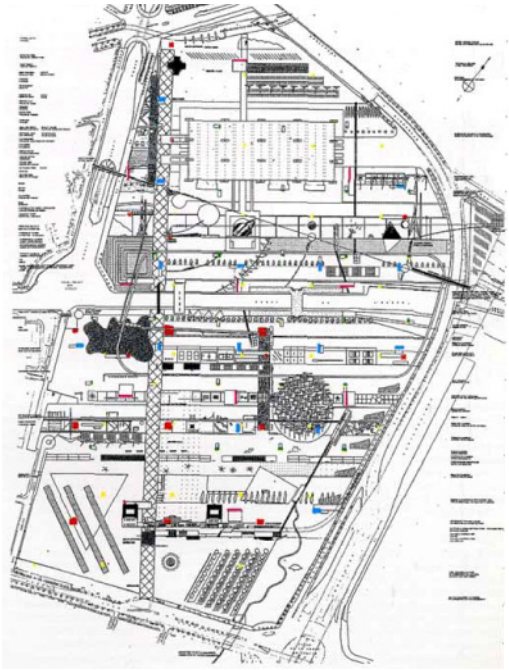

Figure 1.1 Plan of *Parc de La Villette* Project.

As Alejandro Zaera states "OMA's architecture is fundamentally performative, in the sense that its validation as construction is not produced in function of the

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[9] Frederic Jameson; Michael Speaks, "Enveloped and Enclaves: The Space of Post-Civil Society(An Architectural Discussion)", *Assemblage*, No. 17. Apr.,1992, pp30-37.

representation or reproduction of a model, but in its operative exactness, adequacy or efficiency".[10] Among the works of OMA, *Parc de La Villette* is significant to display performative and operative design by means of its strategic structure. In order to analyze the strategic design and its generic structure as a respond to programmatic indeterminacy, the thesis will examine OMA's competition project for *Parc de La Villette* in Paris.

At the first stages of the design process, Koolhaas proposed that the given program of the park should be read "as a suggestion, a provisional enumeration of desirable ingredients."[11] As the given program of *Parc de La Villette* was too large in relation to its site, and also it was subject to perpetual state of revision due to the contextual conditions, he formulates the problem as "combining architectural specificity with programmatic indeterminacy."[12] Thus instead of "simply design", he regarded the project as a matter of strategy. Therefore, the design mechanism of the park is reformulated such as the following:

> how to orchestrate on a metropolitan field the most *dynamic coexistence of activities* x, y, and z and to generate through their mutual interference a chain reaction of new, unprecedented events; or, *how to design a social condenser*, based on *horizontal congestion*, the size of a park.[13]

This strategic formulation is crucial for the thesis, because of the fact that the thesis is directed to understand the mechanism of strategic design that is summarized in this formulation. As indicated in the formulation, Koolhaas asks the question of how to design the park as "a social condenser" (that is to be the program of the park), and explains the ambition of this social condenser as generating dynamic coexistence of various activities. Then, in order to design this social condenser, he initiates "the strategy of strip" that

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[10] Alejandro Zaera-Polo. "Notes for Topographic Survey." *El Croquis No: 53+79,* OMA 1986-1991, Madrid, March 1992, p.51.

[11] Rem Koolhaas, Bruce Mau. "Congestion without Matter", S,M,L,XL Jennifer Sigler, ed. New York: The Monacelli Press, 1998, p. 921.

[12] Rem Koolhaas, Bruce Mau. "Congestion without Matter", S,M,L,XL Jennifer Sigler, ed. New York: The Monacelli Press, 1998, p. 921.

[13] Ibid, p.921. (Emphasis mine).

> creates the maximum length of border between the maximum number of programmatic components and will thereby guarantee the maximum permeability of each programmatic band and the maximum number of programmatic mutations.[14]

The strategy of strip constructs the mechanism of strategic design in *La Villette* by producing an enormous envelope under which future tactical variations can be implemented.

1.5. Structure of the Thesis

The thesis is composed of three main parts. Firstly, the thesis will work on the urban laboratory of OMA in order to grasp tools for the analysis of Parc de *La Villette* project. Secondly, the thesis will construct its own laboratory work, and analyze the *La Villette* project by means of these harvested tools. Then, finally according to the consequences of these two laboratories, the thesis will conceptualize the mechanism of strategic way of design.

Concerning the first part of the thesis, the second chapter addresses to urban laboratory of OMA. This chapter will begin by asking the question of "how to design a social condenser" with regard to the strategic formulation mentioned above. The mechanism behind social condenser is important for the thesis due to the fact that Koolhaas defines *Parc de La Villette* as "a social condenser", and also understanding the mechanism of social condenser is essential to the exploration of the mechanism of strategic design in *La Villette*. In order to accentuate and comprehend the notion of social condenser, this chapter will examine Russian Constructivists in 1920s when the term social condenser first appeared as a new concept in modern architecture. Especially, the works of Ivan Leonidov will be analyzed in detail in order to understand how social condenser works and how it is designed.

[14] Ibid. P.923

The second chapter will continue with the studies of Koolhaas on the Berlin Wall and his project of Exodus: the Voluntary Prisoners of Architecture. These studies will be on scope to highlight the principles of strategy of strip and void in *La Villette*. By the combination of strip and void, how Koolhaas produces *dynamic coexistence of activities* in *La Villette* will be studied in this chapter. The Berlin Wall is a laboratory for Koolhaas to observe how the continuous urban void has the capability of producing infinite mutations of events. Then, in the Exodus project, he loaded this capacity of the void with an intense program so as to represent the multiplicity of urban life.

Finally in the second chapter, the book *Delirious New York* (first published in 1978) will be re-read in order to produce analytical tools for understanding "culture of congestion", which is a new form of urbanism, and later mentioned in *La Villette* as "horizontal congestion". The thesis refers to *Delirious New York* to follow the developments of Koolhaas' theoretical and conceptual investigation on metropolitan context and to find out which tools he uses to read complex urban conditions. Particularly, the sections related with tree amusement parks of Coney Island (namely, Luna Park, Steeplechase, and Dreamland) and Manhattan's Skyscrapers are essential to understand how he analyzes the transformations of urban context, and to highlight the nature of programmatic indeterminacy. Coney Island is a clear example that illustrates how the three parks are continuously modified and equipped with new facilities to respond to new demands and technological developments. The strategies and tactical tools that are produced by the developers of these three parks against programmatic indeterminacy, are transferred to the Manhattan, and used to cope with new form of urbanism; that is *the culture of congestion*. Also, the thesis refers to the chapters related with Manhattan to explore the strategy of the Grid, and its tactical instrument, Skyscrapers. The Skyscraper, with its schizoid arrangement, as an "instrument of a new form of urbanism"[15] acts as a tactical tool in rigidity of the Grid.

In the second chapter, the thesis will derive formulas that involve the consequences of each laboratory work of OMA. By means of these formulas, the

[15] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.87.

mechanism of strategic way of design in the *Parc de La Villette* competition project will be analyzed at the second part of the thesis, namely the third chapter. Therefore, the thesis will explicate the tools that are employed in *Parc de La Villette* and in turn the mechanism of strategic way of design in the third chapter. The analyses will mainly include the definition of the design problem as an urban park, the redefinition of the program of the park as a social condenser, and the construction of the design mechanism in terms of operation and actions that are implemented in *La Villette*. As noted above, Koolhaas points out that the main aim of the *La Villette* project is to combine architectural specificity with programmatic indeterminacy. The question of how this combination is achieved through the instruments of strategic design will also be discussed in the third chapter. Additionally, the strategy and tactics that yield to the *La Villette* project will be examined in detail in order to understand their role in the mechanism of strategic design.

In the third part, that is the conclusion chapter, the thesis will diagrammatize and discuss the mechanism of strategic way of design, according to the consequences of the two laboratories, namely the urban laboratory of OMA (Leonidov's social condenser designs, the Berlin Wall, the Exodus project and Manhattan -the parks in Coney Island, the Grid and Skyscraper-) and the thesis' laboratory (*Parc de La Villette*).

CHAPTER 2

URBAN LABORATORY OF OMA

In order to search out and understand the constituent features of metropolitan culture, Koolhaas pursues a line of research on the material practices that shape urban fabric from the beginning of his career. In the dictionary part of the book *S, M, L, XL*, under the title of "Metropolitan" he explains his architectural position with reference to urban culture:

> OMA produces an architecture that embraces aspects of the maligned metropolitan condition with enthusiasm, and which restores mythical, symbolic, literary, oneiric, critical, and popular functions to large urban centers. An architecture which accommodates and supports the particular forms of social intercourse, characteristics of metropolitan densities, an architecture that houses in the most positive way the *Culture of Congestion*.[16]

From his urban researches, Koolhaas derives design tools that both construct his position in architecture, and shape his projects. He develops an experimental approach to the analyses of his research subjects, and examines these subjects as a part of his laboratory works on metropolis. For example, he states "Berlin is a laboratory"[17] to imagine nothingness, or "Coney [Island] is the laboratory of Technology of Fantastic"[18], or "Manhattan as laboratory"[19] is about for "the Culture of Congestion".

In this chapter, in order to derive tools of analysis for the *Parc de La Villette* project, and to find out the basis of Koolhaas' strategic approach to this particular

[16] Koolhaas, Rem and Mau, Bruce. S, M,L,XL, New York: The Monacelli Press, 1998, p.926.

[17] Ibid. p.200.

[18] Koolhaas, Rem. Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.56.

[19] Ibid. p.9.

project the thesis will study urban laboratory of OMA. This laboratory includes the urban studies of Koolhaas from the beginning of his career to the writing of *Delirious New York* in 1978. At the beginning, this chapter will examine Russian Constructivist Leonidov's projects of "social condenser" in order to reveal Koolhaas' reference to Leonidov in scripting *La Villette*'s program as a social condenser; then, Koolhaas' reference to the Berlin Wall in order to explore how the strategies of strip and void are developed and employed in the *La Villette* project; and finally, the book *Delirious New York* in order to understand how Koolhaas explores the culture of metropolis and derives generic design tools from Manhattan.

How he employs the methods and tools he derived from his readings of Russian Constructivists, the Berlin Wall and Manhattan in the project of *Parc de La Villette* will be explored in the following chapter.

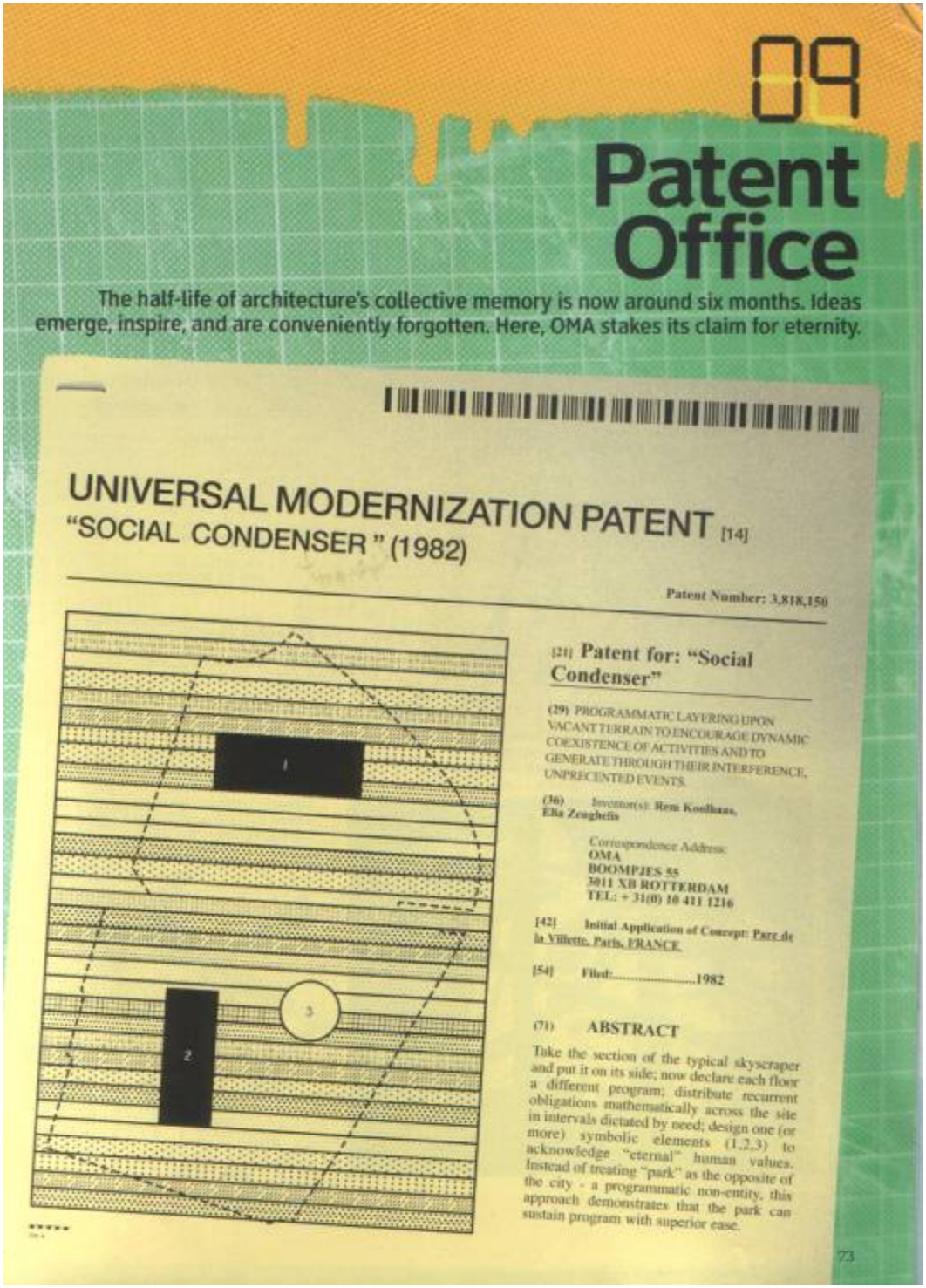

Figure 2.1 Patent for "Social Condenser" which is initially applied in *Parc de La Villette*.

2.1 Social Condenser

In *Content*, Koolhaas points the ephemeral nature of architectural ideas, and states that "the half-life of architecture's collective memory is now around six months. Ideas emerge, inspire, and are conveniently forgotten."[20] Then, in order to get rid of being disappeared he claims series of patent for OMA's ideas developed for various projects. The first of all these patents, which are placed under the title of "Universal Modernization Patent", is "Social Condenser," and the initial application of this patent is the *Parc de La Villette* project (Fig. 2.1). Here, he defines social condenser as a

> [l]ayering upon vacant terrain to encourage dynamic coexistence of activities and to generate through their interference, unprecedented events.[21]

For him, the essence of *La Villette* project is "to design a social condenser, based on a horizontal congestion."[22] Understanding what Koolhaas means by social condenser is remarkably essential to the analysis of the strategic design approach in the *La Villette* project*,* because of the fact that whole mechanism of the strategic design is operated to accommodate social condenser.

The term social condenser was first come into circulation by the Russian constructivist in 1920s. During post-Revolutionary years, in order to "reorganize the life of the mass population according to the direction outlined in the Bolshevik party's Marxist program,"[23] Constructivist integrated social problems into architectural field. Especially, to achieve the corporative and collective ways of living and to construct society in parallel to evolving social forms of new life,

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[20] Rem Koolhaas, OMA, Brendan McGetrick, "Goodbye to Hollywood [Emphasis mine]", Content. Taschen, 2003, p73.

[21] Ibid, p 73.

[22] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

[23] Catherine Cooke, Russian Avant-Garde: Theories of Art, Architecture and The City, Academy Editions, London, 1995, p.29.

architectural profession seemed to be as a "social catalyst" or as a function of "social construction."[24] From the constructivist view, the term social condenser is used to determine architectural or urban structures of any scale that are estimated to play great importance in the transition of the society.[25] Moisei Ginzburg, whose book, *Style and Epoch*, is accepted as a manifesto of the Constructivist doctrine and practice in architecture, defines the role of social condenser in constructivist architecture:

> Our work should essentially be based on a scrupulous and detailed study of the brief in the light of our political and social circumstances. Its essential aim should be the creation of SOCIAL CONDENSERS for our times. This is the essential objective of Constructivism in architecture.[26]

Social condensers came into being as an architectural instrument beginning from the first years of the Revolution in order to transform the society according to new way of life. Anatolie Kopp underlines the dual function of social condenser in society in a way that

> […] in addition to its immediate function, [social condenser] would firstly foreshadow the architecture and town planning of the future so that future users would grow accustomed to both; and secondly influence users through its use of spaces so as to introduce a new way of life into their social habits.[27]

Constructivists approached social condenser as a "mechanism for transforming habits,"[28] and worked on its principles in various range of scale. It could be a housing unit for a collective way of living (e.g. Ginzburg's Narkomfin Housing

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[24] Catherine Cooke, Russian Avant-Garde: Theories of Art, Architecture and The City, Academy Editions, London, 1995, p.99.

[25] Ibid, p. 11.

[26] Anatole Kopp, Constructivist Architecture in the USSR, Academy Editions, London, 1985, p. 70.

[27] Ibid, p. 70.

[28] Ibid, p. 70.

Block), a complex for communal cultural activities (e.g. Leonidov's Palace of Culture for the Proletarskii district of Moscow), and a city for a new way of urban life (e.g. Leonidov's Socialist Settlement at Magnitogorsk). What is substantial for all these social condensers is that they are loaded with programs, which condense tools for reconstructing society, and destine to the collectivization of activities. For instance, in Narkomfin Building, Ginzburg and his team "put many collective facilities at the inhabitant's disposal, amongst them communal kitchens, kindergartens, gymnasiums, libraries and rooms for 'intellectual work', and summer dining-rooms on the roof"[29] in order to encourage a collective way of living.

Significantly, amongst these new "architectural organisms,"[30] workers' clubs were accentuated as centers for a new socialist culture. As Selim O. Khan-Magomedov marks, "the Worker's or Village Clubs -otherwise known as 'People's Houses- which sprang up in those early days provided the main breeding ground for the dissemination points of the new socialist culture".[31] "Workers' clubs were to be the setting for creating and diffusing the new culture"[32] due to the fact that, large industrial enterprises of the new era demanded great number of workers, and the clubs were planned to serve these new labor force. Within the first two years of the Soviet rule, more than 7,000 workers club were built in order to become "centers for mass propaganda and the development of creativity among the working class".[33] The clubs were multi-functionally programmed centers for both stimulating new cultural interaction and struggling with individuals' old habits. Khan highlights the role of the clubs by stating that they "ranked as

[29] Anatole Kopp, Constructivist Architecture in the USSR, Academy Editions, London, 1985, p. 71.

[30] Ibid, p. 71.

[31] Selim O. Khan-Magomedov, ed. Catherine Cooke. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Thames and Hudson, London, 1987, p. 434.

[32] Anatole Kopp, Constructivist Architecture in the USSR, Academy Editions, London, 1985, p. 71.

[33] Selim O. Khan-Magomedov, ed. Catherine Cooke. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Thames and Hudson, London, 1987, p. 434.

outstandingly important centers for mass agitation, for the improvement of cultural standards among workers and for the organization of leisure throughout the population".[34] Similarly, El Lissitzky calls the clubs as a "workshop for the transformation of man" and reveals how these clubs modify and transform the life of inhabitants:

> Inside workers of all aged should find rest and repose after the day's work and should receive there a new charge of energy. Away from the family, children or adolescents, adults and the old should feel that they belong to a community. Here their interest should be broadened. The role of the club is to liberate men by eliminating the old oppressions of the church and State.[35]

At this point it is convenient to point out that, the thesis will search the meaning of social condenser in light of Leonidov's projects. It is because of the fact that, in the beginning of his career, Koolhaas (together with Gerrit Oorthuys) pursued a study on Leonidov's architecture. Moreover, in his particular projects, namely Exodus, Meloun Senart, and *Parc de La Villette*, it is obvious that Koolhaas referred and exploited Leonidov's discussion of social program and its manifestation as architecture. Therefore, in order to better understand Koolhaas' approach to social condenser, it will be significant to examine Leonidov's projects of social condenser, and to analyze how Leonidov defined and designed social condenser. In addition to that, in the various texts on OMA, the experimental designs of Leonidov's social condensers are cited as one of the main references of *La Villette* project.[36] What is significant to the *La Villette* project is its approach to socially interactive program; the project stands for "the moment of extreme intensification in quantity and quality of metropolitan congestion."[37] Hence, the thesis examines Leonidov's projects as a container for social relations in order to

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[34] Selim O. Khan-Magomedov. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Thames and Hudson, London, 1987, p. 434.

[35] Anatole Kopp, Constructivist Architecture in the USSR, Academy Editions, London, 1985, p. 112.

[36] Vicent Ducatez. "El Jardin Del Placer De OMA." *Revista Bitácora Urbano Territorial*, 2005, vol.1, no.009, p.10.

[37] Ibid, p.12.

explicate what social condenser means, how it works and in turn how the strategic approach of *La Villette* project generates socially condensed park.

2.1.1 Leonidov's Social Condenser Projects

It is convenient to classify Leonidov's social condensers into tree kinds by means of their scales, namely the workers' clubs (e.g. the Club of a New Social Type) in building scale, cultural complexes (e.g. Palace of Culture) in an urban scale, and a city planning (e.g. the Socialist Settlement at Magnitogorsk) in a larger scale. Even if they are in different scales, the thesis will search them in unity in order to understand the mechanism of social condenser.

Leonidov's design of the "Club of a New Social Type" was of special interest in the mass production of club in the 1920s, "because designing for the future in his terms was not merely a matter of boldly tackling functional and technical problems but, first and foremost, of providing for changing human needs".[38] Leonidov accused the existing type of club designs as being inefficient to solve the problems of cultural organization of the working class, and developed a new approach to the worker's club design as a "method of cultural organization", and "the organization of consciousness".[39] As stated by Kopp, his design "broke with the usual architectural forms both of Constructivism and more generally of Modern Architecture of the period. It also broke with the program that […] constituted the common basis for the majority of clubs".[40] He rejected the existing club typology by stating that " […] in order to involve those strata of workers who are not so far being properly served, it is essential that *cultural work should not be confined within the framework of the club*, but be developed within the

[38] Selim O. Khan-Magomedov. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Catherine Cooke edits. Thames and Hudson, London, 1987, p. 457.

[39] Andrei Gozak, Andrei Leonidov. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988, p.66.

[40] Anatole Kopp, Constructivist Architecture in the USSR, Academy Editions, London, 1985, p. 112.

enterprises themselves, the workshops, workers' barracks and hostels, and workers' settlement".[41]

In 1928, Leonidov produced two variants of an experimental design for a "Club of a New Social Type" including a "number of separate but interconnected buildings, some of which were reserved for specialized purposes, while the rest were intended for unrestricted use".[42] Khan marks the significance of Leonidov's method:

> Leonidov treated a club complex as a kind of social cultural centre, with a winter garden, a general-purpose hall for lectures, cinema, demonstrations, meetings, use as a planetarium etc; a laboratory; an open ground for glider competitions, motor racing, war games, tourism etc; a sports hall; a playroom with playpens and a pool; and *a park*. In architectural terms, the 'Club of a New Social Type' represented a broadly conceived and loosely organized *park-like* composition with, as its centerpiece the great hall roofed by a parabolic vault-like covering. [43]

[41] Andrei Gozak, Andrei Leonidov. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988, p.61.

[42] Selim O. Khan-Magomedov. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Catherine Cooke edits. Thames and Hudson, London, 1987, p. 457.

[43] Selim O. Khan-Magomedov. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Catherine Cooke edits. Thames and Hudson, London, 1987, p. 457. (Emphasis mine).

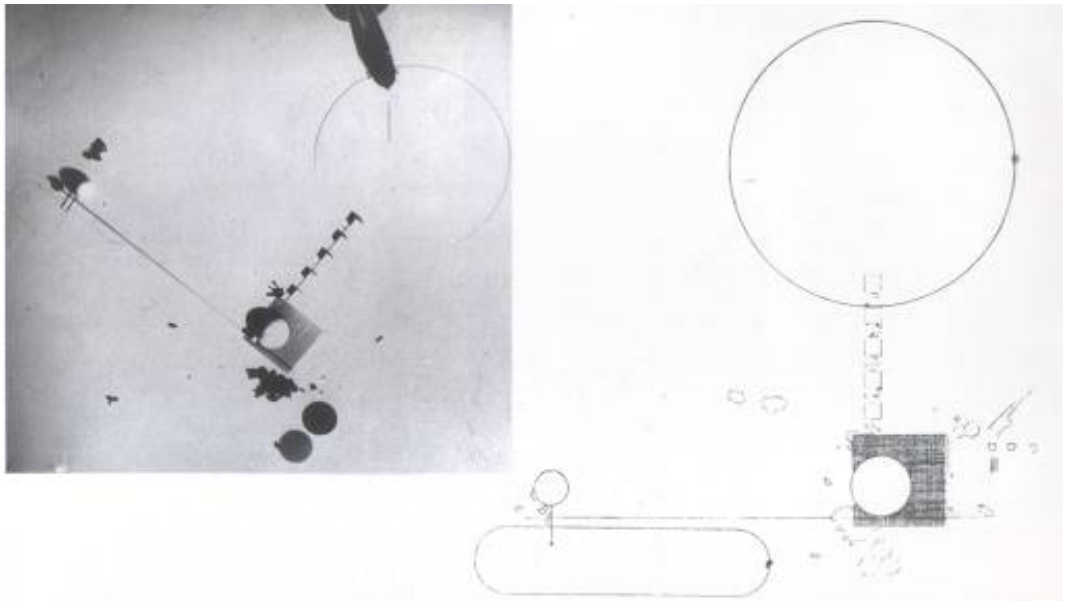

Figure 2.2 Club of New Social Type. VARIANT A. model and plan

What makes Leonidov's design remarkable is that, contrary to the architectural practices of his days, he constituted the club "as a *vast park*",[44] which would contain various cultural and educational facilities. He replaced the concept of building with the concept of a cultural area or cultural district. His park-like approach, as it is pointed by both Kopp and Khan notably, is to be observed by regarding not only its geometrical spatial organization but also its extensive program of club. In addition to the usual programmatic elements for club (such as library, conference hall, laboratories, etc.), he proposed a new spectrum of facilities such as a scientific winter-garden including local natural history, zoology, sports areas, swimming pool, and etc.; an open area for mass activities including gliding, flying, motor-sports, military games, and etc. as well as open-air screens on which radio and television transmissions would disseminate all political and economic events of the day, news of club activities, news of scientific institutes and so on.[45] By injecting these mass exhilarating activities and the new

[44] Anatole Kopp, Constructivist Architecture in the USSR, Academy Editions, London, 1985, p. 112.(Emphasis mine)

[45] Andrei Gozak, Andrei Leonidov. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988, p.60.

technology to the “park-like composition” (i.e. Club of New Social Type), or by redefining the program, he responded the necessity for developing intellectual needs of workers, and transforming complexity of urban life.

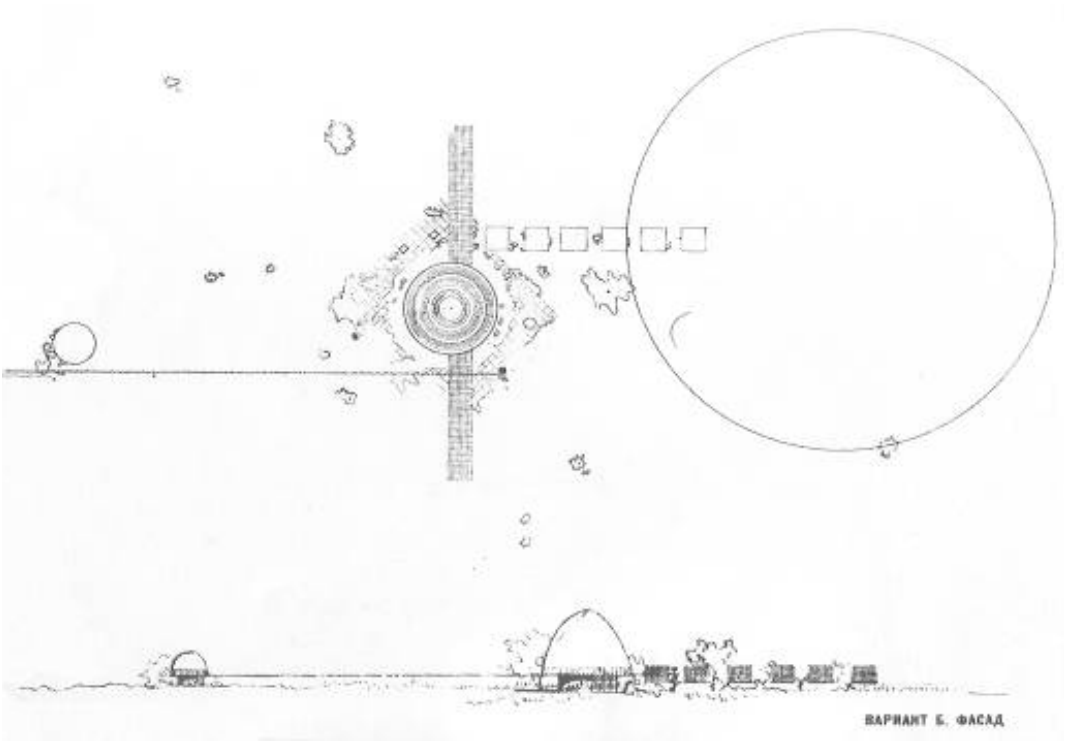

Figure 2.3 Club of New Social Type. VARIANT B. plan and elevation

Leonidov’s experimental works for social condenser provided him with an opportunity to put his theories into practice by applying the socially interactive program in the case of Palace of Culture for the Proletarskii district of Moscow competition project in 1930 (Fig. 2.4). Compared to his Club project, it was more complex and detailed in a way that he developed the concept of Club project into something programmatically more specific and more expansive. He still pursued to focus on ”park-like organization” with special emphasis on the green areas and vast open spaces for implementing collective activities. “He used a large site on which he proposed to create a cultural complex forming an oasis of greenery amid throbbing modern urban life, and shielded from its hubbub, where one might

find spiritual relaxation after a day work".[46] He proposed a line composed of a sequence of four specific programmatic sectors. Each sector was also subdivided in gridal gesture for accommodating facilities. Successively, the first sector was reserved for scientific and historical researches, the second one for mass activities, the third one for a field for demonstrations, and the last one for physical cultural activities. According to Leonidov, the fundamental aims of design in the project of Palace of Culture are:

1) To impart a definite sense of purpose to all cultural work. To create conditions for 100% coverage of the working mass by political and polytechnical education.

2) To give a clear sense of organization which is capable of promoting initiatives self-help amongst the workers visiting the Palace.

3) To make the Palace of Labour not just a place where mass cultural work and leisure is concentrated, but also a center which is leading the cultural creativity of the whole workers' district of the city.

4) To carry it beyond the boundaries of the site, and by that means to make it flow organically into the productive life of the district. The factories, productive enterprises and industrial plants must become a fundamental factor in the shaping of culture and political education.

5) To apply to the solving of these socio-political task the most powerful resources of science and technology and the new ideas for conducting mass cultural work (the cultural field trip, the cultural boat-trip, the team approach and so on). [47]

[46] Selim O. Khan-Magomedov. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Catherine Cooke edits. Thames and Hudson, London, 1987, p. 458.

[47] Andrei Gozak, Andrei Leonidov. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988, pp.53-54.

In addition to proposing specific buildings (pyramid shape gymnasium, hemispherical glass domed auditorium, etc.) for each sector of the Palace of Culture, Leonidov constructs the Proletarskii district together with its peripheries. By implementing operations such as dividing into different programmatic sectors and subdividing each sector into different facilities, he accommodates local production of difference while maintaining overall continuity and unity.

He regulates the movement of masses by using repetitive structural network. He allows interactive communication by allocating technology, and improves cultural exchange by both placing nodal points of collectivization and extending design beyond the boundaries of the site.

Instead of confining cultural work within the framework of specific building, he supplies a sequence of events, which are cumulative of improvisations of active users. He defines the future of Palace of Culture as it would "be the headquarters of the cultural revolution, which on the basis of mass independent work and of wide-ranging development of workers' initiatives [would] organize the whole system of spreading political knowledge, the whole system of cultural development, for its district".[48]

[48] Andrei Gozak, Andrei Leonidov. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988, p. 74.

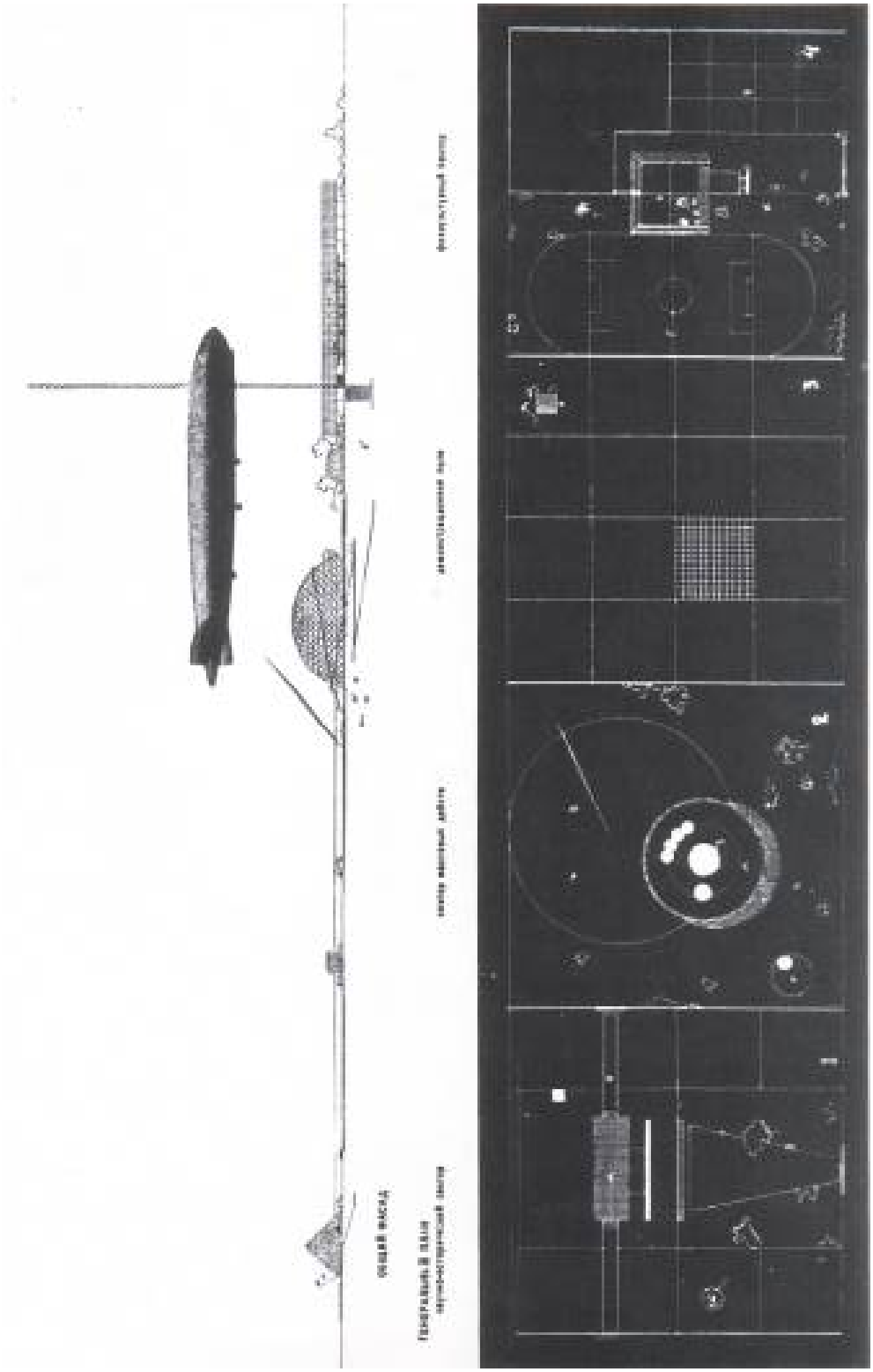

Figure 2.4 Palace of Culture, elevation and plan

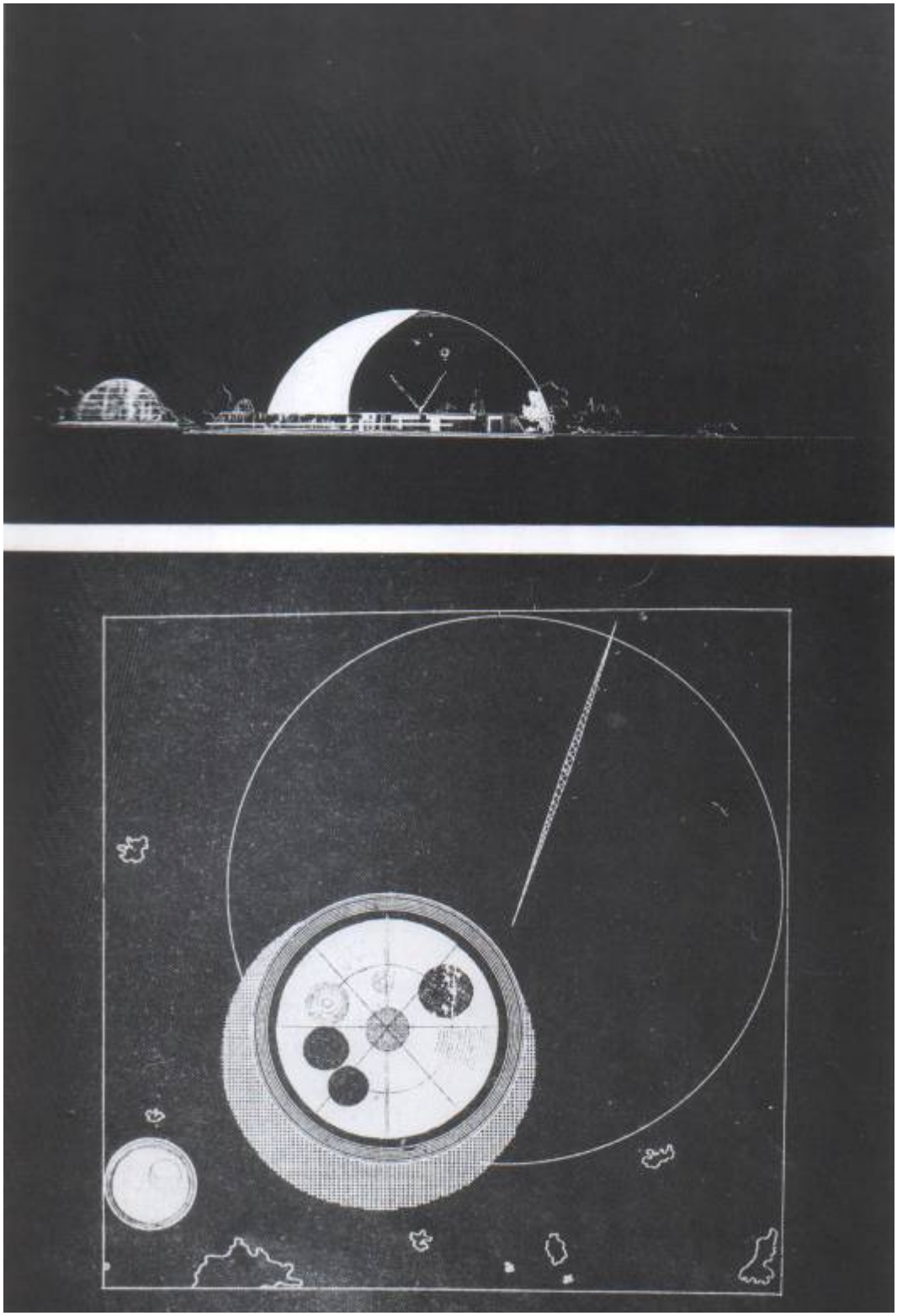

Figure 2.5 Palace of Culture. Mass Activities Sector, elevation and plan

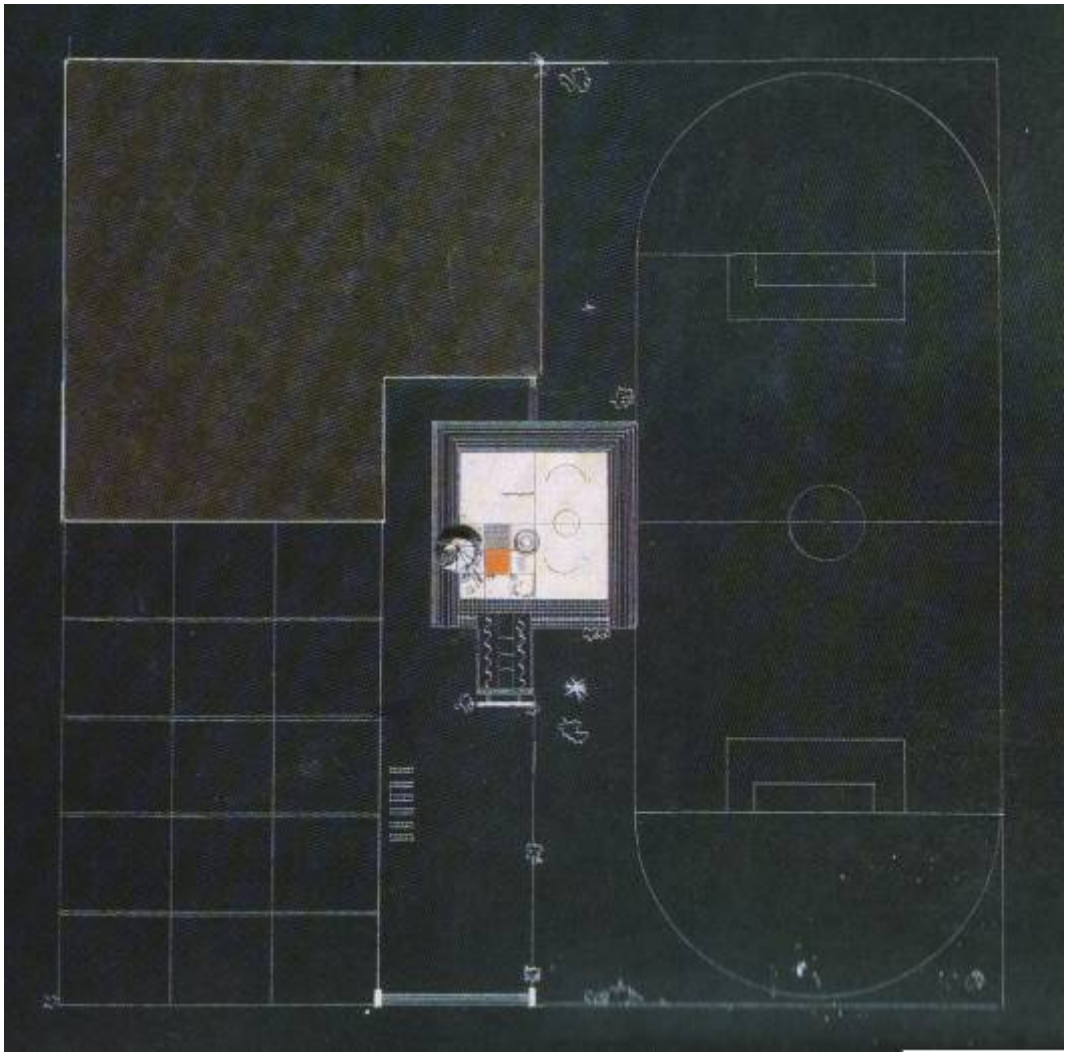

Figure 2.6 Palace of Culture. Physical and Cultural Sector. Elevation and Plan

In an urban scale, Leonidov continued to use the linear organization also in his project of socialist settlement at Magnitogorsk in the same year with Palace of Culture. The transition from the private ownership to the collective economy and the accelerating industrialization were the main executive forces behind formulations of new town planning projects in 1920s. Khan determines the concept and the problems of socialist settlement:

> The mood of time favored a multi-lateral approach to all town planning projects and the solution of the entire range of architectural problems within the framework of a general concept of 'socialist settlement' which of settlement and its component elements; a more flexible organization of planning; the creation of communal centers; the opportunities for zoning buildings vertically in cities, and many other such problems.[49]

Leonidov's project at Magnitogorsk based on the general scheme of linear town planning in order to solve the above mentioned problems of socialist settlement (Fig. 2.7). He approached the concept of socialist settlement as "a properly thought out organization of industry and agriculture, culture and leisure: of everything that informs human consciousness and life".[50] Instead of being random "accumulation of urban district and barrack like buildings", his schema of the city depends on the careful mixture of spatial organization, and distribution of technology and nature. He designed a linear settlement, which composed of three interconnected lines of different programs, namely a line of residential program including low-rise building and tower blocks, and two lines of communal activities including sports facilities, parks, and zoological gardens, which were located on both sides of the residential line (Fig.2.8). Also, at the edge of this linear city was the main highway that could be named as service line for the transportation of goods and masses.

The organization of the linear city is the extended replica of Palace of Culture in a way that each programmatic line is divided into sub-sectors. Each line is divided into squares so as to accommodate different activities, as in the project of Palace of Culture, where an urban linear structure divided into four main squares. As it is stated before, this linear settlement is composed of three different programmatic lines; a residential line, which is placed in between two lines of leisure. Residential line is arranged on a chequerboard pattern composed of housing sectors of low-rise and high-rise buildings, and children's sectors located in the

[49] Selim O. Khan-Magomedov. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Catherine Cooke edits. Thames and Hudson, London, 1987, p. 271.

[50] Andrei Gozak, Andrei Leonidov. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988, p. 84.

green zones between these complexes (Fig. 2.9). Each housing sector of low-rise buildings forms a cluster, which is subdivided in a way to compose typical dwelling units surrounded by gardens, sports grounds and swimming pools (Fig. 2.10). In the same manner, lines for leisure activities are divided into sectors each of which accommodates facilities such as stadium, parks, public buildings, zoological and botanic gardens successively. Then, it is this multiplication of the act of dividing that organizes the city.

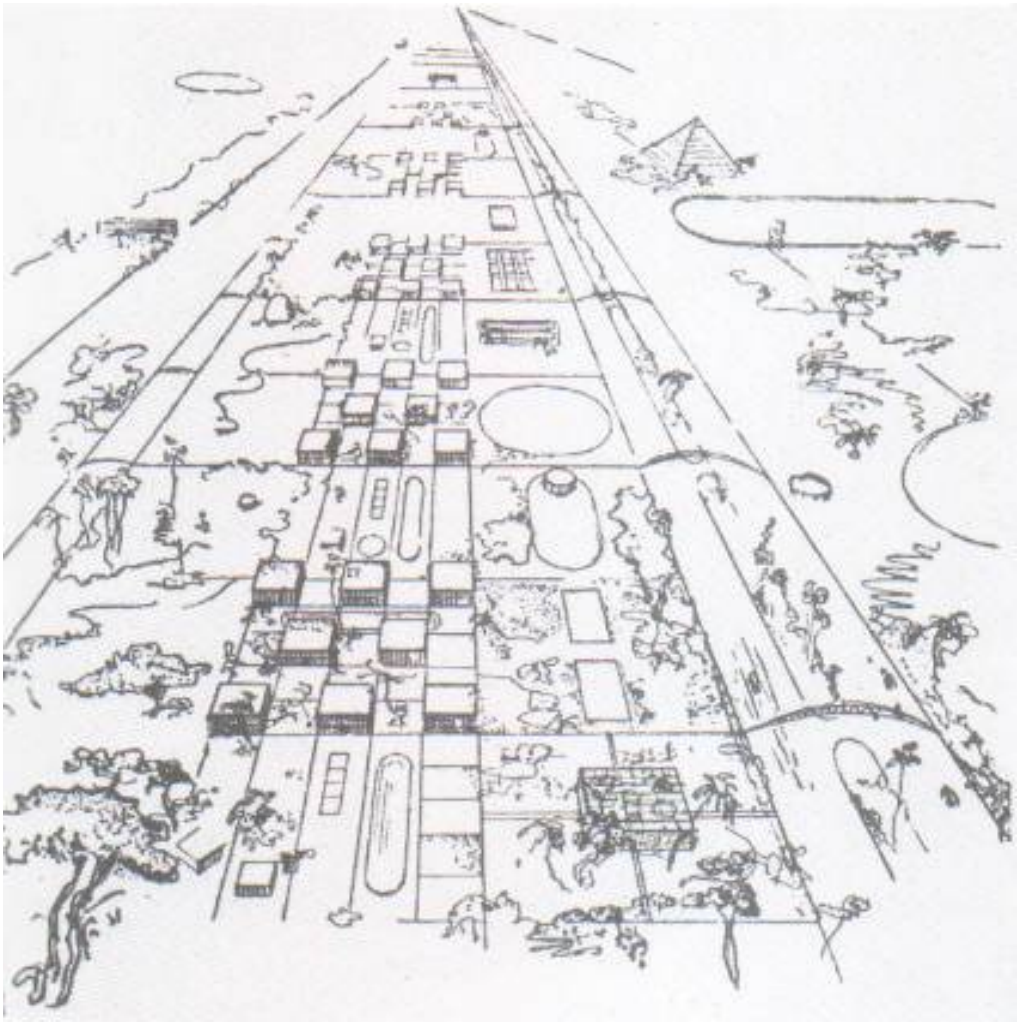

Figure 2.7 Perspective view of Leonidov's line of settlement.

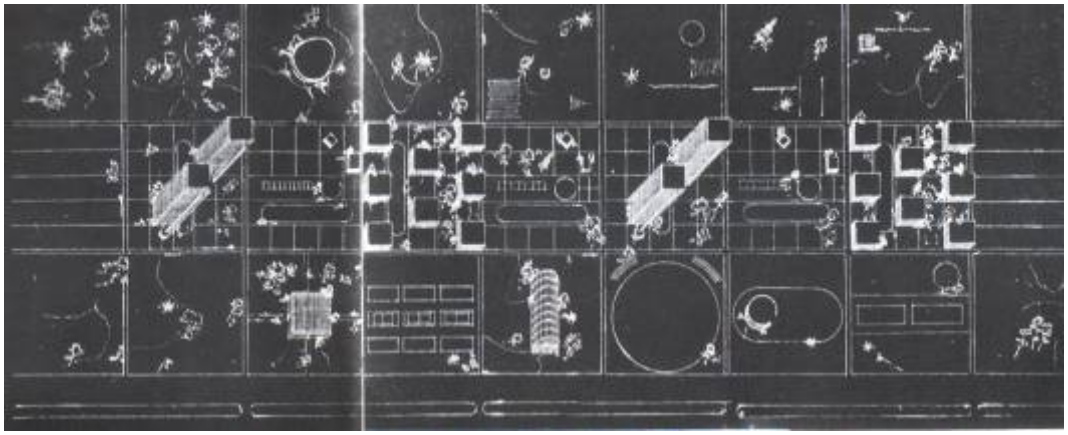

Figure 2.8 Plan of Leonidov's line of settlement.

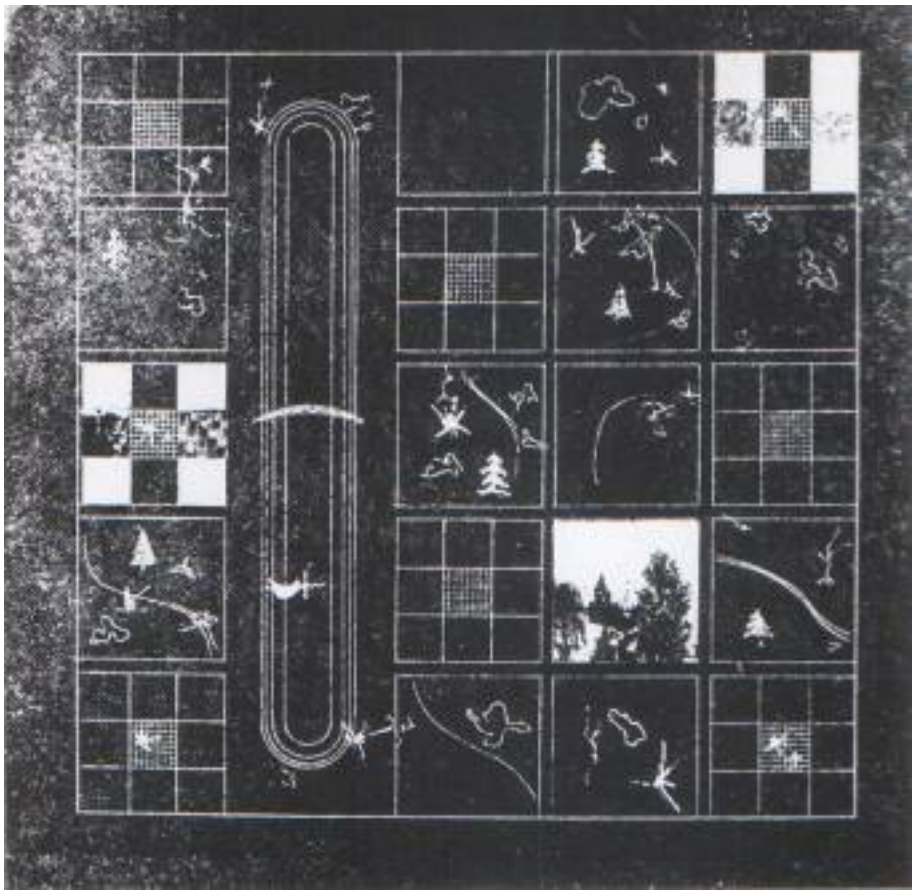

Figure 2.9 Plan of Leonidov's line of settlement showing a housing sector.

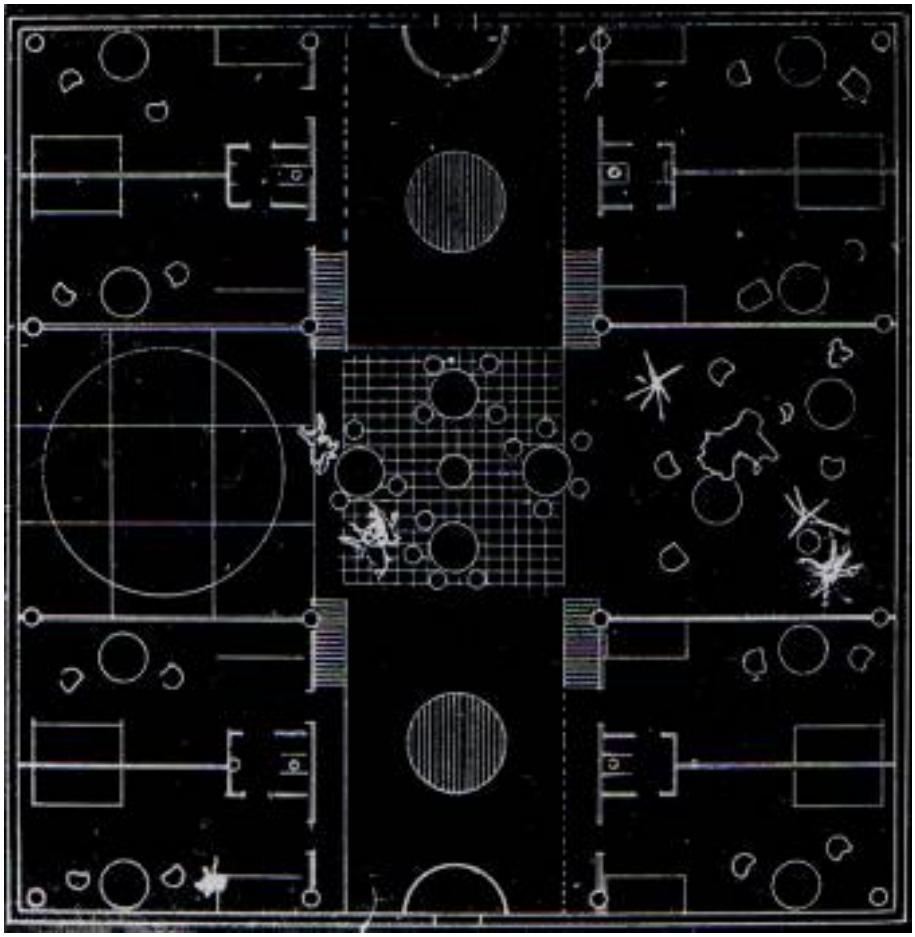

Figure 2.10 Plan of Leonidov's line of settlement showing one cluster.

Khan discusses Leonidov's Magnitogorsk settlement project in his book under the sub-title of "In search for flexible planning", and points out that "[…] linear development gave greater scope for the creation of the flexible structure […]"[51] The capacity of flexibility and expandability of the project is also diagrammed by Leonidov (Fig. 2.11). His diagram that shows how city develops can be seen as an attempt to seek for strategic principles that enables a project to transform without affecting general organization.

[51] Selim O. Khan-Magomedov. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920's and 1930's. Catherine Cooke edits. Thames and Hudson, London, 1987, p. 336.

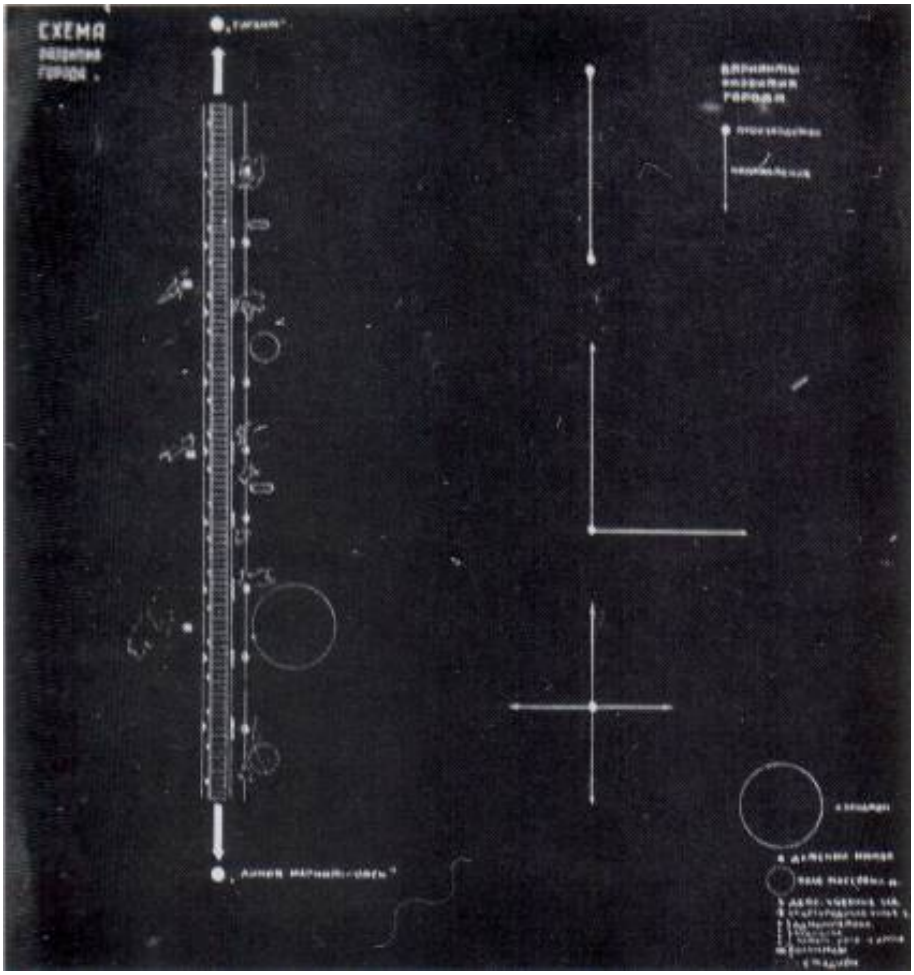

Figure 2.11 Diagram by Leonidov showing possible direction of development.

2.1.2. Modes of Operations in the Design of a Social Condenser

In 1927, Moisei Ginzburg developed a “diagrammatic resume of functional method” explaining principles and procedures for Constructivists to design a building that responded to the social change.[52] The idea of developing “new methods for architectural thinking”[53] was shaped around a search for a systematic design process. This process solves problems coming from the

[52] Catherine Cooke. Russian Avant-Garde Theories of Art ,Architecture, and The City. Academy Editions, London, 1995, p. 121.

[53] This is the title of thr first article of SA (Contemproray Architecture), which was an architectural journal of OSA in USSR, published between 1926-1930.

existence of “two distinct categories of ‘variables’: the ‘general unknowns’ and the ‘particular’ ones”.[54] Catherine Cooke, with reference to Ginzburg, defines these unknowns by stating that:

> ’General unknowns’ were those identifying ‘characteristic of the epoch as whole’ whose influence must permeate the entire design and construction process of the new society. In *Style and Epoch* he [Ginzburg] had discussed these ‘social, economic and national peculiarities’ of a culture as inevitably influencing building form. From further analysis of their own emerging culture Ginzburg now identified four such ‘peculiarities’ of the Soviet situation. The first was that individual clients had been replaced by a collective one, a whole society, which was trying to build ‘a new way of life’; the second was the concomitant shift in architecture’s position, to become one part of a larger social and economic plan. The third was the conjunction of these factors to produce a new, ideological and technical status for norms and standard types. The fourth and final one was an overriding methodological obligation under the new ideology, to ‘solve’ the architectural task, like any other, only through precise evaluation of its ‘unknowns’ and the pursuit of a correct method of solution.[55]

Ginzburg aimed to construct “a unified organic process”[56], which had new architectural tools to operate in order to reply new problems arising from these unknowns. Functional method of Ginzburg was to discover the empirical solutions from the question of “how form should relate to an evolving content”.[57] Obviously, it is a methodological attempt to investigate a generic system of producing forms that have the capability of transforming.

Ginzburg clearly indicates that the main objective of his functional method is to create a social condenser.[58] It is convenient to read his functional method as the

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[54] Catherine Cooke. Russian Avant-Garde Theories of Art ,Architecture, and The City. Academy Editions, London, 1995, p. 110.

[55] Ibid, p 111.

[56] Ibid, p. 111.

[57] Ibid, p.111.

[58] Ibid, p. 70.

formulation to design a social condenser. The method is mainly depending on dismembering of the object according to preconditions of program, then redefining the organization of the dismembered parts in terms of their interrelationships and functions, and finally reassembling of them in order to restore organic wholeness, which is still capable of being modified.

Dismembering process involves description of the "scheme of equipments"[59] -that includes the needs of program and their functional dimensions and requirements- and building up the "flow diagram" -that organizes the correct relationships and movements between parts-. After defining rational and appropriate materialization of structure that is suitable for technical and constructional preconditions, the second stage of dismembering process begins. It is the stage that considers the organization of perception and visual clarity in order to enhance the user's clear perception for accelerating "useful activity of the condenser". Definitions of "the functional character of the object", its "state" (static or moving?), "the relative scales of parts and whole", its "'tektonic structure' (how it is structured; the link of parts and whole; the principles by which its parts are related)", its boundary and finally its spatial organization, are the sub-works of this stage in order to gain a clear perception of both "the relationships between elements" and "unity and wholeness". At the third stage of dismembering process, the volumetric organization of coexisting bodies with regard to each other and the whole (whether they are intersected, contiguous, or related but separated) and the system of their surfaces come into discussion. For Ginzburg, this is the stage to fight against the canonization or fixing of forms, and he continues to state that "form is an unknown, 'x', which is always evaluated anew by the architect".[60] Therefore, studying "the method of their [i.e. elements of architecture] transformations", "how that unknown 'x' changes" and "how changes in the brief affect the form" are amongst the important principles observed throughout this process. Finally in the process of re-assembly, the parts of the object are reunited to create organic wholeness.

[59] Catherine Cooke. Russian Avant-Garde: Theories of Art, Architecture and The City, Academy Editions, London, 1995, p. 121.

[60] Ibid, p. 121.

Ginzburg finishes this “diagrammatic resume of functional method” by stating that “the functional method is used, [whether] for the analysis of an existing design or for creation of a new one”. Here, it is suitable to derive the modes of operations in design of a social condenser from Leonidov’s above-mentioned projects by using functional method analysis of Ginzburg.

At the first stage of dismembering process of functional method, Ginzburg highlights that, at the outset, the scheme of social condenser should be immediately built up for establishing “an integrated organism as a *spatial prototype*.”[61] Spatial prototype comprises operational models for organizations of relationships between program, site, and form. It is a set of theoretical tools that has the potential of yielding spatial organization formalized in terms of the flow diagram and scheme of equipment (i.e. program). In terms of design principles of Leonidov, Club of New Social Type can be evaluated as a spatial prototype for the production of social condenser that is applied later in both Palace of Culture and the linear settlement at Magnitogorsk (Fig. 2.12).

In the First Congress of Constructivist Architects in 1929, Leonidov described his Club project in four sections, which are “operating resources”, “method”, “mass work”, and “component parts of the project”.[62] These sections are arranged in a way that each one composes a stratum of design process. Each stratum overlaps with the others to establish an organizational interrelationship and a functional interaction. By placing a significant element (the circular public hall or auditorium) at the intersection of these stratums, Leonidov creates a focal point that is socially interactive and programmatically condensed. It is the central object from which the vessels of events disseminate throughout the site, and by means of which the other parts of the project are oriented. Spatial organization of the parts is achieved through movement of masses and their full participation to the cultural context. Leonidov’s stratification of design process is an attempt to control the overall layout of club design in other words the layout of social condenser not only by redefining the program (corresponding to the “scheme of

[61] Catherine Cooke. Russian Avant-Garde: Theories of Art, Architecture and The City, Academy Editions, London, 1995, p. 121. (emphasis mine)

[62] Andrei Gozak. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988, p. 60.

equipment" in Ginzburg's method) but also by calculating rational places of the significant elements such as the circular public hall (corresponding to the "flow diagram"). Therefore, in his experimental design of the club, Leonidov produces a *spatial prototype* for future social condenser projects in terms of programmatic understanding and a clear sense of spatial organization.

The programmatic overlapping in the Club for New Social Type continues to be appeared in the Palace of Culture project in a different way. In this project, Leonidov divides program into four distinct sectors, and by arranging these sectors in succession, he constructs a sequence of events beyond the site. Club project, as a spatial prototype of social condenser, is reproduced not only in each sector of Palace of Culture separately, but also in whole design of the complex. The inner relationships between the parts of each sector and also the coexisting structure of whole sectors are the replica of the Club project in terms of programmatic stratification and organization. Each sector has its own focal points (e.g. for the mass activities sector, the focal point is circular auditorium and for the physical culture section it is ziggurat-like sports hall) and its own spatial organization. The form of the complex is achieved by the multiplication of sectors in a linear manner. Then, Leonidov makes use of fractal organization in the design of the complex in order to obtain continuation among diverse programs. He places the sectors of different programs in succession to establish multiple links that integrate parts, construct the whole, and communicate with periphery.

By the same token, fractal organization of design can be clearly observed in the linear settlement project in Magnitogorsk. Here, the spatial prototype of Club project is transformed to the typical plan of dwelling sub-sector. In the fractal composition of settlement, dwellings form housing clusters; clusters form a programmatic line, which accommodates various activities such as leisure, sports and culture; and three programmatic lines together form the whole settlement. Then, dwelling, cluster, a programmatic line and the collectivity of three programmatic lines (i.e. the settlement) are the layers of the linear settlement. Actually, each layer is a social condenser, and all layers together form a city of social condenser.

The organizational principles of Leonidov's three projects suggest a new understanding of relationships between parts and the whole. More than a formal configuration, this approach implies an active scheme to inject personal improvisations to the urban life. Instability in the program and flexibility in the form are the constructive elements of Leonidov's design. He predominantly intensifies the utilization of open spaces, which are open to personal improvisations. There is no coincidence that both Khan and Cooke use the phrase *park* or *park-like composition* in defining Leonidov's projects. That is due to the fact that the above mentioned projects of Leonidov are to generate a complex of mass culture with the special emphasis on the organization of program and collective open spaces that is the main idea of the park.

2.1.3 Formula: Social Condenser as Program

As diagram (Fig. 2.12) reveals, Leonidov's projects of Club of New Social Type, Palace of Culture, and Socialist Settlement at Magnitogorsk can be examined together to better explore the mechanism of social condenser, how it works and how it is implemented in various scales.

In these three projects of Leonidov, it is convenient to point out that socially condensed program is the fundamental principle for creating the mechanism of social condenser. In order to solve the problems of leisure and supplying cultural requests of a new society, Leonidov, first, produces a prototype (that is the Club of a New Social Type) for a socially condensed program, then, carefully organizes this program in a way to increase the possibility of maximum improvisation of users. Therefore, the formulation of social condenser in Leonidov's design approach can be set as the following:

> **Formula 1: "socially interactive, programmatically condensed" architecture**
> **- to define a flexible and unified organic process with active improvisation of users.**

Later, this formulation of social condenser is activated in a linear manner, which is the strategy of the strip, for allowing tactical implementation in the vast park like organization of the Palace of Culture. By using the tactic of placing events in sequence, he achieves a clear spatial organization with more interaction. Finally, the formulation is realized in the city scale by means of the combination of strategies of the grids and the strips (that is the grid of the strips strategy). This strategy first divides the city into programmatic strips and in turn divides these programmatic strips into grids for accommodating a functional mixture of spatial organization. The reciprocal and mutual correlation between the strategies of the grid and the strip guarantees the variety and the flexibility of the program not only beyond the strips, but also in each section crossing these strips.

Consequently, social condenser is the program, which should be considered as collective, cultural, flexible, multiple, and modifiable. Its success is directly related with its potential of being open to active improvisation and appropriation. In addition to that, as in Leonidov's projects, the mechanism of social condenser works strategically, but it motivates the tactical improvisations as well in order to be flexible and anticipatory. As in formula 1, it is a unified organic process, which is open to emergence of possibilities.

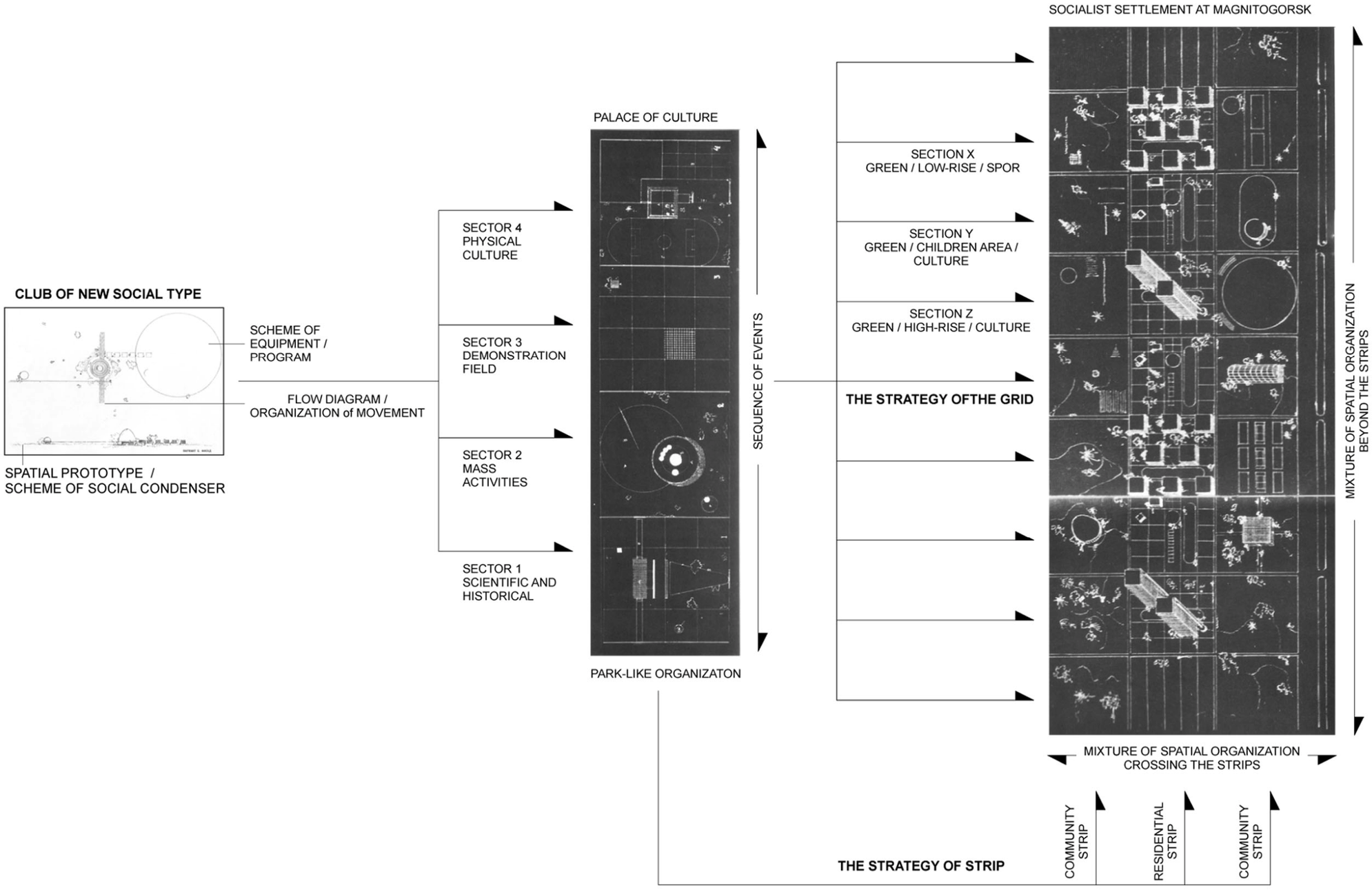

Figure 2.12 Diagram showing programmatic relationships between social condensers' designs of Leonidov. (Developed and drawn by the author)

2.2 The Berlin Wall and OMA's Exodus Project

In 1971, Koolhaas visited Berlin as a part of summer studies at AA.[63] The students were assigned to prepare the documentation (including measured drawings, photographs, and analytical studies) of an existing architectural object. Instead of investigating typical architectural project, Koolhaas examined the Berlin Wall, which celebrates its 10th birthday. His examination of "The Berlin Wall as Architecture" [64] and his subsequent reflections prefigure and shape the OMA's understandings of urban conditions. As Fritz Neumeyer states "OMA's place of origin is not New York, but Berlin".[65] It is important for the thesis to refer the reflections of Koolhaas on the Berlin Wall, because his ideas that are derived from the Berlin Wall later shape the project of "Exodus or the Voluntary Prisoners of Architecture." The Exodus project is the founding projects of OMA, and visualizes the concepts of the strip and the void in an urban level, which later become the strategy of the *Parc de La Villette* project.

The Berlin Wall, as a continuous urban void or as a strip of no man's land, is a laboratory for Koolhaas "to imagine nothingness"[66] in the heart of the metropolis. He defines the condition of the wall as "not an object but an erasure, a freshly created absence,"[67] and continues to explain the power of nothingness:

> For me, it was a first demonstration of the capacity of the void -of nothingness- to 'function' with more efficiency, subtlety, and flexibility than any object you could imagine in its place. It was a warning that -in architecture- absence would always win in a contest with presence.[68]

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[63] Architectural Association School of Architecture in the UK.

[64] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.216.

[65] Fritz Neumeyer, "OMA's Berlin: The Polemic Island in the City." *Assemblage*, No. 11 (Apr., 1990) p.38.

[66] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.199.

[67] Ibid. p.228.

[68] Ibid. p .228.

Departing from this point, Koolhaas questions "the direct correlation between architectural form and its significance,"[69] and concludes that "there was no casual relationship between form and meaning".[70] The tension between the lightness of the wall as an architectural object and the heavy meaning it was loaded makes the wall's impact "utterly independent of its appearance". [71] As Neumeyer marks "from this very basic opposition of program and architecture, form and meaning, OMA's architectural theory distilled the classical formula 'a maximum of program and a minimum of architecture'" or in Koolhaas words "Where there is nothing, everything is possible. Where there is architecture, nothing (else) is possible".[72] Therefore, it is crucial to formulate the potential of the void as an "investing the heart of the metropolis with the quality of nothingness".[73] It is an attempt to magnify the organization of program in architecture, and to achieve this multi-programmed complex with minimum architectural intervention. Koolhaas reads the Berlin Wall as shifting from formal composition to the organization of program in architecture and explains that

> *On the same level of negative revelation, the wall also, in my eyes, made a total mockery of any of the emerging attempts to link form to meaning in a regressive chain-and-ball relationship*.
> …Its significance as a "wall" – as an object- was marginal; its impact was utterly independent of its appearance.
> …I would never again believe in form as the primary vessel of meaning.[74]

In fact, the Berlin Wall is both *the strip* and *the void*, into which different activities could be injected. First, the wall is *the strip*, which generates series of different relations on each side (East and West). "Sometimes, […] the wall would separate, swallowing, for instance, a church. Sometimes the fencing would

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[69] Lara Schrijver. "OMA as tribute to OMU: exploring resonance in the work of Kollhaas and Ungers." *The Journal of Architecture.* Volume 13, No. 3, p.238.

[70] Ibid, p.239.

[71] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.227.

[72] Ibid, p.199

[73]

[74] Ibid, p.227.

surround, like a tiger cage in a circus, a forlorn satellite of Westernness so that a nine-year-old could bicycle to the school every morning".[75] Then, the wall is *the void* that eliminates the necessity of form to anticipate the condition of complexity, and ensures that "[…] emptiness in the metropolis is not empty, that […] void can be used for programs […]"[76] At last, the wall amalgamates the flexibility of the strip with the countless events capacity of the void or in Neumeyer's words it is the strip of no man's land.

The Berlin Wall offers Koolhaas two strategic themes, the strip and the void, from which he derived design tools to be used in his many urban projects. "Exodus or the Voluntary Prisoners of Architecture" is the first project of Koolhaas, in which he combines the strategies of the strip and the void. It is the project that received first prize in the 1972 competition organized by *Casabella* on the theme of "the city as meaningful environment". In Exodus, as Neumeyer states he "transformed the [strip of] no man's land at the wall into a 'strip of intense metropolitan desirability'".[77] If the Berlin Wall is the strip of no man's land, Exodus is also a strip yet filled with intense program at the heart of London. It includes series of scenarios in a continuous segregation with the periphery. "The Voluntary Prisoners of the Strip"[78] is filled with the gridal sectors of collective program in order to generate "an active ideological field of association, a kind of metaphysical strip, or 'Freudian tableau', representing the whole multiplicity of modes of metropolitan life".[79] With the minimum architectural intervention, Exodus produces a "framework for the programmatic needs of complex reality".[80] As Felicity D. Scott states its intense collectivism recalls the architecture of Soviet

[75] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.221.

[76] S, M, L, XL, p.202

[77] Fritz Neumeyer. *"OMA's Berlin: The Polemic Island in the City." Assemblage*, No. 11 (Apr., 1990) p.46

[78] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.11.

[79] Fritz Neumeyer, *OMA's Berlin: The Polemic Island in the City* , Assemblage, No. 11 (Apr., 1990) p.46

[80] Ibid, p.46

Social Condenser.[81] Corresponding to the constructivist's social condenser, Exodus also introduces a new way of life (in Koolhaas scenario, The Good Half -Exodus- and the Bad Half -old London-) for its voluntary prisoners. Koolhaas, as a scriptwriter, depicts the new life inside, beginning from the reception area to the ceremonial spaces, from the baths to the land allotments for the individual cultivation. For anticipating individual improvisation and for guaranteeing the flexibility of the strip he proposes that

> The sole concerns of the participants are the present and the future of the Strip: they propose architectural refinements, extensions, strategies. Excited groups elaborate proposals in special rooms, while others continuously modify the model. The most contradictory programs fuse without compromise. [82]

Koolhaas' approach to the program and the constructing scheme of Exodus has much in common with the Leonidov's social condensers. They both solve the problem of new way of life by introducing condensed and collective program with a similar way of formal organization. Their common concerns are anticipating active participation of the users; allowing flexible development; generating continuous and clear spatial organization for more interaction; recognizing the importance of open spaces; accepting the imperatives of technology and implementing the technology; and organizing these concerns in a multiple program scenarios to the service of new culture. When recalling the studies of Koolhaas on Leonidov in 1970s, it is convenient to point that Koolhaas derives the design strategies of Exodus not only from the Berlin Wall but also from the organizational logic of Leonidov's projects of social condenser.

[81] Felicity D. Scott. "Involuntary Prisoners of Architecture*." October 106*, The MIT Press, Fall 2003, p.84

[82] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.11.

2.2.1 Formula: Program (Social Condenser) and Architecture (Strip of Void)

Neumeyer places the Exodus project among OMA's works on the "imaginary axis that leads from Berlin to New York".[83] Then, on this imaginary axis he signifies the critical position of Leonidov's projects in order to display the basic opposition between program and architecture. He openly states that

> "The wall as architecture" was basically an ordinary strip of space delineated by a minimal architectural intervention, a space waiting to accommodate program. Leonidov's ribbon cities, which likewise attempted to generate a complex reality with a minimal architectural effort, followed a very similar concept. The linear territory of the no man's land rigorously demonstrated a way to neutralize space through its displacement in layers and strips… [In] the early OMA projects, such as Exodus, or… [In] the projects for the Parc de La Villette…Even in the OMA's interpretation of the skyscraper, for example, the Downtown Athletic Club, the preoccupation with linear space seem to be backup of 'the wall as architecture'".[84]

Figure 2.13 Leonidov's ribbon city illustration (left). OMA's Exodus project illustration (right).

[83] Fritz Neumeyer, "OMA's Berlin: The Polemic Island in the City" , *Assemblage*, No. 11 (Apr., 1990) p.38

[84] Ibid, p.38.

As shown in figure 2.14, the Berlin Wall can be defined as the strip of no man's land or the strip of void that has the potential of accommodating program, and yields "a catalog of possible mutations".[85] Koolhaas fills this minimum architecture of the Berlin Wall with the maximum program derived from the social condenser projects of Leonidov. Then, Exodus occurs as the combination of the Berlin Wall and Leonidov's strip, or as the cumulative of the void and the program. As Neumeyer states from this basic dialectic between form and meaning, "OMA's architectural theory distilled the classical formula".[86]

Formula 2: "a minimum architecture and a maximum program"
- to define a script that combines the strip of void (the Berlin Wall) with an intense program (Social Condenser).

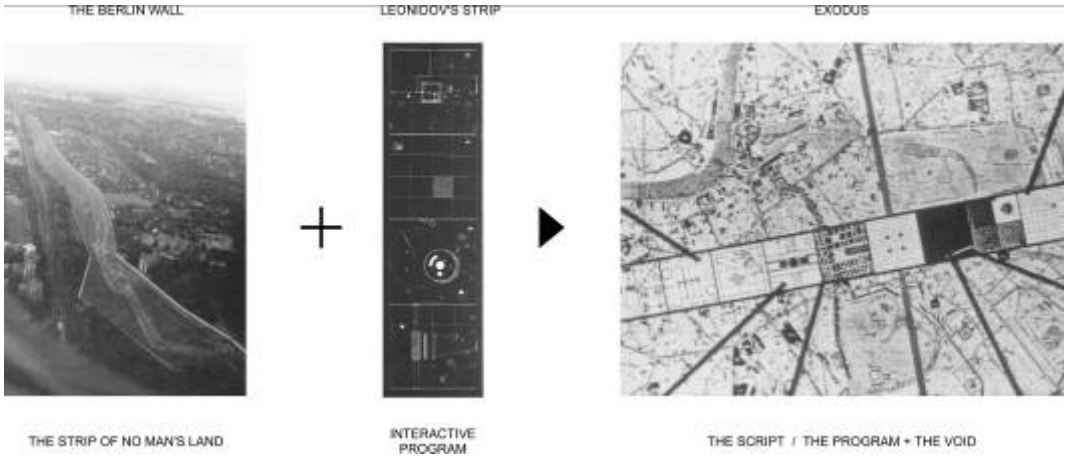

Figure 2.14 Exodus as the script that combines of the strip of void and social condenser (Developed by the author)

In this formula, the thesis defines the combination of the strip of void and the program of social condenser as a script, due to the fact that Koolhaas depicts the

[85] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p. 228.

[86] Fritz Neumeyer, *OMA's Berlin: The Polemic Island in the City* , Assemblage, No. 11 (Apr., 1990) p.38

program of Exodus as a scenario of fiction film. The script or program of Exodus starts with a sentence of “Once, a city was divided in two parts”,[87] and continues with photos that compose the storyboard of Exodus (Fig. 2.15). As a scriptwriter, Koolhaas tells the story of Exodus in detail. Therefore, the thesis approaches the term “script” as a strategy that indicates the strip of void loaded with an intense program. In this strategy of script, the terms that show the negative aspects of the wall such as, “dividing, isolating, inequality, aggression, and destruction” are transferred to the positive tactical tools of “architectural warfare against the undesirable conditions of urban life, in this case London”.[88] These tactical tools that yield possible mutations in the case of the Berlin Wall, are applied to activate the possible mutations in the case of Exodus.

Figure2.15 Storyboard-like depiction of the life in Exodus

[87]Rem Koolhaas and Bruce Mau. S,M,L,XL, New York: The Monacelli Press, 1998, p.5.

[88] Ibid., p. 5.

The formulation between program and architecture or meaning and form continues to be appearing in the skyscraper or amusement parks readings of Koolhaas in *Delirious New York*, which will be searched in the following parts.

2.3 Re-reading *Delirious New York*

Koolhaas openly states that "*Delirious New York* was a search in the influence of the masses and culture on architecture and urbanism".[89] From the beginning of his career, he defends the idea that each architectural work should have the urban dimensions. Even if before his architectural career, he searched for the new techniques of expression and representation of the urban life as a script writer and a journalist. He approaches the complexity of urban life as an inevitable reference in his architectural works, and is always aware of the importance of instable conditions of urban context. As Moneo states "to discover the latent structure of the contemporary city, and learn to use the mechanism used in building it, seem to have become the purpose of Koolhaas' work."[90] Koolhaas has made this urban-based architectural understanding clear in his texts and also in his built and unbuilt works. Among these texts, in 1978, "*Delirious New York* gave Koolhaas a textual foundation"[91] for his future works. For Koolhaas, New York is the ideal city, which represents the contemporary urbanism of the 20th century. In *Delirious New York*, he analyzes the city as the laboratory of experiment to observe how the pressures of the economy, politics and culture manifest themselves in an urban life and create unstable conditions. Also he focuses on exploring organizational tools that encourage future modifications and translations.

"The culture of congestion" and "the grid" appear as the main inferences of *Delirious New York*. The book highlights dialectical relationship between instable

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[89] Rem Koolhass. "Postscript: Introduction for New Research "the Contemporary City"". Theorizing a New Agenda for Architecture: an anthology of architectural theory, 1965-1995, Kate Nesbit, ed. Princeton Architectural Press, New York, 1996, p 324.

[90] José Rafael Moneo. Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects, Cambridge, Mass; London: MIT Press, 2004, p.

[91] Rem Koolhaas, Sarah Whiting, "Spot Check: A Conversation between Rem Koolhaas and Sarah Whiting", *Assemblage.* No: 40, December 1999, pp 36-55.

and rigid part of the urban life. While the culture of congestion refers to the instable, uncontrolled and unprogrammed part of the urban life, the grid refers to the rigid and controlled part. Jameson points out that;

> He [Koolhaas] insists on the relationship between this randomness and freedom and the presence of some rigid, inhuman, nondifferential form that enables the differentiation of what goes on around it (in *Delirious New York,* within the building, the elevator [as the rigid element in the building], and the urban context itself, the grid of Manhattan [as the rigid element in the urban context]).[92]

The book can be read as the conflict between the metropolitan conditions that create instability and the strategic tools to control it. The only way to cope with the instability of metropolitan life is rigidity of the framework and flexibility beneath. As Jameson states the originality of Koolhaas stems from to combine "formal requirements of a certain order" with the disorder.[93] Thus, *Delirious New York* is crucial for the thesis in order to re-read Koolhaas' reading of Manhattan to manage with this duality of rigidity and instability.

This section on *Delirious New York* will be divided into three parts. The first part will focus on the interpretations of Koolhaas on Coney Island, from which he discovers how to read Manhattan. At the beginning of *Delirious New York*, Koolhaas describes his book as a "blueprint for a 'Culture of Congestion'," [94] and continues to define that "Manhattan's architecture is a paradigm for the exploitation of congestion".[95] He uses the culture of congestion as a key for understanding the dynamics that produce unstable conditions of an urban context. Significantly, he finds sources of the culture of congestion in the ever

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[92] Frederic Jameson; Michael Speaks, "Enveloped and Enclaves: The Space of Post-Civil Society" (An Architectural Discussion*), Assemblage*, No. 17. Apr.,1992, pp30-37.

[93] Ibid, p.33

[94] Rem Koolhaas, *Delirious New York: a retroactive manifesto for Manhattan,* (New York: The Monacelli Press, 1994, first published in 1978), p.10.

[95] Ibid., p.10

changing and indeterminate program of Coney Island's amusements park that will be discussed in the first part.

Then, his investigations on the emerging tools that are produced to cope with the new social demands – that are consequences of the culture of congestion- of Manhattan will be the second part of this section. In this part, the "Grid" as a main strategy for controlling the new urbanism of Manhattan, the "Skyscraper" as a tactical instrument for individualization of the grid, and the "schizoid arrangement of thematic planes of Skyscraper" for maximum permeability and interaction will be focused on. Finally, how these studies of Koolhaas allow him for constructing a theoretical base or a strategic approach for the *Parc de La Villette* competition project will be the last part of this section. How Koolhaas applies the "vertical schism of the skyscraper"[96] to the horizontal bands of the *Parc de La Villette*, and implements design acts he discovered from the "free section of the skyscrapers," such as dividing, layering, substituting, on the urban park will be studied.

2.3.1 Coney Island: Nature of Programmatic Indeterminacy

If Manhattan is a laboratory of metropolitan lifestyle, Coney Island is the laboratory of Manhattan. If the culture of congestion is the key to understand "Manhattanism,"[97] amusement parks of Coney Island are the key to understand the culture of congestion. In this part of the chapter, how multiple fluid programmatic uses in condensed areas create a condition of indeterminacy will be investigated departing from the readings of Koolhaas on Coney Island and its amusement parks. This is also an attempt to search for the nature of programmatic indeterminacy and tools that regulate this indeterminacy.

For Koolhaas, Coney Island and its theme parks offer an urban laboratory to grasp the dynamics of the metropolitan life of Manhattan. Population density, ever-changing facilities and constant flow of activity made Coney Island

[96] Rem Koolhaas, *Delirious New York: a retroactive manifesto for Manhattan,* (New York: The Monacelli Press, 1994, first published in 1978), p.105

[97] Ibid., p.10.

simulation of the extreme urban conditions of urban life. Koolhaas sees the Coney Island as a "fetal Manhattan"[98] and states;

> The strategies and mechanisms that later shape Manhattan, are tested in the laboratory of Coney Island before they finally leap toward the larger island. Coney Island is a fetal Manhattan.[99]

Coney Island is a peninsula in southernmost New York. It contained a major beach on the Atlantic Ocean and amusement parks that attracted millions of visitors per year at the junction of the 19th and 20th centuries. Besides many individual amusements, there were three competing major amusement parks; Steeplechase, Luna Park, and Dreamland, which are mainly on the scope of this part. The popularity of these parks made Coney Island as the *playground of the world* between about 1880 and World War II. Especially for the lower and middle classes of new urban life, it was not only the place of enjoyment to escape from the stress of urban conditions, but also a place of mass exhilaration and endless surprise.

Frederic Thompson, who was the creator, owner, and manager of Luna Park, pointed the mission of these parks by stating that, "they [metropolitan people] have enough seriousness in their everyday lives, and the keynote of the thing they do demand is *change*. Everything must be different from ordinary experience. What is presented to them must have life, action, motion, sensation, surprise, shock, swiftness or else comedy."[100] Thus, the crucial formula, which lies behind the development of both Coney Island and these parks, was to create a different and endlessly surprising world. This formula was the most crucial aspect that forced to transform Coney Island, and that causes instability. Unavoidably, the chronic and unsatisfied expectations gave rise to ever-changing situation, and that was the problem that creates programmatic indeterminacy to

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[98] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.30.

[99] Ibid. p 30.

[100] Frederic Thomson, "The Summer Show", *The Independent*, June 20, 1907, pp 1460-1463.

be solved. Each developer must produce controlling tools for dealing with this instability in order to survive in the Coney Island.

As Coney Island was initially designed to be a resort and amusement field for the masses escaped occasionally from the alienated world of metropolitan life, it was to respond the endless demands, to distort the reality of the urban participants, and to supply them a cardboard nature. The producers of the parks had to create an artificial environment. Within this Super-Natural environment, they invented and established many attractions for the mass exhilaration to encourage public interest perpetually. They were forced to discover new instruments and new events continuously. As Koolhaas points out that "to survive as a resort, Coney Island forced to mutate: it must turn itself into the total opposite of Nature, it has no choice but to counteract the artificiality of the new metropolis with its own Super- Natural."[101]

[101] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.33.

Figure 2.16 Plan of the Coney Island middle zone, 1907 (Edited by the author)

In figure 2.16, each small rectangle, marked in yellow, represents a different "pleasure-generating units"[102] of the Coney Island. It reveals the fact that the ever-changing exhilaration demands of the Coney Island's people caused irrational and organic sprawl within the parks. Facilities were so drastically changed, modified and replaced that it created extremely unstable conditions. According to Koolhaas, this condition of instability emerging with the problem of

[102] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.64.

pleasure requires new understanding of urbanism in Coney Island that means the redefinition of relationships between "*site*, *program*, *form* and *technology*."[103] Besides the irrational growth, the economic contest with the other parks caused the producers of the parks to search for a formula or to invent strategies in order to control this instability and to attract people's attention. According to Koolhaas, it is required to provide a border between the inside and the outside of the park, and to create "innocent pleasure inside versus corruption outside."[104] Then, the following formula is set:

> **Formula 3: "innocent pleasure inside versus corruption outside"**
> **- to define the limits of the inside and to establish a spatial relation between the inside and outside.**

Unavoidably, the first step must be to differentiate the park itself from other parks in order to survive within the island's territory. Although, the primordial grid of the Coney defined a structure for limitations of the parks, it was insufficient to be distinctive. As it is observed from figure 2.16, three amusement parks of the Coney Island, Steeplechase Park, Luna Park, and Dreamland, stepped forward in terms of their programmatic layout and ways of organization. Steeplechase Park was the first park showing an attempt to create a legible arrangement of the pleasure units. The producer, George Tilyou, invented mechanical horses that could be ridden on the definite railway surrounding the park. It was the real success that "financial investment in the track is recouped after three weeks of operation".[105] Mechanical track, which is highlighted in figure 2.16, reveals intention of Tilyou in order to organize his park. He made use of track as a main generator, and collected any other additional amusement units "along or around this track." The track was advanced as an architectural tactic for shaping and controlling future additions and modifications of the uncontrolled program of the park. In addition to that tactic, Tilyou isolated his park from the surrounding mess

[103] Rem Koolhaas, *Delirious New York: a retroactive manifesto for Manhattan,* New York: The Monacelli Press, 1994, p.62.

[104] Ibid. p.37.

[105] Ibid. p.37.

with another architectural tactic of "bordering": Wall. Koolhaas defines the role of the wall by stating that:

> A process originates within the walls that generate a spectrum of coordinated facilities. The concept of the park is the architectural equivalent of an empty canvas. Tilyou's wall defines a territory that can – theoretically- be shaped and controlled by a single individual and is thereby invested with a thematic potential.[106]

Even if Tilyou "failed to exploit fully his breakthrough", he was first to improve an operational scheme for organizing the amusement park. Consistent to Koolhaas' formula 3, Tilyou satisfied "innocent pleasure" by introducing "wall", and created controllable area beneath. Secondly, he assigned "track", as a chief element of the park to control other units.

This dual assault to unpredictable conditions of Coney Island was reproduced in tactical variety by other producers of the parks. In 1903, in Luna Park, Frederic Thompson borrowed Tilyou's "park-enclave model" and "doubles the isolation of Luna Park by imposing a theme that embraces the entire site in a system of metaphorical meaning: its surface is to be 'not of this earth' but part of the moon."[107] He produced the park as a stage where the simulation of the moon was experienced. Among the many entertainment activities in Luna Park, the trip to the moon on the airship Luna IV, and forest of spires and minarets scattered around the park as a simulation of the surface/topography of the moon was a result of his efforts to implement a theme (i.e. moon) for the park. Thompson "designed and built the *appearance*"[108] in order to distinguish his park in the Coney Island. In addition to that, the artificial "roof" garden composed of thousand of plants was erected as an artificial plane covering Luna.
It is also the tactic of "layering" underneath different units can be facilitated simultaneously. Koolhaas points:

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[106] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.38.

[107] Ibid, p.38.

[108] Ibid. p 42.

> The single roof drastically reduces the opportunities for individual facilities to display their own character; now that they do not have to develop their own skins, they blur together like many molluscs in one gigantic shell in which the public is lost.[109]

Hence, in Steeplechase, the producers invented a park layout by introducing a "wall" to define a border between inside and outside, and organized the inside of the park by means of "track". In Luna, this layout was evolved by the introduction of a theme (i.e. moon) and by building a "roof" to unite amusement activities underneath. Whether it was in Steeplechase or in Luna, the main aim was to formulate a general structure in order to create a controllable area within the chaotic conditions of Coney Island.

However, within these three amusement parks, Dreamland, directed by Sen. William H. Reynolds, was to be the end of a sequence that had begun with Steeplechase and Luna. As Koolhaas stated, in Dreamland "the preceding breakthroughs are elevated to an ideological plane".[110] Instead of concentrating on inventing new components for public pleasure, Reynolds focused on the re-arrangement of existing "typology of pleasure" established by his predecessors. Programmatic composition of Dreamland depended on the progression of both the overall and independent organization of each attraction. First, referring to the Luna where otherworldliness was represented by the thematic concept of "moon", Dreamland was designed with the metaphor of "underwater". The most progressive issue of Reynolds' approach in Dreamland was to develop a metaphorical strategy in order to exclude reality from his underwater city, and to arrange every detail according to this general framework. From the ship-like entrance to the Shoot-the-Chutes -that was on the Atlantic Ocean, each unit was designed as the part of the total structure. Secondly, governing role of the "track" in Steeplechase was substituted with the calculated circulation in Dreamland. It is calculated circulation in the sense that Reynolds calculated speed of movement, direction of movement, concentration of movement and time intervals between

[109] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.43.

[110] Ibid. p 45.

different pleasure units. He was so aware of the significance of the circulation for his park that he made all the walks leveled (that refers concentration of movement), or inclined (that refers to direction and speed of movement).The inner circulation of Dreamland was structured around Lagoon, and each pleasure unit was located in succession along this circulation path. This was the first attempt to articulate mass orientation and to direct movement. “The park being so laid out that there is no possibility of congestion of the crowds. 250,000 people can see everything and move around without fear of congestion.”[111]

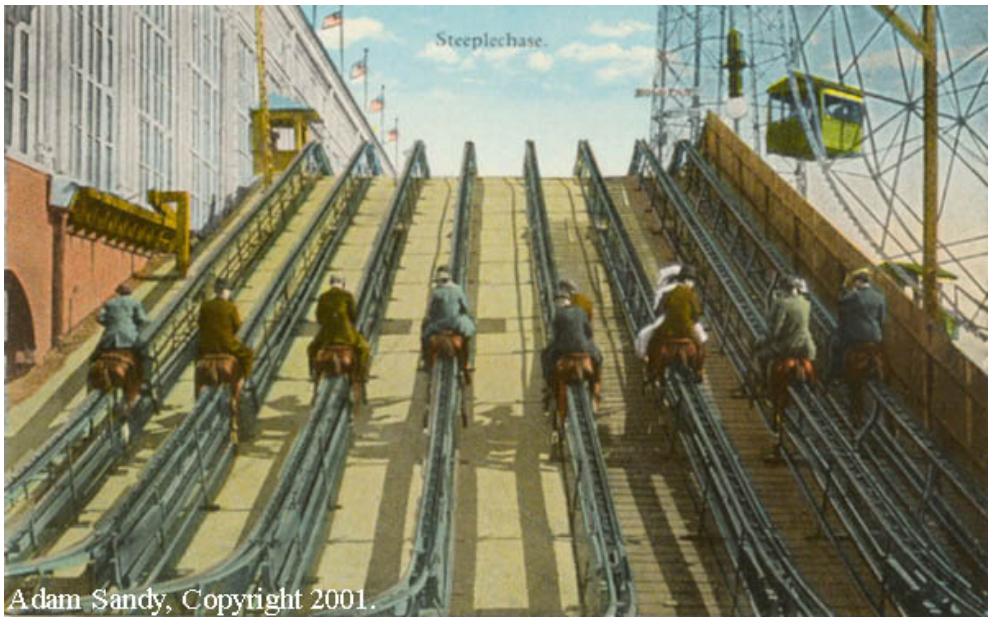

Figure 2.17 Steeplechase’s mechanical track

[111] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.46.

Figure 2.18 Luna Park entrance showing concept of moon.

Figure 2.19 Dreamland's calculated circulation.

As a conclusion, developments in approach to the organization of the amusement parks can be read as the investigation of organizational tools against the unpredictable conditions in congested urban areas. “Track” in Steeplechase, “roof” in Luna Park and “calculated circulation” in Dreamland act as a tool for inner organization. Pleasure units are located along the track, scattered under the roof, and located around the calculated circulation. “Wall” in Steeplechase, “moon” in Luna Park and “underwater” in Dreamland act as a main controlling framework that not only attributes a meaning to each park but also defines a shell/border in a way to isolate each park from the others. Whether it is a “wall” or “roof”, or the themes of “moon” or “underwater”, the primary aim is to create an isolated park according to formula 3.

In Coney Island the developers realized the fact that chaotic, discontinuous, and unpredictable conditions of entertainment need an attempt to determine strategic principles of organization, and also the fact that each amusement park should generate a formal (i.e. wall) or conceptual (i.e. moon, underwater) strategy in order to implement tactical variations (i.e. track, roof, calculated circulation) for organizing individual units (pleasure instruments). (Fig. 2.20)

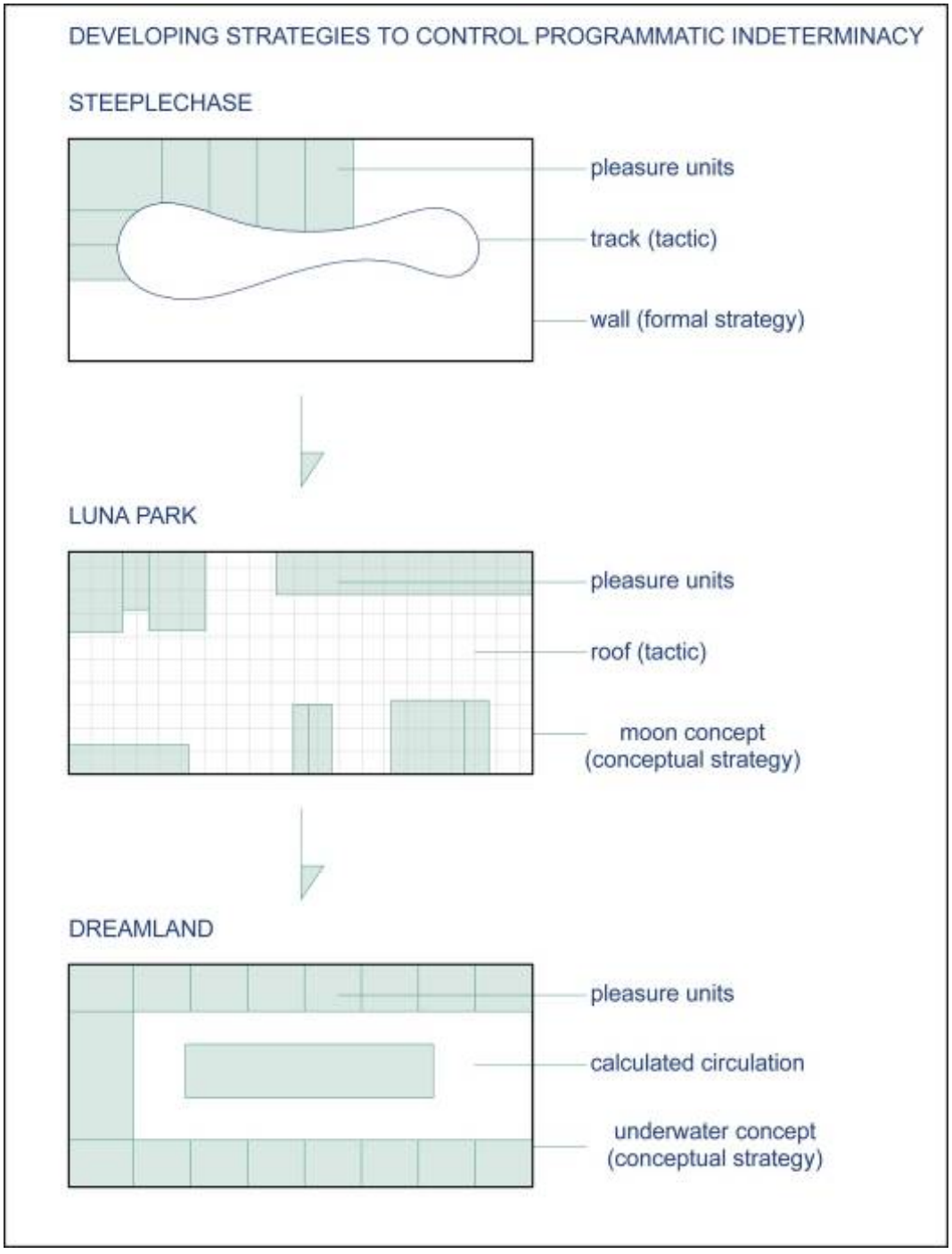

Figure 2.20 Developing strategies in Coney Island derivied from Formula 3.

2.3.2 Manhattan: Culture of Congestion

In this part of the chapter, how the programmatic indeterminacy of Coney Island evolves as "Culture of Congestion" in Manhattan, and how the architectural tools that are discovered in the amusements parks of Coney Island are transplanted into the urban ideas of Manhattan will be studied. Also, The Grid as a transformation of a strategic individualization tool and The Skyscrapers as a tactical tool within each plot of the Grid will be analyzed in detail.

As Koolhaas states "The Culture of Congestion is *the* culture of the 20th century,"[112] and it necessitates new understanding of human activities in unprecedented combinations, and entails new forms of urbanization. The programmatic indeterminacy in Coney Island continues to be appearing in a new form of culture in Manhattan. The former results from endless demands of entertainment and the latter is outcome of instable demands of business. Koolhaas points the cultural, technological, and economic transition from Coney Island to Manhattan by stating that "the strategies and mechanism that later shaped Manhattan, are tested in the laboratory of Coney Island before they finally leap toward the longer island".[113] The developers of Manhattan benefited from the experiences tested in Coney Island (such as, technological improvements, capability of treating the issue of the problem of masses, and ability to face with new instable demands) in order to deal with the new form of "*unknowable* urbanism"[114] of Manhattan. As Koolhaas states, "The paraphernalia of illusion that have just subverted Coney Island's nature into an artificial paradise reappear in Manhattan as paraphernalia of efficiency to convert raw space into office suites."[115]

[112] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.125.

[113] Ibid. p 30.

[114] Ibid. p 87.

[115] Ibid. p 87.

Corresponding to the problem of pleasure, which is a major manipulating force in Coney Island, the problem of business is emerged as a new pressure in Manhattan. Former creates programmatic indeterminacy, latter shapes the culture of congestion. If the answer of the first problem is established by the formulation of dialectic between inside and outside, the second one is formulated by the reciprocal relationship between the grid and the skyscraper. That is the formula shapes the Manhattan.

> **Formula 4: "a city [the skyscraper] within a city [the grid]"[116]**
> **- to create a pattern of activity generators (i.e. skyscraper) that guarantee the perpetual programmatic instability.**

The grid as a strategy and the skyscraper as a tactical instrument come out the new elements of formula to control chaotic, discontinuous, and unpredictable conditions of business. Under the structure of the grid, each skyscraper generates its own programmatic indeterminacy. As a result, the combination of these independent programmatic indeterminacies mutate as culture of congestion.

2.3.2.1 The Grid

In Manhattan, the grid itself acts as a main strategy, and creates rigid infrastructure on which builders "develop a new system of formal values, invent strategies for the distinction of one block from another".[117] The grid describes a general framework consisting 2,028 identical blocks, and on each block developers should implement their tactics to cope with the problem of business.

Each rectangle of the Grid, with its isolated and self-contained structure, is replica of the park in the tradition of Coney Island. Similar to the parks, each block should generate its inner organization of units within the limitation of its size. The strategy of the grid guarantees not only the distinct entity of each block but also

[116] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.89.

[117] Ibid. p 20.

the maximum interaction and permeability between blocks within the whole structure of Manhattan. Koolhaas states interactive character of the Grid: "[s]ince all Manhattan's blocks are identical and emphatically equivalent in the unstated philosophy of the Grid, a mutation in a single one affects all others as a latent possibility."[118] Also he continues to point the distinctive character of the grid: "That potential also implies an essential isolation: no longer does the city consist of a more or less homogeneous texture- a mosaic of complementary urban fragments- but each block is now alone like an island, fundamentally on its own."[119] This dual and generic potential of the Grid turns Manhattan into archipelago of blocks or parks.

2.3.2.2 The Skyscraper

Skyscraper just seems to be a skyward multiplication of each plot of the grid. This way of production composes unlimited numbers of individual levels. In Manhattan, these floors are so disjointed that each of them creates its own scenario in order to meet the instable requirements of business. The skyscraper envelops superimposed and unprogrammed levels in a way that these levels can be easily manipulated, replaced, or united to satisfy business demands without affecting the general framework. Each level performs like an endless activity generator. These levels add up to a single building (the skyscraper) that acts as an envelope including pattern of different activity generators. This generic and flexible potential renders the skyscraper as a simulation of a city or in Koolhaas' terms as a "city-states". Recalling the formula 4 -"a city within a city"-, each skyscraper acts as a city within the city defined by the grid structure that is in fact a combination of these architectural city-states (skyscrapers). Koolhaas defines the role of the skyscraper in metropolitan culture;

> As a vehicle of Urbanism, the indeterminacy of the Skyscraper suggests that - in the Metropolis - no single specific *function* can be matched with a single *place*. Through this destabilization it is possible to absorb the

[118] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.97.

[119] Ibid. p 97.

> ‘change that is life’ by continuously rearranging functions on the individual platforms in an incessant process of adaptation that does not affect the framework of the building itself.[120]

How strategies derived from Coney Island are transferred to Manhattan can be traced in dialectical relationship between inside and outside, or in Koolhaas’ term as “lobotomy.”[121] In terms of inside, tactical way of organizing individual units and, in terms of outside, formal and/or conceptual approach to give meaning to whole structure can be evaluated in succession from the organizational logic of amusement park to the idea of skyscraper. This duality shapes the idea of skyscraper in Manhattan. Cortes highlights this dialectic by stating that, “the skyscraper structures […] embody the programmatic indeterminacy or instability of the modern metropolis but at the same time permit the stability of the building’s outer skin and contain the architectural determination of each specific function”.[122] The outer skin or envelop of the skyscraper is controlled by the strategy of the grid, because of the fact that each skyscraper is the upward replica of its plot in definite numbers. Therefore, the grid shapes the envelope of the skyscraper and gives conceptual meaning to skyscraper. In addition to that, the programmatic instability of business is controlled by individualized but also interactive arrangements of the individual planes of the skyscraper.

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[120] Rem Koolhaas. “’Life in the Metropolis’ or ‘The Culture of Congestion’.” Opposition Reader. K. Michael Hays ed. MIT Press, Mass. 1999, p. 324.

[121] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.100.

[122] Juan Antonio Cortes, ed. *El Croquis, 131/132: AMO/OMA Rem Koolhass I* . 2007, p11.

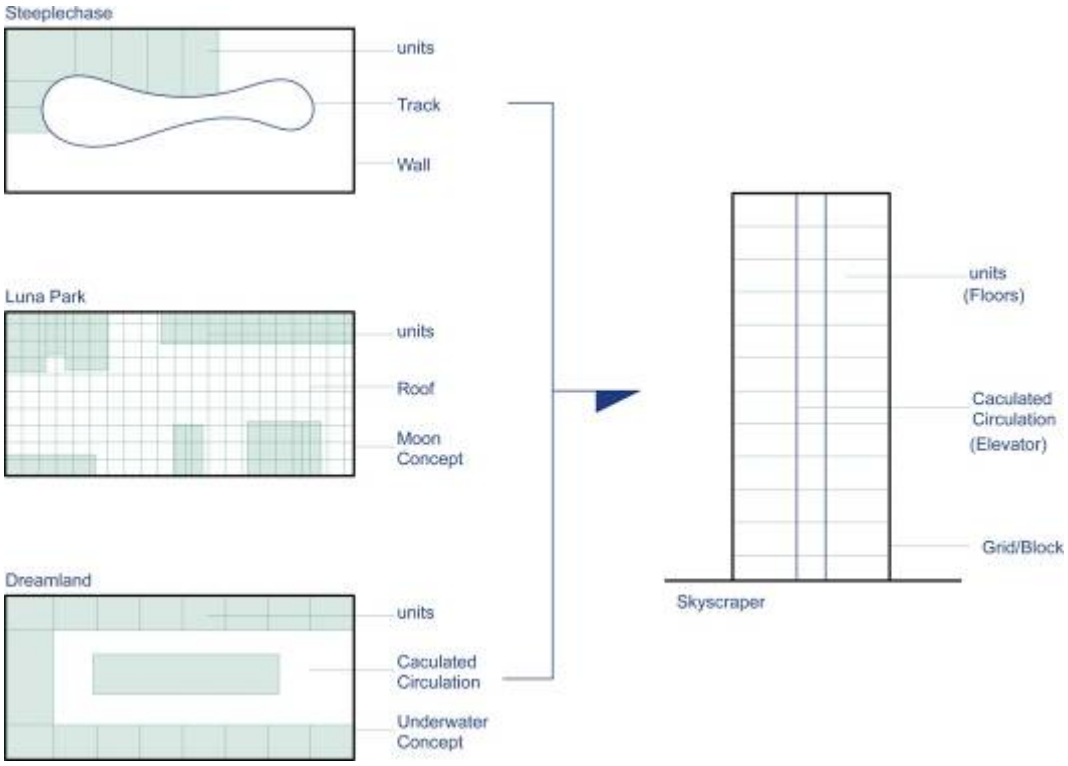

Figure 2.21 Strategy and Tactics: Derived from Parks adapted to Skyscrapers. (Developed and drawn by the author)

Figure 2.21 reveals the fact that the idea of skyscraper is harvested from the organizational logic of amusement parks. If pleasure units of these parks transform as an individual levels of the skyscraper, the formal or conceptual strategies of Coney Island reappear as an envelope (that is the skyward replica of the grid) of the skyscraper. Similar to the track, roof or calculated circulation, which controls the amusement units in the parks of Coney Island, the vertical schism of the skyscraper is controlled by the core of elevator. Elevator is the rigid part of the skyscraper, and controls the flexibility of floors. Therefore, the mechanism of skyscraper and these three parks works in the same manner, and the skyscraper in Manhattan is the replica of the park in Coney Island. Manhattan can be seen as an accumulation of parks within the rectilinearity of the grid.

2.3.3 Formulas: Indeterminacy vs. Specificity

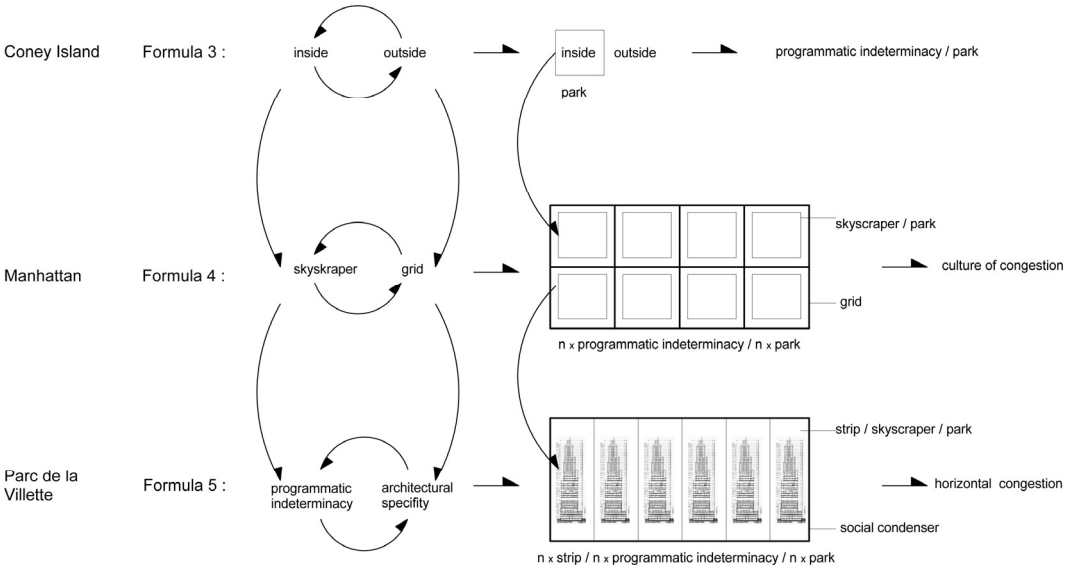

Figure 2.22 Dialectical formulas between indeterminacy and specificity. (Developed and drawn by the author)

As it is observed in Coney Island, Manhattan, and also in *Parc de la Villette* that will be discussed in the following chapter, the strategic way of organization can be formulated from the dialectics of *indeterminacy* and *specificity*. In Coney Island, this dialectic is formed around the relationship between *inside* and *outside*. Here, inside is arranged to cope with indeterminacy, and outside is specialized to give meaning to whole (formula 3). By the same token, in Manhattan the components of the formula are substituted by *the grid* in terms of specificity and by *the skyscraper* in terms of indeterminacy (formula 4). While the third formula is to reply the *programmatic indeterminacy*, and *park* is the primordial inference of this indeterminacy, the fourth formula is set to meet the instability of *culture of congestion*, and *skyscraper* is the answer of this. Whether the components of the formula are replaced or changed, it is crucial to notice that Manhattan is *n times multiplication of Coney Island*. In the same manner, the culture of congestion is the *n times multiplication of programmatic indeterminacy*. (Fig. 2.22)

Consequently, in this chapter, the thesis investigates the urban laboratory of OMA till 1980. Actually, this chapter can be seen as a search for dialectics between architectural specificity and programmatic indeterminacy. In other words, it involves the analyses of tools that interact between program and operated actions. From the program of social condenser, the strategic connection of the Berlin Wall to Exodus, the strategic border definition in Coney Island, and the instable culture and its instruments in Manhattan, the thesis derives four formulas that will be used in the following chapter in order to analyze the mechanism of strategic approach in the *Parc de La Villette* project.

CHAPTER 3

ANALYSIS OF *PARC DE LA VILLETTE*

Up to a point, the thesis has searched OMA's urban laboratory, which mainly deals with the metropolitan culture and its instable condition. This search should be perceived as an attempt to construct a basis to analyze the strategic approach of Koolhaas in the *Parc de La Villette* competition project. From this search, the thesis has derived four formulas, which will operate as analytical tools in order to understand the strategic way of design in *Parc de La Villette*.

Koolhaas' *La Villette* project is basically an attempt to be a "research into the possibilities of 'Culture of Congestion' in Europe and the viability of creating a 'Social Condenser' on an empty lot".[123] In order to inject the socially condensed program into the metropolitan lot of Paris, Koolhaas develops a strategic method "that combines architectural specificity with programmatic indeterminacy".[124] This combination constructs the fifth formula that is to be considered together with the previous formulas. (Fig. 2.22)

> **Formula 5: "architectural specificity with programmatic indeterminacy"**
> **- to create an envelope that is capable of absorbing perpetual state of revision.**

By means of Formula 1 derived from Leonidov's social condensers, Formula 2 from the programmatic capacity of strip and void of the Berlin Wall and Exodus, Formula 3 from the programmatic instability of Coney Island's amusement parks, and Formula 4 from the grid of Manhattan and the schism of skyscraper, the

[123] Juan Antonio Cortes, ed. *El Croquis, 131/132: AMO/OMA Rem Koolhass I* . 2007, p35.

[124] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

thesis will analyze *Parc de La Villette*'s strategic way of design, which is summarized by the following sentence by Koolhaas:

> How to orchestrate on a metropolitan field the most dynamic coexistence of activities x, y, and z and to generate through their mutual interference a chain reaction of new, unprecedented events; or, how to design a social condenser, based on a horizontal congestion, the size of a park.[125]

Parc de La Villette international competition was held to produce "a park for 21st Century", and it was intended to represent the new culture of metropolitan life. The program of *La Villette* included a series of facilities, a music center, and a technology and science museum;[126] the superposition of them establishes an urban park of the 21st century. The attendants were required to develop "an innovative park, which is adapted to the urban reality of today as well as tomorrow".[127] In the declaration of U.I.A (16 December 1982), the ambition of *La Villette* was summarized as

> The realization of a new spirit…the task is not to reproduce one of the traditional models of Parisian parks… The new model (park) should be "active, permanent…experimental… it must assert itself as the park of interbreeding (*métissage*) and integration. It must affirm an urban sense of density. The environment must appeal to the entire sensory capacity of a human being. It should express a message between science and music, which is also in close correlation with the city, canals, specificity,

[125] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

[126] Program of the competition: entertainment facilities (7,500 m^2); cultural information center (300 m^2); kiosks for small shows, games temporary exhibits (1,200 m^2); discovery workshops (7,100 m^2); discovery gardens (20,500 m^2); green houses (10,000 m^2); children's discovery spaces (11,200 m^2); space for permanent exhibits (3,200 m^2); theme gardens (30,500 m^2); outdoor ice-skating ring (1,200 m^2); playgrounds (60,000 m^2); outdoor hard-surface sports facilities (10,000 m^2); children's play areas (16,000 m^2); bathing/water elements (10,250 m^2); restaurants (5,000 m^2); catering (3,300 m^2); snack bars (2,000 m^2); picnic areas (2,750 m^2); reception zones (2,200 m^2); day-care facilities (2,500 m^2); urban services (500 m^2); shops (300 m^2); accessory rental (300 m^2); market (6,000 m^2); offices (500 m^2); circulation (35,000 m^2); maintenance (4,200 m^2); fire, police, and technical services (1,000 m^2); first aid (200 m^2); lavatories (200 m^2); parking (17,800 m^2).

[127] Patrice Goulet. "Capitre II: A L'ambre de la Rigueur." trans. Dr. Cengiz Özmen *L'Architecture d'aujourd'hui* , no: 238, 1985, p. 72.

> and the force of an original creation… One may find there diversity and unity… The challenge of this park is not only building a park but to succeed through this park a particularly complex and original urban operation.[128]

La Villette is the experimental design competition that aims to combine "urban strategies and cultural innovation" in order to create "instruments of new culture".[129] Hence, the representation and anticipation of new culture or the new way of life is the initial focus of the competition's program.

In competition, Koolhaas represented his ideas with seven diagrams each of which acts as a layer, and superimposition of the seven layers constructed the scheme of *La Villette* project (Fig. 3.1). The first layer (Initial Hypothesis) is directly related with the redefinition of the program as social condenser, and then the second layer (The Strips) is the strategic approach showing how to embody the program of social condenser. The required facilities are scattered around the park according to mathematical formulation in the third layer (Point Grids, or Confetti). After designating flow diagram in the fourth one (Access and Circulation), the major elements located in the fifth (The Final Layer). In addition to these, the relationships of *La Villette* with the periphery and green areas are arranged successively in the sixth and seventh layers. The thesis will follow this stratification in analyzing the project of *La Villette.*

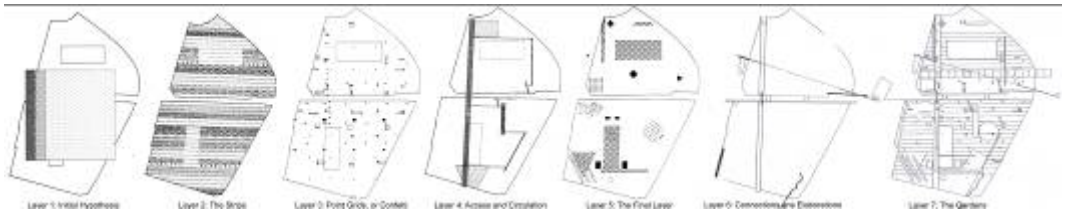

Figure 3.1 Layers of *Parc de la Villette* project

[128] Patrice Goulet. "Capitre II: A L'ambre de la Rigueur." trans. Dr. Cengiz Özmen *L'Architecture d'aujourd'hui* , no: 238, 1985, p. 72.

[129] Ibid, p. 72.

3.1 Redefining the Program as a Social Condenser

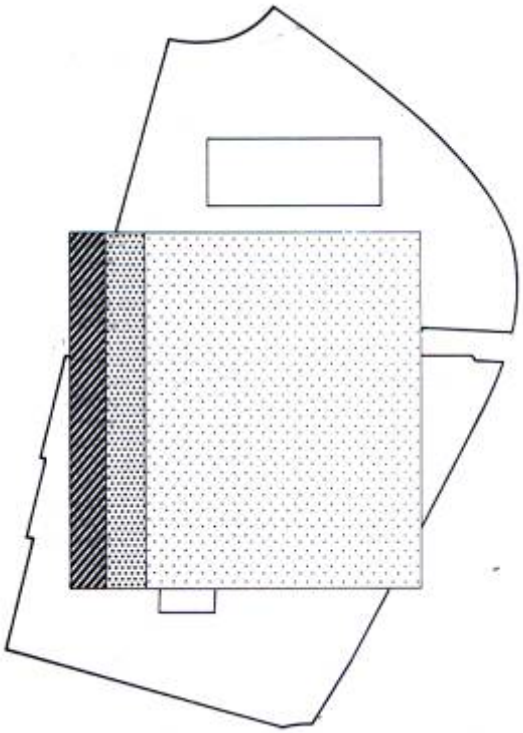

Figure 3.2 Program with relation to the site of *La Villette*

Starting from the first diagram, it is clearly observed that the program of *La Villette* is "too large to create a park in the recognizable sense of the word".[130] (Fig. 3.2) Therefore, instead of designing a conventional park, it is inevitable to redefine the given program with special emphasis on its instability and flexibility. As it is observed in Coney Island or Manhattan skyscrapers, the indeterminacy of the program creates highly instable conditions, and retains the structure "in a perpetual state of revision". The problem of pleasure in Coney Island creates its own programmatic instability, and the problem of business shapes culture of congestion in Manhattan. Similarly, the problem coming from condensed and dynamic coexistence of activities in an urban park generates its own manipulating force that is horizontal congestion. In this horizontal congestion, "the program will

[130] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

undergo constant change and adjustment".[131] In order to deal with both the constraints and instability of the mass program of *La Villette*, Koolhaas redefines the program as a "programmatic layering upon vacant terrain to encourage dynamic coexistence of activities and to generate through their interference, unprecedented events".[132] In Jean-Louis Cohen's words, Koolhaas "elaborate[s] a structure grounded in the frequencies of the different activities and their interrelationships".[133] This approach of Koolhaas is an attempt to reevaluate the program as a social condenser.

In order to "derive maximum benefit from the implantation on the site of a number of activities"[134] and anticipate the mutation among these activities by means of improvisation, *La Villette* project should be socially interactive and programmatically condensed (Formula 1). As it is harvested from the discussions on social condenser, in order to introduce a new way of life (which is also the main ambition of the competition of the 21th century urban park) or to reconstruct the society, it is inevitable to produce a method for cultural organization and for the organization of consciousness. The method used by Leonidov to embody social condenser matches well with the "initial hypothesis" of *La Villette* in terms of generating a complex of mass culture with the special emphasis on the organization of program and promoting initiatives. Both Leonidov's and Koolhaas' approaches share in common that collectivization of activities with a local production of difference yields a mechanism, which includes condensed tools for creating new culture. This mechanism of social condenser establishes multiple links between activities, constructs the whole, communicates with the periphery, generates unprecedented events, and while maintaining the overall continuity and unity "allows any shift, modification, replacement, or substitution […] without damaging the initial hypothesis."[135] Therefore, outlining a flexible and unified

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[131] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

[132] Rem Koolhaas. Content. Taschen, 2004, p.73.

[133] Jean-Louis Cohen, "The Rational Rebel, or The Urban Agenda of OMA," OMA-Rem Koolhaas . Edited by Jacques Lacan. Princeton Architecture Pres, New York, 1991, p.13

[134] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

[135] Ibid, p.921

organic process with active improvisation of users (Formula 1) redefines the program of *La Villette* as a social condenser.

Especially, it can be quite clear to understand why Koolhaas claims for a copyright of La Villette project as a social condenser, when Leonidov's description of Palace of Culture and the initial hypothesis of Koolhaas are assessed together. In parallel to Leonidov's idea that is "to give a clear sense of organization which is capable of promoting initiatives self-help amongst the workers visiting the Palace [and] to carry it beyond the boundaries of the site, and by that means to make it flow organically into the productive life of the district",[136] Koolhaas suggests "how to orchestrate on a metropolitan field the most dynamic coexisting of activities x, y, and z and to generate through their mutual interference a chain reaction of new, unprecedented events."[137] Obviously, even if their projects belong to different time periods, they both emphasize the improvisation of users in a generic system that encourages, and is capable of producing cultural mutations.

3.2 Strip as a Strategy for Social Condenser

Leonidov, according to Ginzburg's functional method, developed a spatial prototype (Club of a New Social Type) that is a set of theoretical tools comprising operational models for organizations of relationships between program, site, and form. He reproduced this model for spatial and programmatic organization of his social condensers. For him, spatial prototype acts as a strategic tool to organize and manage his social condenser system in terms of flow diagram and composition of parts and whole. From this angle of vision, it can be claimed that, spatial prototype for *La Villette* is the strategy of strips, and Koolhaas derives this prototype from the combination of the "void" of the Berlin Wall, the "script" of Exodus (Formula 2), the "border" of Coney Island's amusement parks (Formula 3), the "grid" of Manhattan and the "schism" of skyscraper (Formula 4).

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[136] Andrei Gozak, Andrei Leonidov, Ivan Leonidov: The Complete Works. Edited by C. Cooke, Academy Editions, London, 1988, pp.73-74.

[137] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

Koolhaas explains how social condenser is operated by the strategy of strip that "creates the maximum length of 'borders' between the maximum number of programmatic components, and will thereby guarantee the maximum permeability of each programmatic band, and -through this interference- the maximum number of programmatic mutations".[138] This explanation is essential because of the fact that it not only explains the principles of strategy of strip, but also combines the formulas 2, 3, and 4 together.

First, in amusement park readings, the thesis has reached to Formula 3 that defines the limits of the inside of park, and establishes a spatial relationship between inside and outside. This is an initial attempt to create zones adjustable to the instable conditions of the Island. Then, it is required to specify a "border" in order to create these adjustable zones or parks, each of which has its own structure and definition. As it was discussed in the previous chapter, Koolhaas refers to the term "bordering" or "layering" in order to define the isolated parks. Here, the border is used to "generate a spectrum of coordinated facilities". Koolhaas appreciates the strategic attempts (e.g. wall, moon and underwater concept) of the producers in Coney Island to create a border as a response to its instable conditions.

In *La Villette*, the adjustable zones are produced by the strips. Each line of the strip arranges its own border. Each strip acts as a distinct unit in the whole composition, and has its own inner structure and definition (Fig. 3.3).

Moreover, as he explored from the Berlin Wall that each side of the wall, or each line of the strips, communicates continuously with the city, and this schematic profile of the wall, both east and west, has the potential of yielding possible mutations. It is suitable to deliver his reflection on the Wall to the definition of border in *La Villette's* strips. For instance, his indication that "on each side, the [Berlin W]all had generated its own sideshows/paraphernalia"[139] also displays a maximum capacity of programmatic mutations in a maximum length of strip. In *La*

[138] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.923.
[139] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.921.

Villette, each strip is placed parallel to each other in order to create maximum interaction.

Therefore, in reference to above discussions on “border” that defines isolated and adjustable units in the case of Coney Island, and “maximum interaction and maximum permeability” in the Berlin Wall, the strip in *La Villette* constructs a “border” for defining controllable parts in the whole as well as creates “a maximum length” between these parts for maximum interaction.

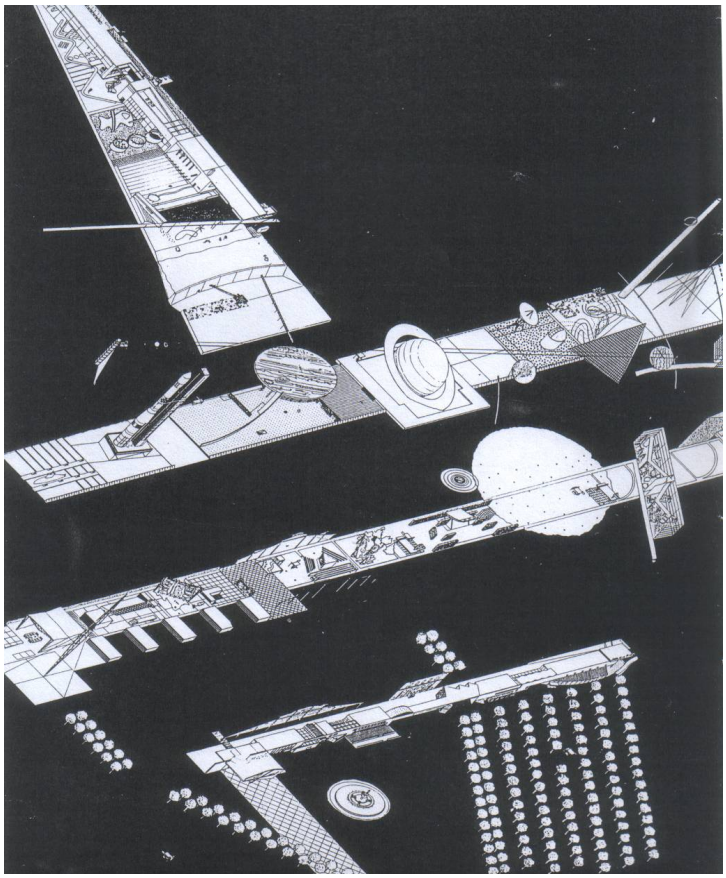


Figure 3.3 Individuality of strips in *La Villette*

Secondly, Formula 2 shapes another principle of the strips so that they can be laden with maximum program without any architectural intervenes. From the laboratory of Berlin, he extracts the program absorbing capacity of the void. For him, “imagining nothingness” or exploring the potential of the void is “to imagine

ways in which density can be maintained without recourse to substance, intensity without the encumbrance of architecture".[140] In the Exodus project, he first tests the capacity of the void by imposing program on it. The synthesis between continuous urban structure of nothingness and the programmatic intensity creates an urban strip, which has the capability of transforming urban fabric. Then, the marriage between void and program shapes the script of Exodus, which later evolves into the strip of *La Villette*. That is to say that, the strip of *La Villette* is a void with intense program. Then, each strip can be evaluated as the script or in other words as Exodus. Cohen points out the duality of strip

> […The strips] permit the construction of a project laden with double meaning pertaining both the location of territorial regularities- contours, primary grids, infrastructure- and to the identification of programmatic regularities- repetitive spaces, services, poles of intensity, etc.[141]

After Cohen calls the strips as swaths, he continues to highlight the programmatic capacity of them that "OMA's swaths define a principle of functional distribution and a sometimes implicit fundamental principle of parcelization, and they contribute to the rules for the disposition of urban and architectural objects".[142]

[140] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.200.

[141] Jean-Louis Cohen, "The Rational Rebel, or The Urban Agenda of OMA," OMA-Rem Koolhaas . Edited by Jacques Lacan. Princeton Architecture Pres, New York, 1991, pp.13-14

[142] Ibid.p 14.

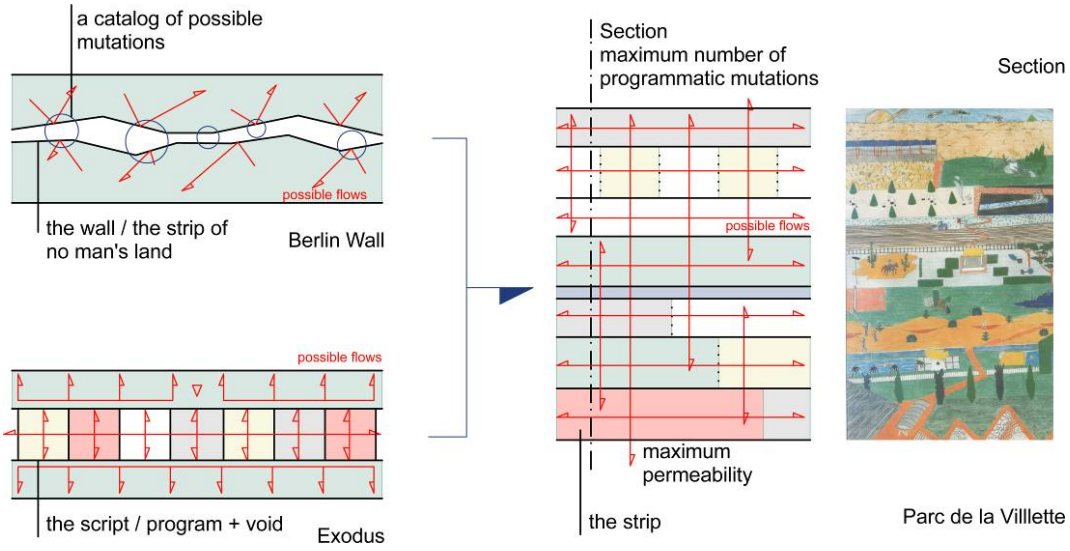


Figure 3.4 Development strategy of strip in Parc de la Villette (Developed and drawn by the author)

Therefore, as shown in the figure 3.4, this principle of the strip "is legitimized by programmatic fragmentation into surfaces and by the combination of these surfaces" [143] in *La Villette*. In the repetitive structure of the strips, maximum mutations within each strip and between strips are achieved by the injection of various programmatic events in maximum length of border.

Finally, the third principle of strips, namely maximum flexibility in a single structure, can be better understood regarding with skyscrapers of Manhattan. Koolhaas openly refers the association between the section of skyscraper and the strip composition of *La Villette* by stating that "the layering [of La Villette] is not unlike the experience of a high-rise building, with its superimposed floors all capable of supporting different programmatic events".[144] For Koolhaas, the section of typical skyscraper, especially of Downtown Athletic Club, is "a stacking of metropolitan life in ever-changing configurations", and a machine whose "interiors accommodate composition of program and activity that change

[143] Jean-Louis Cohen, "The Rational Rebel, or The Urban Agenda of OMA," OMA-Rem Koolhaas . Edited by Jacques Lacan. Princeton Architecture Pres, New York, 1991, p.15.

[144] Rem Koolhaas and Bruce Mau. S,M,L,XL, New York: The Monacelli Press, 1998, p.923.

constantly and independently of each other without affecting […] the envelope".[145] With the segregation between its envelope and its interior (lobotomy) and with its superimposed independent floors in a single unity (schism), skyscraper is the main reference to how to arrange strips to compose *La Vilette* as a social condenser. If the Berlin Wall and Exodus determine the programmatic capacity of single strip, the section of skyscraper explicates the process of multiplication of strips. Then, it is no coincidence that Koolhaas refers to the Downtown Athletic Club "as a Constructivist Social Condenser: a machine to generate and intensify desirable forms of human intercourse".[146] As in the floors of skyscraper, the strips can be united (e.g. thematic gardens of *La Villette* being composed of three strips that is similar to the swimming pool being composed of three floors of the Athletic Club), or subdivided (e.g. accommodation of body building and library in the same strip) so as to sustain programmatic needs with an extreme flexibility yet with unity.

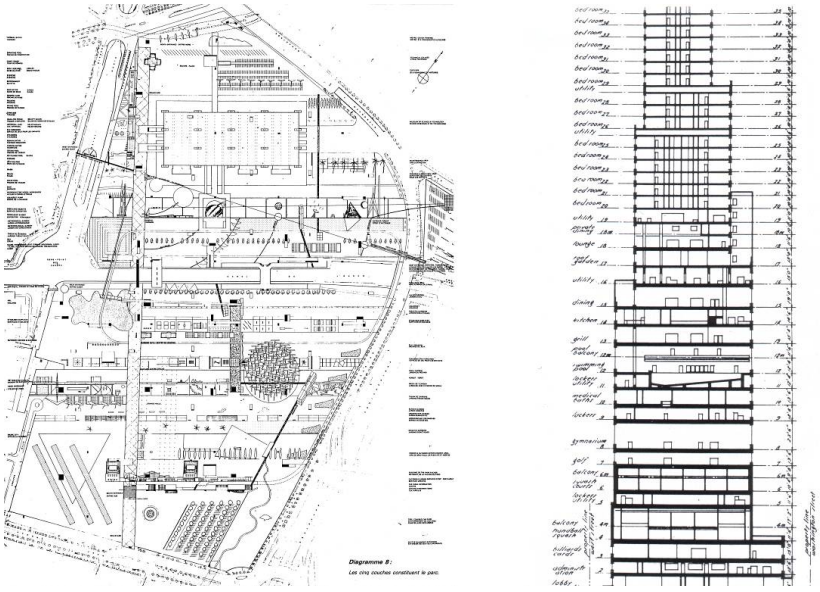


Figure 3.5 Relationships between the strips of *La Villette* and the floors of Downtown Athletic Club.

[145] Ibid, p.937

[146] Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, New York: The Monacelli Press, 1994, p.152.

Therefore, with reference to Formula 4, it is claimed that the strategy of strip divides the site of *La Villette* into patterns of activity generators. The accumulation of these activities guarantees the maximum programmatic flexibility in a single unity, a park. In other words, each strip acts as a park within a park. The strips are not only "capable of supporting different programmatic events" autonomously, but also they all contribute "to a summation that is more than the accumulation of parks".[147]

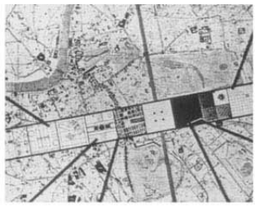
Consequently, the strategy of strips in *La Villette* is a generic mechanism that operates the mode of action throughout the design process. It is:

1- A void that constructs a basis for future programs and events by mode of allocation of a series of fragmental surfaces
2- A border that permits infinite number of programmatic mutations by mode of division in maximum length
3- Flexible that is still able to organize a process in ever-changing conditions of indeterminate context.
4- Autonomous that operates locally without corruption of overall unity.
5- A repetitive structure that not only provides a space for a variety of specific programs but also constructs the site itself in unity.
6- An infrastructure that creates fixed points of service for supporting unforeseeable events.
7- A tool to design a social condenser that combines architectural specificity with programmatic indeterminacy (Fig. 3.6).

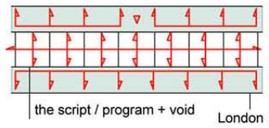
However, by definition, strategy is mainly an index of governing principles, and defines "what" we do. The strategy alone cannot operate but just define the generic framework. It should be activated by the tactics. In the following part, the thesis will search for the tactics that are consequences of strategy of strip, and investigate "how" what will be done is realized.

[147] Rem Koolhaas and Bruce Mau. S,M,L,XL, New York: The Monacelli Press, 1998, p.923.

ARCHITECTURAL SPECIFICITY



EXODUS



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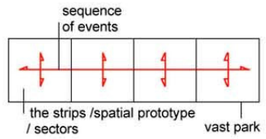
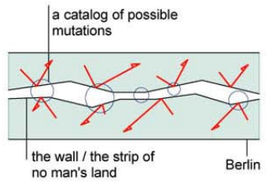
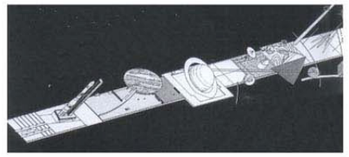


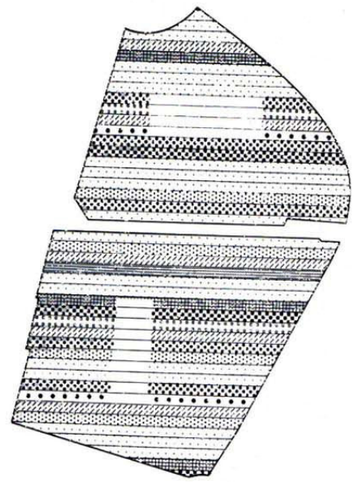
BERLIN WALL



THE STRIP

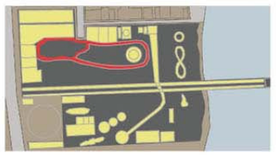


STRATEGY OF THE STRIP

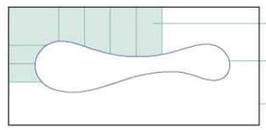


SOCIAL CONDENSER

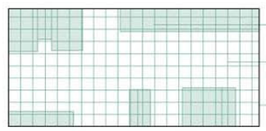
PROGRAMMATIC INDETERMINACY

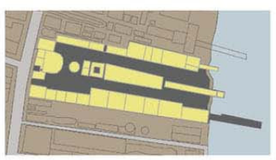


STEEPLECHASE

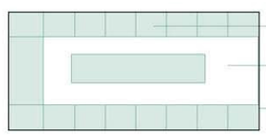


LUNAPARK





DREAMLAND



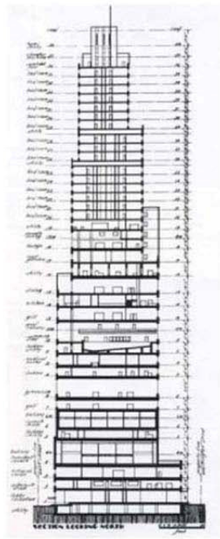


Figure 3.6 Development of the strategy of strip to design a social condenser (Developed and drawn by the author).

3.3 Tactics of Strip

The *La Villette* project is formulated as a social condenser, which combines architectural specificity with programmatic indeterminacy. The main role of the strips in this formulation is to offer "a (relatively) stable aesthetic experience"[148] within the ever-changing condition of the park. The strips behave like an envelope of skyscraper, and frame mutations of unprecedented event so as to create specific architectural composition. So, the question that which tools make the strategy of strips *specific* is essential to understand the mechanism of strategic way of design in *La Villette*. The thesis claims that these tools are the tactics, which are required in every act of strategy in every phases of design process.

By definition, the strategy of strips potentially carries the information about the actions of design process. Obviously, it implies the actions of division, subdivision, paralleling, or uniting. However, the operation of these actions, such as "to divide", "to subdivide", etc, belongs to the field of tactics. In other words, tactics are responsible for activating the strategy. The tactics are for the materialization or realization of the strategy.

3.3.1 Tactic of Dimension

In *La Villette*, according to Koolhaas, "in the first primordial gesture the whole site is subdivided in a series of parallel bands –running east-west-".[149] This is one of the possible actions defined conceptually by the strategy of strips. Yet, in practice, the dimension of strips, the direction of strips, and the way of coming together are determined by tactical tools with regards to functional requirements. For example,

> The strips are based on a certain standard dimensions –a basic width of 50 meters divisible into increments of 5, 10, 25, or 40 meters– to facilitate

[148] Rem Koolhaas and Bruce Mau. S,M,L,XL, New York: The Monacelli Press, 1998, p.923.

[149] Ibid. p.923

> change and replacement without disruption and to create fixed points for the infrastructure.[150]

This is one of the tactical attempts to define the dimensions of strips (Fig. 3.7). It is due to the fact that designer selects one method of division from the possible ways of act of division in order to derive maximum benefits. The tactic of division still carries information about the total process of design, or the strategy of strips. It is directed, manipulated, or operated by strategy.

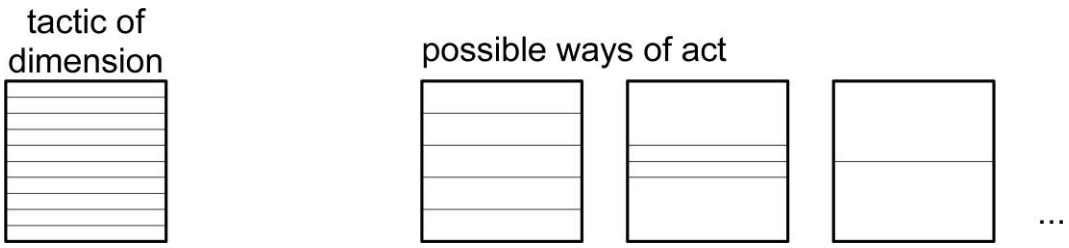


Figure 3.7 Possible ways of the act of division concerning dimension (Developed and drawn by the author)

3.3.2 Tactic of direction

Secondly, the determination of the direction of the strips is another tactic.

> The direction of the bands is chosen so that the dominant elements already on the site – the Science Museum and the Grande Hall- are incorporated into the system: the museum as an extrawide band (that could itself be divided in analogous thematic bands), the Grande Hall as an incidental covered part of another series bands running through it.[151]

Koolhaas integrates existing elements in the park to the system of strips by means of *choosing* the direction of strips according to them. He again chooses

[150] Rem Koolhaas and Bruce Mau. S,M,L,XL, New York: The Monacelli Press, 1998, p.923.

[151] Ibid, p.923.

the tactic of direction from the possible ways of act of division concerning direction (Fig. 3.8)

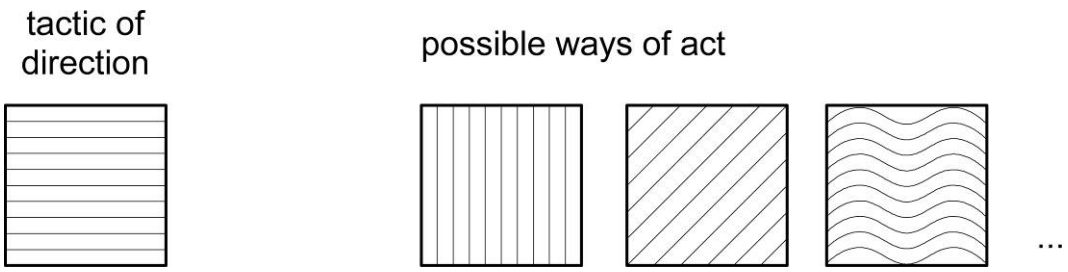


Figure3.8 Possible ways of act of division concerning direction (Developed and drawn by the author)

3.3.3 Tactic of Distribution

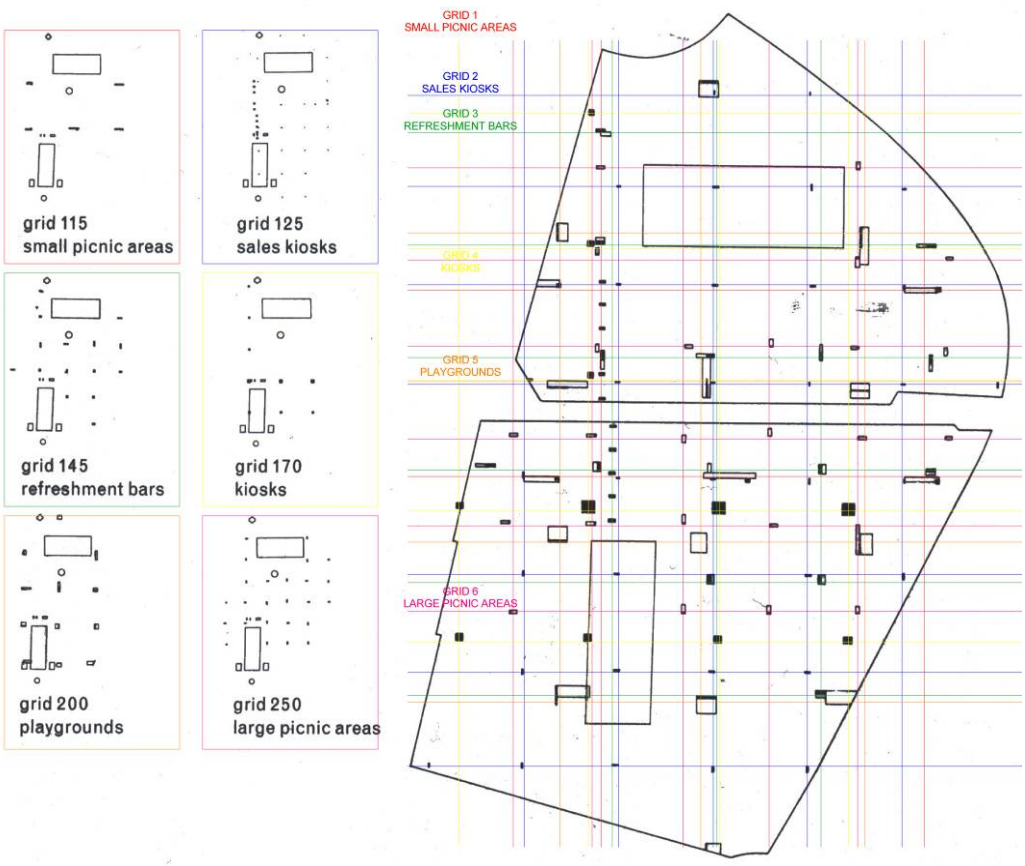


Figure 3.9 Superposition of grids (Edited by the author)

In the third layer of *La Villette*, Koolhaas develops a tactic for the distribution of small-scale programmatic elements, which are kiosks, playgrounds, sales kiosks, refreshment bars, and small and large picnic areas. Based on a desired frequency and required area of these elements throughout the park, he implements the tactic of distribution. The first action of this tactic superimposes six distinct grids (one for each element) on the strips so as to determine desired frequency for the location of these elements. As a second action, the tactic of distribution determines the dimensions of each grid mathematically. Koolhaas formulates the tactic of distribution such as the following:

> The frequency calculation is relative to the available area, the total area per service asked for in the program, an assessment of the optimum number of points required across the site, and the need for distribution across either part of the site or the whole. The formula for determining the dimension of each point grid then becomes:
>
> Where *A* is the available area; *a* is the area of the facilities required; and *x* is the number of points to be distributed.[152]

This tactic of superposition of different grids is not only an effective method to integrate facilities into the system but also it is a clear example to illuminate the mutual and generic relationship between tactics and strategy. Tactic scatters the facilities beyond the site, which is divided into strips by the strategy (fig. 3.9). Each strip and the facilities reciprocally affect the identity of each other. As Koolhaas indicates

> Since the park is divided in bands, it follows that the elements on the point grids will occur in different zones, thereby both acquiring and influencing the character of the "host" zone- i.e., a kiosk in *x* is different from a kiosk in *y*, even if they are the same kiosk.[153]

The strip is intensified by loading different facilities, and the facilities are varied with regards to their positions on different strips. Also, "the occasional proximity

[152] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.925.

[153] Ibid. p.925

of the various elements distributed to the different grids leads to random and accidental clustering",[154] and enhances the possibility of mutations. This reciprocal corporation between strategy and tactics creates a system in which the facilities interact with each other and also the whole so as to produce endless variations and mutations. So, it creates a unity between parts and the whole. Strategy of the strips constructs a base for tactical variations, and redefines itself continuously from the feedbacks coming from these tactics.

Therefore, at this point, it is significant to point out that in the strategic way of design the design process is not a linear process that implies the hierarchical or chronological relationship between strategy and tactics. It is a non-linear process in the sense that both the strategy and tactics work mutually, and have a reciprocal impact on each other throughout the design process.

3.3.4 Tactic of Access and Circulation / Tactic of Flow Diagram

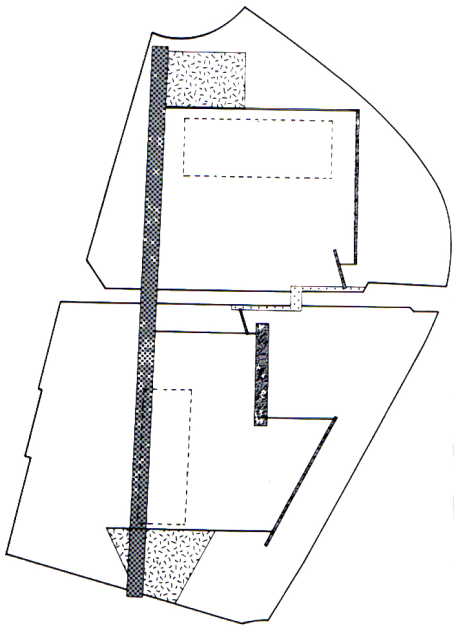


Figure 3.10 Access and Circulation

[154] Ibid. P.925

The fourth layer, which is the system of access and circulation, can be assessed as a tactic for designing a flow diagram of the park. As it has been discussed in the mechanism of social condenser, flow diagram is essential for spatial organization and for accelerating the clear perception of users. In Koolhaas' terms, the access and circulation system, or the tactic of flow diagram, "nourishes all episodes of the park and ensures their most intense exploitation".[155] It aims the improvisation of users by means of exploitation of all tactical tools described above.

The flow diagram of *La Villette "*consists of two major elements: the Boulevard and the Promenade". These two elements merge the role of elevator in the skyscraper with the calculated circulation in Dreamland. Boulevard acts as an elevator that stops at different activity levels of strips, and the Promenade replaces the role of calculated circulation in a sense that it manages speed of movement, direction of movement, concentration of movement, and time intervals between the strips of *La Villette*. Koolhaas describes how these elements exploit the site.

> The Boulevard, running north-south, systematically intersects all the bands at right angles and connects the major architectural components of the park directly – the Science Museum and the Baths in north, the Music city and the Grande Hall in the south. Of its total width of 25 meters, five are sheltered. The Promenade, complementary to the Boulevard, is generated through the identification and subsequent demarcation –in the form of plazas- of certain significant cross sections through the bands whose marking offers an opportunity to capitalize nodes of heightened programmatic interest as they are created fortuitously through the interaction of bands.[156]

Tactic of flow diagram "represents a cumulative visit" for *La Villette*. It not only provides a network for movement, communication, and exchange, but also acts as an activity generator after being equipped with "apparatus such as small

[155] Rem Koolhaas and Bruce Mau. S,M,L,XL, New York: The Monacelli Press, 1998, p.927.

[156] Ibid p.927

amphitheaters, seating, chess tables, tribunes, puppet theaters, roller-skating surfaces, etc." Also, at the east-west direction, the tactic of flow diagram overlaps and interchanges with the inner circulation of strips. Therefore, the strategy of strips and the tactic of flow diagram construct a multiple links between the sequence of events and the overall structure.

3.3.5 Tactic of (Adding) the Major Elements

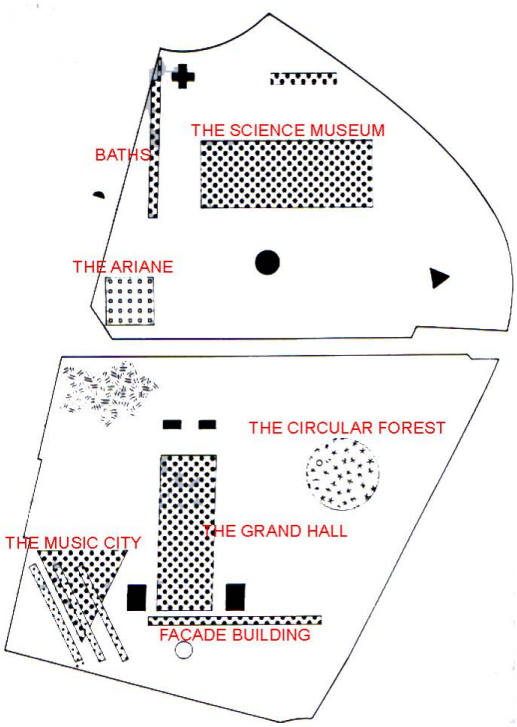


Figure 3.11 Major elements (Edited by the author)

In the fifth layer of La Villette, the major elements of the program are injected into the system. As Koolhaas states, these elements, some of which are already in the site (the Science Museum, and the Grand Hall) and some are added (the Ariane, the Circular Forest), "are unique or too large to be located according to mathematical rules or to a system".[157] The tactical addition of these elements to

[157] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.929.

the system is a depiction of figure/ground composition in an urban level. The strategy of strips as well as the other tactical operations discussed above constructs a ground on which these elements are highlighted. What is intended here is to place these objects “according to organized lines extrapolated from the context” (the Science Museum, the Ariane) or to define their position with regards to the boundaries of the park (the Bath in the north gate, Facade Building in the west). The figures, whether they are emerging from the composition itself or are demarcated as single units, communicate with the strategy of strips. This tactic of addition illustrates that the strategy of strips are capable of absorbing diverse elements of the program while respecting identity of each.

3.3.6 Tactic of Connections and Elaborations

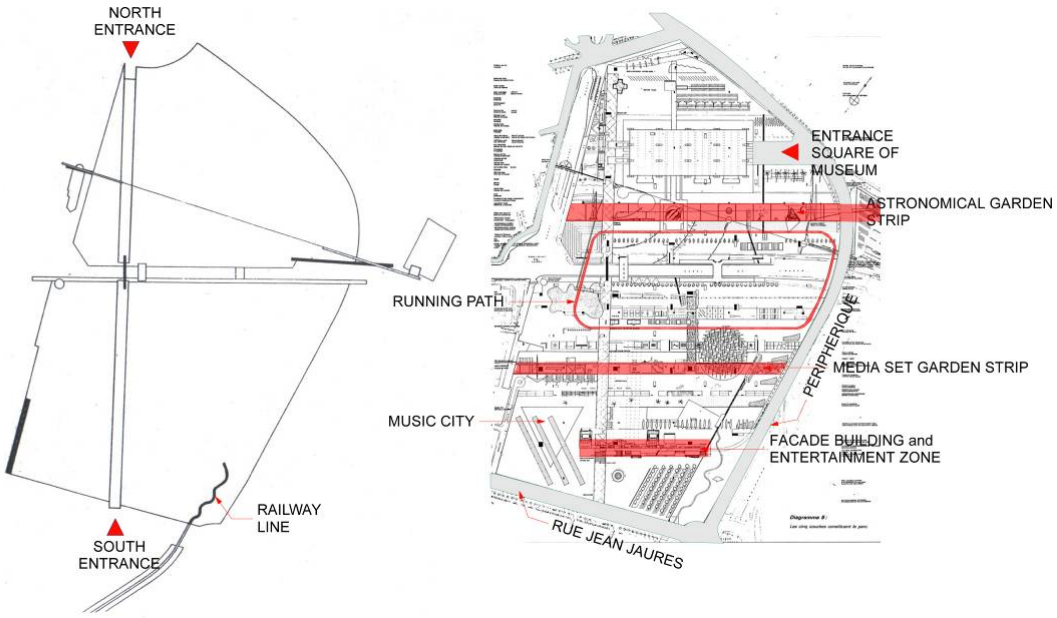


Figure 3.12 Connections and Elaborations (Edited by the author)

The sixth layer of connections and elaborations organizes the relationships between the park and its periphery, between the major elements (the City of

Music, Façade Building, Entertainment Zone, Astronomical Garden and Media Strip) and extra connections within the park.

The park communicates with the city fabric variously and continuously by means of each strip. At this continuous façade of the park, there are specific points defined as an interface between the park and the street of Paris. The locations of these points are selected tactically in order to achieve maximum integration between the life of the park and its periphery. Five interaction points are determined to connect with the city. The two of which are located at the North and South edges of the Boulevard to define the main gates of the parks. The third one is the entrance square of the Science Museum. Then, the Butte railway, coming from the south of the park, "transform[s] into a vegetal connection between the two formal languages of the park: the rectilinear [forest] and the curvilinear [forest]".[158] Lastly, the Astronomical Garden strip is extended across the Peripherique by means of cables and chairlift so as to integrate both the leather-tanning hall (which is outside the park) and the section of Peripherique to the system. These tactical connections are determined to attach people immediately to the most programmatically condensed elements of the park, and "to extend the presence of the park"[159] towards the streets of Paris.

As to the inner organization of strips, Koolhaas develops additional tactics to assemble individual components. For example, in the Astronomical Garden Strip, he organizes the components of this strip so as to create a "Newtonian skyline".

[158] Jean-Louis Cohen, "The Rational Rebel, or The Urban Agenda of OMA," OMA-Rem Koolhaas . Edited by Jacques Lacan. Princeton Architecture Pres, New York, 1991, p. 88.

[159] Ibid, p.88

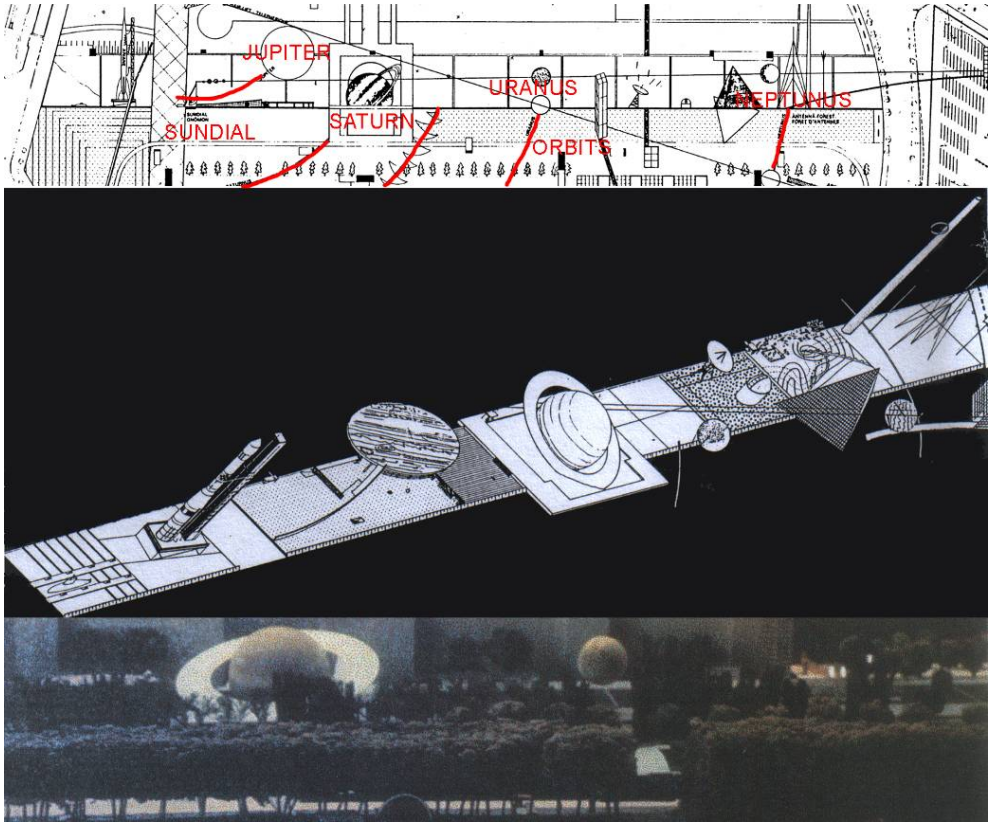


Figure 3.13 "Newtonian Skyline" organization of the Astronomical Garden strip. Plan, axonometric and model view (Edited by the author)

> On the line of the cable and the chairlift, the planets of the solar system are arranged according to their distance from the sun. In this constellation, The Hemispherical Hall becomes Saturn, and is provided with a florescent ring. The sun coincides with the Boulevard, and is represented by the sundial that also acts as a terminal for the cable and chairlift.[160]

As well as the tactical organization of the Newtonian skyline, Koolhaas introduces second tactic, which divides the strip into a sequence of squares (40 x 40m). Each square is used for the exhibition space of the Science Museum. "An ocean basin with bathyscaphe, the Ariane launching pad, permanent sheltered exhibition space, the Hemispherical Hall, radio telescope, observatories, and the

[160] Jean-Louis Cohen, "The Rational Rebel, or The Urban Agenda of OMA," OMA-Rem Koolhaas . Edited by Jacques Lacan. Princeton Architecture Pres, New York, 1991, p. 89.

Antenna Forest"[161] are the activities that are housed in these squares. It is observed from the strip of Astronomical Garden that the tactical improvisations can be multiplied, varied, and continued during the design process. They are implemented at each stage of design process in order to intensify program in a flexible manner. They are operative tools acting between event (program) and structure (strategy).

3.3.7 Tactics of Organizing Landscape / Tactics of Implantation of Natural Elements

The last layer, which is developed at the second phase of the competition, is about the organization of landscape. At this stage, Koolhaas makes use of three tactics for implantation of the natural elements in order to compose different categories of nature.

The first tactic is implemented in the "regions in which the program *itself* is nature" in order to "invest large aggregate areas with the *transposed image* of open fields". These areas are used for didactic gardens, thematic gardens, etc. The second tactic categorizes the natural elements as "the screens of trees parallel to the bands" in order to define the boundaries of strips. This is the tactic for organizing perception of the users in a way that in the north-south direction these "screens interweave and suggest the presence of a mass covering the site", and in east-west direction they "frame open zones, like 'fields'". Finally, in order to get the "image of forest" or to "have a dialectic correspondence: from natural to the artificial, solid to hollow", Koolhaas organizes the natural elements as a major architectural components, namely the Linear Forest and the Circular Forest. The Linear Forest running along the *Canale de l'Ourcq* acts as a buffer and a filter for the Science Museum, while the Circular Forest "is raised on a three-meter socle" and "represent the forest as *program*". [162]

[161] Jean-Louis Cohen, "The Rational Rebel, or The Urban Agenda of OMA," OMA-Rem Koolhaas . Edited by Jacques Lacan. Princeton Architecture Pres, New York, 1991, p. 89.

[162] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.930.

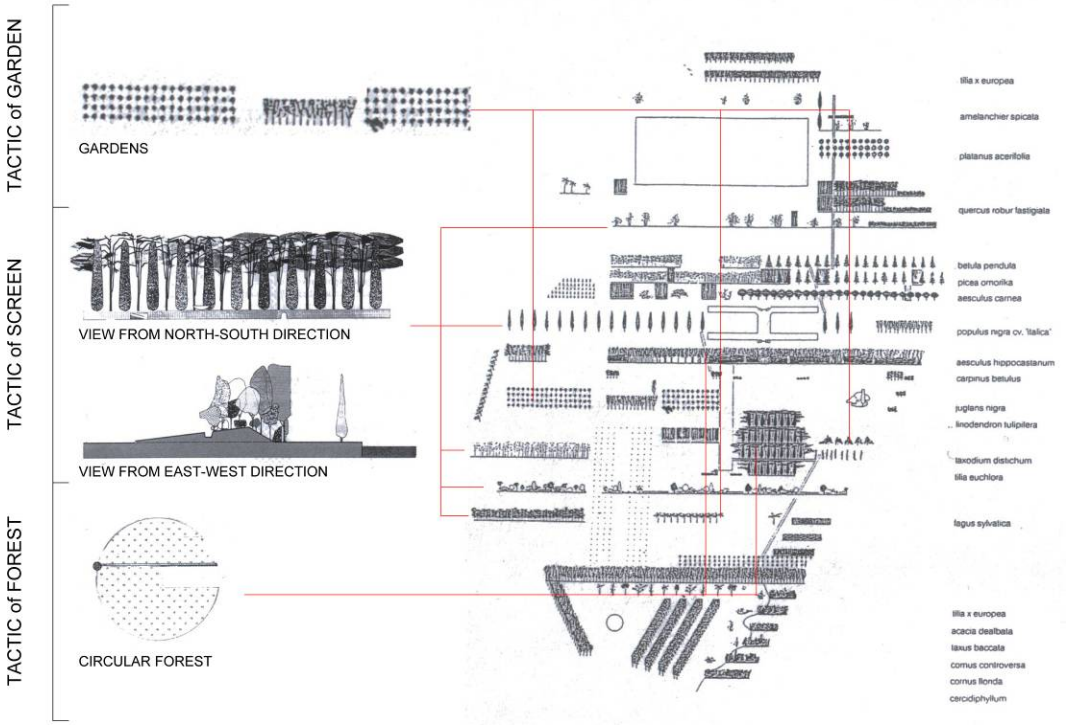


Figure 3.14 Tactics of implantation of natural elements. (Edited by the author)

These tactics, namely tactic of garden, tactic of screen and tactic of forest, define three different patterns for combining the natural elements together in order to utilize the geometry (circular, linear), density (degree of view), and dynamics (interweave) of them. It is a clear example that same components within the same strategy can be organized in different layouts by means of different operational tactics. Therefore, it is the tactics that define the composition between the parts while the strategy produces a unity.

3.3.8 Tactics of Demonstration / Representation

Up to a point, the thesis has discussed the various operational tactics of strategy of strips in the *La Villette* project. Here, it is also essential to search out the tactics that are used for the representation of the project. The thesis claims that the representation of the strategy also necessitates a tactical approach. As Koolhaas states, at the second phase of the competition, although it was asked

to “show how it [the park] looks”, he explained “how it [the park] works”.[163] In this part, the thesis will investigate the representational tactics of *La Villette* as a part of its design strategy.

Koolhaas explains the method of creating social condenser in *La Villette* by stating that “take the section of the typical skyscraper and put it on its site”.[164] Transferring vertical floor in skyscraper to the horizontal strips of *La Villette* implies the simultaneous presence of plan and section. For Koolhaas, the depiction of plan and section together is the tactical demonstration that is used for producing diagrams of *La Villette*. This mode of interpretation creates a space on which sequence of events are depicted. The strategy of strips constructs a base for these diagrams in order to depict the tactical variations and/or the life of the park.

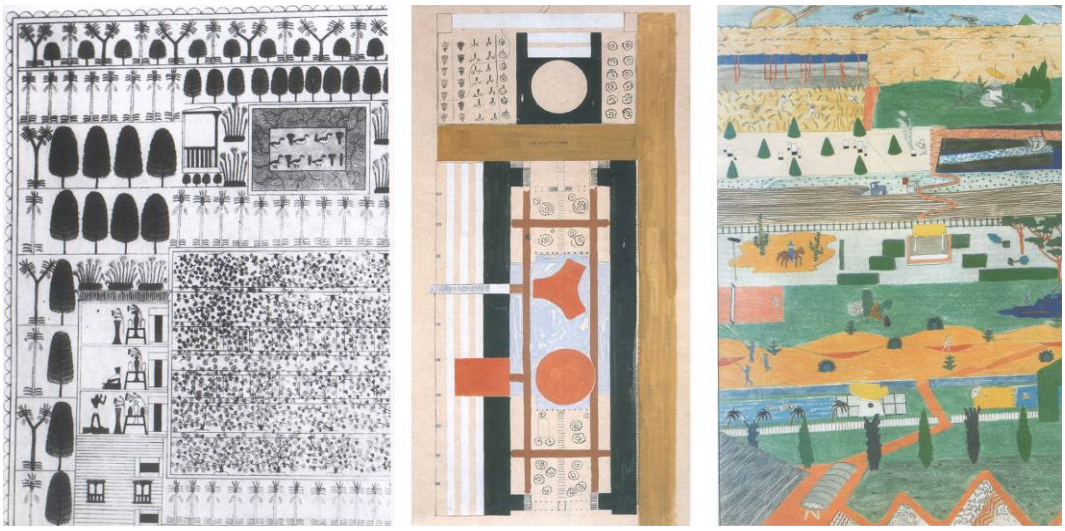


Figure 3.15 Plan of Egyptian Garden; Leonidov’s partial of Narkomtiazhprom site plan; and *La Villette* depiction by Koolhaas

[163] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.930.

[164] Rem Koolhaas, Brendan McGetrick, “Patent Office”, Content. Taschen, 2003, p73.

Additionally, in order to depict the specific component, especially in the Astronomical Garden strip, Koolhaas borrows the formal language from Leonidov (Fig. 3.15, Fig. 3.16 and Fig. 3.17). It can be asserted that Koolhaas refers not only the spatial organization and programmatic approach in Leonidov's social condenser but also his way of depicting social condenser.

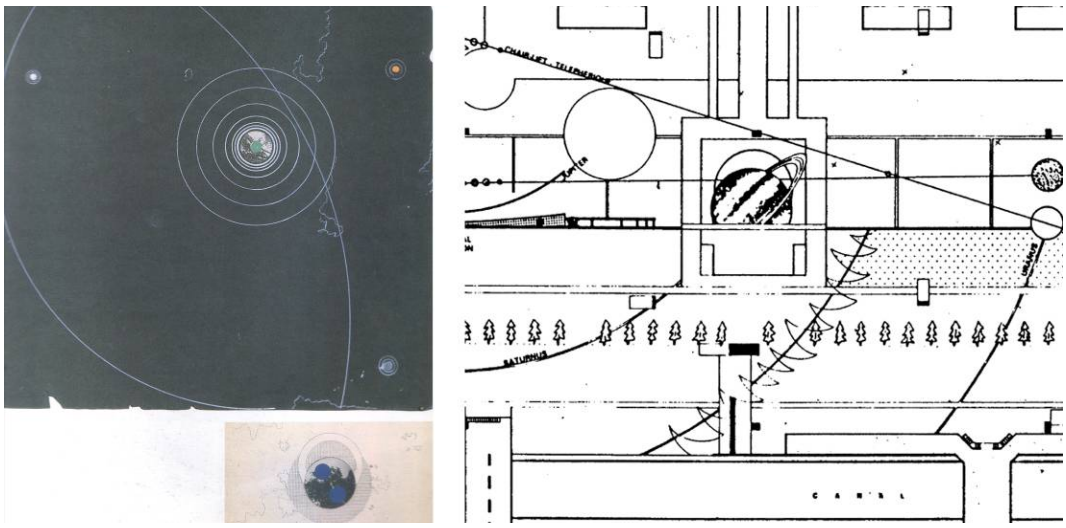


Figure 3.16 Leonidov's schema of spatial organization of cultural services (top-left) and his sports pavilion (bottom-left) for Club for A New Social Type. Koolhaas' depiction of saturnus and orbits in the Astronomical strip (right).

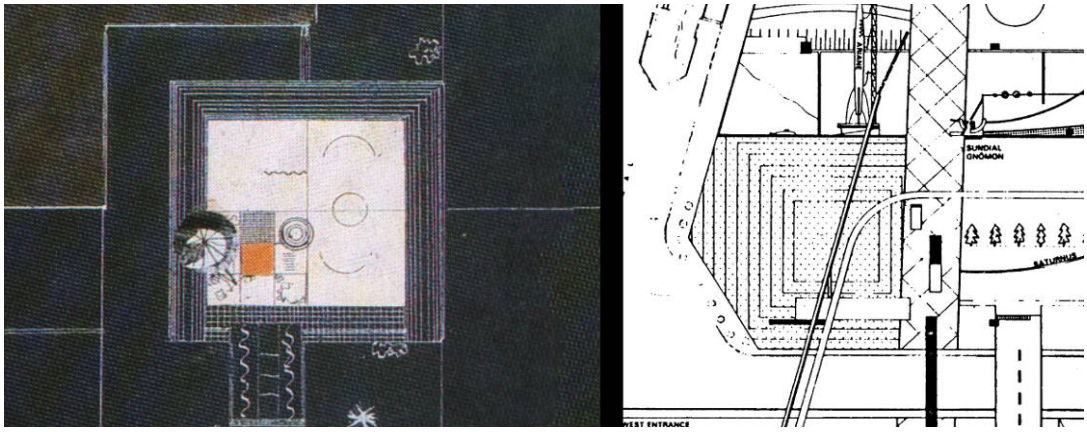


Figure 3.17 Physical Culture Section in Leonidov's Palace of Culture (left). Koolhaas' Ariane (right)

Lastly, the tactical approach can also be observed in the method of model-making. As it is shown in figure 3.18, Koolhaas makes a partial model that shows only the spaces between two major existing elements of the park. In his model, he consciously avoids to depict north and south entrances of the park. It is because of the fact that the partial model brings together all necessary information about the strategic mechanism of the design of the park. It is enough to display the generic capacity of the strips and their active interrelationships distributed throughout the site.

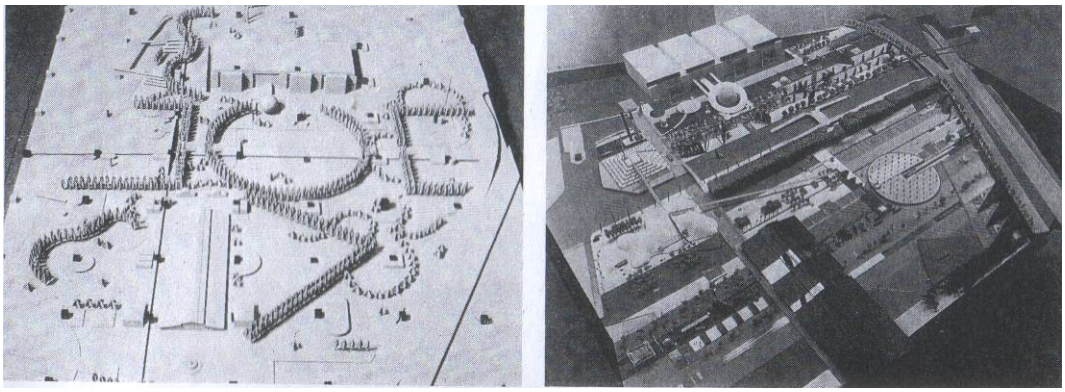


Figure 3.18 Tschumi's model of *Parc de la Villette* (left). Koolhaas' partial model of *Parc de la Villette* (right)

Consequently, the tactics that are implemented in *La Villette* are the mode of actions directed by the strategy. They are:

1) Selected operations that activate strategy so as to gain maximum accommodation for the requirements of program (i.e. division, dimension, direction).
2) To construct a mutual relationship with the strategy in order to make design process interactive and non-linear (i.e. distribution).
3) For the establishment of networks between events in order to organize movement, to regulate flow, and to allow exchange (i.e. flow diagram).
4) To extend the capacity of structure by means of addition, subtraction, integration (i.e. major elements)

5) Accumulation of tools for controlling the mode of interconnections between elements of design (i.e. connections and elaborations)
6) Generic that yields multiple results with the same components (i.e. gardens).
7) Flexible so that they can be used, reused, cancelled, and changed in each phase of design process.
8) Open to improvisations that anticipate the individuality of user within the unity.

To conclude this chapter, the thesis has made the analysis of Koolhaas' *Parc de La Villette* project in order to explore the mechanism of its strategic way of design. Throughout the chapter, the method of analysis is constructed as a laboratory work in a way that the examining tools of this laboratory are extracted from the urban laboratory of Koolhaas. The tools derived from Leonidov's projects are critical to understand how the program of the park turns out to be social condenser. Then, the Berlin Wall and Exodus project are examined to illuminate the generic capacity of the strips, and finally the Coney Island and Manhattan are to emphasize the instability of urban conditions, and to highlight how strips could be flexible to respond indeterminacy. From this analysis, the thesis arrives at an understanding about the structure of strategic way of design, the role of strategy and tactics, and their interrelationships in this structure. Therefore, the questions of what is the magnified role of the program in design process, how the strategic approach operates the program, and how and in what ways the tactical implementations activate the strategy are also investigated in the laboratory of the thesis.

CHAPTER 4

CONCLUSION

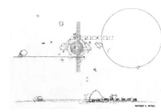
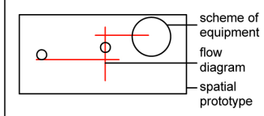
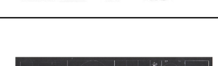
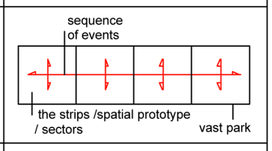
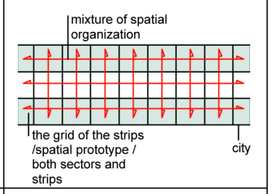
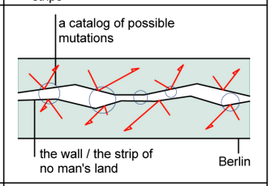
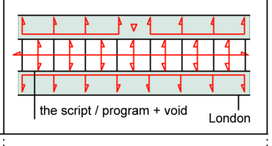
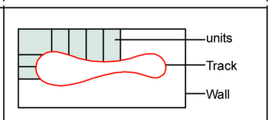
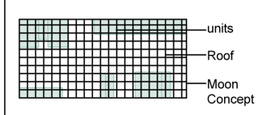
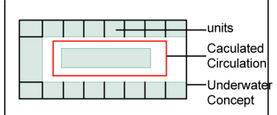
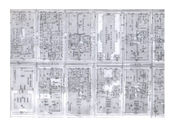
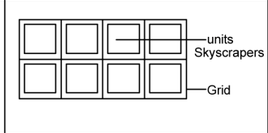
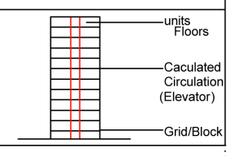
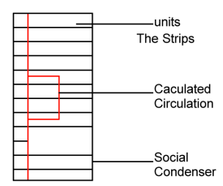
The thesis has examined the strategic way of design and explored how it works by taking into consideration the interconnections between the architectural problem, program, and strategy and tactics. To do so, the thesis has analyzed the *Parc de La Villette* competition project by OMA. Although it is not realized, OMA's *La Villette* project is a crystallized form of a strategy, which responds to a complex urban situation in Paris.

The thesis claims that design process should be mechanized strategically in order to adapt itself to the indeterminate conditions of urban context. The strategic approach advocates a generic design that frames an "enormous envelope for all kinds of unprogrammed but differentiated activities."[165] It accepts the inevitability of change and instability of urban life, and aims to incorporate *programmatic indeterminacy* with *architectural specificity* in order to construct continuously adaptable mechanism. The mechanism of strategic way of design should be considered to integrate uncertainties of program with specificity in design. In other words, the role of strategy in design process is to specify architectural program by acknowledging indeterminacy as an integral part of the mechanism.

The mechanism of strategic way of design in *La Villette* is constructed to combine architectural specificity with programmatic indeterminacy by means of the strategy of strip. The question of how specificity and indeterminacy are integrated in the process of design is also the main focus of urban laboratory of Koolhaas. Koolhaas' inquiries on the New York metropolis, the Berlin Wall and the works of Russian Constructivist Ivan Leonidov and his interest to the post industrial cities form his urban agenda. He derives the cumulative experience on urban context from these inquiries in order to define rules for combining programmatic indeterminacy and architectural specificity.

[165] Frederic Jameson; Michael Speaks, "Enveloped and Enclaves: The Space of Post-Civil Society(An Architectural Discussion)", *Assemblage*, No. 17. Apr.,1992, pp30-37.

Figure 4.1 Mechanism of Strategic Design in urban laboratory of OMA and *La Villette* (Developed and drawn by the author)

				PROGRAMMATIC INDETERMINACY			ARCHITECTURAL SPECIFICITY			
				Problem	Manipulating Force	Redefinition of the Program	Strategy	Tactics	Figure	Diagram
URBAN LABORATORY OF OMA	LEONIDOV	Social Condenser	Club for a New Social Type	Problem of Leisure	New Program for New Way of Life	**Formula 1** "socially interactive programmatically condensed" to define a flexible and unified organic process with active improvisation of users	Spatial Prototype	flow diagram		
			Palace of Culture				The Strip	sequence of events		
			The Socialist Settlement at Magnitogorsk				The Grid of The Strips	mixture of spatial organization		
			Berlin Wall	Problem of Void	Culture of Division	**Formula 2** "a minumum architecture and a maximum program" to define a script that combines the strip of void (Berlin Wall) with an intense program (Social Condenser)	The Strip of No Man's Land	a catalog of possible mutations		
			Exodus				The Script	division isolation inequality aggression destruction		
	DELIRIOUS NEW YORK	Coney Island	Steeplechase	Problem of Pleasure	Programmatic Indeterminacy	**Formula 3** "innocent pleasure inside vs corruption outside" to define the limits of the inside and to establish a spatial relation between the inside and outside	Wall	Track		
			Lura Park				Moon	Roof		
			Dreamland				Underwater	Calculated Circulation		
		Manhattan		Problem of Business	Culture of Congestion	**Formula 4** "city within a city" to create a pattern of activity generators that guarantees the perpetual programmatic instability	The Grid	The Skyscraper		
										
		Parc La Villette		Problem of Coexsisting Activities	Horizontal Congestion	**Formula 5** "architectural specifity with programmatic indeterminacy" to create an envelope capable of absorbing perpetual state of revision	The Strips	Dimension Direction Distribution Circulation Addition Connections Landscape Representation		

His urban agenda constitutes a basis for the development of a strategic approach to the program of urban projects. Exploring the potentials of the program under the pressure of existing urban forces offers not only functional options but also the operational methods for responding to complex urban situations.

How the combination of indeterminacy and specificity is structured to create a social condenser as a 21st century urban park or how the mutual relationship between the strategy of strip and its tactical variations operates and activates the condensed program in *La Villette* is elaborated with reference to the urban laboratory of Koolhaas in the diagram (Fig. 4.1). This diagram can be read as an attempt to search out strategic formulations to overcome programmatic instabilities. It illustrates generic design process that is activated by strategy and tactics in the laboratory of Koolhaas and then in the *La Villette* project. Therefore, the columns of programmatic indeterminacy and architectural specificity in the diagram should be read together in order to understand the generic design process particular to Leonidov's projects, the Berlin Wall, Exodus, Coney Island, Manhattan and *La Villette*.

Programmatic Indeterminacy

The first column of the diagram (i.e. programmatic indeterminacy) explicates the magnified role of the program in the urban laboratory of Koolhaas and the *La Villette* project. The formulations of the design process are directly related with the redefinition of the program according to the manipulating forces peculiar to the existent urban conditions. The forces that create instabilities could be radical cultural transformations (as in the post-revolutionary era of Russia) or socio-political divisions (as in Berlin) or endless demands of public pleasure (as in Coney Island) or inevitable impact of economy (as in Manhattan) or coexistence of multiple events (as in *La Villette*). The formulations intensify program with special emphasis on the force of its site, economy and social life. Each formula is as a laboratory work for registering the instability of the existing conditions, and producing data for developing new approach to the program.

Derived from his readings of Manhattan that is considered as “the culture of congestion” or the vertical congestion, the concept of *congestion*, as a manipulating force on the program, shapes Koolhaas’ urban projects. His urban projects in general are significant in a sense that each project is developed by restating the program with the special emphasis on the concept of congestion. Redefined program is not treated as a response to functional expectations but as a strategy that gives response to indeterminate conditions of a particular urban context.

In the case of *La Villette*, the goal of the program is to design a process itself in order to create an envelope capable of absorbing perpetual state of revision originated from the congestion of coexisting activities. Coexistence of these various activities in a dynamic way that increases the possibilities of mutations is the main problem to be considered in the production of a metropolitan park for the culture of 21st century. Obviously, culture is the wide array of human activities, and a manipulating force to generate these activities. Every act of user in the park is a constituent of and constituted by urban culture. Culture of metropolis so drastically changes and becomes unforeseeable that the actions of this culture become also indeterminate. Without regarding indeterminate culture as the primary force on design, it would be deficient to formulate a proper program.

In *La Villette*, the problem of coexisting activities with maximum mutations should be strictly considered with the horizontal congestion or invisible congestion. Also, it is derived that the problem of leisure is the main focus of social condenser design, which is manipulated by the forces of new social and cultural life of post-revolutionary era of Russia. Likely, the socio-economic and political conflict between two sides of Berlin creates the problem of urban void. Also, the problem of pleasure in the indeterminate conditions of Coney Island and the problem of business in the culture of congestion of Manhattan are the other references that display the relationship between program and the manipulating forces of cultural context.

In social condenser design of Leonidov, the program is redefined as a socially interactive and programmatically condensed in a way that social condenser becomes a flexible and unified organic process with active improvisation of users. This redefinition of program aims to construct a new way of life for workers by means of organizing their working and leisure hours. Additionally, the programmatic capacity of the Berlin Wall is redefined in the Exodus project in order to write a script that combines the urban void with an intense program. By the redefinition of the program, the negative aspects of cultural division or the potentials of the void are transformed into "a strip of intense metropolitan desirability [that] runs through the center of London".[166] In Coney Island, by defining the limits of the parks and by establishing spatial relationship between inside and outside, the producers redefine the program of parks in order to deal with the instable conditions coming from the problem of pleasure. Correspondingly, the skyscrapers change the definition of the program in order to create a pattern of activity generators that guarantee the perpetual programmatic instability developed from the inexhaustible demands of business.

It is accepted that the program is ad hoc, open to improvisations of users and unrecognizable in advance. Formulations of the program are to define rules for combining both the functional requirements and the design process itself in a continuous evolution. In the strategic way of design, program acts as an engine manipulated by the evolving cultural forces; it suggests a generic process capable of not only accommodating programmatic elements with specific functional requirements but also enhancing interaction between various elements and adaptation to the user's needs. This is an attempt that depends on the analysis of urban conditions to reread the *program as a catalyst for creating multiple events* for new modes of social life. Here, the crucial attempt of strategic design is to define contextual forces to figure out the nature of programmatic indeterminacy, to place them as a part of the design process, and to ground a basis for tactical improvisations. Therefore, redefinition of the program as a catalyst that enhances interaction and improvisations not only fulfills the requirements of urban conditions but also has the capability of transforming urban life itself. The question of how evolving urban conditions and changing

[166] Rem Koolhaas and Bruce Mau. S, M,L,XL, New York: The Monacelli Press, 1998, p.7.

needs of individuals are acknowledged as an integral and essential part of the design process is search out in the programmatic indeterminacy column of the diagram. Then, the question of how the program can adapt itself to these ever-changing and unpredictable urban conditions belongs to the field of strategy and tactics, which composes the architectural specificity column of the diagram.

Architectural Specificity

Strategic way of design is to design a generic process capable of producing diverse mode of actions or a catalog of tactics. It establishes a flexible ground on which the acts of design can be implemented, shifted, and modified. In this phase, strategy is responsible for the operation whereas tactics are responsible for the actions of this operation.

In *La Villette*, the strip is the strategy that operates the whole process to design a social condenser by means of tactical design acts. The strips manage the construction process of the park by means of operational tactics. They are divided and directed so as to prepare a generic ground on which programmatic elements are distributed, added, and connected. The mutuality between strategy and tactics is essential for the design process of *La Villette*.

The operational role of strategy and the active role of tactics can be observed in the projects from the urban laboratory of OMA. As noted before, the program in Leonidov's social condenser design is activated by the strategies and tactics in three different projects. The Club for a New Social Type project is developed as a strategy, and then it becomes a spatial prototype for future social condenser projects. In order to activate this strategy, the spatial organization between equipments of social condenser is implemented as a "tactic of flow diagram". Then, this prototype is multiplied according to "strategy of strip" by means of "tactical sequence of events" for composing the Palace of Culture. At last, the organizational scheme developed in these two projects is accumulated by "the strategy of the grid of the strips" so as to gain flexible mixture of programs in the city project of Magnitogorsk. Correspondingly, "the strategy of the script" that is employed to create an exodus at the heart of London by Koolhaas, borrows its

tactical instruments (namely, division, isolation, inequality, aggression, destruction) from the Berlin Wall. In Coney Island, the physical existence of Wall and the concept of Moon or Underwater show how the strategy works reciprocally with tactics, and how the strategy constructs a border in which tactical variations (track, roof, and calculated circulation) are implemented. Lastly, in Manhattan, as Schrijver notes "the presence of the grid [acts] as a *strategy* to contain difference, [and to] allow […] variety in the architectural infill",[167] or in other words to accommodate tactic of skyscraper.

From all above references, the thesis derives that strategy and tactics operate mutually in the mechanism of strategic design. During the design process, the role of strategy is to define a general framework for allocation of various modes of actions. *Strategy refers how the system should be operated*. The role of the tactics is directly related with the actions themselves; and *tactics refer how to activate the system efficiently and effectively.* Strategy and tactics are responsible for the performance of the mechanism according to the programmatic specification. The relationship between strategy and tactics is reciprocal in a way that strategy operates tactics and tactics activate strategy. In design process, they are produced according to the first two phases of mechanism, and are not defined in advanced.

Kerem Yazgan, in his PhD thesis, highlights the role of mutual work between strategy and tactics in design process. In reference to Uğur Tanyeli's book, *Improvisation in Architecture*, Yazgan quotes that there are two distinct approaches to design process, namely the strategist and a tactician approach. Tanyeli separates these approaches by stating that

> The strategist architect, after making his/her main decisions, can work with the expectation that his/her strategy works for many different situations; however, a tactician does not have such a chance. He/she

[167] Lara Schrijver, *OMA as tribute to OMU: exploring resonance in the work of Kollhaas and Ungers,* the Journal of Architecture Volume 13, No. 3, p.243.

> continuously makes consecutive decisions and evolves within his/her own process of creation.[168]

In contrast to this separation, Yazgan proposes a strategist-tactician approach that combines these two design approaches:

> […] both strategy and tactics are not defined beforehand; they are developed in the process, and open to modifications and shifts. One of the tactics becomes the mediator strategy of the design. Moreover, in the strategist-tactician approach, the architect takes into consideration the totality of the design at each phase while making modifications whenever needed. A strategist-tactician approach suggests a non-linear design process, and its production enables shifts and flexibilities in the process.[169]

This thesis is in parallel with the strategist-tactician approach of Yazgan in a sense that it claims that the mutuality of strategy and tactics creates the strategic way of design; there is no hierarchical or static relationship between strategy and tactics in design process. However, the thesis argues that strategy is always determined before the tactical variations. It is due to the fact that strategy constructs a ground for tactics, in other words every act of tactics is generated with reference to strategy. Without tactics strategy cannot be acted, and without strategy tactics cannot be operated. Strategy is just the definition of operation that is still need to be activated. Reciprocally, both have the capability to transform, modify or dismiss the other. Yet, it is crucial to state that since the strategy is open to change according to the feedbacks coming from tactics, new strategy produces its new modes of tactics. Each strategy produces its own catalog of actions.

Consequently, the main aim of the strategic way of design is to combine architectural specificity with programmatic indeterminacy (that is Formula 5). It anticipates maximum improvisation of users in a unified organic process (that is

[168] Cited in Kerem Yazgan. Disagnography of Architecture. Unpublished PhD Thesis, Middle East Technical University, Department of Architecture, Ankara, 2003, p.35

[169] Kerem Yazgan. Disagnography of Architecture. Unpublished PhD Thesis, Middle East Technical University, Department of Architecture, Ankara, 2003, p.36

Formula 1). It performs maximum program by means of minimum architecture (that is Formula 2). It defines an enormous envelope for the design process (that is Formula 3) under which each phase of design can generate schemata of actions that guarantee to adapt to programmatic instability (that is Formula 4). It suggests a process that poses itself with references to external and internal forces of architecture. It is an ambition to develop a flexible and anticipatory structure that is enriched by the unforeseeable conditions of urban life, by improvisations of users, and by its working principles.

BIBLIOGRAPHY

Agrest, Diana. Architecture from Without: theoretical framing for a critical practice. MIT Press: Cambridge, Mass. c1991.

Allen, Stan. Points + Lines: Diagrams and Projects for City. Princeton Architectural Press, 1999.

Certeau, Michel de. The Practice of Everyday Life. Berkeley: University of California Press, c1984.

Chenge, Irene and Tschumi, Bernard, eds. The State of Architecture at the Beginning og the 21st Century. Monacelli Press: New York, 2003.

Cohen, Jean-Louis. "The Rational Rebel, or The Urban Agenda of OMA," OMA-Rem Koolhaas . Edited by Jacques Lacan. Princeton Architecture Pres, New York, 1991.

Cooke, Catherine. Russian Avant-Garde: Theories of Art, Architecture and The City, Academy Editions, London, 1995.

Cortés, Juan Antonio. "Delirious and More: 1. The Lessons of the Skyscraper". *El Croquis No:131/132: AMOMA Rem Koolhass 1996-2006: Delirious and More*, Fernando Márquez and Richard Levene, eds. El Croquis Editorial, Madrid 2006, pp 9-31.

Ducatez, Vicent. "El Jardin Del Placer De OMA." *Revista Bitácora Urbano Territorial*, 2005, vol.1, no.009.

Davidson, Cynthia ed. "From Lagos to Logos". Anymore, The MIT Press: Cambridge, Mass. 2000.

De Meyer, Dirk and Versluys, Ghent. The Urban Condition: space, community and self in the contemporary metropolis. 010 Publishers: Rotherdam, 1999.

Denson, Charles. Coney Island: Lost and Found. Ten Speed Press: Berkeley, Toronto, 2002

Eisenman, Peter. Diagram Diaries. Universe Publishing: New York, 1999.

El-Khoury, Rodophe and Robbins, Edward eds. Shaping the City: studies in the history, theory and urban design. Routledge: New York, 2003

Fritz Neumeyer, "OMA's Berlin: The Polemic Island in the City." *Assemblage*, No. 11 (Apr., 1990) p.38.

Goulet, Patrice. "Capitre II: A L'ambre de la Rigueur." *L'Architecture d'aujourd'hui*, No: 238, 1985, p. 72-83.

Gozak, Andrei. Ivan Leonidov: The Complete Works, edited by Cztherine Cooke. Academy Editions, London, 1988.

Jameson, Frederic and Speaks, Michael. “Enveloped and Enclaves: The Space of Post-Civil Society” (An Architectural Discussion*), Assemblage*, No. 17. Apr.,1992, pp30-37.

Kipnis, Jeffrey, Whiteman, John and Burdet, Richard eds. Strategies in Architectural Thinking. The MIT Press: Cambridge, Mass. 1992.

Khan-Magomedov, Selim O. ed. Catherine Cooke. Pioneers of Soviet Architecture: The Search for New Solutions in the 1920’s and 1930’s. Thames and Hudson, London, 1987.

Koolhaas, Rem. Delirious New York: a retroactive manifesto for Manhattan*,* New York: The Monacelli Press, 1994.

Koolhaas, Rem. “ ‘Life in the Metropolis’ or Culture of Congestion’ ”, *Architectural Design* , Vol: 47 No: 5, 1997.

Koolhass, Rem. “Postscript: Introduction for New Research “the Contemporary City””. Theorizing a New Agenda for Architecture: an anthology of architectural theory, 1965-1995, Kate Nesbit, ed. Princeton Architectural Press, New York, 1996.

Koolhaas, Rem. “From Lagos to Logos”. Anymore, Davidson, Cynthia ed. The MIT Press: Cambridge, Mass. 2000.

Koolhaas, Rem and McGetrick, Brendan. Content. Taschen, 2003.

Kopp, Anatole. Constructivist Architecture in the USSR, Academy Editions, London, 1985.

Kwinter, Stanford ed. Rem Koolhaas: Conversations with Students. Princeton Architectural Press, NJ, 1996.

Leach, Neal ed. Rethinking Architecture: a reader in cultural theory. Routledge: London; New York, 1997.

Lucan, Jacques. OMA- Rem Koolhaas, architecture 1970-1990. Princeton Architecture Press, New York, 1991, pp 85-87.

Márquez, Fernando and Levene, Richard eds. *El Croquis No:131/132: AMOMA Rem Koolhass 1996-2006: Delirious and More*,. El Croquis Editorial, Madrid 2006.

Mau, Bruce and Koolhaas, Rem. “Congestion without Matter”, S,M,L,XL: Office for Metropolitan Architecture, Rem Koolhass, and Bruce Mau, Jennifer Sigler, ed. New York: The Monacelli Press, 1998.

Menu, Isabelle and Croisé, Espace eds. Euralille: The Making of a New City Centr: Koolhaas, Nouvel, Portzamparc, Vesconi, Architects. Brikhauser, 1996.

Moneo, José Rafael. Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects, Cambridge, Mass; London: MIT Press, 2004.

Nesbit, Kate ed. Theorizing a New Agenda for Architecture: an anthology of architectural theory, 1965-1995, Princeton Architectural Press, New York, 1996.

Obrist, Hans- Ulrich, et. al, ed. Mutations. Actar: Barcelona, 2001.

Rossi, Aldo. The Architecture of the City. MIT Press: Cambridge, Mass., 1992.

Ryn, Zoë and Cohen-Litant, Jonathan, eds. Coney Island: The Parachute Pavilion Competition. Princeton Architectural Press, NJ, 2007

Schrijver, Lara. "OMA as tribute to OMU: exploring resonance in the work of Koolhaas and Ungers." *The Journal of Architecture,* Volume 13, No. 3.

Sigler, Jennifer ed. S,M,L,XL: Office for Metropolitan Architecture, Rem Koolhass, and Bruce Mau,. New York: The Monacelli Press, 1998.

Somol, Robert E. ed. Autonomy and Ideology: positioning an avant- garde in America. Monacceli Press: New York, 1997.

Tafuri, Manfredo. Architecture and Utopia: design and capitalist development. MIT Press: Cambiridge, Mass. c 1976.

Tschumi, Bernard. Cinegram Folie: Le Parc De La Villette. Princeton Architectural Press: Princeton, NJ. 1987.

Tschumi, Bernard. Event-Cities 2, The MIT Press, Cambridge, Massachusetts, 2000.

Tschumi, Bernard. The Manhattan Transcripts: Theoretical Projects. St. Martin's Press: New York, 1994.

Thomson, Frederic. "The Summer Show", *The Independent*, June 20, 1907, pp 1460-1463.

Whiting, Sarah and Koolhaas, Rem. "Spot Check: A Conversation between Rem Koolhaas and Sarah Whiting", *Assemblage.* No: 40, December 1999, pp 36-55.

Zaera, Alejandro. "Notes for a Topographic Survey." *El Croquis 53*, no. OMA 1986-1991 (March1992) pp. 32-51.

Yazgan, Kerem. Disagnography of Architecture. Unpublished PhD Thesis, Middle East Technical University, Department of Architecture, Ankara, 2003.