

ARCHITECTURAL THEORY AFTER 1968:

Analysis of the Works of Rem Koolhaas and Bernard Tschumi

by
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Analysis of the Works of Rem Koolhaas and Bernard Tschumi

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Louis Martin

Submitted to the Department of Architecture on July 28, 1988
in partial fulfillment of the requirements for the degree of
Master of Science in Architecture Studies.

ABSTRACT

The thesis analyzes on the nature, the role and the aim of theory in the discourse of two contemporary architects: Rem Koolhaas and Bernard Tschumi.

The first part of the study situates the theoretical and institutional context from which emerged Koolhaas and Tschumi during the late sixties and the seventies. It discusses the influence of politics and Structuralism on the development of architectural theory. It also looks at three places out of which theory emerged during that period: London and its "avant-garde" laboratory, the Architectural Association; New York City and the intellectual elite that gravitated around the Institute for Architecture and Urban Studies; Paris as a center of theoretical production from which originates Post-Structuralism.

The second part of the study analyses the theory of Rem Koolhaas' book Delirious New York, and that of the articles of Bernard Tschumi published between 1974 and 1978. It looks at the theoretical projects which were made by both architects in parallel to their writings. It explains the way in which Koolhaas' manifesto is an attempt to counter Manfredo Tafuri's politicization of architectural history, and it examines how Tschumi used texts by Roland Barthes to build his theory of architectural space.

The third part of the thesis focuses on the critical discourse elaborated by Koolhaas for a series of competitions and exhibitions made after 1978. Tschumi's theoretical activity in the context of art is also discussed in the light of its principles and intentions.

The fourth section of the research compares two projects, one by Koolhaas and one by Tschumi, which were the two winning entries of the 1983 International Competition for the Parc de La Villette in Paris. It reviews the critical commentaries

which followed the selection of Tschumi's project, and finally analyses the concept of Post-Humanism in architecture and its historical implications.

In conclusion, the nature, role and aim of theory is analyzed with a discussion on the structure of architectural manifestoes, the definition of architectural avant-garde and the meaning of institution in contemporary architecture.

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"In girum imus nocte et consumimur igni"

INTRODUCTION

The guiding vector of this research is an interest in the theory of architecture. It could have begun with statements such as: "today, theory is a necessary component of the work of architecture" or "theoretical awareness is characteristic of new practice in architecture". However, these statements would have hidden an intention. In effect, their unavowed goal is the valorization of theory in architecture with their insinuation that theoretical thought is now necessarily a guarantor of quality and novelty in architectural production. These statements are also obviously an inaccurate generalization pretending that theory is a common concern among the architects today. In fact, they reflect the "engagement" of the utterer in the promotion of a certain kind of practice. In effect, apparently neutral, these words are real manifestoes containing particular historical stances regarding present-day architectural practice, and by their exclusion, they implicitly criticize other approaches. They finally illustrate the inevitability of interaction between historical, theoretical and critical forms of speech.

This research could have begun with such statements, but it does not, because their prescriptive nature would contradict its basic goal which is **the analysis of the nature, role and aim of theory in the discourse of contemporary architects**. It is obviously a difficult task, which first calls for a background in the problems of the historical study of recent architecture.

* * *

Theory in Architecture

A study which aims at discussing the nature, the role and the goals of theory in the discourse of contemporary architects must first identify the places of emergence and propagation of this theory. The next paragraphs are discussing three things: firstly, that theory is not the

discourse of buildings but a discourse on them; secondly, that theory is produced by a specialized community; and thirdly that the development of architectural theory in the last two decades is directly related to the development of the architectural press.

Common sense would look for theory in buildings themselves. In effect, it appears only natural to begin talking about architecture with buildings as the prime object of study. However, although buildings are the ultimate goal of architectural practice, their theoretical importance seldom emerges from construction alone. Architectural theory is a process that takes place before and during the design period but it is very often completed after the conception and the construction of a building. A building is first the result and the concretization of an architect's theory of design and production - "the doctrine" according to J.-P. Epron¹. The doctrine is concerned with the elaboration of principles justifying the built forms. The architect's theory is not only a verbal and literary discourse, it is also visual because it is present as well in the architectural drawings and models which are a specialized mode of reflection on architecture. However, the formation of architectural theory does not stop with the end of a building's construction. Another kind of discourse follows that tries to evaluate the results obtained with the doctrine: it is the moment of the critical reception. As a result, the discourse sustaining the conception of a building and the critical reception of this discourse are always engaged in a debate over the legitimacy of the architect's doctrinal position and the resulting built forms. Often labelled ideological, this debate between different doctrinal standpoints occurs in the "public spaces" of periodicals and competitions, or in the more restricted milieu of academic design studios.

An analysis of these debates necessitates the development of intellectual and methodological tools that adequately describe

the different attitudes and for the understanding of their, more often than not, hidden interests. In effect, theoretical models of interpretation are the essential means to grasp complex and heterogeneous phenomena. For example, the dominant model for the analysis of the theoretical debate of the seventies is built around the opposition between Modern and Post-Modern tendencies. Contemporary architecture is thus always evaluated through the lenses of a theoretical model of interpretation. Criticism of these models is in itself an integral part of the debate on architecture and is generally performed by specialists (historians, critics, theoreticians).

Criticism in architecture has thus two objects to evaluate: the architectural projects, and the theoretical models of interpretation. One can thus distinguish two different kinds of theoretical discourse in architecture: one aims at the elaboration of a theory of design and production that is by nature prescriptive; the other tries to develop an objective explanatory theory that is descriptive. The field of architecture sits between two poles, production and history, and its theory is constructed by two kinds of actors, the architects themselves and their critics (architects, theoreticians, journalists, historians).

Although the architectural production is always the ultimate object of debate, the buildings themselves are not the central forum of theoretical polemic. During the last two decades - characterized by economic instability, by a phenomenal development of the architectural press, and by a "conceptual" bend in architecture - books, periodicals, catalogues of exhibitions have been the most permanent trace of the contemporary state of architectural theory. Rather than the buildings themselves, the production of documents describing a building, a project, an idea, or an event (competition, exhibition) became the center of contemporary architectural theory and the essential means for the formulation of a theoretical position.

* * *

Methodology

This study is concerned with problems of description and interpretation of the discourse of contemporary architects. This raises methodological issues and some reflection is necessary on how one addresses such an immense and heterogeneous body of material. One must first consider the nature of the available sources and then one must define a framework in which they become meaningful.

a. Sources

The sources necessary to discuss the theory of contemporary architecture are found mainly in periodicals. Texts, drawings, reports on competitions, interviews, critical essays are depicting the public face of architectural theory. The material can be separated into two broad categories: the texts and the illustrations.

The present study concentrates mainly on the textual part of the theory of architecture, but it also tries to understand its effects on the design process and production. Special attention is given to the identification of the primary sources of the discourse and to how references are treated, interpreted and transformed. Any textual analysis is also concerned with the classic confrontation between content and form. Lastly, as any piece of writing, architectural theory makes use of literary devices, and consequently attention is given to the rhetorical mechanism of the text when appropriate.

The second category of documents - the illustrations - encompasses mainly drawings and photographs of projects and buildings. Art History has developed its own tradition of interpretation by means such as comparison, affiliation, iconology, etc. The difficulty of interpreting an image remains and semiological studies of the sixties, like Barthes' and Eco's, exemplify the complexity and the suggestive nature

of visual communication.² The interpretations developed in the present study are based, for the most part, on the theoretical writings to which they are juxtaposed and the comments already published about them.³

b. Case Studies

Case studies are often the most economical means to identify fragments helping to construct a theoretical model of interpretation. Because the analysis of the theoretical elements contained in contemporary discourse cannot cover the totality of it, the choice of a contained yet rich example is crucial. The example should define a period and also possess all the characteristics of that period's theoretical discourse. These criteria often lead historians of architecture to select an individual to play the role of the central actor of their studies. However, in this particular case, the inherent dangers of the biographical genre do not allow an individual's work to suffice as an example. The text risks becoming a eulogy. In effect, how can a historian consider his/her subject a minor protagonist? Comparison is a common and simple method to circumvent the problems inherent to the biographical genre.

* * *

Koolhaas and Tschumi

This research compares the works of Rem Koolhaas and Bernard Tschumi. The choice of these two architects is justified by the criteria established above. Concentrating on theory, their works raise many questions and are representative of the period during which they were conceived.

Rem Koolhaas and Bernard Tschumi never worked together but they have had a rather similar careers. Both of European origin and of the generation of '68, they were Unit Masters at the Architectural Association Diploma School during the seventies. In the mid-seventies, Koolhaas stayed six years in the U.S.A. (one in Ithaca and five in New York City) while

Tschumi settled in N.Y.C. in 1975. Both kept teaching at the A.A. until 1980. During these years, they published a theoretical and critical production composed of writings and projects. In the early eighties, they stopped teaching and concentrated on international competitions. In 1983, among more than 450 entries, Tschumi and Koolhaas shared the first prize of the Parisian International Competition for the Parc de la Villette. Tschumi's project was finally chosen to be built.

Remarkable enough, although both were already known in the architectural press at the time, neither of them had built a single building. Not only were their projects for La Villette judged superior to those of established firms, they also overcame the proposals of landscape architects, the so-called experts in park design. Arriving in the professional world of construction after more than ten years of theoretical research, do Tschumi and Koolhaas represent a new breed of architect? Certainly not, history of architecture provides many examples of architects who were mainly theoreticians. Will future architects need to be theoreticians? Probably not, but the recent nomination of Bernard Tschumi as Dean of the School of Architecture of Columbia University in New York indicates that this tendency might have a strong effect on the development of architecture during the near future.

In the debate between Modern and Post-Modern tendencies, both Koolhaas and Tschumi are seen by critics as major protagonists in the Modernist camp. Despite these and other striking similarities, however, notable differences also separate them. The works of Bernard Tschumi and Rem Koolhaas do not easily surrender to categorization. Modern or Post-Modern, Avant-garde or Neo-avant-garde, these categories have to be redefined to describe their theories.

* * *

Periodization

The study of the work of Koolhaas and Tschumi highlights two

dates, 1968 and 1983. On the one hand, the year 1968 is a symbolic landmark of intellectual, political and architectural history. Both Koolhaas and Tschumi were in Paris during the student riots of May '68 and these events stimulated their political awareness. They became publicly active in architecture at the beginning of the seventies and they developed their position during that decade. The competition for the Parc de la Villette in 1983 marks perhaps the triumph of the theoretical approach to architecture in the early eighties. However, it indicates also the end of the purely theoretical period of both protagonists and the occasion to compare the results of their respective theories.

This study is divided in four parts. The first analyses the state of the debate in architecture around 1968, in order to establish the context from which Koolhaas and Tschumi emerged. It also looks at the intellectual environments where they elaborated their theoretical work during the seventies. The second part analyses the theoretical foundations of Koolhaas' and Tschumi's positions, enunciated in their first manifestoes. The third part looks at the projects Koolhaas submitted to competitions after 1978 and at Tschumi's works shown in the context of contemporary art between 1978 and 1981. The fourth part compares Koolhaas' and Tschumi's entries to the La Villette competition and analyses some critical reactions to their propositions. The conclusion is a reflection on the initial question of this study. The nature, role and goals of theory in the discourse of contemporary architects is discussed in the light of the elements found in the case study.

Notes to Introduction

1. Epron, J.-P. L'architecture et la règle, Bruxelles, 1981.

2. Barthes, R. "Rhétorique de l'image" in Communications 1, Paris, 1961; and Eco, U. La structure absente, Paris, 1972.

3. If one accepts J.P. Bonta's theory, the interpretations developed in the present study are pre-canonical and are thus subject to re-evaluation by critics. In his study, Bonta has demonstrated how interpretation in architecture is the result of the activity of a specialized community. According to Bonta, interpretation changes through time, from early speculations to canonical interpretation to late speculations, in a movement having nine different phases. Bonta's model will not be discussed here although it generates difficult questions. More relevant for this discussion is the fact that with one example Bonta is able to demonstrate that interpretation is never static and that, most often, it refers more to the contemporary context of the utterer than to the object itself.

See: Bonta, J.P. An Anatomy of Architectural Interpretation, Barcelona, 1975.



Fig. A - Rem Koolhaas and Bernard Tschumi at the opening of O.M.A.'s Exhibition at the Institute of Architecture and Urban Studies in New York. (12 March 1982)

Part 1 - Institution and Theory

The historical study of the development of knowledge shows that every field of human activity evolves according to an internal dynamic and is also influenced by external forces. Like a polarized force field, each discipline is emitting its own discoveries and at the same time receives, with disciplinary discrimination, exterior elements useful for its further advancement.¹

Architecture is no different. The works of Koolhaas and Tschumi are inscribed in the historical conjuncture of the 1970's and 1980's, a context which evolved from the effervescence of the 1960's. Henceforth, it is first necessary to provide to the reader a sketchy picture of the internal debate of architecture and of its major external influence (Structuralism) during the sixties and early seventies before introducing the institutional context in which Koolhaas and Tschumi developed their production. The following portrait is not pretending to discuss every trend which occurred in architecture during these years; it concentrates on the movements which are relevant to the object of our study.

*
* * *

A. The Sixties: Politics and Structuralism

1) Architecture and Politics

The decade of the 1960's was a period of crisis in many academic fields. Architecture, for one, was subject to re-evaluation. After the second World War, the principles of Modern Architecture were assimilated by the profession and became the dominant approach to design. During the fifties, the International Style emerged as the main trend of American corporate architecture and Post-War European reconstruction was considered a technical success. However, already in the early sixties, the effective achievements of Modern Architecture were violently criticized. The iconoclastic approach of Modern Architecture in existing the urban context

was seen as a menace for culture. Also, the modernist ideology of progress was seen as an essential reason for the decline of architecture. Architects' theoretical social role was obliterated by their alliance with capitalist developers. By the end of the sixties, the whole project of Modern Architecture was put into question. For some, the architects had forgotten the original aims of the avant-gardes while for others, the entire project of Modern Architecture had to be discarded. The most powerful symbol of the crisis in architecture was perhaps the closure, in 1968, of its most ancient institution, the French Ecole Nationale Supérieure des Beaux-Arts.²

The crisis, definitely acute in France, was also felt in the Schools of Architecture of many other western countries.

The academic milieu felt particularly concerned with its traditional submission to various forms of power (religious, political, economic). The young generation of architects and the students of architecture, who had the impression of being betrayed by their teachers, felt a collective guilt for the lack of political involvement of both professionals and academicians. Architecture lived a crisis of identity which shook the discipline altogether. The end of the hegemony of the concept of modernity in architecture was marked by the emergence of many tendencies which manifested themselves as many different approaches or ideologies. For many, the problem of architecture was a political one, for others, it was theoretical and internal to the field.

The more politicized groups were broadly divided into three factions: the Avant-gardes, the Populists³ and the Revolutionaries⁴. None of these factions were truly homogeneous.

The Avant-gardes were heir of the great modern tradition of architecture. The different avant-gardist tendencies were united by their common vision of architecture as a practice historically determined by the development of technology. Their ideology of progress was justified either in art

historical or in Marxist terms. Following the call of Reyner Banham's Theory and Design in the First Machine Age⁵, some tried to elevate modern technology to the state of architectural icon (Archigram). Others of Surrealist sensibility evaded in the realm of utopia and ironically designed cities of a desperate future (Superstudio). The political discourse of the cultural Avant-Garde was thus a blend of technological euphoria and cynical nihilism. Their work was propagated mainly by publications, exhibitions and through a network of academic alliances.

Following the position opened in the fifties by Team X and Aldo van Eyck, the Populists were looking for softer ways of integrating architecture into society and environment. Not an homogeneous movement as such, "Populism" is used here as an umbrella word for the various approaches characterized by a discourse placing the human being at the center of the design process. User's needs, human scale, participation, popular culture, ecology are all themes which were developed by the Populists during the sixties and the seventies. The Populists rejected traditional monumentality and composition. They looked, through an anthropological conception of the human being, for "organic" and vernacular architectural models. Architecture without architects was for many the adequate solution in order to not impose the elitist architectural tradition upon popular culture. The architect's role was thus seen as the one of a social worker providing his expertise to autonomous popular groups. Others wanted to develop an architecture integrating soft technology for an ecological society. The Populist theory was concerned with pragmatic issues like flexible design and self-construction and, in certain circles, it was overtly anti-intellectual. The works of Venturi and Scott Brown, especially those following the publication of their book Learning From Las Vegas⁶, can be assimilated to the Populist trend. Overtly celebrating popular culture and its architecture, Venturi and Scott Brown

should nevertheless be distinguished from the other brands of Populism mainly because of the irony of their design works that is fundamentally less morally engaging than the discourses of other Populist architects.

The Revolutionaries were those who lost faith in architecture as a tool for changing the socio-economical conditions of society. Stimulated by the May '68 events, their goal was to catalyze the state of crisis with isolated rhetorical actions aiming at denouncing in the medias the contradictions of governmental policies which were, at the same time, building social housing projects and encouraging capitalist speculation in urban environments.⁷

* * *

2) Structuralism and Architecture

Many architects concentrated their action in criticism and theoretical research. They tried to find help in other fields like epistemology, linguistics, anthropology or philosophy. Although all theoreticians were not working with the same methodological tools, the mainstream of thought in the sixties was deeply influenced by the advance of Structuralism in the Human Sciences, advance which was especially important in fields concerned with language.

a. Structuralism and Nouvelle Critique

Structuralist studies in Human Sciences were for the most part deriving from the linguistic theories of Ferdinand de Saussure.⁸ During the sixties, studies on language were used to provide a system for the analysis of every field of human activity. Saussure initiated a series of binary oppositions (langue/parole, sygnifier/signified, paradigm/syntagm, etc.) for the study of the structure of language. During the fifties and the sixties, Roland Barthes instrumentalized Saussure's theory in the analysis of literature, music and cinema. A posteriori, like Lévi-Strauss in Anthropology, Barthes can be considered as one of the major agents of the

diffusion of the Structuralism through his semiological works.⁹

It is now possible to see that the theoretical position of Barthes shifted constantly from the early sixties to the late seventies, moving from a Structuralist to a Post-Structuralist point of view. In his early studies, Barthes was a high Structuralist believing that the aim of criticism was not to establish the true meaning of a text because there was no such thing as a true meaning. The goal of a critical reading was instead to show "the rules and constraints of that meaning elaboration", a process that the structural method could unveil.¹⁰ Barthes considered the text as an object whose meaning was much larger than its author's message. For Barthes, texts were hiding a deep structure needing the knowledge developed in other disciplines to be discovered.

In the mid-sixties, a public debate opposed Barthes to the more conservative academicians. This debate between the **nouvelle** and **ancienne critiques**, lasted for some years. The nature of the argument was methodological and moral. Barthes wrote then a major essay entitled Critique et vérité (1966)¹¹. In this text, he argued that criticism should not only be the reproduction of the text's message and the appraisal of its literary qualities, like the "ancienne critique" considered its task to be, but a real production providing additional meaning to the work. The critic's text was not only a commentary, it was also a piece of literature having the same status than the studied work. Meaning was the product of the reader, a conception implying the death of the author. As Barthes put it: "the birth of the reader must be at the cost of the death of the Author".¹²

Barthes' detractors complained about the pretention of the essayist to invade the domain of canonical disciplines with his blend of scientificity and iconoclastic avant-garde liberty.¹³ For them, he was attempting to mix scientific advances with philosophical prestige. Doing so, he was

gaining support from students and the most intellectual readers, two publics informed by a journalist press of intellectual pretention, composed of the most intellectual of the journalists and the most journalistic of the intellectuals. That phenomenon was theorized by Pierre Bourdieu under the label of "aggiornamento".

b. Architecture and Nouvelle Critique

Manfredo Tafuri was seemingly the first critic to import Barthes' argument into architecture in his 1968's book Teorie e Storia dell'Architettura.¹⁴ Tafuri's position was nevertheless ambiguous on Barthes' critical project.

In pointing at the structure of the text, Barthes was putting into question every field in which knowledge was produced with language. Against canonical interpretation, he was favoring a rigorous study of the texts' structure and a critical commentary which was not aiming at providing value to the studied work in order to elevate it to the status of high literature. For Barthes, the critic was establishing a dialogical relationship with the author and was thus producing a "construction of the intelligibility of our time".

The context in which Tafuri was working was completely different. Tafuri was reacting against operative criticism which was the meeting place of between history and the project. Operative criticism, in projecting the future of the past, was pragmatically reproducing established values. Moreover, according to Tafuri, even the avant-gardes were justifying their position on a vision of the past reducing history to popular myths. Tafuri argued that it was the task of the critic to demystify these procedures. Tafuri insisted on the necessity of making a distinction between criticism as historical demystification and the political projectual activity. Therefore, Tafuri argued with Barthes against the ideology of the traditional critique, which in architecture had also the task of legitimizing contemporary works, but not

for the same reasons. While Barthes wanted a greater freedom for the critique, Tafuri wanted a greater autonomy for history and criticism against the abuses of the architects.¹⁵

c. Architecture and Semiology

In 1967, Roland Barthes tackled the problem of the meaning of the city in a lecture given in Naples that was published in 1970 in an issue of L'architecture d'aujourd'hui dedicated to urban semiological studies.¹⁶ Barthes considered his study as the one of an amateur. He quoted Victor Hugo who had the intuition that the city was a kind of writing. For Barthes, the problem of semiology was that it could only talk about the language of the city as a metaphor. For him, to achieve a true "scientific jump", urban semiology had to give to the metaphor with language a "real meaning" in emptying it of its metaphorical content - like Freud did when he first talked about the language of dreams. In the end, the real problem of urban semiology was that the urban signified was never definitive. As in Lacan's psychoanalysis, urban semiology was caught in an infinite chain of metaphors in which the signified is always a signifier in another group of signs and vice versa. For Barthes, that chain of metaphors was a hidden dimension of the city, its erotic dimension. The erotic dimension of the city was not functional but semantic and hence social. According to Barthes, it was impossible to understand that dimension with social inquiries and polls. The multiplicity of readings was the result of the subjectivity of each reader. For him, historically, only writers have been able to give access to that erotic urban dimension.

Barthes had certainly helped to popularize urban semiology, but most researches were done by specialists in architecture. Most critical work using semiological tools attempted to find the deep structure of architectural communication but the analogy between architecture and language resisted theory.

What is architecture signifying? How does architecture signify? What is the deep structure of the city? These were the main questions emerging from the new conception of architecture as a language.

Two main approaches emerged as dominant models. Opposite views on the nature of the architectural message polarized those who believed that architecture was able to transmit meaning exterior to itself to those for whom architecture was an auto-referential language.

The first conception was apparently more popular in the Anglo-American culture with the works of Venturi and Jencks who were basically opposing the modern aesthetic of corporate architecture. The original problem of meaning led, in the seventies, to a battle of styles between Moderns and Post-Moderns. With a carefully orchestrated polemic, the Post-Modern protagonists were able to incorporate under their banner all movements not promoting a modernist aesthetic. They attacked Modernism on the basis of the sterility of its architecture. Their argument stipulated that the suppression of classical and popular elements of architecture had diminished the significance of architecture. Concentrating on stylistic issues, the Modern versus Post-Modern debate in architecture was propagandistically amplified by the medias. It unfortunately did not provide a model to understand the idiosyncrasy of architectural theory.

The second group came to be known as the Neo-Rationalists. Their political implication was defined negatively with their intention to retrieve architecture from political interests in arguing for architecture's disciplinary autonomy. This movement developed the typological and morphological methods of analysis of the city. These methods, which were essentially formal, originated in Venice (Muratori, Rossi, Aymonino). They were Structuralist in spirit. In France, the work was received favorably and was developed into the structuralist framework of Semiology and Linguistics (Choay,

Panerai). Various brands of typological and morphological studies sprang, some having historical aims (Boudon), others looking for projectual tools (Castex). Another direction integrated both a phenomenological approach proclaiming that architecture should respond to a metaphysical **Genius Loci**, and structuralist studies considering architecture as a language possessing its own symbolic code (Norberg-Schultz). In the U.S.A., Peter Eisenman, in a solitary research, experimented with Chomsky's linguistic theory and formal models emulating the work of Terragni, the Italian modern architect of the thirties.

Contrary to art criticism, semiological studies in architecture gradually lost their initial dynamics and solidified in the discourse of the architects-critics. The journalistic press favored the traditional notion of style which seemed to fit well with the explosion of heterogeneous trends. The stylistic duality between Modernity and Post-Modernity was accepted as the dominant model of interpretation. It is thus not surprising to see Bernard Tschumi arguing in 1980 against the survival of traditional critique in architecture which, in his views, is interested only in biographical anecdotes and stylistic formalism.¹⁷

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B. The Seventies: Institution and Avant-Garde

1) London

At the end of the sixties, Tschumi and Koolhaas were two young men in their late twenties. Both were in Paris during the student riots, an event that stimulated their political awareness (fig. 1). Both were initiated to typological studies during their education, Tschumi at the ETH, Zurich's Polytechnical School (1963-67, 69), and Koolhaas in London at the Architectural Association (1968-1972).¹⁸

a. The Architectural Association

The sixties were a decade during which English culture radiated throughout the world. In architecture, the A.A.

played an important role in receiving the most dynamic elements of the British avant-garde. The most energetic person of that epoch was certainly Peter Cook who was the Fifth Year Master, a position that enabled him to design the program of the last year of the A.A. five year degree. Henceforth, his theories were inevitably acquired by the graduating students. Cook was also editor of the magazine Archigram which published for many years the theoretical projects of the group bearing the same name¹⁹. He published his own theoretical projects, like the Plug-in City in which megastructures were serving as technical support to individual prefabricated cells. In his book of 1967, Action and Plan²⁰, he exposed his theory. Abundantly illustrated with avant-garde and vernacular buildings and projects, Cook read the recent history of architecture as a movement guided by the development of technology. It ends with the prediction that future architecture would be in great part the result of individuals who would assemble prefabricated elements to design their personal environment. His international renown gave to the A.A. the reputation of an avant-garde bastion.

Apparently, Koolhaas did not choose to study at the A.A. for the prestige of that institution. He invoked pragmatically that he came to London to learn English and because the length of the course was shorter than those of Dutch Universities. He recalled the problems he had to integrate in the School. He had to confront Peter Cook and his students. Koolhaas' will was to learn architecture and to draw projects and as he put it, to glue ping pong balls together was not the idea he had of architecture.²¹ Labelled by Peter Cook, the boring fascist, Koolhaas was even advised to quit the A.A. for another school. He nevertheless stayed and profited from the extreme lack of structure of the A.A. educational program.

Rem Koolhaas travelled extensively during his studies (1968-1973). He went several times to Berlin and Moscow. In Berlin, he discovered O.M. Ungers and his seminars on modern

urban types. In Moscow, he made researches on the work of the Russian Constructivist architect Ivan Leonidov with his friend Gerritt Oorthuys. He also became interested, again through Oorthuys, with the work of the Italian Radicalist architects of Superstudio. He even organized a series of lectures with Adolfo Natalini, the designer of the "Continuous Monument" (1969), a projected piece of architecture which would have run across the globe (fig. 4).

In 1970, the students were asked to select a piece of architecture and to demonstrate how it was transmitting meaning. Koolhaas proposed a polemical reading of the Berlin Wall as a piece of significant architecture. He wanted to demonstrate how the aesthetical and material quality of an architectural object were secondary in the production of architectural meaning. According to Koolhaas, his presentation, made in front of P. Cook, C. Jencks and A. Boyarsky, enabled him to gain the respect of his audience.

b. "Do-it-yourself-city" Project (1969)

In 1969, Bernard Tschumi published a project, made in collaboration with Fernando Montès, in the French periodical L'architecture d'aujourd'hui. It was entitled "Do-it-yourself-city" project²². The project was based on the statement that urban life success depends of the relationships established between peoples, ideas and objects. To improve the actual situation, the architects proposed to insert in the built environment a series of electronic devices accelerating the interactions. An illustrated scenario describes the mediated life in a hypothetical city where the activities and interactions of the citizens were largely governed by an omnipresent technology. Terminals were found everywhere in the city (at the corner of the streets, in supermarkets, at home, etc.) giving the possibility for anyone, to learn, to create or to contact any point of the network at any moment of his/her daily routine. The project was entirely programmatic;

space and form were never an issue. Communication technology could provide a new and uncontrolled public space, new modes of interaction provoking new kinds of human relationship.

The project was prophetic if one considers the current development of interactive communication systems such as Minitel in France. However, in relying exclusively on the development of science, it remained non pragmatic in terms of its realization. Although "Do-it-yourself city project" was not referring to any precedent, it was reminiscent of the technical euphoria that characterized the 1960's avant-garde architectural theory. It could be interpreted as the programmatic analogue of Archigram's work, in which the all-solving possibilities of technology were elevated to the status of architectural icons.

After that project, Tschumi stopped designing for seven years and concentrated on theory. Feeling that the architectural scene was at the A.A., he moved to London where he started to teach there and to write, in the architectural press, book reviews and critical essays.

c. A.A.'s Financial Problems (1970)

A private school, founded in 1843, the A.A. was caught during the sixties into the British reform of higher education. The dilemma of the A.A. Council was to either enter the British system and become an ordinary school or to survive marginally on its own financial resources. In December 1970, having no financial future, the A.A. Council decided to close down the school. Nevertheless, the school did not cease immediately its activities. An agreement between the A.A. and the British government enabled the school to keep the students - among them was Koolhaas - already subsidized until the end of their degree. The A.A. was not accepting any new students. The school had thus a two or three years running down period.

It is in this demoralizing situation that Alvin Boyarsky was

appointed chairman of the school and that he encouraged important changes into the educational program of the A.A.²³ The A.A. used to elect Year Masters in charge of the program of each level. Boyarsky and the A.A. teaching staff decided to abolish the old yearly program system and established another mode of functioning. In the new Unit system, each professor was in charge of a group of students who were not necessarily belonging to the same class. The Unit Master, who had no tenure, had to define his own position and to attract students in order to keep his position. The new structure encouraged competition and emulation. Boyarsky's strategy was to force a constant confrontation in order to stimulate the sharpest possible theoretical discourses. In parallel to the studio work, the school organized lectures and exhibitions. All the activities were financed by the tuition paid by the students. The school attracted a wealthy clientele from all over the world and raised to more than 80% the ratio of its international students. The A.A. became in the seventies an international laboratory for the most contradictory researches and an important stage for the international architectural scene. Its international reputation increased with the publication of A.A. professors works mainly in Architectural Design and also with the gradual development of A.A.'s own publications.

d. Tschumi and Urban Politics (1970-75)

Tschumi started teaching seminars on Urban Politics at the A.A. in 1970. He also wrote a series of articles published during the first part of the seventies, relating the state of his research which was, in reality, a reflection on the revolutionary capacities of architecture. The point of departure of his reflection was the political activity of the French students of architecture during and after May '68.²⁴ He was seemingly fascinated by the potential of rhetorical actions as theorized by Guy Debord and the articles of the

Internationale Situationiste.²⁵ He reviewed a series of books on sociological and political urban theories of Structuralist and Marxist methodology. He also criticized the capitalist urban speculation because it segregated urban environment into "sanctuaries" of homogeneous population separated according to common socio-economical characteristics, racial discrimination or age criteria.²⁶ His involvement into political studies ended with the publication of "The Environmental Trigger" (1975) in which Tschumi wrote that there were only three possible ways of using environmental knowledge as a means of resistance: rhetorical actions, counterdesign and subversive analysis.²⁷

In Tschumi's theory, the tools of the revolutionary architect are rhetorical actions, counterdesign and subversive analysis. Rhetorical actions are the catalyst of the environmental crisis: it is propaganda. Counterdesigns are ideological explanations that demystify and discredit the established order; they are cultural and political statements, architectural daydreams; they are in their own terms nihilistic. They show that if a new architectural language is not revolutionary, the destruction of an old one is. Subversive analyses use environmental knowledge in order to accelerate radical change through demystification. The common thread of these means "may be characterized by a refusal to come to any alliance, however temporary, with existing institutional forces".

But, in the end, the article is a disillusion about the capacities of architecture to change the socio-economical structure of society. It concludes with an unexpected plea for an undefined autonomy. Tschumi's research was keeping alive the hopes of the "soixante-huitards" and was following the French debate from London. But the discourse of the Revolutionary architects was losing its vigor and its attractive power. Urban uprisings were certainly a mean of resistance but were they the project of architecture?

In 1973, Tschumi was appointed Unit Master of the A.A. Diploma School Unit 2 which he named the Urban Politics Unit. The system of emulation promoted by Boyarsky created an atmosphere of complicity and competition among the teachers

who were playing the Prima Donna game. In a climate of general cynicism, Tschumi reacted well to the situation in which each Master had to define his position in order to attract students. It was a time when a 1973 project could be dismissed for looking like a 1972 one.²⁸ The school was forcing everyone to produce original ideas. Tschumi, in directing a design studio, had to find a solution to the dead end of his political criticism. At the beginning of his second year as Unit Master, Tschumi decided to "deliberately concentrate on the oldest constant of all, space", "rather than analyzing the variables of architectural activities".²⁹ It took him three years to find his own way and to finally expose publicly his new position in the exhibition "A Space: A Thousand Words" presented at the Royal College of Art in London during Spring 1975.

e. Koolhaas and Zenghelis

Koolhaas' first published project was designed in 1972 with the collaboration of his teacher Elia Zenghelis. It was their submission to a competition entitled "The City as a Significant Environment" organized by Casabella.³⁰ Their project entitled "Exodus or the Voluntary Prisoners of Architecture" (fig. 2) was a blend of the formal models developed by Leonidov in the thirties (fig. 3) and of the Surrealist monumentality of Superstudio's "Continuous Monument" (fig. 4).³¹ The program, based on the assumption that London was an underdeveloped metropolis, was a sinister scenario in which architecture was not playing a passive role in the life and death of the imaginary prisoners. A large strip of London was transformed into an enclave of metropolitan life. The strip was composed of nine squares containing specific activities programmed for the pleasure and the pain of its inhabitants. Surrounded by high walls, the enclave was accessible only from one door. Once one was deciding to penetrate the strip, one was conscious that one

would be kept in captivity in the artificial metropolitan universe. The project was ambiguous for it was a manifesto in favor of metropolitan life but it was presented with an ironic, if not nihilist, scenario. Koolhaas and Zenghelis obviously wanted to shock and scandalize with their suggestion that the attraction of the metropolis was greater than any will for freedom. In 1986, Koolhaas declared that he was ashamed of that project although he felt that it contained good ideas.^{3 2}

f. Insistence on the Program

If one compares the first projects of Koolhaas and Tschumi, one notices that both stressed the importance of the programmatic content of architecture.

Koolhaas conceived a kind of "minimalist" architecture which was formally referring to Constructivism and to the contemporary Avant-garde counterdesigns of Superstudio. He transformed the programme, which was traditionally a set of requirements, into a surrealist narrative whose excesses were meant not only to shock the conventional conception of the programme but also to defamiliarize the audience's reading of architecture.

With the "Do-it-yourself-city" project, Tschumi conceived a scenario. Completely programmatic and dematerialized, his project was insisting on the human interactions in the city. Tending to realize a situation of maximal uncontrolled human interrelations, the project was also attempting to augment the revolutionary potential of urban life. Largely influenced by the movements of opposition that followed May '68 in France, Tschumi stopped his counterdesign activity to concentrate on the study of the revolutionary potential of architecture.

g. Tschumi and the Art Scene (1975)

It is in Spring 1975, with the exhibition "A Space: A Thousand Words" presented at the Royal College of Art in

London, that Bernard Tschumi made public the new direction of his research.³³ Tschumi was the co-organizer of the exhibition with Roselee Goldberg of the R.C.A. He invited during August 1974 many artists and architects to submit a project revealing "a change of attitude towards the theories and the language of space". Twenty-eight contributors answered. All were already known to Tschumi. There were two of his students (N. Coates and J. Lowe), there were four French architects of Tschumi's generation (Grumbach, Portzamparc, Montès, Castro) and one French artist (Buren), there were six Italian - among whom Pesce and La Pietra - and many English artists and architects like A.A.'s P. Wilson and E. Zenghelis.

Tschumi's contribution was enigmatic with its plea for a gratuitous and pleasurable architecture to be consumed in vain just like fireworks. Real pleasure was recognized by its uselessness. Pleasure was more important than meaning. Like erotic pleasure, architectural pleasure was a delight producing nothing. The pleasure of drawing architecture was the ultimate diversion of energy.

The exhibition was also presented in New York at the Institute for Architecture and Urban Studies during Fall 1975. It was followed by a series of four articles whose analysis may throw light on the nature of the enigma.³⁴ These articles and the content of Tschumi's theoretical research are analyzed in Part 2 of this study.

h. Unit Masters (1977-80)

Koolhaas left the A.A. in 1972 and continued his studies in the U.S.A. Three years later, in 1975, Tschumi also left and moved to Manhattan. Nevertheless, both kept ties with the A.A. and were appointed Unit Masters in 1977. Koolhaas worked with his associate Elia Zenghelis in Diploma Unit No 9 where he taught Zaha Hadid. Hadid later worked with them on a competition in 1978 before starting her own practice. Tschumi

was directing, with his former student Nigel Coates, Diploma Unit No 10. Both Koolhaas and Tschumi kept their position until 1980, year when they both decided to concentrate on their design activities. Units 9 and 10 have been since respectively directed by Hadid and Coates.

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2) U.S.A.

a. Koolhaas in the U.S.A.

For his fifth and final year at the A.A. (1973-74), Rem Koolhaas received the prestigious Harkness scholarship. Koolhaas moved to Cornell University in Ithaca N.Y. to work with O.M. Ungers who was then director of the School of Architecture. Between 1973 and 1978, Koolhaas seemingly collaborated to many projects submitted by Ungers to architectural competitions. At Cornell, he met also Colin Rowe who was in conflict with Ungers for obscure reasons. Koolhaas was thus avoiding the normally inevitable confrontation, for all A.A. graduating students, with Peter Cook.

Already in Ithaca, Koolhaas had the intention to write a book on the architecture of Manhattan. He started collecting old postcards with his wife the painter Madelon Vriesendorp and following the advise of Kenneth Frampton, he moved to N.Y.C. the next year to work at the Institute for Architecture and Urban Studies (I.A.U.S.).

b. Manhattan and I.A.U.S.

The I.A.U.S. was the intellectual center of American architecture. It had been founded in 1967 by a group of young and well educated American architects after their Urban Renewal propositions for New York City were exhibited at the Museum of Modern Art.^{3 5} The Institute was an autonomous institution encouraging an intellectual approach to problems of architectural and urban design. It favored group and individual research in design theory and in history. In 1968,

Peter Eisenman was appointed director. In 1971, among the five fellows of the Institute, three were American (Ambasz, Anderson, Ellis) and two were British (Frampton, Rykwert). They shared a high level education in leading American Universities (Columbia, Cornell, Princeton) or British institutions (Architectural Association, Cambridge University). Its director having been educated in England, the Institute was a natural harbor for British intellectuals in America. The Institute had already an international reputation in the early seventies as demonstrates a special issue of Casabella in 1971.³⁶ However, its influence increased considerably with the creation of the magazine Oppositions in 1974.³⁷ Oppositions presented the work of the people invited at the Institute. It was not only a platform for a new generation of architects but also an international forum where were exposed the most important tendencies developed by the international intellectual elite of architecture. Oppositions was the meeting place of historians, theoreticians and critics as well.

The Institute also organized exhibitions and subsidized catalogues and publications. Although lectures were organized on a regular basis at the Institute, the I.A.U.S. was not truly a school but a center for architectural research and an organism of diffusion. The Institute also published, between September 1978 and March 1983, a monthly tabloid, entitled Skyline, which was looking with a journalistic stance at the activities of that micro-society gravitating around the Institute and in Manhattan. In 1984, after more than fifteen years of activity, the I.A.U.S. closed down because of internal dissensions about its role which, over the years, deviated considerably from the original goals.

Retrospectively, the role played by the Institute during the seventies was primordial to the development and the diffusion of ideas on architecture. With the A.A. in London, the Institute established an Anglo-American axis in the world of

architecture. Both institutions being open to lecturers from other countries, this axis was favoring a new kind of internationalism, less based on a common architectural project like the C.I.A.M., than on the intent to form a trans-cultural intellectual community working on different approaches to the discipline. Historical, typological, semiological, Modernist and Post-Modernist theories were all developed concurrently with a tacit connivance to create a debate on the established practice in architecture.

c. Koolhaas in New York City

During his stay in New York City, Koolhaas embarked on many projects. His main one was the redaction of his book Delirious New York.³⁸ He worked on his book nearly five years before he published it simultaneously in London and New York at the end of 1978. The book necessitated two different kinds of work: first a historical research and second the production of a series of theoretical projects to illustrate the alternative conclusion of the book projected by Koolhaas. These projects were conceived by Rem Koolhaas and Elia Zenghelis with the help of their wives the painters Madelon Vriesendorp and Zoé Zenghelis. The first paintings were realized in 1973, well before the research for the book was completed. The two couples formed officially a team with the foundation of the Office for Metropolitan Architecture (O.M.A.) in 1975. O.M. Ungers was also presented as a member of the group but he was apparently more a honorary than an active partner.

Koolhaas published excerpts of his book in Oppositions (1974), L'architecture d'aujourd'hui (1976), Archithese (1976) and Architectural Design (1977). However, the first article he published in Oppositions was a contextual reading of a project by the Russian Constructivist architect Ivan Leonidov for the Red Square in Moscow. He also announced the publication of another book on the work of Leonidov, a book

that Koolhaas intended to write with his friend Gerritt Oorthuys. The project was never realized but an exhibition on the work of Leonidov was presented at the I.A.U.S. and a catalogue edited by Kenneth Frampton was published in parallel.³⁹ In his introduction, Frampton did not miss the occasion to associate the work of Koolhaas with the one of Leonidov, a procedure that was mutually substantiating the work of both architects.

During his researches on Manhattan, Koolhaas discovered the work of Wallace Harrison, an architect who worked on the United Nation's Building. Koolhaas organized an exhibition of Harrison's work at the Institute and edited also the catalogue of the show. Koolhaas ran seemingly into opposition with this show because Harrison was considered a minor architect for many people at the Institute. He was moreover seen as an architect of the mainstream of the Post-War American architecture, a period often despised by historians and architects alike for its lack of intellectual research. On the other hand, Koolhaas appreciated the professional unconsciousness of this kind of architecture which was the result of people having no doubts about their works.

Koolhaas also tested his ideas in teaching at Columbia University. He met there Laurinda Spear a student who proposed that he works with her on the project of a villa in Florida for her parents.⁴⁰ Koolhaas accepted and they submitted their project to the 1975 Progressive Architecture Award. They won the award with the help of Peter Eisenman who was on the jury. In effect, Eisenman's office was just in front of the room in which Koolhaas was working at the Institute. Eisenman often stepped in to discuss with Koolhaas and also to nag the Dutch architect in pretending that he had no sense of space. Nevertheless, the influence of Eisenman was decisive for the design to win as demonstrated the article announcing the winning scheme.⁴¹

d. Tschumi in New York City

Bernard Tschumi decided to leave London in 1975. He said that he wanted to establish his independence. He felt too closely bound to his group at the A.A. and was attracted by the New York scene. He thus continued his activities as teacher, architect-artist and theoretician in New York City. He spent his first months in the U.S.A. at the I.A.U.S. teaching and meeting new people. His first move was to present his London show at the Institute during Fall 1975. He also wrote, during the next two years, four articles that were published in London, Paris and New York.⁴² He resumed architectural drawing in participating to the 1976 International Competition for the urbanization of La Villette in Paris. During Spring 1977, he visited the A.A. to direct a special studio during which he started to work on another project entitled "Joyce's Garden". He also started to work on his series entitled the Manhattan Transcripts (1977-1980).

As he mentioned later, Tschumi did not find the Institute very stimulating in itself. Although the I.A.U.S. was not the platform he was looking for, he nevertheless admitted to have enjoyed, like Koolhaas, the conversations with Peter Eisenman about strategies and power games. The scene was outside, in Manhattan with its Universities (Columbia, Cooper Union) but foremost, with its dynamic art world gravitating around art galleries and art periodicals. Tschumi integrated quickly to the young generation of artists and art critics of French Post-Structuralist sensibility. It is the moment when he met Kate Linker who wrote the first thorough article on Tschumi's intellectual research. In 1982, Linker was even integrated, as an art critic, to the design team for the second international competition for La Villette.

In the following years, Tschumi taught temporarily at Princeton University ('76 to '78 and '80). He was also hired for few months by Artforum (1979-80) as architectural editor. He then published his series "Architecture and Limits" and

presented works of his friends Koolhaas, Frampton, Eisenman, Hedjuk and Vidler. It is also in Manhattan that he initiated in 1979 a series of temporary constructions entitled the 20th Century Follies. Tschumi taught at the Cooper Union after he left the A.A. in 1980.

* * *

3) Paris

a. Attraction of Paris

While in Manhattan, just as in London, Tschumi always looked at the intellectual and architectural debates occurring in Paris. Not only his work was deeply influenced by French Structuralist and Post-Structuralist theories, he also wanted to participate in the Parisian architectural scene.

There was in Paris no institution in Architecture that could be compared with the A.A. or the I.A.U.S. The reform of education that followed 1968 had opened new directions of research but almost every study, being for the most part subsidized by the French government, had to be integrated into the academic system. Only the magazine L'architecture d'aujourd'hui, edited then by Bernard Huet, was providing a space for a French presence on the international scene. During these years, Huet published the new French theoretical researches and the work of French architects of the '68 generation in parallel to reports on architects or events of international interest. The review permitted to evaluate the French production on an international scale.

The French government was also experimenting a new system for the assignment of commissions with the development of architectural competitions. The success of the international competition for Beaubourg (1971) was seen as a model to emulate. In 1976, an international competition, sponsored by the City of Paris and diffused by L'architecture d'aujourd'hui, on the vacant site of La Villette attracted most young theoreticians including Tschumi. The sponsor of the competition seeking for ideas and not for definitive

solutions, that competition was a perfect ground to test theories.

To partially understand the Parisian scene in the first part of the seventies, it is necessary to explain briefly the development of Post-Structuralist thought in the intellectual circle.

b. From Structuralism to Post-Structuralism

Since the emergence of French Structuralist theories during the sixties, Paris was seen as a major center of contemporary thought production. At the height of the debate between *Ancienne* and *Nouvelle Critiques* in 1967, Jacques Derrida published a series of books exposing his critical conception of a post-structuralist thought.⁴³ Derrida attacked the foundation of the structuralist method: the concept of sign.

Using philosophical concepts, Derrida argued in De la grammatologie that the series of binary oppositions theorized by Saussure to explain the structure of language were reproducing the historically dominant system of occidental thought. Philosophy had historically developed sets of binary opposites - like man and nature, good and bad, Truth and Falsehood etc. - that were condensed in the dialectical problem of the Subject and the Object or, in contemporary terms, of the Same and the Other. For Derrida, this system of thought was mirroring the metaphysical dialectics of absence and presence. Derrida's reading unveiled the theological aspect of the Structuralist thought at its theoretical root.

Saussure had concentrated on the spoken dimension of language, agreeing with the philosophical occidental tradition, that Writing was only a supplement to, or a double of, Speech. Derrida first attacked this violence done to Writing. Also, in his Cours de linguistique générale, Saussure was foreseeing the possibility of a new science studying the material of all human communication: the sign. He named it Semiology. In his mind, Linguistics would be only

one branch of that larger entity. Already in the sixties, Barthes reversed Saussure's proposition. For Barthes, the historical development of all semiological studies was showing that they were dependant on Linguistics and he placed the science of language at the top of the theoretical pyramid. Derrida radicalized Barthes' proposition in giving priority to Writing over Speech in a very tight theoretical development in which he tried to prove the historical anteriority of Writing over Speech. This hypothesis was developed with the invention of the concept of "Différance" to explain the movement of Writing's evolution from an hypothetical initial trace to the structure of language. One can conceive this initial trace, anterior to language, as perhaps a path or a event that was first read as a significant "sign". To use derridean terms, language was "always already" in Writing while Writing was "always already" in the initial trace. To explain the logic of the trace is difficult because, for Derrida, it does not exist, it is only a theoretical device. It only serves to think Writing as "a chain of substitutive significations, a chain of differential references". Perhaps the most important aspect for this study is that, in Deconstruction, like in the Nouvelle Critique's argument, reading was the activity giving meaning.

This reasoning is only a first step in Derrida's argument. For him, language is first Writing, but to demonstrate that is not enough. It would only reverse the traditional position. Derrida's project is more ambitious. For him, the priority of Speech over Writing in Structuralism is a direct outcome of Philosophy and of its history - History being itself a philosophical invention. The reign of Philosophy was the reign of Speech, phenomenon that Derrida called Logocentrism. For Derrida, Logocentrism perpetuated the myth of the "full presence" (read God). Behind this ethic of the Speech, lies the myth of the full speech that expresses Truth. In demonstrating that there exist an abyss between the signifier

and the signified, Derrida wanted to "deconstruct" the logic of the absolute presence. To deconstruct the whole tradition of occidental philosophy means to dislocate all binary opposition, all dualism and dialectics having for unique theme the metaphysical presence. Deconstruction is therefore a reading and a production (writing) attempting to demonstrate that there exists no transcendental signified.

Once the concept of sign is dislocated and its logic destroyed, the sign is not reflecting a definitive meaning. It is always doubling, re-doubling and de-doubling what it reflects. Writing becomes a game open to all manipulation. To deconstruct is to think Writing as the game of language, but for Derrida, this game, which is thinking the absence of the transcendental signifier, is not only a game in the world: it is the game of the world. To play the game of language is to think the world. Therefore, the deconstructionist studies the functioning of language as a game and tries to demonstrate that there exists a difference between the internal reality of the Saussurian psychic image and external reality. His favorite strategy is to show the ambivalence of any reading. The plurality of meaning becomes, in the end, the proof of the absence of an absolute metaphysical and pure signified.

Deconstruction wants to open a reading space that defines itself negatively in relation to the philosophical tradition. It is also a written production that Derrida defines as such:

"(...) what we call production is necessarily a text, the system of a writing and of a reading which is ordered around its own blind spot. We knew this a priori, but only now and with a knowledge that is not a knowledge at all."

In Derrida's system, "nothing is extratextual". The task of reading and writing is looking for the limits of scientificity but it "must also point beyond the field of the *épistémè*" and thus put into question the very idea of science. In the logic of the thought of the trace, thought becomes "a blank part of the text", an empty word, because "in a certain sense 'thought' means nothing".

Derridean deconstruction spread rather quickly in the specialized milieu of literary studies. Derrida's effective deconstructive reading of the Structural anthropological studies of Lévi-Strauss, a major tenor in the propagation of Structuralism in the sixties, was radically putting into question the unavowed metaphysical assumptions of Structuralism.

Already with his polemic of the *Nouvelle Critique*, Roland Barthes was denouncing the incompleteness of purely formalist analysis. In doing so, he was also questioning the scientificity of any study on literature. In a certain sense, Post-Structuralism was "always already" in Structuralism and, in parallel to classical semiological studies, Barthes started to publish short essays exploring the production of the text and the production of meaning. In the seventies, Barthes nevertheless theorized the problem differently than Derrida.

In his Leçon given at the Collège de France in 1977, Barthes reflected on his earlier activity, hence once again on language.⁴⁴ For him, the studies on language, in revealing its nature as code, also pointed out that language is fundamentally a legislation, in other words, the place of an oppressive power to which only literature resists. In playing with words, in trying to express in its unidimensionality the pluridimensionality of reality, literature is combatting language from the interior. Barthes explained how he conceived of Semiology as a deconstruction of Linguistics. Linguistics in dissociating Language and Speech was mystified. In concentrating on the structure of Language, Linguistics was neglecting the Speech or Discourse and thus the rhetoric of power. For Barthes, only the text was a place of resistance to power and when applied to the text Semiology was becoming negative and was necessary transformed into a non-discipline, a non-scientific text. The semiologist was therefore also an artist playing with the signs, knowing consciously the lure of the sign but yet, fascinated by it. Barthes had already

explained the nature of this fascination in an essay published in 1972 entitled, Le plaisir du texte.⁴⁵ The pleasure of the text was then defined as an erotic play.

The movement from Structuralism to Post-Structuralism is a displacement of interest from Language to the Text, from linguistic code analysis to reading, from Speech to Writing. The popularity of Derrida's thesis in America increased at the pace of the translation of his books, starting with the publication of Of Grammatology in 1976.⁴⁶ The diffusion of deconstruction in America was principally the result of the activities of literary critics based at Yale University. Among them was Paul de Man. The interest of Paul de Man here is tangential but revealing of the equivocality of the deconstructionist project. Paul de Man defined himself as a traditional professor of literature.⁴⁷ The center of his interest was the study of the rhetorical structure of literary texts. In his major book, Blindness and Insight, de Man tried to demonstrate how all insights provided by the texts he analyzed were hiding a blind spot.⁴⁸

Notes to Part 1 - Institution and Theory

1. All reference to the concept of discipline should be understood as Michel Foucault has defined it. For Foucault, a discipline is a set of principles that anyone can use, having no author, and defining a field. See: Foucault, M. Archeology of Knowledge, London, 1972, pp 215-237.
2. Pawley, M. & Tschumi, B. "The Beaux-Arts since 1968" in Architectural Design, No 41, September 1971, pp 536-566.
3. Tzonis, A. & Lefaivre, L. "The Populist Movement in Architecture" in Forum, No 3, 1976.
4. The term "Revolutionaries" is drawn from Bernard Tschumi's research on French groups of agitators during and after '68.
5. Banham, R. Theory and Design in the First Machine Age, Cambridge, 1960.
6. Venturi, R., Scott Brown, D. & Izenour, S. Learning from Las Vegas, Cambridge, 1972.
7. These ideas are developed by B. Tschumi in: "La stratégie de l'autruche" in L'architecture d'aujourd'hui, No 176, novembre-décembre 1974, pp 71-72; and "The Environmental Trigger" in A Continuing Experiment, Edited by J. Gowans, Architectural Press, London, 1975, pp 89-99.
8. de Saussure, F. Cours de linguistique générale. English Translation: Course in General Linguistics, London, 1983.
9. Other Structuralists of importance for architecture were the anthropologist Claude Lévi-Strauss, the linguist Roman Jakobson and the semiotician Umberto Eco.
10. Barthes, R. "L'activité structuraliste" in Essais critiques, Paris, 1964, pp 213-220.
11. Barthes, R. Critique et vérité, Paris, 1966.
12. Barthes, R. "The Death of the Author" in Image-Music-Text, Glasgow, 1977.
 The implications of Barthes' argument were exceeding the realm of literary criticism. Not only Barthes offered a new model for the critics in other fields, but he also created an immediate crisis in the French academic institution. In effect, the established literary disciplines like Philology and Rhetoric were menaced of extinction. Also the hardly acquired autonomy of the Human Sciences was threatened. The Human Sciences whose main objective was the establishment of their scientific respectability in front of the exact sciences

were reacting negatively to the non-scientific genre promulgated by Barthes: the essay. The main problems were related to the evaluation of the scientificity of vulgarization and the inevitable transformation of scientific ideas during the process of transposition in other contexts. For the structuralists, these problems were not so important because they considered that all sciences were united by a universal structure hidden behind the reality of human activity in the human thought.

13. Bourdieu, P. Homo Academicus, Paris, 1984, pp 154-6.

14. Tafuri, M. Teorie e historia dell'architettura, 1968. English translation: Theories and History of Architecture, New York, 1980.

15. The theoretical position of Tafuri is analyzed more deeply in Part 2 of this study.

16. Barthes, R. "Sémiologie at urbanisme" in L'architecture d'aujourd'hui, No 153, Dec. 1970, pp 11-13.

17. Tschumi, B. "On Delirious New York: A Critique of the Critique" in International Architect, Vol. 1, No 3, 1980.

18. Tschumi worked in Paris during the academic year 1967-68. The following year, he returned to Zurich to complete his studies. In Paris, he worked with Candilis, who had worked with Le Corbusier on the Unité d'habitation in Marseilles, on the big project for a new city in Toulouse: the famous French project of the sixties, Toulouse-Le Mirail. Koolhaas completed the last year of his studies at Cornell University in 1973-74.

19. Archigram, London, Nos 1 to 6, 1961-65.

20. Cook, P. Action and Plan, London, 1967.

21. Goulet, P. "La deuxième chance de l'architecture moderne... Interview avec Rem Koolhaas" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 3-9.

22. Montes, F. & Tschumi, B. "Do-it-yourself-city" in L'architecture d'aujourd'hui, No 148, février-mars 1970, pp 98-105.

23. "School of Thought, Interview with Alvin Boyarsky" in Design Book Review, No 11, Winter 1987.

24. Like Koolhaas saw in the Berlin Wall a piece of significant architecture, Tschumi read the barricades erected during the May '68 riots more like symbols of the resistance

than truly effective means of action. Their goal was to politicize urban space.

25. After the dissolution of their organization, the articles of the Situationists published during the sixties were collected in: Internationale Situationiste, Paris, 1972.

26. Tschumi, B. "Sanctuaries" in Architectural Design, No 43, September 1973, pp 575-590.

27. Tschumi, B. "The Environmental Trigger" in A Continuing Experiment, Edited by J. Gowans, Architectural Press, London, 1975, pp 89-99.

28. Boyarski, A. "Interview" in La case vide: La Villette, Architectural Association, London, 1985.

29. "Diploma School Unit 2" in AA Projects Review 1974/75.

30. "The City as an Artefact" in Casabella, Nos 359-360, 1971.

31. Natalini, A. & Als. Superstudio (1966-1982). Storie, figure, architettura, Florence, 1982.

32. From the tape of a lecture given by Rem Koolhaas at the A.A. in 1986.

33. Tschumi, B. & Goldberg, R. A Space: A Thousand Words, Royal College of Art, 1975.

34. Tschumi, B. "Questions of Space: The Pyramid and the Labyrinth (or the Architectural Paradox)" in Studio International, September-October 1975, pp 136-142; "Le jardin de Don Juan ou la ville masquée" in L'architecture d'aujourd'hui, No 187, octobre-novembre 1976, pp 82-83; "Architecture and Transgression" in Oppositions, No 7, Winter 1976, pp 55-63; "The Pleasure of Architecture" in Architectural Design, No 47, March 1977, pp 214-218.

35. The New City Architecture and Urban Renewal, M.O.M.A., 1967.

36. "The City as an Artefact" in Casabella, Nos 359-360, 1971.

37. The I.A.U.S. established early connections with Italian intellectuals. The magazine Oppositions was a major factor in the popularity of Italian theoreticians and architects like Rossi and Botta, and of a critic-historian like Tafuri in the U.S.A.

38. Koolhaas, R. Delirious New York: a Retroactive Manifesto for Manhattan, Thames and Hudson, London 1978.

39. Frampton, K. ed. Ivan Leonidov, I.A.U.S., 1976.
40. Spear and Fort-Brescia founded later Arquitectonica, an architectural firm based in Miami.
41. ----- "Agreeing in Disagree, Award to Remment Koolhaas and Laurinda Spear" in Progressive Architecture, Vol. 56, Jan. 1975, pp 44-48.
42. They are: "Questions of Space: The Pyramid and the Labyrinth (or the Architectural Paradox)" in Studio International, September-October 1975, pp 136-142; "Le jardin de Don Juan ou la ville masquée" in L'architecture d'aujourd'hui, No 187, octobre-novembre 1976, pp 82-83; "Architecture and Transgression" in Oppositions, No 7, Winter 1976, pp 55-63; "The Pleasure of Architecture" in Architectural Design, No 47, March 1977, pp 214-218.
43. Derrida, J. De la grammatologie, Paris, 1967.
 ----- L'écriture et la différence, Paris, 1967.
 ----- La voix et le phénomène, Paris, 1967.
44. Barthes, R. Leçon, Paris, 1977.
45. Barthes, R. Le plaisir du texte, Paris, 1972.
46. Derrida, J. Of Grammatology, 1976.
47. De Man, P. Resistance to Theory, Minneapolis, 1986.
48. De Man, P. Blindness and Insight, Minneapolis, 1983.

Part 2 - Manifestoes

Between 1974 and 1978, Rem Koolhaas and Bernard Tschumi emerged gradually on the international architectural scene with the publication of many articles in leading art and architectural magazines and in participating in important competitions. Most of Koolhaas's articles were excerpts of his book Delirious New York¹ which was published at the end of 1978. In 1975, he and Laurinda Spear won the Progressive Architecture Award for their design for a villa in Miami.² Also in 1975, he and his associate Elia Zenghelis submitted a design for the Roosevelt Island Competition next to Manhattan Island.³

Bernard Tschumi settled in Manhattan during Fall 1975. He came to the U.S.A. with his exhibition "A Space: A Thousand Words" and published a series of articles on his new research on space. In 1976, he submitted a project for the first international competition on the site of La Villette in Paris. Thereafter, he worked on a series of theoretical projects that were collected, in an exhibition catalogue published by the A.A., under the title of Architectural Manifestoes.⁴ His "Architectural Manifestoes" were first presented in New York at the art gallery Artists' Space in April 1978 and were exhibited the next year, in February 1979, at the A.A. in London.

* * *

A. Koolhaas and Tafuri: Myths

1) Public Exposure

The publication of Delirious New York was carefully orchestrated with launchings in New York and London coupled with an exhibition of O.M.A.'s Manhattan projects at the Guggenheim museum. The book was also published in French.

In the early seventies, Manhattan was generally seen as a monster, the twentieth century Babylon. With the oil crisis, the state of the U.S. economy degraded. It affected the metropolis which faced enormous financial difficulties that

resulted in a problem of image. In the mid-seventies, the development of a new sensibility towards architectural styles, with the publication of historical studies on the development of classicism in America and the popularity of Art Deco, were signs of a new affection for Manhattan. Koolhaas himself contributed to this new interest with the publication of six articles directly related to his book between 1974 and 1978. A barometer publication like the Swiss periodical Archithese even dedicated two whole issues on Manhattan in 1976, a fact showing the universality of the fascination for the metropolis.

The timing of Delirious New York was perfect. Conceived as a retroactive manifesto for the metropolis of the twentieth century, Koolhaas' book was appreciated by all lovers of Manhattan. Its public success was immediate yet it was received controversially by the architectural institution. Koolhaas was perceived as the great theoretician of "Manhattanism", the first architect to propose that the metropolis was the most fabulous invention of Modern Architecture.

* * *

2) A Retroactive Manifesto

a. Declaration

Rem Koolhaas' book Delirious New York starts with a statement: European Modern Architecture was constituted of many manifestoes and very few buildings while American modernism was essentially the opposite with its numerous buildings and virtually no manifesto. Koolhaas wanted to correct the situation. American modernism created "Manhattanism" as the celebration of urban life and the culture of congestion. For him, architects were refusing to see that Manhattan is the most important realization of twentieth century modernism. A completely man-made world, Manhattan was both a popular and ambitious project. Moreover, Manhattan is not utopia. It is built, it exists, it is real

yet it celebrates the unnatural and the unreal. In this artificial and mutant life, "architecture is Manhattan's new religion". Koolhaas decreed himself the ghostwriter of Manhattan. The unperfect city had to be idealized by the perfection of theory. The unspoken ideology of Manhattanism had to be unveiled and the unconscious of Manhattan architecture narrated.

b. Explanation

Delirious New York is a book about architecture. It is structured in seven parts. The first four are analyzing the development of the structure of Manhattan and of its architecture through selected works. The fifth part analyzes the reaction of two European who visited the city: Salvador Dali and Le Corbusier. A postmortem and a fictional conclusion follow.

- Mythical History

In his "prehistoric" preamble, Koolhaas discovers that New York, being the realm of artificiality, had developed a mythical past. To become the "theatre of progress", New York needed "to mythologize its past and to rewrite a history that can serve its future". Koolhaas never intended to change that tradition. In a mythical history, buildings are not only human inventions, they are the product of heroes exploring the unconscious of architecture.

- Opposites

Koolhaas wanted to explain the principles of the architecture of Manhattan and to describe the delirium of the metropolitan life filling the buildings. Like Manhattan, the writing of Koolhaas always unites opposites: order and chaos, pleasure and terror, rationality and irrationality. The rigidity of architecture contains the anarchy of metropolitan life. In his description of the streets grid of Manhattan,

the foundation formal principle of the metropolis, Koolhaas displays his skills:

"The Grid's two-dimensional discipline (...) creates undreamt-of-freedom for three-dimensional anarchy. The Grid defines a new balance between control and de-control in which the city can be at the same time ordered and fluid, a metropolis of rigid chaos."

- Metaphors

The extensive use of metaphors is the second characteristic of Koolhaas' prose. They are carefully selected to enhance the seduction for Manhattan and his thesis.

Inspired by the reproduction of Venetian decor in Coney Island and by the urban projects of Corbett and Hood for Manhattan, the metropolis is represented like a Venice of steel and concrete. The quintessential grid creates a finite context described as an archipelago of 2,028 islands in a sea of traffic. Fascination is produced by the drawings of a past future depicted with a mixed feeling of Venetian romanticism and megalomaniac futurism. Koolhaas's Manhattan is similar to Nietzsche's Venice. He quotes him:

"A hundred profound solitudes together constitute the city of Venice. That is its charm. A model for the men of the future."

Koolhaas reintroduces the old humanistic metaphor of the human body. The buildings are as many solitudes, as many human bodies. The city is conceived like a gigantic organism. It even possesses its clitoral appendix in the pleasurable Coney Island. The metaphor is transformed in a concept by Vriesendorp who painted her erotic Manhattan series representing the secret passion between the Chrysler Building and the Empire State Building, with a jealous third party embodied by the Rockefeller Center (fig. 5). Seduction and desire become architectural. Each skyscraper is an atrophied body on which architects have performed specific operations. That induces the use of a medico-psychanalytical vocabulary. The first operation is the lobotomy enabling the perfect

separation between internal and external logic. The building is an envelop hiding the internal disorder. Lobotomy is the only possible solution to the humanistic assumption that architectural honesty is a facade speaking of the activity it conceals. The interior of the building is not spared either. The second operation is an internal schism. The programmatic independence of each floors enables the maximal exploitation of the cultural potential of the skyscraper. Schism establishes permanent instability inside the building's body. That is why the program is no more considered a simple sets of requirements but is instead opened to imagination. The programme becomes a plot which activates the mutant life of the metropolis.

- Experiments

The history of Manhattan is further seen like a vast architectural experiment. The phenomenon of Coney Island and its attraction parks is read by Koolhaas like a laboratory of architecture where were experimented the new programmes of the playful metropolitan life, where were displayed new inventions like the elevator, and where appeared Manhattan's archetypal forms: the tower and the sphere.

- Heroes

The whole heart of the book examines the development of the skyscraper as a new building type. Koolhaas first looks at the reasons that led to the adoption of the 1916 zoning law regulating the shape of Manhattan's skyscrapers. Then, he examines the work of the theoreticians of Manhattanism. They were Hugh Ferriss, the automatic pilot, H.W. Corbett, the dreamer of a futurist Venetian Manhattan, and R. Hood who conceived the idea of the "city under a single roof" and who built the Rockefeller Center as a demonstration.

- Icons

In parallel, Koolhaas also discusses many buildings. He reads them as anecdotes, as different new plots exploring the possibilities of the metropolitan life. Among them three emerges like gigantic icons: the Empire State Building, the Waldorf-Astoria Hotel and the Downtown Athletic Club. The Empire State Building is the ultimate lighthouse of Manhattan. It is conceived as an harbor for dirigibles but it is mostly the symbol of the efficiency of American professionalism. The Waldorf-Astoria Hotel represents the new lifestyle of the metropolitan life that enables one to live permanently in a luxurious hotel suite with all its services and more. Finally, the Downtown Athletic Club is the machine for the mutant metropolitan bachelor including a variety of sport facilities, medical services, bars and bedrooms. The variety of activities permitted to imagine the possibility of eating oysters, naked, with boxing gloves, on the ninth floor (fig. 6 & 7). The Downtown Athletic Club realizes the revolutionary dream of the Constructivist social condensers. The knowledge developed by the creation of these three buildings was later used and elevated to perfection in the construction of the Rockefeller Center.

- Two Paranoid Europeans

The heroic and delirious work on the skyscraper was analyzed by visiting Europeans. Koolhaas juxtaposes the reactions of Dali and Le Corbusier. The collision effectively reveals a Le Corbusier as surrealist as Dali. While Dali expressed his satisfaction in front of the monument the Americans had built for his arrival, Le Corbusier affirmed that the Manhattan skyscrapers were too narrow. Koolhaas exposed the paranoid-critical method theorized by Dali and analyzed, in its light, the creation of Le Corbusier's naked skyscrapers of the Ville Radieuse and his participation to the design of the UN Building. Koolhaas concludes that Le Corbusier did not know

"that in Manhattan theories are only diversionary tactics, mere decorative dressing for the essential founding-metaphors." For him, the anti-Manhattan urbanism of Le Corbusier was unseductive in New York because it contained no metaphor.

That chapter may be read as a criticism of Le Corbusier's architecture but, more important, it contains two statements of more general consequences. First, history reveals that New York was more surrealist than the Surrealists, and second, and radically, "Architecture is **inevitably** a form of Paranoid-Critical activity". Architecture is "the imposition on the world of structures it never asked for and that existed previously only as clouds of conjectures in the minds of their creators". Aggressively, architecture insists on its **otherworldliness**.

- An Unachieved Project

In conclusion of his history, Koolhaas discusses the work of Wallace Harrison, Hood's assistant at the Rockefeller Center, and the builder of the UNO building. Koolhaas sees in him the embodiment of the American professional skills and the unconsciousness of Manhattan. The 1939 World's Fair exhibition, designed by Harrison, unconsciously rediscovered the sphere and the tower, the two archetypes of Manhattan, but the demonstration of "Democracy" - the garden city of the future - historicized Manhattan and its urbanism. Le Corbusier won. The original splendors of Manhattan's daydream vanished during the Post-World War 2 era with the apparition of the curtain wall boxes that are buildings X, Y, and Z at Rockefeller Center.

c. Demonstration

The fictional conclusion of Delirious New York presents five projects for Manhattan designed by O.M.A. between 1972 and 1977. These five projects are part of a series of seven that

were published together for the first time in 1977 by Architectural Design.⁵

Many of the drawings presenting these projects are paintings executed by Madelon Vriesendorp and Zoé Zenghelis, the wives of Koolhaas and Elia Zenghelis. Koolhaas explained pragmatically the use of painting as an architectural tool of representation by the fact that the wives of the two architects from the A.A. were both painters in a time when painting was not popular. The uniformity of the medium throughout the series enhances the unity of the ensemble. These paintings quickly became O.M.A.'s trademark but, moreover, they contributed to create the oneiric character of the Manhattan Projects.

The essential goal of these projects was to demonstrate the unexplored capacities of Manhattanism. The Grid, Lobotomy and Schism as well as the Plot were used as design principles for all projects. With the exception of the 1975 design for the Roosevelt Island Housing Competition, which was conceived as a realizable proposition, all six others are considered by O.M.A. as "conceptual-metaphorical" designs.

These projects were drawn before and during the process of writing Delirious New York. The architectural projects served thus not only to demonstrate the principles of the manifesto, they were also speculative and testing tools. The drawings are almost all exclusively representing buildings - the absence of human figures giving them the status of metaphysical entities. To the frozen landscape of architecture, the programmes, written like plots, are more than plain narrative. They are riddles, which juxtaposed to the drawings, are both seriously amusing yet clearly ambiguous and puzzling. The Manhattan Projects are creating a world of their own by the recurrence of certain themes and metaphors. The purpose of that recurrence is to underline two statements: first, architecture is a manifestation of culture and second, form is not invented but modified through adaptation.

- Manhattanism

The two earliest Manhattan Projects - the City of the Captive Globe (1972) and the Egg of Columbus Center (1973) - were conceived as a "sequel" of Exodus, the 1972 project for London. They were transferring the quest for metropolitan architecture into an idealized Manhattan context.

The first, the City of the Captive Globe was even originally planned to be one of the "squares" of Exodus (fig. 8). It was conceived by Koolhaas and painted by Zoé Zenghelis. It is demonstrating the functioning of the first principle structuring Manhattanism. The street grid creates a series of equivalent blocks on which all mania (sciences) can explore their theories (plots). The metropolis is the capital of the ego: intellectual masturbation and speculative ejaculation are the rules. It is a laboratory of rapid invention, destruction and restoration: the incubator of the world. As an overarching concept, the metropolis is the end of totalizing ideologies by the proliferation of all ideologies.

The painting is significantly a collection of all O.M.A.'s architectural references. Ungers, Le Corbusier, El Lissitzky, Leonidov, Malevitch, Dali, Mies, Superstudio: each is directly or indirectly represented by one of their projects. To each one a city block is consecrated. The other blocks are anticipating the discovery of Manhattan icons like the Waldorf-Astoria Hotel, the Downtown Athletic Club and the Rockefeller Center.

The second project was designed by the two Zenghelis and was not published in the fictional conclusion of Delirious New York. The Egg of Columbus Center was O.M.A.'s contribution to Tschumi's exhibition "A Space: A Thousand Words" of 1975 (fig. 9). Projected for a real site, the Center was acting as an entrance to the metropolis from the East River. It was openly importing the programmatic inventions from the 1972 Exodus to New York. In that project, the City of the Captive Globe reappears but it is transformed, as a city block, into a

school of architecture, showing the pedagogical potential of the idea of metropolis as an incubator of ideologies.

The project also demonstrated the metropolitan housing condition in lobotomized and schizoid skyscrapers. Programs including Palladian villas, Constructivist communes and a variety of artificial pleasures were expressing a multitude of mutant lifestyles.

- Architectural Types

The two first projects for Manhattan established the theoretical premisses of a new metropolitan architecture. These intentions were applied to a realist project for the Roosevelt Island Housing Competition of 1975. The project was not included in Delirious New York.

O.M.A.'s project was conceived by Koolhaas and Zenghelis with the help of students at the I.A.U.S. in New York. It is formally more developed than all other Manhattan Projects but its narrative part is more descriptive than evocative. Apart from a prototypical floating pool, the project does not incorporate many metropolitan programmatic inventions.

However, at the formal level, the project is more inventive with its gigantic mass obtained by the "cross-breeding" of two Manhattan types: the skyscraper and the Brownstones (fig.10). Criticizing the approach of the Urban Development Corporation that O.M.A. considered to be an Acapulco-like resort, the project wanted to be an extension of Manhattan's grid and architecture on the island.

- Hotels

The second project of Delirious New York, the "Hotel Sphinx" (1975-76) was designed by Zenghelis (fig. 11). The hotel "plot" is seen as the ultimate ideal of the metropolitan lifestyle. The luxurious hotel life is proposed as a model for metropolitan housing. On a triangular site facing Time Square, the Hotel Sphinx is a strange animal acting like a

landmark in Manhattan's grid.

Another project for a metropolitan hotel was designed for the Welfare Island facing Manhattan on the East River side (fig. 12). The project is a gigantic city-in-the-city composed of six vertical and one horizontal skyscrapers. The Welfare Palace Hotel is only one of the many other interventions on the Welfare Island. At the size of Manhattan, competing with the Rockefeller Center, the Welfare Palace Hotel incorporates metropolitan attraction like a lagoon dining room with tables on gondolas which are on calm nights navigating in the East River. Each of its facades is different to respond contextually to the metropolis and its suburbs.

- Allegorical Tales

Two allegorical motifs migrate constantly like phantoms through the Manhattan Projects. Each proposes a model for interpreting the history of Modern Architecture. The first one is the tragedy of the Raft of the Medusa and the second is the fabulous Story of the Pool.

The Raft of the Medusa made its first apparition in the Egg of Columbus Center (1973) and re-emerges in the Welfare Palace Hotel (1976-7). The Raft of the Medusa is referring to a Nineteenth Century painting by Géricault. That "peinture de genre" is depicting the story of a shipwreck and the panic that followed the incident. The passengers of the Medusa, losing their nerves, started killing and eating each others. They were rescued days later and could have all survive without any food. The tale is used by O.M.A. to read the attitude of architects of the seventies in facing the problems of Modern Architecture. Their lack of nerves is, in the Manhattan Projects, compensated by the discovery of the metropolis.

The Story of the Pool is a riddle invented by Koolhaas. It appeared as an architectural design during the project for the

Roosevelt Island Housing Competition (1975). The narrative came later in 1976.

According to the legend, a floating pool was designed in 1923 by an unknown student of architecture in Moscow (fig. 13). Built by the students during their spare time, the pool was an immense success.⁶ Its major characteristic was its sunken glass rooms at both ends which enabled the swimmers to see simultaneously into the swimming pool and into the muddy natural water. One day, they realized that in swimming together in formation in the same direction, the pool was moving in the other direction. With the changing political situation in the early thirties, the Constructivist architects and their pool became suddenly subversive. They decided to get away with the pool to New York whose skyscrapers inspired their enterprises. Swimming in the direction of Moscow, they moved towards New York.

"A rotating schedule gave each lifeguard/architect a turn at the command of the ship, an opportunity spurned by some hard-core anarchists who preferred the anonymous integrity of the continuous swimming to such an imposed responsibility."

Their arrival in New York four decades later, in 1976, was for them a shock. They were welcomed by New York's architects who were at the time all anti-modernist. They criticized the design of the pool for its ruthless simplicity. They nevertheless gave the Constructivist architects a medal with an old inscription which was obsolete, according to the speech of the orator. The Russians read it: "there is no easy way from the earth to the stars". One Russian said: "we just went from Moscow to New York" and all the Russian architects boarded the pool to continue their journey. In leaving New York, in front of the Welfare Palace Hotel, they overlooked an obstacle. Their optimistic pool hit the pessimistic Raft of the Medusa which sank in the East River with most of the people who were on it.

* * *

3) Operative Criticism

The reading of Delirious New York demonstrates that the architectural manifesto is mixing many language games. Description, explanation and demonstration are three general categories covering the interplay of axioms, hypothesis, statements, commentaries, critiques and prescriptions. The claim made by Koolhaas with his mythification of history and his poetical projects may be forever ambiguous if it is not analyzed in the intellectual context of the architectural institution of the seventies. Koolhaas addressed his manifesto to architects and historians alike.

a. Against Post-Modernism

In the context of a rising popularity of Post-Modern architecture, Rem Koolhaas openly objects to the anti-modernist New York architects for whom Manhattan's architectural significance still lies in the playful and inventive use of historical styles. To the traditional stylistic approach of architectural history, Koolhaas opposes a typological and programmatic reading of the Manhattan's skyscraper and its principles. Koolhaas considers the opponents of Modernism ignorant with a stereotypical understanding of history. For him, historians have only a one sided view of history. The canonical history of Modern Architecture is a myth that neglects the true built reality of Manhattan. The metropolis is the invention of the twentieth century and it needed its own myth to counterbalance the negative effects of the canonical one. Modernism is not an utopia, it exists and architects have no choice but to be modern. But more important than Manhattan itself, which is only a model, Manhattanism, the theory of the metropolis, has to be continued. In Koolhaas' theory, Manhattanism is larger than Manhattan: it is the culture of congestion with its new metropolitan lifestyles.

The Raft and the Pool are two images, two opposing visions

of architecture. The Post-Modern Raft is drifting with no captain. It is a pessimistic and tragic view of the future. It is elevated by O.M.A. to the status of symbol of architects having lost confidence in themselves and in their means. On the contrary, the Constructivist Pool is driven by the energy of architects working in group, in the same direction and at the same pace. Paradoxically, to move in one direction, they should face the opposite direction: they are moving towards the future in looking towards the past. The Pool has not one but many captains one after the others. The pool-ship of Modern Architecture is directed by a group of leaders and driven by the efforts of everyone. The role of the modern architect is thus articulated on two poles. The more "paranoids" among them want to be captains and the more "anarchists" are working anonymously to the advancement of the project. The project or the trip is in itself idealist and metaphysical: once the Pool has attained its goal, it leaves for another unknown destination. Behind the optimism of the Pool is intimately hidden a blind spot. Heading towards an unknown destination, the Pool is moving only because of the belief of the swimmers that nothing but action can solve the dead end of their initial project. What Koolhaas reclaims is the return to an architectural practice in which the architects would never doubt of the capacities and would work always unconsciously as if they were driven by an automatic pilot like in the Thirties.

b. Mythology

Koolhaas felt he was responding to the need for a new modern and revolutionary mythology joining Manhattan and Constructivism into a theory of metropolitan architecture. American commentators reacted strongly to Koolhaas' approach which was attributed to the fact that he was another European fantasizing about America. His history was non-objective in obliterating the reality of capitalist development, the

stylistic concerns of the American Beaux-Arts architects and the tragic social conflicts of the metropolitan life. But the retroactive manifesto had other goals than the narration of urban history. The seduction of the manifesto was based on two assumptions. First, the historical and phenomenal reality of Manhattan was used as an objective proof of the theory of Manhattanism. The reality of Manhattan was used to substantiate a cultural project which was inspired by it but that was also other than it. Second, the transfiguration of history into mythology, was transforming the historical discourse into the justification of a specific praxis. It is that very process using history as a tool legitimizing the project in architecture that Tafuri had denounced in 1968 as operative criticism. The retroactive manifesto was a direct provocation answering to Tafuri's "intimidation".⁷

* * *

4) Tafuri and Myth

It is in 1968 that Manfredo Tafuri published his book Teoria e storia dell'architettura.⁸ In this study on the role of history and criticism in architecture, Tafuri adopted a Marxist point of view. For him, a major reason of the failure of Modern Architecture was its refusal of history. With that statement, Tafuri was not condemning the Modern avant-gardes of the twenties - Tafuri named them the historical avant-gardes - for their attempt to break with history in favoring positive and negative reason as their guiding principle. Tafuri was in total agreement with that position. Rather, the refusal of history was for him the refusal to historicize the past. By historicization, he meant a total cut with the past and the uselessness of history for the architectural project. For Tafuri, history was not a repository of solutions at the architects' disposal, it was a tragic series of utopias, defeats and betrayals. Tafuri opposed architects who looked at the past for solutions and historians who legitimized such practice in proposing interpretations of contemporary works by

formal affiliation with past examples: for Tafuri, these architects and historians performed operative criticism and not history. The early historians of modern architecture were doubly guilty because in accepting to become polemicists in favor of the modern movement, they wrote a mythical history. Now architects were establishing their works on myths. Tafuri proposed to demystify the canonical history of modern architecture by a critical revision of history.

a. Mythologies

Tafuri had found his definition of the modern myth in Roland Barthes' book Mythologies of 1957.⁹ In his book, Barthes looked at a series of modern myths propagated through media. For him, these new myths reflected the values of the French middle class. He concluded his book with an essay on the semiological analysis of myth.

Basically, Barthes demonstrated that myth is against history for it is emptying the sign of its history and it is reducing culture to nature. It is masking the artificial behind a "natural" facade. For Barthes, the function of the myth is to get rid of the real: it becomes a meta-language, a language that is not talking of the real but on the real. Mythology does not mirror the real world but what the world wants to be. As the speech of the right wing middle class, myth is not a political speech, on the contrary, it is a speech that is de-politicized. As such, myth is not the negation of the world, it simply purifies and acquits the things of the world and gives them a natural basis, an eternity. Myth has a clarity that is not the one of an explanation but the one of an authentication: it states without explanation, it is uttering the speech of common sense most often by means of aphorisms.

Barthes concluded his book with a reflection on the necessity and limits of mythology that was, in fact, a reflection on his own work as semiologist confronted with

myth. Barthes here introduced the figure of the "mythologist" whose task is the systematic destruction of myths. He reflected on the shortcomings of that position.

The "mythologist" can only conceive his work as an act of destruction. He has a sarcastic relationship with the world, because, in breaking the myth, he excludes himself from the myth's consumers, i.e. the general public. The "mythologist" pretends to act in the name of history but he excludes himself from it as well. For Barthes, history is, by definition, never the triumph over its contrary (myth): it unveils syntheses that are unforeseeable and unimaginable. But for the "mythologist", his action is destructive and he does not want to imagine the world when the object of his criticism will have disappeared. For him, all of tomorrow's positivity is completely hidden by today's negativity. For him, history is like a "subjective night" in which the future is by essence the essential destruction of the past. Finally, the true "mythologist" is condemned to use a meta-language to destroy the meta-language of the myth and therefore he also excludes himself from reality. For Barthes, that exclusion bears a name: it is ideologism.

In the end, the radical position of the mythologist is not satisfying. For Barthes, the essential problem of the modern era is that, in order to grasp reality, one has the choice of only two discourses that are equally excessive. The first accepts the real world as something which can be totally accounted for by history: for, Barthes, it is the ideological discourse. The second defines reality as something impenetrable and irreducible, it is the poetic discourse. For Barthes, there is no means of synthesizing these two discourses and that explains why one cannot grasp reality in its totality. In our unstable relationship with the object, we are always balancing between the object and its demystification because we cannot restore it in its totality. The dilemma of Barthes as a semiologist was to either adopt

the position of the mythologist and liberate the object from the myth - that position was implying the destruction of the object - or to accept the object with all its weight and thus return it still mystified.

b. Operative Criticism

The situation was clearly stated by Barthes. Tafuri understood the dilemma of the Structuralist point of view and, as a historian, he tried to adopt a position different from that of a mythologist. For Tafuri, the problem of architecture was not only that its history was a mythology, it was also that that mythology was instrumentalized in the design process by the architects. Operative criticism was defined by Tafuri as an attempt to use history as an instrument for action. Instead of being a means for the understanding of the present, history was transformed into an ideology - ideology being for Tafuri understood in its Marxist definition. That transformation of history into ideology was a betrayal of history's goals and was finally masking the real possibilities for changing reality.

Tafuri retraced the historical development of operative criticism in architectural theory. For him, it appeared during the Renaissance with the historicist attitude toward history. Tafuri defined historicism as the deduction of values from history itself. Renaissance philologists and architects deduced from their studies of Antiquity the values they infused in their works. During the eighteenth century, a new notion was introduced in operative criticism: anti-historicism. In the anti-historicist attitude, the authority of history was replaced by that of reason. The philosopher was the guide of the architect, the former being the legislator and the latter in charge of the execution. The anti-historicist attitude was inductive and was "forcing the future" with the introduction of new values. Therefore, operative criticism is both deductive and inductive,

historicist and anti-historicist.

The main characteristic of operative criticism is that it is always directed towards action and as such, it is ideological criticism because it privileges value judgments useful for immediate action over analytical rigor. What Tafuri despised was the mix of value judgments and factual analysis in the discourse of the architects. In effect, Tafuri noticed that 90% of the literature on architecture was written by architects engaged in the practice. The use of historical facts was only a mean to give a form of objectivity and scientific dignity to their speculation. Operative criticism, in accepting the common myths, is also producing new ones. It is also evaluating the architectural production solely on the basis of the objectives it is setting for itself.

In 1968, Tafuri saw two dominant types of operative criticism, the typological and the opposition criticisms but, for him, their shortcoming was that they were not able to touch the ideological roots of architecture as a discipline. Like all other kinds of operative criticism, they were instruments to integrate the critique in the projectual activity.

c. Semiology

Tafuri was uncomfortable with semiology. On the one hand, he was accepting it as a tool that could demystify architecture but on the other hand, he was not ready to accept Structuralism because of its dangerous anti-historical attitude. This anti-historicism was the perpetual attempt of the Structuralists to find universality and what is invariable in the world. For the Structuralists, the study of myths was a mean to define the structure of the human unconscious and as such to find a supra-historical logic. Tafuri was suspicious of such importance given to the unconscious and to the system. He saw it as more than a working hypothesis, but as a real ideology by which everything was justified. Tafuri was

putting a lot of hope in semiology and he was ready to accept it as a science of demystification but wanted to avoid its possible recuperation as a mystifying ideology. The goal of Tafuri, in using the tools of the enemy, was to contradict those for whom architecture was a mute and autoreferential language. Architecture had a meaning and semiology could prove it.

d. Historical Criticism

For Tafuri, the only way the historian could adopt a demystifying attitude was to go beyond what architecture shows and to research instead what it is hiding. For him, architecture was a permanent creation in opposition with nature. Its history was that of the servitude of nature by dominant classes and historical criticism was trying to discover the signification of that activity. For Tafuri, such signification was that architecture is a discipline historically determined and institutionally necessary: first, for the "progress" of the pre-capitalist bourgeoisie, and later, for the development of capitalist civilization. Defined as such, history was not action-oriented: it was the criticism of architectural ideologies. History was used by Tafuri as a political weapon and as any political activity, it was looking for specific effects.

Tafuri called for a complete dissociation between criticism and architecture. Criticism would be done by historians and not architects. Operative criticism being based on myths, the new role of the historian was to discover these myths and to uncover the common ideologies they were propagating. Moreover, the historian was not proposing new myths and was not projecting in the future further developments. As such, the critic-historian was undermining the ground of the architects in showing them the original function and ideologies of the codes they were using and in delimiting the role and the meaning of architecture. Instead of delivering a

history of solutions, the critic-historian had to cruelly expose the contradictions of history in order to return it inoperative for the architects.

The effects of demystification were dual. First it was forcing architects to face their usual automatic approach to form by making them conscious that their choices should be analytical and verifiable. Second, it was putting the system of consumption of architectural methods and languages in a state of crisis. For Tafuri, criticism had to refuse any complicity with architecture. Explanation commentaries, analyses and historical projections were condemned as operative criticism. The critic-historian was in reaction to the profession and was in charge of the verification of the historical validity of its architecture.

For Tafuri, architecture as an ideology and a profession was in crisis and it was necessary not to hide this by pretending the situation was normal. For him, the position of the architect was absurd. The architect could have no confidence in the structures determining his projects nor in the autonomy of his own tools. The most lucid of the architects had only one possible choice ahead: the death of architecture or the escape in utopia. If they tried auto-critical experiments they were producing pathetic monuments alien to urban reality. The goal of the critic was to push the architect to the point of exasperation and to accentuate the crisis.

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5) Koolhaas and Tafuri

When Rem Koolhaas designated Manfredo Tafuri's attitude as an intimidation, he was right. Koolhaas perceived Tafuri as the Barthesian mythologist of architecture. Tafuri found in Barthes that myth was against history and was a de-politicized speech. For him, against myth, history had to be politicized. His goal was to break all myths with the hope of a radical change. Although he was against prediction, he could only anticipate the death of architecture. This is effectively

what he did in his next book. Progetto e utopia (1973) can be read as an attempt to historicize architecture altogether.¹⁰ For Tafuri, the death of architecture was something specific that had important consequences. It was signifying the end of architecture's role as an agent promoting the ideology of capitalist development. His thesis was moreover substantiated by the effective economical crisis of the early seventies. For him, the historian's role was to demonstrate that any "hope in design" was anachronistic. The architects were now only mere technicians and a group of intellectuals incapable of understanding their historical situation. That was a sign of their political backwardness. Any attempts to pursue the work of the avant-gardes was now ironically the work of conservatives. A sign of architecture's death was the return to formalism and to the rhetoric on the autonomy of architecture.

Koolhaas' was well aware of Tafuri's menaces. He had surely read Tafuri's analysis of the Roosevelt Island Competition to which he had participated in 1975. In that article entitled "The Ashes of Jefferson", Tafuri demonstrated the formalism of American architecture.¹¹ An interesting fact concerning that article is that Tafuri, already in 1976, had associated New York City with Nietzsche's Venice of solitudes. In fact he quoted, two years before the publication of Delirious New York, exactly the same sentences that Koolhaas later used for his thesis. This identity between Tafuri's and Koolhaas' sources is certainly not an accident.

Koolhaas also probably knew Barthes' Mythologies. This, at least, is the claim of one of his critics.¹² For Barthes, the two only means to grasp reality - ideology and poetry - were equally excessive. Tafuri accused operative criticism of transforming history into ideology, but for Koolhaas, it was Tafuri's politicization of history that was ideological. Tafuri saw architecture as an institution, i.e. an ideology serving the capitalist bourgeoisie. Althusser would call that

institution an ideological state apparatus. For Koolhaas, instead, architecture was not only one single ideology but the expression of them all. His theory of Manhattanism tried to prove that all ideologies could coexist in architecture. In fact, his study on Manhattan's architecture was done with what Tafuri called typological criticism and with a belief in the existence of a collective unconscious. Both methods were in themselves Structuralist and anti-historical for Tafuri.

Finally, the use of myth was for Barthes, by definition, both against history and a de-politicized speech: Koolhaas, in seeing the consequences of Tafuri's action, opposed him point by point and wrote a mythical history blending both the excesses of poetry and ideology. Koolhaas probably conceived his action as a form of negative political act that was countering Tafuri's politics. The goal of writing a retroactive manifesto was not only the promotion of Manhattanism as a form of modern architecture, it was also to re-enact operative criticism as a technique constituting architectural theory. In itself, the ideological poetry of Koolhaas was a long declaration of love for architecture.

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B. Tschumi and Barthes: Masks

When Tschumi arrived in New York in 1975, he had already spent five years in theoretical research. Facing a dead-end with his research on Urban Politics and the means to politicize architectural practice, he concentrated on a new definition of space in architecture. The first results of his new research were embodied in his first manifesto entitled "Fireworks" in which he pleaded for an architecture to be built and burned just for pleasure. Tschumi spent his first three years in the U.S.A. trying to advance and refine that statement. The research took the form of four articles that are analyzed in this section.

After, three years of private design work, Bernard Tschumi

finally broke into the open with his first solo exhibition entitled "Architectural Manifestoes". The show, first presented at the Artists' Space in New York (April 1978), was, ten months later, displayed at the A.A. (February 1979). For the occasion, the A.A. published a small catalogue bringing together all the experimental works of Tschumi between 1974 and 1978, with the notable exception of his 1976 project for La Villette. In this catalogue were presented the first two "Manhattan Transcripts" which became later an autonomous project with the addition of two other parts.¹³ The "Manhattan Transcripts" and the content of the exhibition "Architectural Manifestoes" are analyzed in Part 3 of this study. In this section, we are concentrating on the articles explaining the nature of his first manifesto "Fireworks" that he presented in the show "A Space: A Thousand Words" and on two other projects which were designed before the show at the Artists' Space. As such, both sections on Tschumi's work, "Masks" and "Idea", are intimately related and should be read as a whole.

Before entering the meanders of Tschumi's theory and references, it seems necessary to present a short theoretical introduction to describe how Tschumi developed his research and what were the basic intentions behind his work. This introduction, entitled "Procedures and Intentions", contains three thematic parts that are not chronological for the sake of clarity and concision.

* * *

- 1) Procedures and Intentions
 - a. System and Non-System

The research of Bernard Tschumi on the nature of space in architecture took the form of texts and experimental projects. The words were first trying to define the nature of space and later to state Tschumi's cultural project. Most experimental projects were exploring various readings of architecture by different modes of notation and conception. As such,

Tschumi's theory is cumulative. It is also heterogeneous, each experiment being defined as a fragment having direct, indirect or no relationship with the others. In Tschumi's work, system and non-system are coexisting and are thus making possible the inclusion of new elements, new fragments. The "labyrinth of experiments" of Tschumi's non-system is occasionally transformed in a "pyramid of reason", that is to say, in theoretical essays trying to organize the fragments in a coherent system. These moments of synthesis often occurred at the end of a period of research and experimentation. Henceforth, just like "The Environmental Trigger" (1975) was the conclusion and the synthesis of Tschumi's reflection on Urban Politics, "The Pleasure of Architecture" (1977) marked the end of the discourse on eroticism.¹⁴ A third phase ends with the publication of the series "Architecture and Limits" (1980) in which Tschumi established his most coherent statement of objectives about his cultural project for architecture.¹⁵ Moving from the experimental to the synthetical, Tschumi's research is to a certain extent the reversal of traditional manifestoes, the declaration coming sometimes after the demonstration. In Tschumi's research, theory is considered a play of the mind, the irrational excess of reason that collides with the reality of experience. Theory always masks reality, and perhaps, just for the pleasure of the mind, reality is masking theory. When reading Tschumi's theory, one should always keep in mind one of his statements made with his first project for La Villette in 1976:

"If one has a passion for the absolute that cannot be healed, there is no other issue (sic) than to constantly contradict oneself and to reconcile opposite extremes."¹⁶

b. Discipline and Non-Discipline

By 1975, Tschumi stated that architecture could not change the world and that the transformation of architecture into a revolutionary tool had aborted. But he also disagreed with the contemporary Post-Modern historicism for its inadequate

conception of architecture. For him, architecture, that is historically a form of knowledge in and of itself, was reduced by Post-Modern architectural theories to a mere knowledge of forms.¹⁷ With that statement, Tschumi was performing a double act.

On the one hand, he used an oxymoron, a rhetorical device inverting the initial proposition. The oxymoron is a favorite among the literary strategies used by Tschumi. The inversion shows the other side of the system. Hence, each affirmation or axiom has its double. For example, the pleasure of architecture is calling for an architecture of pleasure. The oxymoron creates a gap between the two terms. Tschumi then presents this gap as an unsolvable opposition, an abyss impossible to fill. Thus, the oxymoron is used to create abyssal paradox, in order to provoke the "mise en abyme" of the system of architecture. In that case, the consequence of concentrating on forms is that the discipline and its theory cannot explain reality. Architectural theory is generative and not explanatory.

On the other hand, Tschumi is establishing his theory on history in invoking it to prove his point. For him, history demonstrates that architectural knowledge has increased not only with the building activity but also with theoretical writings and drawings. He criticizes the traditional critics who are using canonical history to reduce the development of architecture to simple partisan oppositions. Tschumi considers that they do not understand the real disruptive and fragmentary nature of history. It follows that in order to reduce history to a simple dualist system, they also exclude the grey zones of eccentric and rebellious past experiments. A consequence of this reductive view of history is exemplified by the confusing behavior of the same ignorant and partial critics who proclaim that the plurality of styles makes the complexity of thought. In 1980, Tschumi declared that a battle was engaged between the supporters of outmoded models

of interpretation and those looking for a definition of the discipline. For him, this definition had to include the possible work on the limits of the architectural field. Those limits were located where architecture overlaps other fields like literature, psychoanalysis, music, etc. Just as architecture served as a model for other disciplines, architecture could find models in other fields. Tschumi wrote: "cancelling limits (...) is cancelling architecture altogether for these limits are the strategic areas of architecture."

As a matter of fact, Tschumi tried to correct some of the mistakes of traditional historians and critics in writing himself historical articles on Surrealism and Futurism and in publishing many critical texts and, in particular, one on Koolhaas' book Delirious New York.¹⁸

At a methodological level, Tschumi's proposition implies the contamination of architecture with concepts developed in other fields of knowledge whether artistic or scientific. It also implies the exploitation of the full potential of drawing as a mode of thinking architecture. This project is supposing a constant movement of import and export between disciplines. Tschumi's position was extremely similar to Barthes' argument in Critique et vérité because it was proposing a new reading of architecture and its history through the knowledge of other disciplines.¹⁹ Tschumi's proposition also meant that the knowledge of architecture was not only the task of the architects alone but also that of critics using the tools of the Nouvelle Critique. In the process, architecture becomes an intellectual activity simulating and dissimulating reality; it is at the same time a discipline and a non-discipline.

c. Import-Export

After the publication of "Architecture and Transgression", a reader complained about the fact that Tschumi did not quote T. Kuhn's book The Structure of Scientific Revolutions, although

he had, without any doubt, almost integrally copied a part of it (see Appendix A).²⁰ The juxtaposition of the texts shows that Tschumi simply replaced the word "science" of the original text by the word "architecture" in his own text. He then transformed slightly Kuhn's prose in order to make it fit into his article.

The procedure is certainly a provocation, but it also demonstrates what Tschumi means by the process of import-export. By the hidden use of intertextuality, the text acquires an immediate depth. Without the quotation marks, the concept developed in the field of science is integrated in architecture and becomes a new element of its system/non-system. Once Kuhn is discovered, the text invokes his authority but still remains autonomous. It is also possible to read the correspondence established by Tschumi between science and architecture as a pure equation of the two terms: architecture is science. It is what Christian Girard reads, and it is on the basis of Tschumi's epistemological pretention that he dismisses his theory.²¹ In fact, in that undeclared quotation, Tschumi was not arguing about the scientificity of architecture. The contrary would be more exact. Tschumi, in negating architecture's theoretical autonomy, negates all that could make of architecture a scientific discipline. The allusion to science is a metaphorical mask of Tschumi's architectural theory.

In verifying Tschumi's sources, one discovers that the procedure is used extensively in the construction of his texts. Playing on the notion of the "Death of the Author", Tschumi's texts are composed of fragments of other texts almost as if they were mere "objets-trouvés" without origins. Titles of articles like "Architecture and its Double" and "The Pleasure of Architecture" are direct references to Artaud's Theatre and its Double and to Barthes' The Pleasure of the Text. The equivalence of architecture with science, theatre and text are integral metaphors when the sources are given but

when they are hidden, like Tschumi does, they are used as if they were scientific concepts. New knowledge is thus produced by the architect with two strategies. He first hides the origin of his quotations and second, he follows Barthes' suggestion and tries to empty metaphors of their metaphorical content. He wants to instrumentalize Nietzsche's definition of the scientific concept as a forgotten metaphor.²² To do so, Tschumi is obliged to avoid the difficult problem of the evaluation of the relevance of metaphorical knowledge. Tschumi was surely conscious that the best way to talk about the language of architecture was to forget that it was a metaphor. As a result, what Tschumi does is less a "scientific jump" than an acknowledgement of the metaphorical nature of architectural theory. The comparison with science remains only an analogy and the one with theatre is a play. It is the analogy with the text that was for Tschumi the most useful to develop his theoretical correspondence between architecture and eroticism. Other models were used to contaminate the process of design. The first one was drawn from literature in the project entitled "Joyce's Garden" or from music in his project for the Opera of Tokyo (1986).²³ Tschumi's richest metaphor for design remains the one using cinema that he developed as a concept in the "Manhattan Transcripts" and later used in the design of his second project for La Villette.

* * *

2) Text and Architecture: The Paradox of Architecture

In 1974, Tschumi conceived his first project-manifesto, "Fireworks", for the exhibition "A Space: A Thousand Words". To rescue architecture from the profit society, Tschumi suggested to exploit its most radical aspect that is to say its non-necessity. Such a burst of energy wasted in vain needed an explanation. Why was it the only possible way of conceiving the role of architecture? Few months after the exhibition, Tschumi provided an answer in an article, entitled

"The Pyramid and the Labyrinth", in which he explained what he was considering to be the paradox of architecture.²⁴ The key for the understanding of this article, and of the three that followed - "Le jardin de Don Juan", "Architecture and Transgression", "The Pleasure of Architecture" - is the little essay entitled The Pleasure of the Text written by Roland Barthes in 1972... although it is not quoted.²⁵

a. Barthes

Barthes' essay is a series of fragments reflecting on the resistance of the text to semiology - semiology was then, for him, representing the institution. The essay revolves around a metaphor uniting text and human body. The text and its double - its reading - are split and are thus breaking the moral unity that society demands of every human product. This split of the object (text) is the split of the subject (writer/reader). The metaphor is even forgotten by some perverts for whom, the sentence is a body.

In one sentence, "the pleasure of the text, according to Barthes, it is that moment when my body pursues its own ideas - for my body does not have the same ideas I do." While the pleasure of the writer is essentially the perversity of writing without function, the pleasure of the critic is the one of a voyeur observing clandestinely the pleasure of the others.

Looking at the economy of the work, Barthes defined modernity as the constant attempt to defeat exchange: it resists the market (in excluding itself from mass communication), the sign (by exemption of meaning, by madness) and sexuality (by perversion, which shields bliss from the finality of reproduction). Therefore, the split perversity of the modern author is to write at the same time two texts, one participating in the profound hedonism of culture and the other in the destruction of that very culture. But exchange recuperates everything; even the very uselessness of the text

becomes useful. Society is equally perverse and split in consuming an object which is gratuitous²⁶. In reading Freud, Barthes explained how both parties, the writer and society, take their share of pleasure through exchange, but that, in the exchange, there is nothing gratuitous for only death is gratuitous. So, for the text, only its own destruction would be gratuitous: to stop writing or to be recuperated is the ultimate choice. Barthes reflected on the inadequacy of the self-destructive approach and saw clearly the paradoxical role of the avant-garde art which is working against the established opinion while being sure it will eventually be recuperated by it. It follows that there is a structural complicity between the contesting and contested forms. Barthes suggested that only a subtle subversion could escape that structural paradigm through the discovery of a third term. He offered as example the work of Georges Bataille who did not "counter modesty with sexual freedom but...with laughter".²⁷ For Barthes, pleasure was that third term in literature, for it is going beyond ideology - "the pleasure of the text does not prefer one ideology to another" - and it cannot be reduced to a method nor a science.²⁸ Therefore, for Barthes, it was impossible to institutionalize the theory of the pleasure of the text because it can only produce theoreticians or practitioners, not critics, teachers or students.

The dilemma of avant-garde practice was carefully enunciated by Barthes, and Tschumi obviously saw that the same problem was occurring in architecture. His studies in urban politics were also trying to find a solution to the vicious circle of production-consumption that the avant-garde was facing. In literature, Barthes proclaimed that the resistance of the text was coming from the perverse pleasure of its uselessness. Tschumi repeated exactly, step by step, the same act in architecture. He was using the contemporary metaphor of the

text but he was, at the same time, re-importing in architecture the old humanistic analogy with the human body. Nevertheless, to state the uselessness of architecture was obviously the result of a perverse logic. To be useless, architecture had to negate itself and what society was expecting from it. Tschumi found in ruins the most architectural objects. Probably with the intention of proving his point, Tschumi announced, in 1977, the publication of a book which title would have been "Architecture of Negation", but he did not realize that project. More effectively, architecture was finding its mean of resistance in its autonomy. Aldo Rossi had already worked in that direction, but Tschumi did not follow the project of the Neo-Rationalists. He was on the side of Tafuri from whom he quotes the idea that Rossi was inflicting to architecture a "sadistic" process in order that it speaks only of itself.²⁹ Tschumi preferred instead to contaminate architecture with external concepts. The first manifesto was an ambiguous act which was proclaiming a form of autonomy (in negating the role expected from it, architecture was also turning back to itself) by a process of importation negating that autonomy.

b. Hollier/Bataille

It was necessary for Tschumi to accept, at least tacitly, the autonomy of architecture in order to concentrate, as he did, on the definition of architectural space. In shifting the center of interest on space instead of architecture, Tschumi insisted that his research was not a disciplinary one. The claim is rather rhetorical considering that what follows is fundamentally an attempt to give a new definition to architecture.

The logic of Barthes' "Pleasure of the text" was to break the structural paradigm welding the text to the institution. It was the third term that was dissolving in Barthes' mind the economy of the exchange. In order to repeat the same act,

Tschumi had to establish a dualist interpretation of architecture. Barthes had proposed Bataille as an example to find the third term. Tschumi thus research on Bataille and his solution. What he found was more extraordinary than he could imagine.

Bataille was a librarian expert in medieval studies. During the thirties he edited the review Minautaure that was criticizing the Surrealist publications. Bataille was especially interested in finding the opposite term to reason as theorized by Hegel. The horrors of the first World War and the trauma caused by the death of his father had deeply affected him and, before he was treated for a severe nervous breakdown, he produced virulent materialist texts opposing the metaphysical philosophy of Hegel. In these texts, he tried to find the opposite to Hegel's "spiritual elevation" or **Aufhebung** in the hidden part of history: the most cruel and singular rites of human civilization. But Bataille's attack against Hegel was also an attack against his theoretical edifice. For him, architecture was a key metaphor to enter and undermine the Hegelian reason.

In effect, Bataille had an obsession with architecture. Architecture was for him the symbol of order and power: it was hiding death behind a serene rationality. Architecture was the overarching metaphor for the systematic unity of both philosophical and scientific projects. Bataille's subversive attack against reason was the revolt of reason against itself; it was also, at least metaphorically, an attempt to destroy architecture and what it represents.

Tschumi found the book of Denis Hollier La prise de la Concorde, published in 1974.³⁰ In his book, Hollier analyzed the work of Bataille with an architectural metaphor borrowed from philosophy: the opposition between pyramid and labyrinth. Philosophy, caught in the labyrinth of experience, tries to erect a pyramid of reason (science) to overlook the labyrinth (nature) and understand it. Hollier explained with that

metaphor Bataille's offensive against the Hegelian philosophical building. For Bataille, the labyrinth could never be overlooked because of the impossibility of the pyramid. The labyrinth was, for Bataille, constituted by language and was not a simple prison because one never knows if one is inside or outside.³¹ In Bataille's logic, writing was thus just a game played with the ungraspable reality.

Hollier's book is, in part, about architectural theory. The architectural metaphor led him to reflect extensively on Hegel's conception of architecture and also to refer to the writings of many architects-theoreticians (Vitruvius, Alberti, Quatremère, etc.). His research showed that architecture is the fortress of reason for the philosophical thought. Hollier also demonstrated how the analogy with architecture is essentially theological - God is seen as the Great Architect of the world. He also found in the writings of the architects, the conception of architecture as a *cosa mentale* - the forms they conceive are establishing the domination of idea over matter. All that research was important for Tschumi who picked many ideas into it.

His interest in architecture notwithstanding, Hollier never forgot that it was a metaphor for the philosophical text. He explained how Bataille's opposition to architecture took the form of an opposition to the very idea of project. The book, and its metaphor - the building, were seen as a complete and oppressing unity which had to explode. Hence, Bataille's texts are incomplete fragments transgressing the book form. To the temptation of the form, Bataille opposed the violence of desire: the most material and crude depiction of the body being opposed to the mind that created the idea of God. Like pleasure for Barthes, Bataille's transgression was not a theory but a practice, writing being one form of that practice. In fact, the work of Bataille can be interpreted as the constant expression of the negative forces. Bataille wanted to express the other side of the system, but he also

wanted to understand where positive and negative thought were meeting and to locate the point of their union or, in his own words, the blind spot. He found a solution in his studies on eroticism.

Bataille had the intuition that both sides - the positive and the negative - were meeting where social taboos emerge. Sex and death have always been the fundamental prohibition of mankind. As Tschumi explained it, as a result, any discourse about life, death and putrefaction implicitly contains a discourse on sex.³² Symmetrically, eroticism being a sexual relationship not aiming at reproduction but at pure pleasure, it is automatically mirroring death. This discovery led Bataille to write that eroticism is assenting to life up to the point of death. Eroticism was the ultimate transgression because it was standing on the border between life and death.

Hollier's book was apparently discovered by Tschumi after the exhibition "A Space: A Thousand Words". It is only few months later, in his article having the same title, that Tschumi incorporated many of Hollier's ideas into his research. The subtitle of the article being "The Pyramid and the Labyrinth or the Paradox of Architecture", the reference was too obvious to not be quoted in a footnote.

The article was an accumulation of new and earlier fragments which were organized in three large sections trying to explain the two terms of the paradox and the means to escape it. Tschumi was trying to impose the dualist system of philosophy over his analysis of architectural space with the intention to reveal the formulations of the third term that he found in Barthes and Hollier/Bataille, namely: pleasure through uselessness and the concept of the erotic transgression.

For Tschumi, the paradox of architecture emerged when the discipline (i.e. himself) started to reflect on the nature of the space. For him, that paradox was "the impossibility of both questioning the nature of space and, at the same time,

experiencing a spatial praxis." Tschumi's "mise en abyme" of architecture was rather ambiguous. He again appealed to Barthes to clarify his thought:

"We cannot both experience and think that we experience.
 'The concept of dog does not bark'; the concept of space is not space."

He found another formulation:

"the achievement of architectural reality (building) defeats architectural theory whilst at the same time being a product of it."

Essentially, Tschumi wanted to demonstrate that architecture was made of two interdependent and mutually exclusive terms, reason and experience; and that architecture was always missing one of them: "architecture is always the expression of a lack, a shortcoming, a non-completion"; "it always misses something either concept or reality"; it is "both being and non-being".

The paradox of architecture was obviously a dramatization for the introduction of the third term. To illustrate his theory, he used the model of the pyramid and the labyrinth.

On the one side, there was the pyramid of reason. He had no problem to explain how philosophers and architects were defining architectural space as a product of the mind. Tschumi saw in the recent architectural trends this tendency to dematerialize architecture into the realm of concepts. He even suggested it to be more the characteristic of the epoch than any avant-garde group. He illustrated the problems confronted by those who are thinking space. That led him to reflect on the different use of the analogy with language and to introduce many ideas developed by Hollier like, among others the question of whether architecture imitates or constitutes its own models.

On the other side, there was the labyrinth of sensation. The consequence induced by the dematerialization of space into the realm of concepts was the removal of architecture of its fundamental element: real space. The goal of Tschumi was to

prove that real space is affecting the senses long before reason. Tschumi enumerated a series of experiments and theories which tried to explore how space could affect the inner nature of the human being. The discussion on the labyrinth ended with a reference to Bataille and his opposition to Hegel with the idea that the labyrinth is unescapable, but it is obviously not Bataille who was speaking: it was again Hollier.

The two "paradoxical" terms of architectural space were thus established. The mental space of conception was opposed to the physical space of perception: "conceived" space was opposed to "perceived" space. Tschumi recognized that his analysis could be reduced to a "naive" confrontation between mind and body, between the rational play of architectural language and the experience of the senses. He then suggested two ways of reading this duality, one political and the other disciplinary.

The political reading would dismiss the "paradox" on the basis that it is an intellectual problem and that architecture can pragmatically change society. Tschumi used the reasoning of his research in Urban Politics to demonstrate the false hope of the avant-gardes to change the socio-economic structure of architecture with architecture. He established the structural paradigm of modernity as explained by Barthes and proposed the same solution.

"If the architectural piece renounces its autonomy by recognizing its latent ideological and financial dependency, it accepts the mechanisms of society. If it sanctuarizes itself, in art for art's sake position, it does not escape classification among ideological compartments. So architecture seems to survive only whenever it negates itself, whenever it saves its nature by negating the form that society expects of it. **I would therefore suggest that there has never been any reason to doubt the necessity of architecture, for the necessity of architecture is its-non necessity. It is useless, but radically so.**"^{3 3}

The most politically valid position was to use architectural autonomy as a weapon. Like literature, the resistance of

architecture was coming from the perverse pleasure of its uselessness.

The second reading, the disciplinary one, would face the paradox and try to go beyond the problem of these two interdependent but mutually exclusive terms. Using Barthes again, Tschumi dramatized the dilemma in stating that the consequences of not finding a solution would be architecture's self-annihilation.³⁴ The solution was obviously Bataille's erotic transgression. Tschumi introduced the solution as a proposition perhaps unbearable for scientists, philosophers and artists alike. This description was in fact paraphrasing the words Philippe Sollers used to characterize the work of Bataille (see Appendix B). Tschumi was at the same time trying to transpose in the realm of architecture the effects sought by Bataille in literature. As the reincarnation of Bataille, Tschumi was voluntarily assuming the role of a wicked architect.

In Tschumi's mind, the "paradox" was solved at the moment when space was not merely perceived by senses but when space was deeply experienced, when the praxis of space was bridging sensory pleasure and reason, when the concept of space was at the same time experienced. This profound interior experience was also theorized by Bataille in his essay L'expérience intérieure.³⁵ In architecture, this moment was, for Tschumi, reached by the subject only when he/she was recognizing the architectural rule: like eroticism, architecture needed both system and excess. The paradox provoked by the opposition between "conceived" and "perceived" spaces was dissolved by Tschumi's third term of architecture: "experienced" space. The products of architecture were ultimate erotic objects enabling to resolve the historical philosophical problem of the Subject and the Object. As the ultimate erotic act, architecture was proposed, by Tschumi, to replace literature and the text as cultural model for society.

By a strange detour, Tschumi was rearticulating the trilogy

he proposed in his first project where he was advocating new relationships between ideas, people, and objects. This detour was made possible only because of Tschumi's systematic equation between text and architecture. The philosophical problem of the subject was introduced in the analysis of architecture and its resolution was possible only through the discovery of a subjective practice, like in literature.

* * *

3) Architectural Applications

Tschumi had established the "paradox of architecture" and revealed the means to resolve it. It became clear for him that the pleasure of architecture was lying both in the dialectics and the disintegration of the dialectics.³⁶ In a sense, his thought was both Structuralist and Post-Structuralist. In a second phase, he needed to demonstrate why it was concretely implying the redefinition of the practice and the revision of the traditional vision on history.

In parallel, Tschumi was facing a major problem. The model proposed by Hollier was not conceived to be operative. On the contrary, it was paralyzing the projectual activity in negating its totalizing enterprise. Tschumi did not find immediately a mean to instrumentalize his discovery. The theory was first a new reading of architecture. Hence, he insisted on the themes that concerned architecture in Hollier and Bataille and he conceived, in 1976, the series "Advertisements for Architecture" to illustrate his articles and to trigger desire for architecture (fig. 14). What is most paradoxical in Tschumi's paradox is that for his main reference, Bataille, architecture was the enemy, while for him, it was suddenly the ultimate erotic object.

a. "Le Jardin de Don Juan" (1976)

The problem of the Subject and the Object had developed, historically, in the long tradition of philosophy. To

establish the same permanence for his "paradox" of architecture, Tschumi looked for precedents in architectural history invoking a dualist vision of the world. This was the purpose of his article entitled "Le jardin de Don Juan" in which the fable of Don Juan was used to stress the permanent inner struggle of human beings that every mythical tale expresses.³⁷

Dualism in architecture was clearly theorized by the Abbé Laugier when he argued for a dialectic between regularity and fantasy, relation and opposition in city planning. Laugier wrote that who is able to design a garden has no problem in designing the plan of the city. Adopting Laugier's theory, Tschumi saw in Renaissance gardens mirrors of urban models: "conceived just for pleasure", they were juxtaposing rational order and sensual experience. Tschumi gave a series of architectural examples illustrating that "eternal dualism" of architecture opposing city to nature and order to disorder.

For Tschumi, if the opposition was expressed by the blending of order and disorder, the dualism was dissolved with seduction. Here, the dissolving third term - "experienced" space - was given a new formulation. The story of Don Juan served to explain the fascination and the violence of seduction. Tschumi explained that seduction implies a fascination for disguise and like Don Juan, architecture plays one role after the other without cause nor ideology (like Barthes' text!). But Don Juan feared to lure himself: just as he loved bodies and was indifferent to love, architects are more seduced by geometry than by space. They fear the sensuality of real space but "this violence done to the other" is only psychological, because the seduction of architecture is effective only on those who are willing to be caught. The masks of architecture are the myths (Baroque, Constructivists, etc.) collected by history. But for Tschumi, today, nobody confuses the mask with reality and only seduction remains.

Under the cover of the great myth of seduction that is the

story of Don Juan, Tschumi tried to give another formulation to the idea of architecture as an erotic object that was now an object of seduction. The history of architecture was also read by Tschumi as a series of invariant dualities in which the same plot is always re-enacted, like all versions of Don Juan are built around the same events. Using a more poetical language, Tschumi gave to his theory a new face, a new mask.

b. "Architecture and Transgression" (1976)

Once the permanence of the paradox was established, Tschumi's strategy was to demonstrate that contemporary architecture had also its taboos that needed to be transgressed to reveal architecture in its erotic dimension.³⁸

Tschumi formulated a first taboo when he read Modern Architecture with a concept borrowed from Bataille. For Tschumi, Modern Architecture was an healthy project trying to negate death with white and timeless skeleton often made of materials not revealing the trace of time (like glass and glazed tiles). The goals of modern architects were reflecting the deep fears of society. For him, the sight of buildings in state of decay is not without recalling the view of putrefied bodies, and this explains why, when Le Corbusier's Villa Savoye was discovered with peeling walls and stinking of urine, it was easy to find supporters to the idea that it should recover its original purity. However, in Tschumi's mind, it was that very moment when life was meeting death that was the moment of architecture: the moment when it was negating itself.

The second kind of architectural taboos was, for Tschumi, that propagated by education. This is where Tschumi borrowed from Kuhn his idea that the transmission of unquestioned paradigms constitutes taboos. As a result, perception is often culturally conditioned and transgression is the mean to fight stagnation.

Tschumi defined transgression in architecture as the mean to

overcome unacceptable prevalence. But, for him, it was not a matter of destruction or avant-garde subversion: the act of transgression was conserving the limits and the erotic act consisted of standing on the border.

Transgression was the most operative concept in Tschumi's theory of "erotic" architecture. It was seemingly not implying a radical change of architectural rules. What could it mean for architectural practice? Could it be used for design?

c. First Project for La Villette (1976)

At the time he was theorizing the paradox, Tschumi designed a project for an International Competition sponsored by the city of Paris. The competition was a "concours d'idées" for the reurbanization of the industrial vacant site of La Villette. It was meant to confront different theoretical conceptions for this large site (55 hectares) at the edge of the Parisian historical center and its suburb.³⁹ Hence, the submissions were never intended to be build. Tschumi's project did not win and was received with a certain condescendence by the French architectural press while two of his English friends reacted positively in his favor.⁴⁰

"Le jardin de Don Juan" was published in L'architecture d'aujourd'hui in the same issue that were made public the results of the 1976 Competition for La Villette. Tschumi's entry was thus published simultaneously. The conception of his project was deeply influenced by the ideas developed in the essay. Tschumi attempted to express the opposition between city and nature and to transgress it.

Very few documents concerning Tschumi's project were published. The most complete series was seemingly published in Art Net, a polycopied periodical edited in London by Peter Cook.⁴¹ The presentation is composed of three parts: a typed text with no apparent order among the words, a picture of the project's model on which was handwritten the same text and an

axonometric drawing (fig. 15 & 16).

The apparently incomprehensible text takes all its meaning when superposed on the picture. One then understands that Tschumi divided the site in four "quadrants" by means of two perpendicular axes. The "horizontal" one is determined by the position of a canal crossing the site. It is in fact a virtual frontier between the realm of the rational (bottom part) and the irrational (top part). The "vertical" axis is an extension of the axis of symmetry of an existing nineteenth century industrial shed designed by Baltard and built perpendicularly to the canal. It separates the "grown" realm from the "built" realm. The two axes are also establishing an unbalanced symmetry which is more evident along the grown/built axis - the grown area being the mirror image of the built one and vice-versa.

The four "quadrants" are therefore qualified with "early associations" induced by the axes. Tschumi numbered them as such: 1. grown/irrational, 2. grown/rational, 3. built/rational and 4. built/irrational. The frontier between the grown and the built is identified as a "battle front". It is crossed, therefore transgressed, by one quotation located on the irrational shore. It reads as follows:

"If one has a passion for the absolute that cannot be healed, there is no other issue (sic) than to constantly contradict oneself and to reconcile opposite extremes."

The only other quote is situated in the built/irrational "quadrant". It refers to transgression and paraphrases Bataille:

"Transgression opens the way into what lies beyond the limits usually observed, but it maintains these limits just the same. Transgression is complementary to the profane world, exceeding its limits but not destroying it."

The rest of the text consists of words and sentences without verbs, describing the main architectural concepts for the design of each "quadrant".

The grown/irrational part is marked with an informal nature with dwarfed trees, grotto, labyrinth of secret sensations and

fireworks. The grown/rational part is mirroring the built/rational one, which is labelled the Pyramid of Reason. Formal "parterres of broderies" are opposing houses covered with ivy. Both areas have "bondage gardens", one being grown and the other being built. However, the built one, characterized by an excess of all sorts of lines (tree, water, glass, virtual lines), is crossing the frontier separating the rational and the irrational. Finally, the built/irrational part is the place where the city equates the garden. It refers to the hanging gardens of Babylon and to arcades in state of putrefaction. In this section of the site already existed an enormous empty building that was obsolete before its completion. Its mass is negated by a long building transpercings it and by the intrusion of public ways in its interior. The frontier of the built realm of the project with the surrounding city is conceived like walls, with gates, pylons and hanging peristyle.

The project is a map of architecture and its possibilities by means of oppositions that are materialized on the site by the creation of virtual axes that are permeable. That enables each territory to be contaminated by the concepts developed in the others.

In an interview conducted by Alvin Boyarsky in 1985², Tschumi remembered that his motivations for doing the project were to "get into a subject matter which was outside [himself] and also to make contact with the French scene once again". He said that although his design was not bad in conventional terms, he was unsatisfied with it. He was upset of not having been able to express in his project the powerful ideas he was developing in his writings. He had sleepless nights for about a year. There was something missing, and retrospectively, it took him five years to find the missing link. According to him, the first period of his design research was a rejection of everything he did wrong with La Villette the first time. In fact, he wrote a last article summarizing all the points

that he had developed with his theory of the paradox. That was "The Pleasure of Architecture" published during Spring 1977. It was the conclusion on Tschumi's chapter on eroticism.

d. Joyce's Garden (1977)

In Spring 1977, he had already started working on "The Park", the first "Manhattan Transcript", but another project, "Joyce's Garden", was published before in the 1976-77 A.A. Projects Review⁴³. Conceived during the third term at the A.A., "Joyce's Garden" was a short pedagogical exercise made "by students and tutors [among whom were Fred Scott and Nigel Coates] from different units of the Diploma and Intermediate Schools". The site was London's Covent Garden and the program, a fragment of Joyce's Finnigans Wake. The fragment was a page of Joyce's book in which the Irish writer experimented with a new language obtained by the contamination of English with French. It was the narration of a mythical expedition. Tschumi had already used "narrative texts of literary authors (Poe, Kafka, Borges, Calvino, etc.) as programs for architectural projects at the A.A." in 1974⁴⁴. The choice of Joyce as a "brief" was to remind "about attitudes at times of cultural change". The individual project locations were conceived as mere technicalities. They followed the "random logic of an ordinance survey grid": each of the thirty-six participants were given a site on the point of intersection of the abstract lines (fig. 18). The end result was reflecting "the current architectural preoccupations of the various contributors rather than their reading of the work of the Irish writer". The overall project was aimed at exploring "a multitude of urban and literary obsessions" on the background of a "nostalgia for architectural order".

Tschumi's original contribution for "Joyce's Garden" is rather poorly documented but an expanded version of the 1977's

A.A. project is presented in the A.A. catalogue of the exhibition "Architectural Manifestoes"⁴⁵. It is illustrating Manifesto No 4 entitled "Imports". Tschumi first states:

"Architecture will break its cultural isolation and expand further the particular form of knowledge of its time. It will both import and export."

A short text follows and explains how use and function in architecture are results of convention. But spaces are also sometimes the outcome of the "social demands of a ritual, or the cultural demands of a period". Some texts suggests spaces calling for an architectural reply. "Here fiction replaces function." In the case of Joyce's text, imports of linguistic perversion take place. According to Tschumi, although it contains numerous references to writing techniques, the project is not directly relating to the text. "One merely triggers the other."

An axial axonometric drawing depicts a "virtual" route from Covent Garden to the River Thames. Another small illustration is entitled "Homage To Eisenstein" (fig. 19 & 20). It is an attempt to express graphically the three kinds of space theorized by Tschumi. The horizontal drawing is divided in three stripes. The middle part shows in parallel the plan and the section of the project. This representation of the architectural space is juxtaposed to two other kinds of illustrations. The top stripe is a series of seven photographs named "Action Phases". Each photograph determines by its vertical edges vertical lines that cross the drawing below. These lines are virtual frontiers dividing the long axis in a sequence of seven parts. Below is the "Performance Space". It shows two arrows, one dotted and the other continuous. They relate vaguely to the geometry of the architectural space above and suggest the movement of bodies in space and their possible itineraries. The overall drawing can be read as a piece of a 16 mm black and white film: the series of juxtaposed images freezing movement and marking time, and the continuous lines in the "Space of Performance"

being analogous to the sound track. The extreme right of the drawing is "cut" by an oblique and sinuous line that recalls the river shore but also a breaking of the film.

The project was published a third time in Architectural Design at the end of 1980⁴⁶. Tschumi needed to affirm that: "It must be made clear that Joyce's Garden is above all a polemical work on the writing of the city." The architectural project was now compared with writing. The work was based on two hypotheses, one questioning the concept of urban typology, and the other applying to the idea of programme.

The first hypothesis stated that "architecture, by its very nature, precedes language" and thus that Joyce had invented nothing that was not discovered 300 years before by Bernini. "The manipulation of space is related to the exploration and perversion of language." The new meaning of Joyce's Garden was an unexpected reversal of the process of import/export. While originally, Tschumi took the book as his starting point, now architecture was the origin of the book itself. Artistic invention was the result of the contamination of one discipline by another. The project paid homage to Joyce because Tschumi considers that his "most intense exploration of the faculties of language" had "shown architecture what it already discovered, despite itself, a long time ago". In this first hypothesis, Tschumi was repeating Derrida's act, which was stating that Writing was preceding Speech, in asserting in his turn that architecture was preceding Writing itself.

The second hypothesis stated that every function can be replaced by another, just like a barn can become a theatre and vice-versa.⁴⁷ To clarify his conception of the relationship between literature and architecture, Tschumi added: "If a book will not replace a cathedral, it will know how to replace the gods of that cathedral". In "Joyce's Garden", a book, not a function, is taken as point of departure. Tschumi continued the comparison with literature:

"Here, the project plays on the de-construction of a

narrative structure comparable to a journey from one point to another. A journey rather than a use, because the construction of a new district does not compensate for the void produced by the destruction of another."

Tschumi was proposing that architecture could be read, like the derridean text. The change of programs that was occurring in a building during its existence was similar to the new meanings a word was accumulating through time. Architecture was affected by the same movement of "différance" as language.

Tschumi ended with a note about Covent Garden which has lost its original function as a market place. The project was stressing the idea of garden and was using typical Londonian elements like the crescents. Finally, the axis that it established was crossing the Savoy Hotel and was giving "rise to a series of Joycean variations on the theme Savoy or Savoye in architecture". Floating above the city like "spiritual vessels", "they must under no circumstances be confused with architecture."

Retrospectively, it is possible to say that "Joyce's Garden" is like a joker in Tschumi's game. It is presented by Tschumi as the missing link of his research. The evolution of the commentaries accompanying "Joyce's Garden" reflects a change in the sources of Tschumi between 1977 and 1980. The drawing itself becomes a pretext for a theoretical discourse that changed constantly. Just like Joyce's text was a starting point for the process of design, the architectural drawing is used to initiate a theoretical discourse. Just like architecture was changing function over time, Tschumi's project changed of narrative. The architectural drawing having not the capacity to substantiate the pretention of its author, the procedure has for effect to dissociate formal models and discourse. The strategy was further developed by Tschumi in his second project for La Villette.

In "Joyce's Garden", the drawing is showing the manipulation, transformation and "cross-breeding" of architectural types. The programme is virtual. With the

exception of the pseudo film strip which is an attempt to express the third term with drawing, the rhetoric of the paradox were seemingly abandoned. Joyce's Garden was first a statement on the non-disciplinarity of architecture with its simulation of a literary import which seems to have aborted.

It seems that, with Joyce's Garden, Tschumi was once again following Barthes who had just published during Spring 1977, few weeks before the project was made, his inaugural Leçon at the Collège de France.⁴⁸ Tschumi could certainly not forget how Barthes had already in 1970 rediscovered Victor Hugo's "old intuition" that the city was a kind of writing.⁴⁹ In his Leçon, Barthes was now presenting literature as a resistance to the legislation of the language code, and Semiology was now the deconstruction of Linguistics. The initial goal of Tschumi was probably to produce a new "writing" of the city, transgressing the legislation of urban typological code. The project was finally recuperated to reaffirm the intention of establishing architecture as the leading cultural model. More research on deconstruction has seemingly changed his understanding of his act. The "deconstructive" reading he made of his own project could theoretically have been made of any object.

As in "Fireworks" where Tschumi borrowed from Barthes, he was in "Joyce's Garden" borrowing from Derrida. The act was ambitious and was only a rhetorical success. As a result, architectural theory was transformed into a mental game, producing retroactive meaning. Theory had only tangential effects on the elaboration of the project.

* * *

4) Criticism of Post-Modernism

Like Rem Koolhaas, Tschumi was publishing his works during the rise of Post-Modernism. He attacked the Post-Modern doctrine for its regressive use of the concept of style and its simplistic application of the analogy with language. The development of the interest for architectural styles was a

direct outcome of semiological studies looking for meaning in architecture. Post-Modern architects were trying to develop an "architecture parlante" with elements borrowed from the past examples of architecture.

In 1968, Tafuri also conceived architecture as a language possessing its own codes but, for him, these codes were reflecting bourgeois ideologies. In 1973, he changed his mind concerning semiology and considered that it was in itself an ideology masking the real problem of architecture.⁵⁰ For him, architecture, tormented by the loss of its meaning, was reduced by semiology to pure and autoreferential signs. Experimentation on the architectural language was performed by a new "artistic-literary avant-garde" resurrecting formalism. The latter comment could fit Tschumi's work which aimed at the manipulation and perversion of existing architectural types. However, Tschumi did not really establish his production on semiology.

For Tschumi, the problem of architecture was not only one of meaning. The question had to be asked differently. The field of architecture had to be redefined. Tafuri's definition of architecture as an ideology was announcing the death of the field. Against Tafuri, Tschumi felt that architecture was going beyond ideology. Just as Barthes had pointed out how the text was not preferring any ideology to another, so he tried to demonstrate how architecture could be a new cultural model for society, a model as rich as, if not richer than language. To achieve that project, architecture had to negate its traditional disciplinary borders and renounce its theoretical autonomy. Once again, Tschumi was following Barthes: the critique of architecture had to follow the model of the Nouvelle Critique in literature and to borrow concepts elaborated in other fields. It could not be established only on Tafuri's historical criticism.

Unlike the Post-Modernists who were resurrecting the old category of style, Tschumi kept the analogy with language but

he discarded the Structuralist semiological model and adopted the Post-Structuralist negative thought on language.

Architecture was not defined as a language bearing an intrinsic meaning, it was now a piece of writing carrying no fixed signification, being open to any reading. Like the text, architecture was conceived as a place of resistance.

It is too early to conclude on the design theory of Bernard Tschumi, but we have now a few elements indicating how he built his texts on architecture by transposing literary concepts into architecture. The metaphor with language was applied directly on architecture and was transformed into an operative concept.

Tschumi used many ideas developed by Barthes in Le plaisir du texte. In comparing architecture with Barthes' notion of the text, Tschumi reintroduced an up-to-date version of the humanistic analogy with the human body. Architecture, text and human being were associated in such a way that the qualities and characteristics of one were affecting the others in the same way. That explains why Tschumi could comfortably to invoke the pleasure of architecture for the same purpose that Barthes was pleading for the pleasure of the text. While for Barthes the structural dilemma of the modern literary avant-garde was resolved because of their perverse pleasure for the text, for Tschumi, the same solution was valid in architecture. It is also in Barthes that Tschumi found the reference to Bataille as the thinker of the system's negativity. In fact, Barthes' theory of pleasure itself was inspired by Bataille's theory of eroticism, but for Tschumi, Bataille was more important because he was the great theoretician of the link uniting the philosophical text and architecture. In superposing Barthes' theory of the erotic text on Bataille's analogy between text and architecture, Tschumi developed his theory of erotic architecture. Intertextuality was the means to produce a new definition of architecture. That definition was the result of a complex

metaphorical chain. Each concept was emerging from the superposition of different metaphors which were acting like as many masks disguising the ungraspable reality.

Notes to Part 2 - Manifestoes

1. Koolhaas, R. Delirious New York: a Retroactive Manifesto for Manhattan, Thames and Hudson, London 1978.
2. Koolhaas, R. & Spear, L. "House in Miami" in Architectural Design, Vol 47, No 5, 1977, pp 352-353.
3. OMA, "Roosevelt Island" in Architectural Design, Vol 47, No 5, 1977, pp 348-351.
4. Tschumi, B. Architectural Manifestoes, Architectural Association, London, 1979.
5. Special OMA - Architectural Design, Vol 47, No 5, 1977.
6. Koolhaas has probably taken his idea of a Constructivist floating pool in El Lissitzky's book on architecture. Lissitzky discussed there how the Constructivist architects were intending to use the floating pool, which was originally reserved for privileged classes, as a social attraction. See: Lissitzky, E. Russia: An Architecture for World Revolution, Cambridge, 1970, pp 84-86.
7. Goulet, P. "La deuxième chance de l'architecture moderne... Interview avec Rem Koolhaas" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 3-9.
8. Tafuri, M. Teorie e storia dell'architettura, 1967. English translation: Theories and History of Architecture, New York, 1980.
9. Barthes, R. Mythologies, Paris, 1957.
10. Tafuri, M. Progetto e Utopia, Bari, 1973. English translation: Architecture and Utopia, Cambridge, 1976.
11. Tafuri, M. "Les cendres de Jefferson" in L'architecture d'aujourd'hui, No 186, août-sept. 1976, pp 53-58. Modified English translation: "The Ashes of Jefferson" in The Sphere and the Labyrinth, Cambridge, 1987.
12. Delirious New York was presented at the A.A. as a dissertation for a graduate degree and was reviewed by Anthony Vidler who mentioned the influence of Foucault and Barthes on Koolhaas. In another article, Vidler quotes Barthes' 1977 Leçon to discuss the works of O.M.A. Nevertheless, the link is not established by Koolhaas himself. See: A.A. Projects Review 1977/78 and Vidler, A. "The Ironies of the Metropolis: Notes on the Work of OMA" in Skyline, May 1982, pp 18-20.

13. Tschumi, B. The Manhattan Transcripts: Theoretical Projects, Academy Edition, St. Martin's Press, New York, 1981.
14. Tschumi, B. "The Environmental Trigger" in A Continuing Experiment, Edited by J. Gowans, Architectural Press, London, 1975, pp 89-99. And: "The Pleasure of Architecture" in Architectural Design, No 47, March 1977, pp 214-218.
15. Tschumi, B. "Architecture and Limits I" in Artforum, December 1980, p.36; "Architecture and Limits II" in Artforum, March 1981, p. 45; "Architecture and Limits III" in Artforum, September 1981, p.40.
16. In using the word "issue", Tschumi made a mistake, he was meaning solution.
17. Tschumi, B. "Architecture and Limits I" in Artforum, December 1980, p. 36.
18. Tschumi, B. "Architecture and its Double" in Architectural Design, No 48, March 1978, pp 111-116; "Episodes of Geometry and Lust" in Architectural Design, No 51, January-February 1982, pp 26-28; "On Delirious New York: A Critique of the Critique" in International Architect, Vol. 1, No 3, 1980.
19. Barthes, R. Critique et vérité, Paris, 1966.
20. Tschumi, B. "Architecture and Transgression" in Oppositions, No 7, Winter 1976, pp 55-63. Kuhn, T.S. The Structure of Scientific Revolutions, Chicago,
21. Girard, C. Architecture et concepts nomades, Bruxelles, 1986.
22. For Nietzsche, all scientific concepts have a metaphorical origin. They become concepts when the metaphor is forgotten. That hypothesis was the starting point of Philippe Boudon in his series Architecture et architecturologie, in which he tries to find if there are scientific concepts in architectural theory.
23. Merlini, L. & Tschumi, B. "Opéra de Tokyo" in L'architecture d'aujourd'hui, No 247, Octobre 1986. pp 46-47.
24. Tschumi, B. "Questions of Space: The Pyramid and the Labyrinth (or the Architectural Paradox) in Studio International, September-October 1975, pp 136-142.
25. Barthes, R. Le plaisir du texte, Paris, 1972.

26. The French word "gratuit" means both gratuitous and free. Gratuitous is the word selected by the translator of Barthes' essay.

27. Barthes was not the only one interested in Bataille. The whole circle of Parisian avant-garde intellectuals was discoursing on the validity of Bataille's position. Writers including Barthes, Hollier and Kristeva were united by Philippe Sollers to a symposium on Bataille during the Summer 1971. Among the debates, the name of Derrida emerged as one of the best essayist on Bataille. See: Sollers, P. Bataille, Paris, 1971.

28. Barthes also discussed the perception of the concept of pleasure for members of the political right and left. Tschumi has developed exactly the same argument in: "The Pleasure of Architecture" in Architectural Design, No 47, March 1977, pp 214-218.

29. Tafuri, M. "L'architecture dans le boudoir - The Language of Criticism and the Criticism of Language" in Oppositions, No 3, May 1974.

30. Hollier, D. La prise de la Concorde, Paris, 1974.

31. Bataille's image of the "prison of language" was transformed by Tschumi in the "prison of architectural language" in: "Le jardin de Don Juan ou la ville masquée" in L'architecture d'aujourd'hui, No 187, oct.-nov. 1976, pp 82-83.

32. Tschumi, B. "Architecture and Transgression" in Oppositions, No 7, Winter 1976, pp 55-63.

33. Tschumi, B. "Questions of Space: The Pyramid and the Labyrinth (or the Architectural Paradox) in Studio International, September-October 1975, pp 136-142.

34. Tschumi was dramatizing the situation and was surely thinking about Tafuri who had already stated the death of architecture.

35. Bataille, G. Oeuvres complètes, Paris, 1971.

36. Tschumi, B. "The Pleasure of Architecture" in Architectural Design, No 47, March 1977, pp 214-218.

37. Tschumi, B. "Le jardin de Don Juan ou la ville masquée" in L'architecture d'aujourd'hui, No 187, oct.-nov. 1976, pp 82-83.

38. Tschumi, B. "Architecture and Transgression" in Oppositions, No 7, Winter 1976, pp 55-63.
39. The site is described in Part 4 of this study.
40. Huet, B. "Concours pour l'aménagement des anciennes halles de La Villette" in L'architecture d'aujourd'hui, No 187, Oct.-Nov. 1976, pp 84-100; Shane, G. "Grand bland plans for Paris" in Architectural Design, Vol. 46, No 10, 1976, pp 620-622; Scott, F. "Review" in Architectural Design, Vol. 47, No 1, 1977, p. 14.
41. "Bernard Tschumi" in Art Net, No 3, London, 1976.
42. Tschumi, B & Derrida, J. La case vide: La Villette, Architectural Association, London, 1985.
43. "Special Project: Joyce's Garden" in AA Projects Review 1976/77.
44. Tschumi, B & Derrida, J. La case vide: La Villette, Architectural Association, London, 1985.
45. Tschumi, B. Architectural Manifestoes, Architectural Association, London, 1979.
46. Tschumi, B. "'Joyce's Garden' in London: a polemic on the Written Word and the City" in Architectural Design, Vol. 50, No 11/12, 1980, p. 22.
47. The idea of the transformation of a barn into a theatre was found in the work of Antonin Artaud. See: "Architecture and its Double" in Architectural Design, March 1978.
48. Barthes, R. Leçon, Paris, 1977.
49. Barthes, R. "Sémiologie et urbanisme" in L'architecture d'aujourd'hui, No 153, Dec. 1970, pp 11-13.
50. Tafuri, M. Progetto e utopia, Bari, 1973. English translation: Architecture and Utopia, Cambridge, 1976.

Part 3 - Negativity: Competitions and Exhibitions

A. Koolhaas and the Faith

1) Back in Europe

After the publication of Delirious New York, Rem Koolhaas settled in London. The book was successful and he did not want to become its victim. Not only did he feel that his theoretical statement about the metropolis was made, he was finally less interested in New York itself. His love affair with Manhattan was over. The heart of America was beating at the Post-Modern pace and Koolhaas felt that the European context, with the emergence of the Neo-Rationalist polemic on historical urban centers, was a more fertile ground for the kind of activity he was projecting.

Koolhaas' return in Europe was the occasion to test his ideas in another context and to change the type of activities of O.M.A. Between 1972 and 1977, O.M.A. concentrated on Manhattan and the theory of the metropolis. The critics who were seeing in O.M.A.'s work a plea for the deprofessionalization of architecture were mistaken.¹ In 1978, O.M.A.'s work changed and became more pragmatic and definitively professionally oriented. The Office established bases in London, Rotterdam and Athens. Koolhaas, in London and Rotterdam, and Zenghelis, in Athens, were working independently except on few occasions, when the size or the importance of the project requested it. O.M.A.'s staff increased and opened opportunities for some talented A.A. students.

O.M.A. worked on three kinds of projects. Immediately after the publication of Delirious New York, O.M.A. started to participate in architectural competitions, a context which enabled Koolhaas and Zenghelis to develop their theory in concrete situations and in concurrence with leading architectural trends. The Office also answered the needs of clients having read Delirious New York. These clients gave O.M.A. important and unexpected commissions. Finally, O.M.A. continued to work on the theoretical development of their

oneiric and mythical vision of architectural history in showing their work in architectural exhibitions and art galleries.

From the isolation of the theoretical world to the confrontation of reality, the step was high. Koolhaas saw in the common perception of architecture a major obstacle. The reality of the profession was, for him, similar to the humiliation a rejected lover was experiencing in enumerating his qualities to an uninterested partner.² The era when architects were trusted by politicians only on the basis of esoteric sketches was over. Some countries, like the Netherlands, had even institutionalized public "participation" in the projectual activity, leaving the architect caught in between popular and political power. Moreover, European politicians were playing with the architects in giving marvelous opportunities only to later contradict themselves with ridiculous budgets or in postponing perpetually the execution.

In Koolhaas' opinion, faced with such a cynical behavior, architects, "like a group of junkies" - he named them the Anonymous Architects - were rediscovering architecture and, as a cure, were invoking ritually history and past examples. The avant-garde was suffering of a permanent jet-lag. For Koolhaas, all this activity in the architectural institution was a big circus hiding the reality of a deep wound. The architects were responding politely to the brutality they were confronting with rhetorical and hollow theories. Koolhaas felt that this situation was rotten and that only an excess of passion and confidence could re-establish the balance. Paradoxically, to assume the traditional role of an architect, it was necessary to become some sort of hero. It needed the courage to contradict clients, to shock protectors and to brave politicians. That kind of courage was, for Koolhaas, necessary for the mythology of architecture. He wrote in 1985:

"The unconscious of our culture needs to be nourished with heroic examples or at least with proofs that certain essential things exist that only an architect can do."

This fight to recover the lost faith into the architects' capacity took the form of a crusade against every movement undermining the professional credibility of the modern architect.

* * *

2) Competitions

Since 1978, O.M.A. has submitted projects to at least six major architectural competitions. Their first work was a design for an extension to the Dutch Parliament in The Hague (1978); the second was a design for the new Residence of the Irish Prime Minister (1979). The group struck again in Berlin in 1980 with two projects answering polemically to the guidelines proposed by the organizers of the I.B.A. competition. In 1982-83, O.M.A. won the first prize - ex-aequo with the team of Bernard Tschumi - of the International Competition for the Parc de la Villette in Paris. Also in 1983, O.M.A. designed two projects for the French Universal Exhibition of 1989 which was finally cancelled. Lately, in 1987, O.M.A. was invited to participate in a limited competition for the design of a new Town Hall for The Hague.

a. Dutch Parliament Extension (1978)

The competition for an extension of the Dutch Parliament was the first project of O.M.A. after the "Manhattan Projects" series.³

The Dutch parliament and government were sharing an old medieval fortress erected through time by the addition of buildings built in different epochs. The goal of the competition was to build an extension to the feudal complex for the exclusive use of the parliament. It intended thus to separate physically the governmental and parliamentary activities. O.M.A. proposed an aggressive modern scheme that was architecturally creating a "breach of modernity in the

wall of the Fortress" (fig. 21). For Koolhaas, it was necessary to put the building of the Dutch Parliament into its long historical perspective. Modern democracy was building the symbol of its victory over feudalism.

Koolhaas and Zenghelis worked together on that project with one of their student, Zaha Hadid, who was just graduating. After the general principles were established, the project was designed like an "Exquisite Corpse"⁴. The project was divided in three parts and each architect worked individually on his/her own building. The general scheme was incorporating three modern building types, a vertical slab (Hadid), an horizontal slab (Zenghelis) and an "extruded" mini-skyscraper (Koolhaas).

The project meant to be controversial and was accompanied by a manifesto against three trends in architecture which were, in the context of the competition, the most important adversaries.

- Dutch Humanism

In the Netherlands, a local doctrine was dominating the Dutch scene for twenty years. Labelled by Koolhaas, Dutch Structuralism or Humanism, the doctrine was arguing for the fragmentation of all large institutional buildings into smaller components with the intention of re-establishing human scale. They were heirs of Aldo van Eyck and Herman Hertzberger. Seeing that a large part of the projects submitted were belonging to the Humanist trend, Koolhaas criticized the fact that the original intentions of their model, Aldo van Eyck's Orphanage, were lost and that subdivision was now mere mannerism.

For Koolhaas, there was a false consciousness in the Humanist position. They were blind in front of the post-war revolution made by the state which is now controlling everything in the Netherlands. By the mere process of subdivision, the institution was not becoming "more

transparent, less bureaucratic, less alienating, more understandable, less rigid". Koolhaas argued that there was no direct relationship between a social question and a formal answer: "architecture cannot have the pretention of solving social problems".⁵ As such, the humanity of architecture was a false problem, all architecture being humane.

Koolhaas also saw a certain condescendence in the Humanists' habit to address their work to special categories of people like orphans, elders, single mothers and all sorts of needy people. He argued that the Humanists were over-evaluating social categories, a problem that led them to look for a universal anthropological conception of the human being. For Koolhaas, both directions were problematic. On the one hand, specificities were becoming prescriptions and on the other hand, their conception of the universal man was simplistic and altogether dangerous and irrelevant. In the end, the Humanists did not see that there is no therapeutic value in architecture. For Koolhaas, they were using morality like a weapon and as a tool of legitimation. The Humanists' formula was for him too easy and vulgar. In good conscience, the architects were guaranteeing a priori their good intentions. Koolhaas was looking for an architecture for normal people with a vague nostalgia for the struggle of life.

- Contextualism

The second trend criticized by Koolhaas was the rising theory of Colin Rowe which had just been publishing in Collage City.⁶ Rowe was drawing a lot of attention with his participation to "Roma Interrotta", a laboratory of design that united many contemporary theoreticians of the city in 1978.⁷ Essentially, Koolhaas criticized the "anti-metaphysical comfort" produced by the contextual collage theory. Rowe defined the interventions on the city as the collision of a projected ideal with an "empirical necessity". Koolhaas criticized Rowe for his attempt to separate

aesthetical utopia from political utopia. The procedure, which was for him typically anglo-saxon, was amputating modernism of its social program. Then he argued that Rowe's conception of the context was idealizing the impurity of the "circumstantial". The context was forced to represent impurity and imperfection. It was losing its aura and was thus becoming an abstraction. The third point of Koolhaas' criticism was concerned with the inherent contradiction of the collage as theorized by Rowe. In juxtaposing aborted past utopias, it was producing, in a single act, what normally results from a long historical process. As such, contextualism could only preclude other solutions which would "bring the actual context into focus".

Koolhaas knew Rowe very well, he met him at Cornell in 1973. According to Koolhaas, a strange conflict between Ungers and Rowe was dividing the school in two opposite factions. Nobody really knew the origin of the war which was apparently more political than theoretical because both Ungers and Rowe shared similar points of view - collage being a particular one. This personal aversion between the two teachers was quickly transferred on Koolhaas who felt rejected by Rowe solely on the basis that he was Dutch. Koolhaas constantly refers to his first encounter with Rowe to denigrate his position.

He recalled in many interviews, that Rowe was working in the basement in a big dark room. When he came in for the first time, there were "a disgusting odor and a big sick dog covered with red sores within its black fur, like Tschumi's project for La Villette". There was only "a black student working and, behind his back, Rowe was whispering in his ear: 'Palazzo Piti, Piazza Navonna...'", as if they were pornographic expressions".⁸ Koolhaas declared that it was one of the most shocking scenes he had ever seen but that it tells a lot about American architecture.

- Rationalism

On the European continent, (Neo-) Rationalism was perhaps the strongest opposition Koolhaas was facing. The movement for the rebuilding of the European City based in Brussels was producing a series of counterdesigns to undermine the theory of Modern Urbanism mainly on the basis of its zoning principles.⁹ These projects were instrumentalizing typological and morphological researches and were reproducing existing urban types (streets, plaza) with a moral discourse on culture and against the iconoclastic approach of hard-line modernists.

Koolhaas criticized the Rationalists for their amnesia about modernist history. For him, they were doing to architecture what the robber Procruste was doing to his victims. They were eliminating from the discipline all modern types. In concentrating arbitrarily on pre-twentieth century urban forms, they were also eliminating the new programs developed by the mutant society. For Koolhaas both Contextualism and Rationalism were aborting history before it happens.

b. Residence for the Irish Prime Minister (1979)

O.M.A. participated in a second competition in 1979 and proposed a design for a new residence for the Irish Prime Minister and the State guests.¹⁰ Hadid had left the Office. Koolhaas and Zenghelis once again worked independently. The program was divided in two parts. Koolhaas made the State Guest House in the form of an American motel and Zenghelis designed the Prime Minister's House (fig. 22). That house needed its public and its private sectors to coexist and interact, but also, to be independent when necessary. Zenghelis' solution took the form of two curvilinear buildings intersecting in an odd shape reminding vaguely an X.

O.M.A.'s project clearly demonstrated the complementary sensibilities of Koolhaas and Zenghelis. Koolhaas referred to an existing modern type and transformed it to accommodate a

new function. Zenghelis, in using more abstract and architectural forms, was inventing an atypical building. His intention was to produce a modern building having a powerful iconic quality. Zenghelis' references were less architectural than artistic, the "architecture" of Suprematist paintings being his starting point.

Koolhaas and Zenghelis worked on the same project on only two other occasions: first for the second international competition for La Villette (1982-83) and finally, in 1983, they designed two projects for the International Paris exhibition planned for 1989, an event that was later cancelled.

c. Berlin 1980-81

The competition held in Berlin in 1980-81 was organized by the International Berlin Exhibition (I.B.A.) committee to select schemes for the construction of new buildings in West Berlin. The committee was governed by a group of moderate Rationalists who wanted to rebuild Berlin according to the principles of traditional urbanism. I.B.A. had doubts about the quality of Berlin Post-War architecture. They insisted on street facades and on the restoration of the city blocks perimeter.

Rem Koolhaas was well acquainted with Berlin. His first project was reflecting on the significance of the Wall and during 1978, he had also worked with O.M. Ungers during a summer school on an urbanistic proposition for the West part of the divided city. Since the end of World War II, the population of West Berlin has been decreasing. On that premise, they argued that it was more reasonable to reinforce the architectural infrastructure that survived the bombing and to transform the rest of the city into an archipelago of greenery for its eventual further development. A city could also die. The reconstruction of Berlin according to its original principles was negating the major historical event of

its existence.

O.M.A. submitted two projects on two different sites. One was designed by Zenghelis and the other by Koolhaas. They revealed once again two different personalities sharing the same historical vision. For O.M.A., the openly contextualist theory of I.B.A. was negating the very context of Berlin which had now a modern vernacular architecture.

- Lützowstrasse¹¹

Elia Zenghelis worked on a site on which five rows of townhouses were projected. For him, these urban houses were paradoxically projected in the void and had no context. I.B.A. wanted to develop the left-over space on Lützowstrasse. For Zenghelis, the site was narrow and left open only two possibilities. The first was to built at the height of the projected townhouses which were three and a half stories high. That solution would have contradicted the context of Lützowstrasse which was twice that height. I.B.A.'s solution was contradicting Berlin's reality. Since the end of the war, the tendency in Berlin was to occupy the center of the block, not its perimeter. For Zenghelis, the projected town houses were an example. To build the perimeter at the ancient height was producing twice the density permitted. Two movements were occurring at the same time in Berlin. The city was shrinking and the need for cheap housing was expanding. The proposition of I.B.A. to hide the townhouse with a screen of public assisted housing was seen as a cynical gesture by Zenghelis who proposed a complex design amalgamating two distinct urban types, the slab and the townhouse, into one design (fig. 23). The slabs were eight stories high and the new townhouses four. They were visually establishing a link between the different scales of Lützowstrasse and the townhouses. Zenghelis's project was intending to protect the private gardens of the townhouses and also to form an entrance gate to the private streets.

To a certain extent, Zenghelis was restoring the periphery of the block but his design was bold and inventively modern in inverting the expressionist curves of Mendelsohn and in fragmenting the mass of the slabs. Although the rhetoric sustaining his project could be convincing, it was partially contradicted by his project.

- Kochstrasse-Friedrichstrasse^{1 2}

Rem Koolhaas worked on two blocks near the Berlin Wall and Checkpoint Charlie. He saw in I.B.A.'s rejection of Berlin's Post-War architecture an anti-historical act. It was necessary to stop the "mindless pendulum movement" by which one generation contradicts the previous one. That movement was breaking historical continuity and reducing history to an "incomprehensible chain of disconnected sentences". The reality of Berlin needed a retroactive manifesto.

The first part of Koolhaas' project was a demonstration of the models developed for Berlin by notorious Modern architects (Mies van der Rohe, Hilberseimer, Mendelsohn) near the site (fig. 23). He read them as contextual answers to the problem of the twentieth century metropolis. Koolhaas proved that, historically, Berlin was a laboratory of modernity.

Koolhaas submitted a project which was in total opposition with I.B.A.'s intention of building urban facades in front of the Wall. He proposed to build variations of the courthouses schemes developed by Mies and Hilberseimer in the thirties. Next to the Wall, the introverted dwellings, surrounded by brick walls, were conceived like a Suprematist Pompei (fig.24).

During these competitions, O.M.A. defined their work in negating the competing trends of Post-Modernism. Their argumentation was revolving around contextual issues. Context was not only physical for O.M.A., it was also historical and history was concerned with the development of architectural

types as much as with the forces having shaped the site. The interventions in Berlin aimed at defining a non-nostalgic vision of the decaying city. O.M.A. intended to stay positive with reality and was ready to find a retroactive concept for even the most rotten situation. Their work was attempting to be more contextual than the one of any contextualist theory. The faith in modern architecture was implying a deterministic vision of history in which the progress of the discipline was unfolding linearly. The task of the modern architect was to face both the history of the discipline and to feel the pulse of the time of each particular site. The quality of the architectural work could only be judged by its intelligence and by its capacity to make a disciplinary statement on the relevance of modern architecture.

Their designs were referring to modern precedents which were not only transformed to fit programmatic requirements, they were also critical of the functional zoning of the Functionalist theories. The modern types were not stable entities, they were subject to mutual formal contamination. New types were thus generated in following the formal logic of the Constructivist architectural experiments and the Suprematist pictorial examples.

In their discourse, O.M.A. kept cultivating excesses of language and personal attacks. Their elliptic speech always wanted to juxtapose opposite terms. However, their categories of analysis were personal and misleading. The assimilation of Dutch Post-War architectural movements to Structuralism and Humanism is excessive yet the analysis of their intentions is valid. The reduction of Structuralism to a formal strategy using the grid as a common denominator does not make justice to the impact the Structuralist movement have had on architecture during the sixties and the seventies. O.M.A.'s theory with its acknowledgement of architectural typology is certainly an obvious heir of the application of Structuralist theories to architecture. Similarly, to qualify the movements

interested in the user and legitimizing their practice on social rhetoric is inadequate. These movements, that we have described in the first part of this study under the name of Populism, cannot be related to the preoccupations of Renaissance Humanism, preoccupations that have been discussed and analyzed by Wittkower and Panofsky.¹³ The abuse persists with the notion of contextualism that is certainly applying to C. Rowe's urban design theory but that was also a concern of other movements, like the Rationalists and O.M.A.'s own practice. The label Rationalist or Neo-Rationalist is also ambiguous and serves often as an umbrella word uniting opposing approaches.¹⁴ Rationalism in architecture means nothing specific and is certainly one of the less scientific term of Architectural History.

* * *

3) Modern Faith

The faith in modernity is necessarily metaphysical and, as such, remains impossible to dispute on a strictly materialist basis. O.M.A. intends to provide the reality of modern architecture an aura that most critics try to deny. The inversion of mediocrity by means of a positive retroactive concept is seen as the work of a critical non-philosophical intelligence. As Delirious New York was looking for the unreal in the real, now O.M.A. searches intelligibility where it does not exist. The role of architecture is to provide an intelligibility to inanimate wholes. The project is very similar to Barthes' conception of the structuralist activity and the Nouvelle Critique which were constructing "the intelligibility of our time".

Architecture appeals thus to a meta-discourse which is depicting reality in a narrative having specific aims. For O.M.A., it is to shock common perception. Their discourse is therefore disruptive and always in opposition with the dominant perception. Trying to escape fashion and to avoid the recuperation of their work by any ideological system,

O.M.A. is positively thinking negativity. History becomes "a forgery, a chain of mirror-images or an undisturbed row of self-portraits".¹⁵ O.M.A.'s history speaks more about O.M.A.'s interests than reality.

The continuation of the modern project calls for actions guided by the unconscious and a belief in a discipline which is not founded on other objectives than the efficiency of its own discourse. The development of the discipline is thus conceived as a series of actions that are later theorized, that is to say, transformed into principles receiving their authority from reality, and propagated by a modern mythology. That mythology is meant to elevate to the status of icons the idealized models of past modern masters. Architecture as high art and ultimate artificial product is providing a victory over death. The author transcends with architecture his mortal condition.

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* * *

B. Tschumi and the Idea

1) The Manhattan Transcripts

The Manhattan Transcripts were a series of four projects trying to provide a new reading of architecture with experimental modes of notation. Each project looked at one particular urban type of Manhattan which were the park, the street, the tower and the block. The drawings were accomplished between 1977 and 1981 and there were presented gradually in exhibitions. Transcripts 1 and 2 were shown in New York City (1978) and in London (1979) as part of the exhibition "Architectural Manifestoes". Transcript 3 was first exhibited at P.S.1 (1980) and Transcript 4 at Max Protetch Gallery (1981), both in New York City. The four parts were grouped in 1982 in a publication in which a text explained the goals and the methodology of the research.¹⁶ The Transcripts were developed graphically and were later

justified by words.

a. A New Trilogy

Started during Spring 1977, "The Park" is among the first of Tschumi's attempts to introduce the third term - experience - in his work. In fact, the third term or "experienced space", which was originally dissolving the dualism, was now added to the two others, "conceived" and "perceived" spaces. Tschumi proposed to replace the old Vitruvian trilogy by his new one.

In Tschumi's system, the conceived space corresponds to a mental construction and finds in language his best analogy. The perceived space is a physical phenomenon: the encounter with matter. The experienced space is a social experience that Tschumi associates with the body. He wrote:

"Distinction can be made between mental, physical and social space, or alternatively, between language, matter and body". The question for Tschumi was to find how these three terms relate to one another.¹⁷ For a synthetic look at the evolution of Tschumi's trilogy, refer to Table 3.

b. Notation

With the Manhattan Transcripts, Tschumi's definition of architecture was articulated around three new terms that are space, movement and event. In his new mode of notation, each term was represented independently. The concept of space was the new formulation of the conceived space and was represented with the conventional architectural techniques that are the plan, the section, the elevation, the perspective and the axonometrics. Each technique could be contaminated by others to give hybrids like the elevation-perspective, the plan-axonometric, etc. Movement was the concept replacing perceived space. It was referring to the motion of the body into space and symbolized by diagrams borrowed to choreography and football strategy. The third term which replaced the notion of experienced space was the concept of event

represented like pieces of reality by photographs (fig. 25).

c. Relations

The three terms - space, movement and event - were interdependent and mutually exclusive but nevertheless necessary to constitute architecture. They were three possible relationships between these terms. The first was their total independence like in London's Crystal Palace of 1851 where were presented, under the same roof, elephants dressed in rare silks and boxing matches. In a relation of independence, "the battalion marches on the fields". The second relation is one of reciprocity. That relation was the one favored by the Functionalists. Here, "the skater skates on the skating rink". The third relation is conflictual and happens when events negate space, space negates movement or vice-versa. The conflictual relationship transgresses the internal logic of each term and historically it has not been thoroughly explored by architects. It opens the way to speculative situations like "the battalion skates on a tightrope".

Tschumi's three relations were exemplified by simple sentences in which the subject and the object were united by an active verb. Although he did not make that relation explicit, movement is associated to the subject, space to the object and event to the verb.

d. Program

In Tschumi's system, the three relationships - indifference, reciprocity, conflict - between the three constitutive terms of architecture -space, movement, event - can also qualify the architectural program. However, Tschumi's theory of the program is more complex than that.

Tschumi considers the program to be more than a simple sets of requirements. He adopts also the Oxford English Dictionary definition of a program as "a descriptive notice, issued

beforehand, of any formal series of proceedings, as a festive celebration, a course of study, etc. (...), a list of items or 'numbers' of a concert, etc., in the order of performance the items themselves collectively, the performance as a whole..." The program orders events as much as space and movement. It is not just a prescription, it also includes all the possible events. It follows that architecture is qualified not only by the activities it suggests but also by the events it witnesses. Tschumi also looked at the definition of Literature given by the Russian Formalists of the twenties.¹⁸ For them, the *raison d'être* of literature was the inventive use of literary devices "and 'content' was a simple a posteriori justification of form". Similarly, for Tschumi, architecture's autonomous spatial language may be justified by ulterior events.

The program is thus both the starting point of the design process and its ulterior justification. The program becomes a combination of possible events, a plot, a script or a narrative. Because a narrative can be translated from one medium to another - just like Don Juan is a play, an opera, a ballet, a film - it suggested for Tschumi architectural equivalences. Therefore, any sets of events unfolding in a literary work may be used as a program because they suggest a parallel architectural unfolding of events. For Tschumi, "good architecture is a form of re-enactment". As such, the programs of architecture can also be replays of "past events (including Futurist, Expressionist, Constructivist, Surrealist, Bauhaus ones)".¹⁹ However, when programs are plots, they imply an end. It is the case of some "well known stories", like the single-family house program, which interest lies only in their retelling. For Tschumi, this end is a superimposed conclusion on the open-endedness of architectural transformation.²⁰ The endless possibilities of architectural combination are thus suggesting new combination of events.

For Tschumi, these considerations are re-delimiting

architectural discourse. For him, the discourse of architecture would be at the intersection of signs and space, and architectural communication is achieved by means of the shock manufactured by the architect. To overtold plots, like the single-family house, new dramatic programs and modes of representation are used to stress the "inevitable 'mediatisation' of the architectural activity". The choice of the programme may be influenced by mass media, fashion, popular magazines and actuality: the intention is to redefine architecture as "the discourse of events as much as the discourse of spaces".²¹ Violence becomes a device to shock: the violence of non-moral and unproductive programmes locates architecture outside of its traditional humanist frame; and the violence done to architectural language is seen as the polemical violence of difference. Violence is metaphorically associated to architecture like the guard is linked to his prisoner.²²

e. Cinema

The new role of architecture, or the role of narrative architecture, is similar to the use of film. With the Manhattan Transcripts, Tschumi instrumentalized that analogy and imported cinematographic devices into his architectural notation.

Tschumi elaborated a cinematic theory of design based on two elements, the frame and the sequence. The frame is the basic element of films. It is, like photograph, a modern mode of perception, and perspectival representation is its direct extension.

A series of frames forms a sequence. In architecture, sequences are transformational, spatial or programmatic. In the transformational sequence, frames and what is framed are subject to conscious manipulation. Transformation devices like superposition, distortion, repetition, fade in, cut up, are imported from cinema. On the one hand, transformational

sequence is conceived like a procedure internal to the work, it is a method. On the other hand, spatial and programmatic sequences are external, the first being the juxtaposition of actual spaces and the second, the juxtaposition of events.²³ As in cinema, architectural sequences can be linear or disruptive. A flashback would be the quotation of an architectural precedent; scripts would be programs.

Tschumi explored other means of instrumentalizing the analogy with cinema in other works like the Screenplays (1978) (fig. 26), which were trying to transpose situations into spatial concepts,²⁴ and in a skyscraper designed as a late entry to the Chicago Tribune Competition of 1980 (fig. 27).²⁵

f. Exhibitions

The first two Manhattan Transcripts were shown during Spring 1978 as a part of the exhibition "Architectural Manifestoes" at the Artists Space in New York City. A description of the installation was given by G. Shane in his review of the show that bore the striking title of "Crime as Function".²⁶

The gallery was a sequence of three rooms. The first, like a waiting room, was containing the desk of the curator and some chairs. On the walls were displayed posters. There were the "Advertisements for Architecture", triggering desire for architecture through their rhetoric on eroticism and transgression.

In the second room, the two first Manhattan Transcripts were exhibited. On the left was "The Park", a series of twenty-four sheets illustrating a murder with its episodes: the lone figure stalking its victim, the murder, the hunt, the search for clues and the murderer's capture. On the right was "Border Crossing", a 32 ft long drawing, illustrated the journey of the fugitive on 42nd Street after he evaded justice. The fugitive was thus running across the different worlds of 42nd Street "from the Chrysler Building to the \$10 whorehouses or the rotting West Side Highway", each street

being a border. "He gets out of jail, they make love, she kills him, she is free" are the episodes of the plot.

Nevertheless, the drawings were not yielding that easily their signification. In "The Park", each terms (event, space and movement) were clearly dissociated in a tripartite composition incorporating on a square grid, photographs, plans and diagrams that were developing sequentially and were thus suggesting a linear reading. "The Park" could be read like a film, like a long narrative but points of disjunction were emerging when the conflictual relationship between space, event and movement was experimented. In "Border Crossing", two diagrams were showing two routes, one was expressing the normal path of an imaginary street user while the other was demonstrating the transgressions made by the fugitive that were breaking the architectural order. Buildings were fictitious, the process of sequential transformation was starting to take shape. The narrative, which was voluntarily a B movie script, was only a pretext to start the process of architectural transformation.²⁷

The third room was an installation entitled "The Room". Inside were carefully displayed the clues of the crime, the lines that were on the drawing diagrams of movement were materialized (fig. 28). The door was locked and, like in a 42nd Street peepshow, the viewer was transformed into a voyeur. At the back of the room, a mirror partially hidden by a curtain was reflecting "the face of the real criminal, the alienated observer".²⁸ While, the drawings were plots and paper space desiring real space, "The Room" was a real space desiring a plot. For Tschumi, the Transcripts were similar to a movie script or a libretto, they were relating to architecture like a script to a movie.

In the next two Transcripts, the process of sequential transformation was put in evidence and the narrative was less determining the sequences of drawings. In the last, plates of the fourth Transcript, "The Block", the initial system is

completely dissolved and fragments of photographs and drawings are juxtaposed and intermingling with the intention of demonstrating the extreme possibilities of the conflictual relationship. The literal translation of the plot "the battalion skates on a tightrope" was made. The metaphor with the film was transformed into a conceptual device, the shape of the film itself being translated into architectural forms (fig. 29). The Manhattan Transcripts ended with the total dissolution of the elements and the disintegration of the system.

* * *

2) Sources and Models

a. Surrealist Spaces

A month before the first presentation of his "Architectural Manifestoes" at the Artists Space, Bernard Tschumi wrote an article providing some clues on his interests while he was preparing the show.

"Architecture and its Double" was published in a special issue of Architectural Design on Surrealism.²⁹ It is worth noting that that "surrealist" publication was regrouping the writings of many teachers of the A.A. There were, among others, two Unit Masters of the A.A. Diploma School, Dalibor Veseley, who was announcing the publication of a book on Surrealism, and Rem Koolhaas, who published a short version of Delirious New York's chapter on Dali and Le Corbusier. This fact is not only showing the close relationship between the "old A.D." and the A.A., it also reveals a collective interest for surrealist research at the A.A. Diploma School during those years.

Tschumi's article was reviewing the architectural experiments done by the Surrealists. The article was composed of four parts and was attempting to define four kinds of spaces with an interpretation of the work of four critics of the Surrealists. They were Duchamp for the Spaces of Desire, Artaud for the Spaces of Performance, Bataille for the Spaces

of Limits and Kiesler for the Spaces of Exhibition.

With Duchamp, Tschumi discovered the critique of the "retinal" art. Duchamp had a distaste for all kind of visualization. He insisted on concepts as the prime content of art and his work can be seen as a series of attempts to establish a relationship between words and images. In several interviews, Tschumi stated the same aversion against the "retinal" in architecture. Tschumi's fascination for Duchamp contaminated his work. A first obvious example is Tschumi's second manifesto, entitled "The Box", produced during the exhibition "A Space: A Thousand Words" (fig. 30). "The Box" was openly a fetish in which were kept 66 cards on which were written 66 questions related to space given by 66 visitors of the show. "The Box" came with a plan of one of Palladio's unrealized villas illustrating the "conceived space" of architecture to which was juxtaposed a photograph of an event: the visitors in the gallery space. A diagram of Tschumi's movement into the gallery space was also superimposed. The questions in "The Box" were each given a number that was printed on the drawing. It was Tschumi's early attempt to express his spatial trilogy. Tschumi's work was obviously inspired by Duchamp's "Large Glass" which was also coming with instructions in a side work also entitled "The Box". Duchamp described his box as "an album, a series of notes, a sort of catalogue with some calculations and unrelated thoughts". The Glass was not meant to be looked at in the aesthetic sense. The book and the Glass were coming together to remove the retinal aspect so despised by Duchamp. Tschumi adopted the same strategy and the same tool in his second manifesto.

Eroticism was a common interest among the Surrealists. This interest is obvious in the work of the Surrealist painters. It was a sensibility also shared by contemporaries like Bataille who wrote a famous book on eroticism and by Duchamp alike. In his article, Tschumi reports Duchamp interest in eroticism:

"`I believe in eroticism a lot because it is truly a rather widespread thing throughout the world, a thing that everyone understands.' Eroticism was for him `a way to bring out in the daylight things that are constantly hidden - and that aren't necessarily erotic... because of social rules... To be able to reveal them and to place them at everyone's disposal I think this is important, because it's at the basis of everything.'"

It is with this frame of mind that Duchamp built in 1946 his first complete architectural installation, "Given: 1 The Waterfall, 2 Illuminating Gas"³⁰. It was a closed room which door had no doorknob and could not open. Only two holes, at the eyes level, were permitting to look into the forbidden space. Inside, the image of a nude woman with her legs open was facing the "voyeur". She was holding in her left hand a dim gas lamp. Behind her were a wooden landscape with a blue sky and the continuous flow of a waterfall. Duchamp had created the erotic space "par excellence". With his installation "The Room", Tschumi was using once again Duchamp's strategies.

After Duchamp, Tschumi read the work of the actor Artaud as an attempt to define a spatial language and he tried to find in it some architectural implications. He also analyzed Bataille's attack against Surrealism. Tschumi's text on Bataille was summarizing Hollier's thesis and some biographical notes on Bataille, seemingly drawn from Philippe Audoin's book Les surréalistes, were added.³¹ The text informs us that Bataille and Breton, the Surrealists' pope, were mutually accusing each other of mysticism.

Finally, Tschumi reviewed the work of F. Kiesler, the only architect acquainted with the Surrealists. For Tschumi, the lack of popularity of Kiesler is due to the lack of interest of historians for people who very seldom built. He concluded about Kiesler, that he was the first architect to introduce a new dimension to architecture: the event. He quoted Kiesler, who wrote in "The Magical Architecture of the Hall of Superstition":

"The new reality manifests itself as a changing relationship of events. These are not only based on the perception of the five senses, but also take psychic need into consideration."

For Tschumi, this new dimension of architecture was appearing:

"where architecture and events could not be dissociated from spaces, and where spaces could not be separated from deep unconscious processes."

It is seemingly in Kiesler that Tschumi found the notion of event that he equated with Bataille's interior experience.

b. Futurist Manifestoes

Later, Tschumi looked again at history in an article on Futurists' concerns with architecture in which he tried to demonstrate the historical manifestation of a new sensibility for space during the early twentieth century. In studying the Futurists, Tschumi had the same intention that he had while looking at the Surrealists: he wanted to show that architectural space was not only physical and built but also mental and social. Spaces of manifestoes, of lust, of sensation, of desires and of borders are categories used to define the works of Marinetti, Saint-Point and Sant-Elia. Essentially, Tschumi argued through his Futurist examples for the validity of thinking architecture as an idea and of experiencing it as an intense sensual act.

Tschumi found that, in manifestoes, words are a masochistic contract that the author takes with society, a contract establishing laws that the author then perversely transgresses. That meta-discussion on manifestoes was very similar to the text introducing his exhibition "Architectural Manifestoes" which was paradoxically attenuating the "shock effect" of the intended polemics.

Similarly, Tschumi reflected on the drawings sustaining the manifestoes. He considered them as fetishes having for function to be powerful substitutes triggering desire for an absent object. He discussed the drawings of Sant-Elia as the fragments of a dissolving city after an explosion. For

Tschumi, these fragments were not indicative of a possible whole. He wrote:

"On the contrary, these fragments are responsible only to themselves. They have no father, no ethics, no philosophy, because philosophy requires a coherence. They are 'innocent' because they do not relate to anything but themselves. But they are also 'complete', since each acts as a microcosm in which the world is reflected."

Tschumi associated this notion of fragment to Nietzsche's insistence on fragmentation as a "plurality of will to power, each with its plurality of forms and of means of expression". For Tschumi, Sant-Elia's projections of a Nietzschean metropolis, in which each fragment contains all others, was indicative of the Futurist dream in which "architecture is to transform the world of things into a direct projection of the world of spirit".

In this article, Tschumi found in the Futurists the ancestors of his own cultural project. He presented their works as heroic transgressions. Futurist works were less a formal reference than a form of legitimation, in which historical material was molded into a theoretical framework in order to substantiate the theory of transgression. Tschumi's idiosyncratic use of history is also a form of operative criticism: the Surrealists give models and strategies and the Futurists serve as a proof of the "disciplinarity" and political overtones of the research's aims.

c. Foucault

With these researches, Tschumi found a new interest, the concept of "folie" or madness. In effect, two of Tschumi's references, Artaud and Bataille, have been interned for psychiatric treatments, the first facing madness and the second having a severe nervous breakdown. Barthes had also pointed out, in The Pleasure of the Text, how the modern avant-garde work was resisting to the sign by means of madness or by the exemption of meaning. Tschumi worked on the same

idea in architecture. It is perhaps his discovery of Foucault's famous study, Madness and Civilization that catalyzed Tschumi's interest.^{3 2}

Considered by historians a philosopher, Foucault was inversely seen by philosophers as a historian. Tschumi could easily relate to him because he was himself seen as an artist by the architects and as an architect by the artists.

Madness and Civilization is Foucault's doctoral dissertation and it was first published in 1961. The book soon became a classic because it addressed ethical issues of contemporary interest. It was thus an important reference to many leading theoreticians of modernity, Barthes being one among others. In his book, Foucault retraced the history of the different meanings of madness between 1500 and 1800. His research demonstrated the institutionalization of madness during the development of modern thought in the Age of Reason. Foucault showed how madness, which was an accepted phenomenon in pre-modern European society, was gradually repressed and hidden by modern institutions. Foucault's book was also a history of the dark side of reason and has many allusions to notable madmen like Sade, Nietzsche or Artaud.

During the year 1978-79, Tschumi oriented the work of his Unit at the A.A. with readings of Foucault's other works on the prison and the asylum. Foucault's studies on the development of the institution were developed with the participation of architectural historians like B. Fortier and had an architectural resonance. The idea of violence as an architectural theme may have been triggered by the Foucault's reading of architecture. However, Tschumi's program of study at the A.A. was insisting on opposites in architecture like order versus chaos, urban typology and spatial experience, etc.^{3 3} While he was experimenting with the third term in his theoretical work, he did not abandon his dualist approach in his teaching.

* * *

3) Twentieth Century Follies

While Tschumi was conceiving his last two Transcripts in 1979 and 1980, he started working on another project entitled the Twentieth Century Follies. Tschumi presented his project as a critical and theoretical laboratory of architecture which had no intention to refer to eighteenth century Follies with their aristocratic and extravagant connotations. They were exploring the disjunction between space and event. They had, for Tschumi, certain links with Foucault and contemporary psychoanalytical concepts.

For Tschumi, madness became a fetish word because of its manifold and controversial connotations. Madness was the negation of society and what society was negating. Not only was it demonstrating the movement of "différance" in the transformation of language that Derrida had theorized, it was also historically an architectural building type - an extravagant thematic pavilion built in aristocratic parks. Finally, for Foucault, "madness is the absolute break with the work of art". In labelling his works "folie", Tschumi wanted to reconcile extreme opposite and was creating a semantic fission.

The project was to conceive and build a series of temporary constructions subsidized by artistic funds. That type of practice was very popular in the second part of the seventies. Environmental sculpture was a new domain in art and was breaking traditional categories between sculpture and architecture.³⁴ The works of Robert Morris, Mary Miss or Alice Aycock represented the vanguard of contemporary artistic production. Architects, like Melvin Charney who started building temporary constructions as early as 1975, were part of that new movement. Art critics, like Kate Linker, who reviewed Tschumi work in Art in America, were even specialized in the analysis of "architectural art". Tschumi's Follies were thus part of a general artistic movement that marked the end of the seventies.

The Follies are poorly documented and apparently Tschumi has been able to build four of these constructions, two in New York City, one in London and one in Middleburg (Holland). Three other projects were drawn, one for New York (1982), one for Toronto (1982), and another for Kassel (1982).

More research would be necessary to discuss the London construction. The first Follie was built in New York City in June 1979 and was entitled "Staircase for Scarface" (fig. 31).³⁵ Like "The Room" at Artists Space, it was not a true manifesto for Tschumi but its exact reversal. The side view of the pseudo stair was similar to a half pyramid with a flat top. The front and rear views of the staircase were like a three dimensional cinematic sequence having three frames. In the front view, three frozen figures of the murdered Scarface were superposed; in the rear view only the top two were visible while on the sides only the top one was visible. For Tschumi, the staircase was not coming with a determined meaning. It was even not referring to the film Scarface. Scarface was just an object to be used, like the staircase. It was to the viewer to create a scenario, to intrude in the event and to fill the gaps.

Another construction was built in New York City during 1980. The "Textile Follie" was seemingly a formal "deconstruction" of Léon Krier's pavilion of the "Colline des vents" projected for La Villette in 1976 (fig. 32-33). Tschumi's construction was looking like if Krier's project had been broken by a stormy wind.³⁶

Tschumi built another construction in Middleburg in 1981 that is not documented. Tschumi described them as two constructions facing each other. They were conceived with the same elements except that one was built in order and the other in disorder.³⁷ In 1980-81, he projected nine Follies for New York which drawings were exhibited at Leo Castelli Gallery in October 1983 with the works of nineteen other architects (fig. 34).³⁸ They were cubic architectural objects broken

differently by the combination of staircases, posts and beams, walls, doors and windows. In the catalogue, he presented his work as an architectonic and social laboratory done to solve theoretical problems that had been incompletely solved by texts and drawings. The Follie was a real place with real material and real actors. Collectively, the Follies, placed in different cities, were investigating new forms of urbanism.

The drawing of the Toronto Follie (1982) depicted a steel structure acting like a gate with steel poles transpercing it at odd angles (fig. 35). It also incorporated two flag poles. The drawing played with perspective in giving to the construction a depth and a fairly large scale that it perhaps would not have had if built.³⁹

The Kassel Follies was conceived for the an artistic event, the 1982 Documenta (fig. 36).⁴⁰ It is seemingly one of Tschumi's first attempt to instrumentalize Deconstruction in the process of design. The project is the "deconstruction" of an existing building, the Kassel Town Hall, and its re-assemblage into new configurations to be built in different location of the city. The process of "deconstruction" is not a mere explosion of the existing building into fragments. It is a careful selection of the elements determining its exterior shape - the walls with their doors and windows and the roof. These elements are then broken in smaller pieces that are reassembled with other elements like stairs and planes to form a series of new architectural configurations. According to Tschumi, the Kassel Follies were a theoretical drawing exploring a formal combinative process in which the resulting forms were not the result of a prior visualization.

From this partial analysis of the Twentieth Century Follies, it appears that Tschumi did not experiment with programs like in his theoretical Manhattan Transcripts or in his Screenplays. The Follies were a formal research looking for a retroactive justification by the real events. With no sets of

meaning and no programs, they were an attempt to build an architecture to be built and burned just for pleasure, like fireworks. Their program were their supreme uselessness that was revealing architecture in its purest manifestation. There were conceived as the exact opposite of the Transcripts but were seen, like Sant-Elia's drawings, as fragments of the Nietzschean plurality of the modern metropolis.

It is only much later in 1984, that the Follies received their retroactive meaning with the work done on La Villette. It appeared there clearer for Tschumi that the essential aim of building "folies" was to free that concept from its historical connotations "and to place it on a broader, more abstract plane, as an autonomous object which, in the future, will be able to receive new meanings".⁴¹

The 1982-83 project for La Villette was a summation of the Manhattan Transcripts and the Twentieth Century Follies. The pure mathematics developed in the Transcripts were applied to a real situation.

* * *

4) Thinking Negativity

The work on the Manhattan Transcripts covered a period of four years during which new themes entered Tschumi's research. The first Transcripts were conceived to provide a new reading of architecture with new modes of notation. "The Park" was a direct translation of Tschumi's earlier texts on the paradox of architecture and its three terms. However, the last Transcripts focused more on the implementation of the analogy with cinema. Cinematic techniques were used to elaborate a design theory in which the transformational sequence - that can be expressed only in drawing - was a new architectural invention.

In his criticism of Modern Architecture, Tschumi deplored the fact that, unlike the other arts, architecture never expressed the negative thought explored by movements like

Cubism, Futurism, Dada and Surrealism. On the contrary, the avant-garde architects established their work on positive reason and produced theories like Functionalism in which the relationship between space, movement and event was maximized. The relationship of indifference was perhaps represented by the universal spaces of Mies' American buildings, but almost nobody had thought about conflictual relationships. Tschumi intended to work on that limit of architecture. One of these limits was to use the analogy with the text until it reached irrationality.

Tschumi's reference to Russian Formalism suggests that the distinction between form and content in a text has an architectural correspondence. For Tschumi, architecture is a medium like theatre, music, opera or cinema. Just like Psychoanalysis after Lacan does not aim at curing patients, the goal of today's architecture is not to make people happy although it is a welcomed side effect.⁴² Its meaning does not result just from its programmatic content - plots which are often well known - but from the formal manipulation of the medium. The Twentieth Century Follies were exploring new articulation between the known basic elements of architecture and new elements imported from the "great repository of forms" containing "objects, events and spaces".⁴³ Any object, including the human figure, could be turned into architecture. Meaning was superimposed only later by the subject in contact with the object. The Follies were nevertheless thematic and were suggesting references to the process of their conception: cinema, the process of combination and metaphorical deconstruction. As a result, the Follies were objects bearing a name but having no set of meaning. Therefore, Tschumi was still following Barthes. In order for architecture to resist exchange, Tschumi first stated its uselessness. Then, his practice was an attempt to resist against the sign with intellectual madness and the exemption of meaning in architecture.⁴⁴

Nevertheless, Tschumi negates his formalism on the basis that he is not interested in a priori visualization of his projects. To the object, he opposes the idea of a process of which the object is only an arbitrary result. The starting point of architecture may be the program with its collection of organized, random, predicted or imaginary events, but inversely, the program may sometimes be an a posteriori justification to arbitrary stop the endless process of architectural manipulation.

Space, movement, event, as well as, text, cinema, madness and deconstruction were all themes already explored by Tschumi before the 1983 competition for La Villette. However, with that project, their interaction reach another level of coherence.

Notes to Part 3 - Negativity

1. Porphyrrios, D. "Pandora's Box: An Essay on Metropolitan Portraits" in Architectural Design, Vol 47, No 5, 1977, pp 367-369.
2. Koolhaas, R. "Architecture: pour qui? pourquoi?" in L'architecture d'aujourd'hui, No 238, avril 1985, p. 71.
3. Koolhaas, R. "Urban Intervention: Dutch Parliament Extension, The Hague" in 3. International Architect, No 3, Vol. 1, Issue 3, 1980, pp 47-60.
4. The "Exquisite Corpse" is a game invented by the Surrealists during the twenties. It is a drawing made by many participants. Each participant must draw only one part of a body on a piece of paper folded in such a way that it is impossible to see what the others have drawn. In unfolding the piece of paper, the "Exquisite Corpse" appears.
5. Djik, H. van "Het bezwijken van tegenstellingen" in Wonen TA/BK, no 13/14, 1982, pp 12-19.
6. Koetter, F. & Rowe, C. Collage City, Cambridge, 1977.
7. The event occurred during Fall 1978 and was reported in: "Roma Interrotta" Architectural Design, vol. 49, Nos 3-4, 1979.
8. Goulet, P. "La deuxième chance de l'architecture moderne... Interview avec Rem Koolhaas" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 3-9.
9. See the magazine Archives d'architecture moderne.
10. OMA Projects 1978-1981, Architectural Association, London, 1981.
11. OMA "Lützowstrasse" in Architectural Design, Vol. 53, Nos 1-2, 1983, pp 72-75.
12. OMA "Koch/Friedrichstrasse, Block 4" in Architectural Design, Vol. 53, Nos 1-2, 1983, pp 88-89.
13. Wittkower, R. Architectural Principles in the Age of Humanism, London, 1952, New York 1971. And: Panofsky, E. Meaning in the Visual Arts, Garden City, 1955.
14. In effect, the category "Rationalism" has been used to qualify architecture as different as the Beaux-Arts schemes of Léon Krier, the abstraction of Peter Eisenman's architecture,

the architecture of the historical avant-garde, etc. Koolhaas himself was skeptical with the concept in his lecture at the A.A. in 1986.

15. Steingenga, M. "Not Without a Scratch" in Forum, Vol. 31, No 2, 1987, pp 2-5.

16. Tschumi, B. The Manhattan Transcripts: Theoretical Projects, Academy Edition, St. Martin's Press, New York, 1981. Also about the Transcripts, a more complete text: "Illustrated Index" in A.A. Files, No 4, July 1983, pp 65-74.

17. Tschumi, B. "Architecture and Limits II" in Artforum, March 1981, p.45.

18. Tschumi, B. "Sequences" in Princeton Journal, vol. 1, 1983, pp 29-37.

19. The Chicago Tribune Tower Competition, Late Entries, Vol.2, N.Y., 1980, p. 75.

20. Tschumi, B. "Sequences" in Princeton Journal, vol. 1, 1983, pp 29-37.

21. Tschumi, B. "Spaces and Events " in The Discourse of Events, Themes 3, Architectural Association, London, 1983, pp 6-11.

22. Tschumi, B. "Violence of Architecture" in Artforum, September 1981, pp 44-47.

23. Tschumi's spatial sequence corresponds to Le Corbusier's "promenade architecturale". The programmatic sequence could be conceived as it analogue but instead of spaces, events form a determined (a concert) or indetermined (real life) series.

24. The experiments made in the Screenplays (Manifesto no 10) were already begun in Manifesto No 5 - Little Books (1977).

25. The Chicago Tribune Tower Competition, Late Entries, vol 2, N.Y., 1980 p. 75.

26. Shane, G. "Crime as Function, Bernard Tschumi Reviewed and Interviewed" in Architectural Design, No 49, February 1979, pp 57-59.

27. Boyarski, A. "Interview" in La case vide: La Villette, Architectural Association, London, 1985.

28. That observation was made by Graham Shane in his review of the show.

29. Tschumi, B. "Architecture and its Double" in Architectural Design, No 48, March 1978, pp 111-116.
30. Original title in French is "Étant donnés: 1 La chute d'eau, 2 Le gaz d'éclairage".
31. Audoin, P. Les surréalistes, Paris, 1973, p. 57.
32. Foucault, M. Madness and Civilization, London, 1965.
33. AA Project Review 1978/79 and AA Project Review 1979/80.
34. See: Krauss, R. "Sculpture in the Expanded Field" in The Originality of the Avant-Garde and Other Modernists Myths, 1984.
35. Tschumi, B. "Architectural Manifestoes" in Skyline, May 1979, pp 8-9.
36. Fillion, O. "Bernard Tschumi, portrait", in Architecture Intérieure Créée, No 197, 1984, pp 84-93.
37. Tschumi, B. Des Transcripts à La Villette, Institut Français d'architecture, Paris, 1985.
38. Graaf, V. "Monumente der Verschwendung" in Du, No 4, 1984, pp 30-35.
39. Postcard printed for Ballenford bookstore, Toronto.
40. Tschumi, B. "Madness and Combinative", in Precis, Vol. 5, Fall 1984, pp 148-157.
41. Idem.
42. Idem.
43. The Chicago Tribune Tower Competition, Late Entries, Vol. 2, N.Y. 1980, p.75.
44. For a Marxist theoretician like Terry Eagleton, that resistance to the sign is a Post-Structuralist characteristic: "Post-Structuralism was a product of that blend of euphoria and disillusionment, liberation and dissipation, carnival and catastrophe, which was 1968. Unable to break the structure of state power, Post-Structuralism found it possible instead to subvert the structures of language." See: Eagleton, T. Literary Theory, University of Minnesota Press, Minneapolis, 1983, p. 142.

Part 4 - A Post-Humanist Architecture?

A. Competition and Winning Schemes

The International Competition for the Parc de La Villette of 1982-83 deserves a study in itself that cannot be done here. That study would reflect on the history of the site and on how it was modeled by several political scandals. However, that study would necessarily be architectural. It would discuss the original function of the site as central slaughterhouse of Paris from the nineteenth century in to the midst of the 1960's, and the original sheds designed by Baltard - the famous architect of the former Parisian Halles. It would also analyze the architecture of the huge Museum of Science and Technology, which is a major monolith on the site, and how it was transformed from an ultra-modern slaughterhouse into a museum. That study would also look at the first international competition of 1976 during which emerged the Neo-Rationalist movement with the polemical project of Léon Krier and the moderate one of Bernard Huet. That 1976 competition can be interpreted as one of the major springboards of the Movement for the Reconstruction of the European City that became later the official approach of the I.B.A. in 1980-84. Finally, that study would analyze not only the winning schemes of Koolhaas and Tschumi, but also the other projects which received prizes, the composition of the jury, the process of selection and the different doctrines which were represented.

This section only concentrates on the terms of the competition and analyses the two winning schemes of Koolhaas and Tschumi. A review of selected critiques follows which discerns some theoretical problems about two concepts of contemporary criticism of architecture: Humanism and Structuralism. These problems are discussed more thoroughly at the end of the section.

* * *

1) Site

The site is a flat terrain of 55 hectares at the North-East edge of the Parisian historical center in the nineteenth

arrondissement. It is delimited by a canal, railroad tracks and a highway, which all served to connect La Villette with the different networks of industrial transportation. The site itself has always been an industrial enclave divided in two parts by the Canal de l'Ourcq (fig. 37). That canal is in itself a major feature of the Parisian city plan and is the central axis of a radial composition converging at one of the eighteenth century gates of Paris designed by C.-N. Ledoux.

At the moment of the competition, there were, on the site, existing buildings, two of which were huge structures. On the southern part was built perpendicularly to the canal a nineteenth century rectangular industrial shed, Baltard's "Grande Halle". It was surrounded symmetrically by four small pavilions and on its axis, facing the city, was a fountain. Close to the highway, towards the North, was built the Zenith, a rock concert hall that was supposed to be demolished. On the northern part was the enormous Museum of Technology built parallel to the canal. Between the Museum - which was surrounded by a ditch - and the canal, was built a spherical building - the "Géode" - which is a hemispherical cinema. The only historical building on that part of the site was the cruciform building named the "Rotonde des vétérinaires".

Although the site had a very irregular contour, its architectural infrastructure established a strong sense of axiality due to the presence of the canal. Another characteristic was that all the architectural elements already in place had simple geometrical forms - rectangles, square, sphere, cross - having no relation with the surrounding urban fabric.

* * *

2) Program

The competition was organized by the newly elected French Socialist government. It was one of the seven major projects for Paris that the President François Mitterand wanted to leave in the capital as traces of his government.¹

The idea of transforming La Villette into a cultural park came from the former President Valéry Giscard-d'Estaing who had, since 1976, started the procedures for the transformation of the modern slaughterhouse into a Museum of Science. Much work was already done and many teams of architects worked under Giscard's government at the conception of a park. The Socialists stopped the works and organized an international competition.

The new program was a collection of all kinds of activities reflecting contemporary culture. It aimed at establishing a bridge between Paris and its suburb. Articulated between the Museum of Science and a projected "City of Music", the park had to incorporate thematic gardens, restaurants, playgrounds, electronic arcades, rock concerts and to offer public activities 24 hours a day. The programmatic requirements filled more than 80 pages and were distributed to the 806 teams of architects who registered. Among them, 471 answered with a project.

The program asked for a new concept of park, which had to be different than the classical compositions and the romantic designs of the past. It had to be an urban park for the 21st century and, as such, it had to be distinguished from the Hausmannian "city lungs" and the static green spaces of Modernist zoning. The park had also to be different from the popular amusement parks in stressing the sociability of urban life and the activities of urban culture. Among all the projects sponsored by the Socialist government, La Villette was the one that most reflect the Socialist ideology. In the mind of the politicians, the new park had to have the same impact on the conception of future urban landscape than Beaubourg had on the concept of Museum ten years earlier.

* * *

3) A Constructivist Social Condenser²

Rem Koolhaas and Elia Zenghelis worked together on the design of O.M.A.'s project for La Villette. Their initial

hypothesis stated that the program of the park was too dense for the site and that it was thus impossible to conceive the park conventionally as replica of nature (fig. 38). That hypothesis was illustrated by a diagram showing the site on which were superimposed the requirements for interior, covered and programmed open spaces. The diagram showed that very little surface was left for free space. Another consideration in O.M.A.'s initial hypothesis was that the program would be certainly subject to change during the execution of the project. Hence, the architectural project had to be conceived more like a process than a definitive design. The project was conceived as a series of principles allowing a maximum programmatic freedom.

a. Strips

O.M.A.'s first and primordial principle was the division of the site in a series of parallel bands having each a different program (fig. 39). The tactic was to produce a maximal interaction between the activities with a maximum of borders. The "strips", having a width of 5, 10, 25 or 40 meters were parallel to the canal and the Museum which were integrated in the plan as bands - the Museum being an extra large one. The system was indifferent to the nineteenth century Baltard shed which was set perpendicularly to the strips. The shed was conceived as a roof covering parts of many different programmatic bands. For O.M.A., the plan of the park was like the section of a skyscraper. Just as the Downtown Athletic Club was a highrise Constructivist club, O.M.A.'s park was conceived as an open-air Constructivist social condenser.

b. Superposition

On the striped site were further superimposed three other layers having their autonomous logic. One was a system of point grids named the "Confetti", the second was the system of circulation and the third layer was a composition of major

elements counterbalancing the existing masses of the Museum and the shed.

The "confetti" were the generic name for all the smaller and repetitive equipments. Snack bars, kiosks, playground, picnic areas were all distributed evenly on the site according to a mathematical calculation (fig. 40). A formula determined a specific point grid for each family of elements. For example, the snack bars were distributed evenly on the site at every 145 m while the sales kiosks were at 125 m from each others. The elements of each family were identical with each family strongly differentiated by specific shapes and colors. It was the specific context in which each element landed that determined the individuality of each point.

The second layer was constituted by the system of circulation combining two elements, the Boulevard and the Promenade (fig. 41). The Boulevard was a band perpendicular to the strips having a width of 25 meters of which 5 were covered. A journey on the Boulevard was thus a constant transition from one world to another. It linked two open surfaces acting as entrance plazas on each side of the site. The one next to the Museum was a rectangular surface; the "Ronde des vétérinaires" was there transformed into an entrance gate. At the other end of the boulevard, the entrance plaza was triangular. The Boulevard was the only common axis of the different point grids of "confetti". Along the Boulevard, which was open 24 hours a day, were concentrated the all-night facilities. The Promenade was another means to go from one entrance to the other. It was constituted as a linear experience by a series of broken straight paths of different width. Along the promenade, certain nodes of programmatic intensity were "created fortuitously through the interaction with the bands".

A series of larger elements were added to form the third layer (fig. 42). The Music City, next to Baltard shed, took the shape of an equilateral triangle containing the auditoria

and of three slab buildings on pilotis - the beams - for three institutions: the Conservatory, a research center and a Music Museum. In front of Baltard's shed, next to the entrance plaza, were concentrated in a linear "facade building" all the offices necessary for the running of the park. Another major feature was the circular forest which was conceived as a major natural element to counterbalance the masses of the Museum and Baltard's shed. In opposition to that piece of exterior "nature", a ziggurat-like pyramidal greenhouse was proposed at the intersection of the Boulevard and the canal, on the Museum's shore. In front of the Museum, a band was divided into squares to form a sequence extremely similar to the 1972 project "Exodus" for London. It was once again a direct formal reference to Leonidov and Superstudio. Each square would have displayed a different exhibition on a scientific theme. Next to the "Géode" to which was added the rings of Saturn, the Ariane Rocket, an antennae forest and other curiosities were exhibited. The "Géode" was only one planet of a solar system reproduced proportionally on the site. At the location of the sun was the terminal of a chairlift running across the park to connect a point in the suburb on the other side of the boarding highway.

c. Nature

Another series of principles were given for the plantings with the intention of giving to the natural elements of the park the most artificial structure (fig. 43). The bands were seen as the curtains of a theatre stage. They were permitting two different perceptions of the park: one being a series of natural barriers and the second being long perspectives on the activities.

In O.M.A.'s project, the natural elements belonged to two different scales like the architectural ones. Small vegetal formations were analogous to the "confetti" while big pieces, like the circular and linear forests, were conceived at the

scale of the large buildings. The organization of natural elements was thus mirrored the one of architecture.

* * *

4) A New Type³

For Bernard Tschumi, the site of La Villette was a personal challenge. His first project of 1976 had been an unsatisfying application of his theoretical principles. He had, in 1982-83, a second chance to test his approach which was then much more elaborate in terms of design theory, with the cinema analogy as a generative concept.

a. Program

For Tschumi, the proposed program for an urban park, with its intention to break with the traditional park as a piece of nature opposed to the city, was an important breakthrough for contemporary architecture. During the seventies, architects rediscovered urban types and morphology but they forgot the importance of the program and retreated in formalism. By encouraging new attitudes through its stress on the programmatic content of urban life, La Villette was thus an occasion to reflect on this essential element of architecture. Tschumi reiterated the intention of the brief to create a new type for the new program for an urban park. For Tschumi, the biggest danger was to create an "everything" park in which anything and nothing is possible - a green, shapeless space **without meaning**". Tschumi's new model was presented like a large and discontinuous building in which "programme, form and ideology" were playing an integral role.

b. Deconstruction-Recomposition

Tschumi's project started with a drawing extremely similar to O.M.A.'s initial diagram. It had the same purpose of showing the programmatic requirements in comparison with the site. However, unlike O.M.A., that first diagram had an important role to play in the narration of the project. In

effect, the formal aspect of Tschumi's design originated from the explosion of that diagram (fig. 44). The fragmentation of built and covered space into the open space was metaphorically associated with deconstructive literary theory.

Programmatic fragments were regrouped arbitrarily on a 120 m grid of points evenly spread on the site (fig. 45). Those points were essentially a series of red cubes measuring 10 m per side. The cubes were named "folies" and would be transformed to fit any specific programmatic need.

Nevertheless, the deconstruction was not only restricted to the program. In effect, in a theoretical drawing, Tschumi did exactly the same thing that he did in Kassel with the Town Hall. He metaphorically deconstructed one of the existing pavilions on the site and by a series of fragmentation and combinations, he rhetorically reduced it to an empty cube. The goal of that drawing, entitled "La case vide", was also to illustrate a change in the meaning of the word "folie" (fig. 46). In his presentation, Tschumi reminded that, in the seventeenth century, the word "folie" was associated to an aristocratic house for entertainment. The idea behind La Villette's "folies" was to break with the collage of styles that represented that historical precedent. Tschumi's new concept of "folie" was to substitute culture for nature with the repetitive capabilities and artificiality of the machine.

c. Superposition

The park emerged from the superposition of three autonomous systems having each its own logic (fig. 47). Tschumi introduced his trilogy of events, movement and space without explanation. Each term was associated to a formal system. The point grid of the "folies" was the system of objects where the events were concentrated. Movement was represented with the system of lines, and space with surfaces.

For Tschumi, the point grid was an artificial and autoreferential abstraction which, when applied, gave to the

arbitrariness of the site and its constraints an absolute perfection. Each "folie" was theoretically an autonomous sign that was connoted by its specialized program but that was also always suggesting the global system. Each "folie" was red in order to give to its site an identity as strong as that of London telephone booths or Parisian metro stations. The abstract system of the grid was, for Tschumi, a symptom of the time that was already explored in other forms of art like repetitive music, or serial sculpture.

There were three kinds of lines. The first kind was formed by two straight covered sidewalks having a width of 5 meters and intersecting perpendicularly. They created an intense circulation network passing through the site. One was situated next to the canal on the side of Baltard's Grande Halle. The other, exactly like O.M.A.'s Boulevard, linked the "Rotonde des vétérinaires" to the other side of the site.⁴ These coordinate axes were open 24 hours a day and linked those "folies" having all-night activities. A sinuous path regrouping linearly all the thematic gardens was the second linear system. That path became, two years later, the cinematic promenade that Tschumi conceived as a series of "frames" individually designed by other architects or artists. The path was associated with a continuous soundtrack and the frames were physically divided by aluminum catwalks (fig. 48). The sinuous cinematic promenade was intersecting randomly with the third type of lines constituted by pathways bordered by linear plantings of trees forming square, triangular and circular surfaces.

The surfaces were delimited by the system of lines. They were planned to receive all outdoor programmatic activities. Left over space was kept unprogrammed.

* * *

5) Comparative Analysis

The projects of O.M.A. and Tschumi for La Villette were share many characteristics, first through their initial

conception of the program and second with similar design principles.

a. Program

In describing its park as a "social condenser", O.M.A. was obviously referring to Russian Constructivist theory. Similarly, Tschumi appealed to the "most constructive principle of the legitimate 'history' of architecture": the invention of new type by means of new programs.⁵ In both projects, the program was also seen as something unstable necessitating the most flexible architectural solution. The accent was put on the architectural process, not on the final design solution.

b. Rhetoric of the New

O.M.A. and Tschumi insisted on the novelty of their solution in stressing their artificial arbitrariness. For both, the essential rhetorical tactic expressing the novelty of the work was to play down formal references by stressing metaphorical discourse.

c. Metaphors and Models

O.M.A. used two analogies, one with the skyscraper - the transposition of the skyscraper's section into a matrix for the plan - and one with the theatre stage and the visual effects of its "coulisses" (wings). In doing so, they directed the viewer's attention towards the artificiality of metropolitan types. Nevertheless, they were hiding the real origin of the strips which were reproducing the system of division of Dutch rural fields (fig. 49).⁶ In effect, O.M.A. took the Dutch model of rural exploitation and transformed it into a system for their artificial urban park. The act indirectly underlined how the Dutch rural infrastructure was essentially urban: the historical development of a city like Amsterdam shows clearly how anterior rural plots surrounding

the city provided an urban matrix for further development. Essentially, in O.M.A.'s project, the Dutch field strips were keeping their original role: they were simply read differently as a structure capable of supporting the congestion of metropolitan life.

The presentation of Tschumi's project can also be read as a rhetorical attempt to play down formal references. Tschumi insisted on the point grid for its mechanical repetitive character which was, for him, a symptom of contemporary sensibility. Nevertheless, the idea of a series of cubic buildings conceived by the permutation of established elements had already a precedent in the "Ten Houses" of Peter Eisenman, and in the typological research of O.M. Ungers.

At the larger scale of the park, Tschumi rejected the romantic approaches that would negate the reality of the site (by hiding the highway with artificial hills, for example). That loud rejection of the past was moderated by Tschumi's choice to design a plan that was openly "a variation on one of the canonical spatial theme of the modern epoch: the free-plan"⁷. The reference to Le Corbusier's design principles was clear enough to incite critics to see in Tschumi's project another version of the Ville Radieuse. Tschumi's intention was to compensate the rigidity of the point grid of the Ville Radieuse with the sensuous possibilities of the free-plan and to abandon modern zoning. Hence, Tschumi's project was also recuperating an existing type. Le Corbusier had theorized a new model for the twentieth century metropolis in which the buildings were placed in a natural environment: it was the city in the park. Tschumi's new model for the urban park for the 21st century was in fact a adaptation of Le Corbusier's formal model for the metropolis of the twentieth century. Tschumi essentially kept the same design principles except that he did not adopt the modern zoning strategy and favored urban chaos. Tschumi had a laconic commentary on this formal connection between his park and Le Corbusier's ideas. He

pleaded that the idea of reversing the existing figure/ground of the Parisian plan was perhaps the same, but that the two projects were not made for the same reason.⁸

The systems of circulation of the two projects also shared the same principles. O.M.A. proposed two systems of circulation, the straight Boulevard and the broken Promenade. Tschumi also established two types of paths; there were, on the one hand, the rigid coordinate axes and the geometric rows of trees, and on the other hand, the sinuous cinematic promenade breaking the geometrical order. In fact, the disruptive superposition of the cinematic promenade on the straight paths was already conceived by Léon Krier in his 1976 project for La Villette in a drawing bearing the evocative name of "The Enigmatic Promenade" (fig. 50). However, it is in his earlier research on gardens that Tschumi found at Stourhead the idea of the two paths.⁹ He described the organization of that English Park where two itineraries are possible, one leading rationally from faked ruins to pavilions (folies?), the other running almost randomly into nature.

Tschumi's cinematic promenade was also similar in its principles to O.M.A.'s project in which the strip facing the Museum was divided into squares containing different exhibits. Both were linear sequences inspired by Leonidov's proposal for a new town in Magnitogorsk (1930). In Tschumi's sequence, the metaphor with the film was literally transcribed into form. He was thus giving another materiality to the promenade.

d. Superposition and Artificiality

The superposition of layers having their own autonomous logic is the most striking similarity of the two designs. The method emphasized the logic of alien systems which, when arbitrarily superposed on the site, were artificial abstractions. For O.M.A., superposition was a summation "that [was] more than the accumulation of parts". For Tschumi, the superposition was provoking conflictual relationships that

would be further accentuated in the design process.

Artificiality was also created by the extreme formality of pure geometrical forms. In O.M.A.'s project, circular and linear forests were negating random nature. Buildings were arbitrarily made with pure geometrical figures - triangles, "beams", ziggurat. In Tschumi's plan, the buildings were all cubic and the designs of the surfaces were also pure geometrical forms. Both designs were thus expressing radically the two characteristics of the existing architectural infrastructure: its orthogonality and its pure geometry.

e. Confetti and Folies

Both O.M.A. and Tschumi chose to fragment the program and to spread it evenly on the site with small constructions. The system of confetti was seen by O.M.A. like a meteoric bombardment on the site. Families were created and the buildings having the same program were exactly the same, only their location differentiated them. The context was more important than the object itself that was rather anonymous. Tschumi's "folies" were exactly the opposite. Yet they were theoretically all the same, (cubic and red) like the confetti, they were, in fact, all different and connoted by their particular program. Against a relatively neutral background, the "folies" were individual and unique objects. While the confetti were objects from outer space, the "folies" were invested of a theoretical mission: they provided a new meaning for the word madness.

This short comparative analysis focuses mainly on the intentions and the principles behind the conception of O.M.A.'s and Tschumi's projects for La Villette. It reveals a similar approach to design although the projects were extremely different. Their intrinsic novelty was the result of the same procedure: the de-familiarization of known formal

models by their programmatic transformation. In O.M.A.'s project, a Dutch rural field was transformed into a metropolitan park celebrating congestion. The discourse justifying it referred to metropolitan precedents and concentrated on the pragmatic and architectural implications of a process. In Tschumi's project, the modern city in the park was reversed like a glove and became "a park like a building". The solution was presented as an illustrated narrative: the origin of the project was an imaginary "big bang" that "deconstructed" programmatic and architectural elements into fragments. The explosion was followed by an implosion: these heterogeneous fragments formed a series of buildings located on a point grid. Tschumi's narrative took another dimension when he named these buildings "folies". What effectively results from these operations is a separation of formal models and discourse.

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B. Critical Interpretation

On December 12, 1982, the jury of the competition, unable to choose a winning scheme selected nine of the 471 projects that they studied. Two were awarded a first prize; they were those of O.M.A. and Tschumi. The traditional landscape architects were baffled. However, against the established rules, the jury decided to send the architects of the nine projects back to their drafting tables. The procedure was seen as a scandal by the French press. The following part examines some of the critical commentaries on La Villette. There were, of course, many more critiques written. The following selection looks at two kinds of critiques. The first kind is the commentaries which followed the final decision. They establish the basis of a debate opposing Koolhaas to Tschumi. The second kind of critiques is a selection of texts that were written in the years following the competition. They give meaning to the work of Tschumi.

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1) Critical Reception

a. Early Reactions

The periodical L'architecture d'aujourd'hui took position in favor of Koolhaas and when Tschumi was finally chosen to build, he was denounced as a formalist.¹⁰ The argument of the critic Patrice Goulet was that Tschumi's project was a composition using the geometric vocabulary of the eighteenth century (Boullée, Ledoux) and that the serial repetition of the "folies" was reminiscent of Kahn.¹¹ The effects of superposition, which was for Goulet the only modern notion in Tschumi's project, were eliminated by the too great distance between the objects. Finally, Tschumi's project being classical and monumental, it was an abuse to qualify it a free-plan. Thus, the conceptual and minimalist intentions of Tschumi did not meet the goals of the initial brief, which asked for a new and powerful symbol. For Goulet, only Koolhaas understood the modern condition and its culture of congestion. His project achieved with minimal means a maximum of interface between the programmatic elements. His model proved the perfect logic of the process. The jury had committed a mistake. Two years later, Françoise Choay, one of the jury members, agreed with Goulet and explained that the jury feared innovation and the unpredictable.¹² Even those who wrote the program feared its consequences. So, as in 1976, Tschumi was rejected by the French architectural scene. He nevertheless received an unanimous international acclaim.

Almost unknown, Tschumi was presented by Kenneth Frampton as heir of the Futurists, the Constructivists and the Situationists.¹³ A true avant-gardist, Tschumi was not "prejudging of the necessary destiny of the **homo ludens**". His former work had shown that "the **homo sapiens** cannot realize itself within a moralistic cage of petit-bourgeois values". The three terms of Tschumi's theory - space, movement and event - were, for Frampton, delimiting "the conditions for the

creation and experience of a Post-Humanist architecture" with the possibility of their endless permutations. Looking at La Villette, Frampton saw in Tschumi's park a cross-breeding of the Situationist project "New Babylon" and the radical social programs of the heroic period of Russian Constructivism.

Frampton wrote:

"Despite undeniable differences in intent and syntax, it would be reductive to ignore the affinities obtaining between Tschumi's design for La Villette and Ivan Leonidov's Culture Park proposal of 1930."

For Frampton, the Cartesian covered galleries, in marking the site with a cross, were "alluding to the distant stability of the Roman **Cardo** and **Decumanus**". Also, the serpentine lines were engendering a dynamic space stimulating unprogrammed activities. Location of the events, the essential "folies", in oscillating between identity and difference, were both insisting on their "sameness" and their "otherness". Finally, the remarkable thing in Tschumi's design was "the way in which a categorically avant-gardist stance has been able to come into terms with the unpicturesque reality of a late twentieth century programme."

Paradoxically, Tschumi was perceived by professional critics as both a classicist and an avant-garde.

b. Exhibitions and Publications

Immediately after he won, an administrator came to Tschumi and asked him to change the name of the "folies" for something less polemical like "fabriques".¹⁴ Tschumi refused categorically and he started to work on a series of theoretical drawings that were exhibited and sold in New York and Paris. For many, Tschumi's theory was mere pretention, and after several months, many people started to believe that Tschumi did not want to build and was ready to assume the role of the wicked and not-understood architect.¹⁵

Tschumi wanted first to establish clearly the rules of his project. He had also to redraw the master plan because the

administrators had decided not to demolish the rock concert hall that was on the site. The year 1983 was very busy for him. He published his project in periodicals around the world and accepted numerous interviews. Six months after the competition, he decided to publish a series of small diagrams showing anterior urban models that could have been applied to the site (fig. 48).¹⁶ Among the 12 models studied were Le Corbusier's "Plan Voisin", the Roman Baroque axis and the Manhattan grid which inspired perhaps Tschumi. Some models were implemented on the site but were discarded for the point grid. Amazingly, Tschumi seemed to have anticipated O.M.A.'s project. Obviously, the final solution was not as arbitrary as its author pretended.

During 1984, Tschumi prepared an exhibition of his work for the Institut Français d'architecture that led to the publication of a catalogue entitled "From the Transcripts to La Villette".¹⁷ In that catalogue, the theoretical link between the Transcripts and La Villette was established and the first diagrams demonstrating the process of combination used for the conception of the "folies" were published (fig. 52).

By the end of 1984, Tschumi published an article theorizing the two poles of his operation at La Villette: "Madness and Combinative".¹⁸ In the first part of that article, Tschumi, quoting Blanchot, Foucault and Lacan, gave a psychoanalytical reading of his folies. For him, the state of architecture reflected the disjunctive condition of our time, disjunction demonstrated by the "non coincidence between being and meaning, man and object". Although Tschumi's reasoning is much more complex than the following explanation, it could be grossly understood in that manner: the individual transfers his interpretation on the building like the patient transfers his problems to the psychoanalyst. Commenting on the point grid solution, Tschumi stated that it also played a political role in not being an hierarchizing device and in refusing "a

priori master plan of the past".¹⁹ In the second part of his article, Tschumi made more or less a structural analysis of his own work in using Barthes (combinative) and Genette (hypotext, hypertext). He conceived architecture to be the result of a process of transformational relations. These relations were something between "pure formalism" - that was producing meaningless forms - and "classical realism" - in which each form has an expressive meaning. For him the architect was the formulator of new relations. His method was the "combinative", and structural analysis was useful to distinguish the nature of the transformational relations performed during the making of architecture. He explained the transformational relations of his combinative method as something similar to the Structuralist concept of the empty slot:

"Indeed, perhaps the most important legacy of structuralism has to do with heuristics, demonstrating that meaning is always a function of both position and surface, produced by the movement of an empty slot in a series of a structure."

That notion of empty slot, in French "case vide" was the reference of the title of the drawing in which Tschumi "deconstructed" an existing pavilion on the site of La Villette (fig. 46). That notion was also central in the next show that Tschumi prepared for the A.A. in 1985.

For that exhibition, Tschumi drew a series of theoretical plates that were published with two texts, one written by the philosopher Jacques Derrida and the other by the historian of architecture Anthony Vidler.²⁰ The drawings were theoretically deconstructing the plans of La Villette, whose fragments were once more dissociated (fig. 53). These drawings rhetorically demonstrated that La Villette's design was an arbitrary stop in the endless process of architectural permutations. Like the Manhattan Transcripts, La Villette was ending in the dissolution of forms into new fragments. The exhibition was entitled "La case vide" and the two texts were giving meaning to Tschumi's operation.

It must be underlined here that the writing of Jacques Derrida is almost untranslatable because it plays constantly with the limit of language. As such, the text becomes as poetical as it is philosophical. Moreover, Derrida described his reading of Tschumi's "writing of space" as an hazardous journey, a fact showing the uneasiness with which Derrida tackled architectural criticism.

In that text, Derrida reflected on Tschumi's vocabulary and he found in it powerful words - especially those beginning with "trans" (transcript, transfer, etc), and those beginning with "de" (destabilisation, deconstruction, disjunction, disruption, difference) - that were all expressing the dislocation and the displacement of architecture.

Derrida structured his text around a word: "maintenant" (now). The stress on "maintenant" is the stress on the event. For Derrida, Tschumi's park is not the event itself, instead it is a writing of space making place for the event. For Derrida, the event is a question: what happens to meaning? - or better - what happens to the meaning of meaning? For him, the event is intimately linked to madness.

In a rather ambiguous paragraph, Derrida explained how Tschumi, in naming his series of buildings "folies", was making an abyssal double metonymy because the meaning of the "folies" was their non-meaning. They were deconstructing the semantics of architecture.

Before explaining how Tschumi achieved that deconstruction, Derrida insisted on the fact that there exists an architecture of architecture that naturalizes architecture itself. The idea of Derrida could be explained as such: we forgot the historicity of architecture and therefore the values that we impose on it. For Derrida, these values postulate only one thing: architecture must be significant.

For Derrida, meaning is the metaphysical edifice of architecture. That edifice is based on four points. The first is the experience of dwelling as theorized by Heidegger.

The second is the role of architecture as an institutional means to hierarchize collective memory. Historicism is an-always hierarchizing nostalgia. The third point is the teleology imposed on architecture: it must serve, it is always in service. The fourth point depends on art, which imposes its values of beauty, harmony and order. For Derrida, these four points are working against the work (oeuvre) in forming a frame inside which is enclosed architecture as a coherent totality.

For Derrida, the "folies" are resisting and deconstructing the fortress of architectural metaphysics because: a) they defy dwelling, b) they have no hierarchy, c) they have no end, thus no teleology, and d) they have no order. The "folies" are decentering architecture in exceeding the metaphysical frame of meaning. However, they are not destroying architecture: they are thinking it. Hence, they are not nihilistic because deconstruction is followed by reconstruction. Like madness, the "folies" are not chaos but a new order. Their order is the one of the point grid which is not a synthesis because it is open-ended and made of fragments.

For Derrida, the "folies" are a "performative" architectural writing. They are the signature of the present and are explaining the event, which is for Derrida, the dislocation of meaning.

Derrida ended like this:

"Pledge but also wager, symbolic order and gamble: these red cubes are thrown like the dice of architecture. The throw not only programmes a strategy of events, as I suggested earlier; it anticipates the architecture to come. It runs the risk and gives us the chance"

It is exactly that very idea of game that Vidler put in evidence in his article. He compared contemporary architecture to a game of which we know the name but which seems to have no fixed rules. It causes a dilemma similar to the one of Alice when she played cricket with the Queen of

Wonderland. The notion of "case vide" suggests at least two connections. The first one has to do with games like chess in which each square of the checkerboard is a "case". In such a game even the empty square (cases vides) have a meaning. For Vidler, Tschumi was playing on and in between the "cases vides". The second connection is made with architecture itself. "Case" suggests "casa" or cottage: the "hovels of natives in the colonies". It is opposed to "maison" or mansion which implies a mode of living based on nostalgia and simulacra. For Vidler, Tschumi's "cases vides" had no nostalgia, and although they echoed vaguely the "casa" and some Modernist methods, they were "empty of the traditional rules and empty of functionalist content". "They start where they start and finish arbitrarily". However, if the "folies" were almost empty of references, the park itself was retaining two formal aspects of the historical parks, the classical axis and the romantic "parcours". For Vidler, they were nevertheless standing for no narrative.

c. Note on the Combinative

Let us conclude this short review of the commentaries on La Villette by mentioning the analysis of Daniel Guibert on the origin of the combinative process in architecture. Guibert underlined that the theory of the "combinative" is nothing new in architecture. It has always been central in classical architecture and it had already acquired the status of architectural concept at the end of the eighteenth century in the work of Boullée and in the early nineteenth century in the theory of J.N.L. Durand (fig. 54). For Guibert, combination had also a philosophical origin in the thought of Leibniz.²¹ Guibert's analysis pointed at a critical elusion in Tschumi's theory: the problem of selection of the fragments and of the principles of their assemblage.

Guibert was interested in the genealogy of the combinatory process. However, the connection he made between Durand and

Tschumi could be further extended. In a recent work, W. Szambien has demonstrated how Durand based his theory on the philosophy of J.-J. Rousseau.²² Szambien put in parallel two texts, one by Durand and the other by Rousseau. He showed how Durand was merely paraphrasing Rousseau in attributing to architecture the virtues that the philosopher was assigning to the Republic. The process of import, of which Tschumi made a manifesto, was also part of the tradition of architectural theory.

* * *

2) Critique of the Critiques

"Any drawn project of architecture secretes a space that is both concrete and abstract, i.e. a buildable artefact on which become imbedded the history of architecture, the characteristic concepts of contemporary knowledge, the conceptor's biography and the cultural memory."²³

With that definition, Daniel Guibert provided four categories of analysis of which only the last one, cultural memory, is too vague to be useful. In fact, the three other were used by all critics with different degrees of intensity and the analysis of the critical texts on La Villette informs as much the projects as the position of the authors.

The first commentaries that were published after the competition were passionate. The early criticism tried to evaluate the avant-garde nature of the projects through formal affiliation and biographical notes. Until then, Koolhaas and Tschumi were both known to be against Post-Modernism. After La Villette, the "progressist" critics were divided.

Patrice Goulet dismissed Tschumi on the basis that the plan of his park was a composition. For Tschumi, that was a true insult because composition is associated to the traditional Beaux-Arts method, and in the French context, it is still

today a very pejorative word. Tschumi reacted to that criticism in his following statements and made a priority to develop a rhetoric demonstrating that the grid was politically anti-compositional. Goulet's argument was not really demonstrated; he just vaguely mentioned historical precedents. Had it been rigorous, his demonstration would have probably been based on an analysis of the genealogy of Tschumi's formal models. The method is traditional and it was used also by Vidler who recognized in Tschumi's scheme references to historical parks. For Goulet, Tschumi's "composition" was not formally avant-gardist.

Kenneth Frampton wanted to correct what he perceived as an injustice done to Tschumi. He wanted to demonstrate that Tschumi was an avant-garde and insisted on the origin of Tschumi's thought with a biographical stance. Frampton looked at Tschumi's references and found the Futurists, the Constructivists and the Situationists. Taking a Marxist point of view, Frampton was ready to accept Tschumi as the legitimate heir of the soviet avant-garde. He wrote:

"For Tschumi, as for no other contemporary architect, the Russian avant-garde remains alive as a constant source of reference and inspiration; for him, (...), it keeps its power as a portent; it endures the unfulfilled promise of millennial transformation, as the irreparable breach in the time-honored bastion of bourgeois culture, as the revolt of reason against itself".

Frampton tried to legitimize Tschumi's avant-gardism with a political reading of his production. In invoking earlier revolutionary movements, Frampton attempted to give Tschumi's work a revolutionary gloss with the intimation that the wish for change of the revolutionary was more "moral" than the conservative interest of the bourgeois. Frampton did not insist too much on the formal affiliation of Tschumi's plan with the works of the revolutionary avant-gardes, more important for him was the intellectual affinities they were sharing.

Frampton is known for his adherence to the ideas developed

by the School of Frankfurt, and especially those of Walter Benjamin who pleaded, in his famous essay "The Work of Art in the Age of Mechanical Reproduction", for the politicization of the work of art.²⁴ For Frampton, an avant-garde art is one that is politicized, one that attacks the values of the Bourgeoisie, finally, one that is opposed to the dominant trends. The dominant Post-Modernist tendencies of the architectural practice were for Frampton a symptom of a Humanist/humanist regression. The intellectual background of Tschumi as well as his theoretical independence were for Frampton guarantors of his engagement in the development of a Post-Humanist architecture. However, his interpretation of Tschumi's position forced the material in bypassing the crucial moment when Tschumi stated the impossibility for architecture to change the world and that his theory of transgression was not a matter of subversive avant-garde.²⁵ Frampton placed himself in the position of the critic validating on political ground a cultural project. He made thrilling connections, however, they are difficult to substantiate.²⁶ Was Frampton consciously building a myth? A fact remains, in associating Tschumi with the historical avant-garde, Frampton was performing operative criticism as theorized by Tafuri.

It is worth noting that, although they were sharing the same sources, Tafuri and Frampton were in diametrical opposition. For Tafuri, architecture itself was an ideology. For Frampton, architecture was still a means to change the world. Paradoxically, Frampton found in Tschumi's project a formal reference to an old and classical concept, the Roman **cardo** and **decumanus**. Frampton's personal notion of avant-gardism was not incompatible with tradition. In using the traditional tools of operative criticism, Frampton's conception of avant-gardism resulted to be ambiguous. It seems that what was important for him was to state the association of Tschumi with the avant-gardes and with a new concept in architecture:

"Post-Post-Modernism" or Post-Humanism.

Derrida's reading was not concerned with the history of architectural forms nor in the biography of Tschumi. Derrida tried to evaluate the cultural impact of Tschumi's work. While for Frampton, Post-Humanism was a political reaction to the dominant tendencies in architecture, for Derrida, it meant something totally different. Seemingly, Derrida refused strategically to characterize Tschumi's work as Post-Humanist. In current philosophical thought, Post-Humanism was defined as the de-centering of the subject. Derrida mentioned it in his essay on La Villette. However, he introduced that notion to dismiss historicism and the ideology of progress which have the tendency to label every moment and thus historicize the present. Post-Humanism was for him one of these labels with all the other "Post-" of our time. He probably did not want to historicize Tschumi's project instantly. Instead, Derrida made a "deconstructive" reading of the project aiming at demonstrating how Tschumi de-centered architecture, not the subject. A major element in Derrida's text is the idea of Tschumi's writing of the space as a signature, the signature of an author. The de-centering of the architecture was thus not incompatible with the return of the author. Also, Derrida saw the non-meaning of the "folies" and understood the meaning of Tschumi's act of denomination. He knew that it was pure play of language. Nevertheless, one can legitimately ask what was the intention of Derrida when he wrote about Tschumi. Was he a critic appraising a work that promotes his own theories? Was he an amateur fascinated by architecture? Was he a philosopher making a deconstructive reading of architecture? He was probably fulfilling all these roles and thus gained from Tschumi's work as much as he gave. Retrospectively, the genial move of Tschumi has been to persuade the authority of deconstructive theory to validate his work.

Vidler and Guibert looked at the nature of the game in

relation with the history of architectural formal models and of architectural design theories. For Vidler, the shape of the "folies" was arbitrary. He could have gone further and recognized that an arbitrary situation is necessarily the result of the decision of an arbiter - in that case, of an author. For Vidler, the "classical" and "romantic" paths of La Villette stand for no narrative. Perhaps they stand for no allegorical narrative, yet a fact remains: Tschumi's project is in itself a whole narrative. It is an architectural fiction in which an initial big bang engendered a process determining the architecture of the "folies". Guibert in pointing the historical existence of the architectural combinative process showed that Tschumi was once more masking an older principle behind the veil of a new structuralist literary theory. But more important, that veil was Tschumi's insistence on the process. In effect, Tschumi always presented the architecture of the "folies" as the result of a combinatory process. However, that process is fictional since none of his transformational diagrams is really explaining the resulting forms of the built "folies", as if the combinatory process was one theoretical thing and the actual design something else. In other words, none of Tschumi's "folies" is presented, through a series of drawings, as the final result of a concrete development of permutations. The combinatory process, as illustrated by the diagrams, appears to be a rhetorical device because there is no evidence that the forms of the "folies" are not resulting from the traditional approach to design, i.e. the production of sketches of a preconceived mental visualization. This observation is extreme but it shows the rhetorical use of architectural theory. The generative combinative process is a theory acting more like a metaphor than like an effective method of conception.

* * *

This short reflection on the different interpretations of La

Villette demonstrates how speculative the meaning of a work can be, especially when it aims at having no meaning, but also that operative criticism is very much alive in architecture in spite of Tafuri's denunciation of its use. It nevertheless substantiates Guibert's assumption that the work of architecture is secreting a world of its own, in putting into play contemporary cultural forces, in engaging a dialogue with the history of the field, and in reflecting the preoccupations of its author.

Architectural criticism is a forum where the validity of a project and of its underlying theory is debated. It is the place where the most dynamic forces of contemporary culture compete. It is the crucial second moment in the development of architectural theory: the moment of its institutional validation. Our sample shows that the validators - the critics - are never impartial because they are literally "engagés" in the promotion of the object which comes to represent their own cultural project. Once again, the project of architecture is the starting point of a discourse going far beyond the immediate materiality of the object. The work of the critics is in itself a project because it effectively projects values on the architectural project in a rhetorical and speculative description of its forms and effects. The critics are producers of a descriptive theory of architecture whose function is the historical, political and cultural legitimization of the work of architecture. Their validation is the one of the institution constituted by the community of specialists.

The project is most often evaluated on the basis of its historical resonance. The critics may value either its capacity to express the actual cultural values of the time or the historical continuity of the discipline. Tschumi's project divided the critics because it gave the possibility of a dual reading with its covered historical references and its moderately radical proposal. The success of Tschumi at La

Villette was not so much the result of the invention of new architectural forms than of the fact that his project could be validated by political (Frampton), cultural (Derrida) and historical (Goulet, Vidler, Guibert) language games.²⁷

Finally, the analysis of La Villette's critiques shows that, as a "signature", the project was very much the product of an author. The latest development of Tschumi's theory aimed at the consolidation of the aura of the author. In a recent publication entitled "Cinégramme-folies", Tschumi contributed to the construction of his own personal mythology in presenting La Villette as the sum of all his previous research.²⁸ The "Manhattan Transcripts" were described as a research on the "pure mathematics" of architecture and La Villette as the application of the results. Tschumi pulled his joker out his sleeve and demonstrated how the survey grid used to allocate building sites in the collective project entitled "Joyce's Garden" was anticipating the point grid solution used at La Villette. Finally, the folies were presented as part of a larger study begun with the Twentieth Century Follies series which were an urban laboratory trying to dissociate form and function. These early Follies were ancestors of the empty red cubes of La Villette. The "folies" of La Villette were conceived as an "architecture of the signifier rather than of the signified". They were empty signs waiting for a meaning. But the following act of denomination was apparently contradictory since the signs were then over-determined by means of a polemical name. Tschumi performed at the same time two perlocutory acts: one was stating that the buildings were empty signs and the second was naming these buildings with powerfully charged name.²⁹ The goal was not so much to find a name defining the buildings, it was to empty the concept of "folie" of its meanings. In doing so, Tschumi had a specific aim:

"To dismantle meaning, showing that it is never transparent, but socially produced was a key objective in a new critical approach that questioned the humanist assumption of style".

The empty cubes named "folies" are thus invested a mission by their author. They are far from being meaningless from the authorial point of view although all their rhetorical meaning is the absence of meaning. They are openly "pure trace or play of language". Tschumi was placing himself in a long (anti-) tradition of negative thought extending from Nietzsche to Blanchot, from Bataille to Derrida.

Nevertheless, in conceiving architecture as a piece of writing produced by an author, Tschumi was contradicting the structuralist notion of the death of the author and all his earlier practice based on a radical use of intertextuality that may appear for some as pure plagiarism. In search of the absolute, Tschumi is not afraid to contradict himself.

A notion remains unsettled: the significance of Post-Humanism in architecture. Philosophically defined by Derrida as the de-centering of the subject, is it affecting architecture? What is the difference between the Humanism and the humanism presented by Frampton? Is architecture an ideology born with Renaissance Humanism and dead in the Post-Humanism era of late-capitalism as pretends Tafuri? Is Post-Humanism another empty signifier waiting for a signified, like the "folies"? These questions are theoretical and difficult to answer. The next paragraphs try to shed some light on the notion of Humanism in architecture and its relationship with the works of Koolhaas and Tschumi.

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C. On Humanism

1) Humanisms

In Part 3 of this research, Koolhaas' conception of Humanism was analyzed. Koolhaas' Humanism has been associated with the Populist architecture influenced by Dutch theories of the fifties and the sixties. Koolhaas' denomination was induced by the intent of this architecture to focus on people, their needs and their culture.

Tschumi's Humanism is associated with style and by extension with Post-Modern architecture's appeal to design principles drawn from the classical tradition. These Humanist architectural principles insisted on the production of stable objects complete in themselves. For Tschumi, this architecture of the past was not in tune with a society marked by dissociation and disjunction in every field.

For both Koolhaas and Tschumi, Post-Humanist architecture is not a condescending and paternalistic practice. It reflects the mood of its epoch. One may perhaps associate Koolhaas' definition to Frampton's humanism, and Tschumi's conception to Frampton's Humanism. The first is a contemporary attempt to re-define the principles of architecture in accordance with a "natural" vision of man. The second is the long tradition of classical principles of architecture which was appropriated by the Renaissance with its Humanist theory. These principles were explained by Wittkower's in his Principles of Architecture in the Age of Humanism where he demonstrated the use of the metaphor with the human body and music by Renaissance architects.³⁰

For Manfredo Tafuri, Renaissance Humanism had given birth not only to sets of principles but, more important, to the ideology of architecture in the service of the advancement of the Bourgeoisie. The death of architecture in the 1960's was the end of the architects' role as dominant actors and developers of capitalist society. They were now mere technicians totally assimilated. Tafuri never alluded to Post-Humanist; for him, architecture died in the late-capitalism era.

Another definition could be derived from Derrida's association of Post-Humanism with the de-centering of the subject. In his analysis of Tschumi's project for La Villette, Derrida drew the frame of Humanist architecture by means of four points and demonstrated how Tschumi's project is de-centering architecture. Tschumi's architecture is an

operation undermining architecture's traditional metaphysical edifice. The procedure marks the return of the author. The de-centering of architecture corresponds to the Post-Humanist de-centering of the subject, hence architecture was analogue to the subject.

Humanism, like Foucault's "madness", is thus a word which meaning changed through time, a word that means different things for the various authors. However, in the end, Humanism is always associated with dominant and regressive thought. Humanism is the enemy of the avant-garde.

* * *

2) The Humanist Heritage

Although Bernard Tschumi has built his theory of space on the philosophical dualism of the Subject and the Object, none of his critics really tried to look at it in the perspective of the philosophy of art. Nevertheless, art theory has developed historically in strong relationship with philosophy. This relationship between ideas and reality in art has been theorized since antiquity and the contribution of Panofsky on the matter, with his book Idea, is useful to place Tschumi's theory in a larger frame.^{3 1} In fact, the reading of Panofsky suggests a series of correspondences between Tschumi's as well as Koolhaas' positions and the classical theory of art, that cannot be neglected.

Bernard Tschumi's almost exclusive use of models developed during the twentieth century is an important part of his rhetoric of the New. The reading of Panofsky demonstrates how Tschumi, in reintroducing a philosophical problem in architecture, ended up reaching old conclusions and old solutions.

a. Idea

For Tschumi, the idea is a guarantor of a deeper work. The necessity of expressing an idea prevents the work of architecture of becoming formal and meaningless. For him,

architecture is a mode of thinking in and of itself, like language. He referred to Duchamp and the Futurists to substantiate the prevalence of ideas over forms as a modern phenomenon, but his act was a diversion because the "Idea" in art theory is as old as philosophy. In effect, since Plato, the theory of "Ideas" is a central part of the theory of art. For Plato, these Ideas were metaphysical entities existing outside the world of sensory appearances but also outside the human intellect in a "supercelestial place". The philosophy of Plato relegated art to a minor activity which could open a perspective on the Ideas but which was always partially hiding them. The main problem of philosophy during antiquity was to find the origin of these Ideas. For the Platonicians, they were metaphysical while for their adversaries they were in the mind of the artist.

b. A Means of Knowledge

For Panofsky, the great achievement of the Renaissance was to have asked the question of art differently. The artists tried to find the means to compete with nature. Art was seen as a means to have access to the universal ideas hidden by nature. Renaissance theoreticians "removed the object from the inner world of the artist imagination and placed it firmly in the 'outer world'".³² One of the goals of the Renaissance theory of art was to extract rules from the observation of nature in order to provide the artist with a objective sets of rules which would automatically be the guarantor of similitude and thus of beauty. That act created a distance that was, at the same time, reifying the object and personalizing the subject. The dualism of the subject and the object was born, but it was not immediately perceived as a problem for Renaissance art theory. For Panofsky, a quiet inspiration was characterizing the works of art of that period which, in a general tendency, harmonized the most extreme opposites.³³

When Tschumi referred to the conservative Abbé Laugier to

plead for order and chaos - i.e. rationality and irrationality - in architecture, he was adopting a typical Renaissance position. Similarly, when Koolhaas described in "surrealistic" terms the grid of Manhattan as an order of "rigid chaos", his mix of extreme opposites had affinities with Renaissance attitudes.

The Platonic theory of the "Ideas" survived during the Renaissance and was subject to reevaluation. For the Neo-Platonicians, the Idea was a celestial vision. For other Renaissance theoreticians, it had no metaphysical nobility: the Idea was an intuitive synthesis but it was obviously in harmony with divine nature since everything it expressed was drawn from it. Their method was deductive like that of Koolhaas when he looked at New York. For him, modern architectural types were what nature was for the Renaissance artists. Koolhaas found in them formal principles for the architecture of a mutant society: his work could only be in harmony with modern reality since the latter was its starting point. For Tschumi, "nature" was not only modern architecture, it was also modern art (as for Zenghelis), literary theory, music and cinema.

c. Analogy with the Human Body

The Humanism of the Renaissance conceived architecture in analogy with the human body and music. It tried to build a normative theory of architecture based on the study of human and harmonic proportions. Koolhaas and Tschumi also referred to the analogy with the human body but they challenged the old Humanist prescriptive theory of architecture with an up-to-date conception of a mutant, seductive and erotic human body.

Koolhaas conceived the skyscraper as an atrophied and mutant body. The Humanist metaphor was still useful to explain what was happening to architecture in New York. Moreover, the analogy was even used with a playful and logically perverse excess that enabled Vriesendorp to paint a mythical skyline of

Manhattan in which all skyscrapers were topped with human heads (fig. 5). The buildings were even given human attributes and feelings. They had secret passions and desires.

Tschumi reached almost the same conclusions by another path. He smuggled in the Humanist analogy with the human body and the problem of the Subject and the Object by using Barthes' conception of the text. For Barthes the text, like the human being, was split. The split of the object-text was that of subject-writer versus subject-reader. In Tschumi's theory, the split situation of the "human" text took another formulation in the "paradox" of architecture where it became the abyss between conceived and perceived spaces, between mind and body, between the subject and the object. The analogy with the human being was hidden behind a philosophical discourse: the drama of architecture was mirroring the one of the human subject. In superposing Barthes' theory of the "erotic text" - which was inspired by Bataille - on Bataille's metaphor of the text as architecture, Tschumi obtained a theory of "erotic architecture" in which architecture, text and human were sharing the same characteristics.

It is necessary to underline the importance of dramatization to create a state of crisis and stimulate a new reading. The tendency in O.M.A. or Tschumi's discourse to force the meeting of opposites is certainly an outcome of their interest in Surrealism. While for the Renaissance artists, these juxtapositions were done almost innocently, for Koolhaas and Tschumi they were a means of dramatizing the common reading of architecture. For Koolhaas, it is the opposition between artificial and natural, between metropolis and traditional city. For Tschumi, it is the drama of the subject and the object, city and nature, ideas and real.

d. Transcendence

For Panofsky, the importance given to the personality of the

artist during the Mannerist period that succeeded the Renaissance demonstrated the discovery of the abyss between Subject and Object. Facing the necessity of filling the gap, the Mannerist period tried to go beyond the opposition between Subject and Object and introduced a higher transcendental unity. The tension between Subject and Object was that between genius and rules, between intellectual and sensory perception. It was transcended in reinvesting the Idea with its metaphysical character. The artist's "inner image" was a gift of divine grace. The artist acquired the dignity of a genius. To ground that twist in art theory, Zuccari went back to Scholastic thought where he found that man was composed of body, spirit and soul, spirit being the mediator between body and soul.

Tschumi also found a third term to solve the "eternal dualism" of architecture which he also expressed by the opposition between intellectual and sensory perception. The dilemma of architecture was dissolved with the introduction of a third term: Bataille's intense interior experience. To "conceived" and "perceived" spaces was added "experienced" space. The Scholastic trilogy of spirit, body and soul corresponds term to term with Tschumi's three spaces.^{3 4} Tschumi's new trilogy was mirroring Scholasticism's tripartite conception of man. Just as the soul was the mediator between mind and body, "experienced" space was dissolving the abyss between "conceived" and "perceived" spaces. That may explain why Breton considered Bataille's theory mystical. In his third formulation, Tschumi replaced the notion of experience by the concept of event. Having himself been deeply affected by the Parisian events of May '68, Tschumi could easily use both concepts indifferently. The experience of the event was affecting the individual and was the term always forgotten by the architects.

e. Faith and Allegories

According to Panofsky, during the Mannerist period the visible world was, for the artist, only the symbol of invisible and spiritual signification and the opposition between subject and object could only be resolved in referring to God. The work of art became allegorical and was attempting to represent a body of thoughts through symbols. Even ancient art was read as an allegory.

That "spiritual" dimension of architecture was made evident in Tschumi's article "Le jardin de Don Juan" in which he explained that the seduction of architecture was affective only on those willing to be caught. The allegory of Don Juan masked the necessity of faith in architecture.

On the other hand, Koolhaas never hid the necessity of faith in architecture. His tales of the pool and the raft are allegories of faith. And his very use of allegorical tales, as well as his mythical reading of Manhattan through metaphors, are a typical mannerist approach to art. The architect-artist knows the hidden principles of architecture and builds the mythology of his time in assuming the role of mediator between society and its unconscious.

f. Faith and Unconscious

Panofsky showed that the Renaissance established a dualism between Subject and Object that was concretized in the opposition between man and nature. During Mannerism, the philosophical abyss provoked by such dualism was resolved by an appeal to God and faith.

For modernist protagonists like O.M.A., only an excess is possible: it is the bet on the artificial and the breaking of the ideal and utopian equilibrium. As a result, faith is necessary to fill the gap. Faith in modernity does not imply a research of the transcendental unity for it is unattainable and unnecessary.³⁵ One could probably argue that Koolhaas' appeal to the metaphysical in architecture is a rhetorical strategy. His metaphysical rhetoric may come out of his

interest for O.M. Ungers' theory which overtly establishes a metaphysical role for architecture in society.³⁶ The main difference between O.M.A.'s works on Manhattan and Ungers's theoretical projects is that the former is surrealistic while that latter is hyperrealistic.³⁷ The most metaphysical aspect of Koolhaas' theory is his reference to the existence of a collective unconscious. He becomes Surrealist when he pretends to have access to that unconscious. When Koolhaas applies Freud's theory to architecture, it is essentially to create a Surrealistic reading of architecture aiming to defamiliarize. Tschumi's trajectory runs parallel to O.M.A.'s. Once the abyss between intellectual and sensory cognition is established, Tschumi introduces his third term. That third term was already present in his early work when Tschumi was interested in establishing new relationships between people, ideas and objects (see Table 3). In the mid-seventies, he built his theory of architecture by superposing on the field of architecture the dualist framework of Structuralism and Philosophy. He intended to dissolve the dualism with a third term: Pleasure (Barthes), interior experience (Bataille), seduction (Don Juan) or event (Kiesler). Later, in the theoretical text explaining the "Manhattan Transcripts", this third term was added to the initial opposition and formed a self-contained trilogy in which it was not an agent of dissolution anymore. In doing so, Tschumi abandoned Barthes' Structuralist dual conception of man. Tschumi's architecture reflected the three constituents of the human being as defined by the Scholastic thought (body, spirit, soul). However Tschumi, in referring to Bataille, was trying to avoid the transcendental term. Soul was replaced by the unconscious whose presence is substantiated by multiple references to Freud and Lacan, or to Artaud's experiments on his own psychics.³⁸ Tschumi was considering architecture as a means of knowledge of the human nature by the exploration of human unconscious: he thus

adopted a typical Surrealist conception of the role of art.

In La Villette's project Tschumi, like O.M.A., ended up stressing the artificiality of architecture. The insistence on the dissymmetry of the relation between subject and object (city and nature) was conceived as the de-centering of the architecture (subject). Tschumi's sophisticated manipulation marked the return of the author in architecture. That return is not dissimilar to the elevated Mannerist conception of the artist.

Koolhaas and Tschumi articulated their theory around the unconscious which becomes the place where the system collapses and faith emerges. Defined as such, the unconscious is the conceptualization of Bataille's and Derrida's "blind spot" or the black hole of human thought. Their theories are thus in perfect harmony with art criticism of the seventies which often referred to psychoanalysis to demonstrate how art can be conceived as a form of knowledge of the human being. The work of art being a manifestation of the unconscious, its signification is ulteriorly discovered by the work of the critic-psychoanalyst.

g. An Architecture of Post-Humanism?

Koolhaas' and Tschumi's theories incorporate major elements of the Humanist theory of architecture.

Methodologically, Koolhaas and Tschumi kept the old Humanist analogy with the human body which comes straight from Vitruvius. Yet, their use of it was aimed at contradicting traditional principles of Humanist architecture. One may ask whether it is the analogy or the principles that are Humanist. If one keeps Tschumi's logic according to which the process is more important than its results, one must look at Renaissance architectural principles as resulting from the application of the Humanist metaphor. Therefore, the theoretical association of architecture with human body and intellect remains Humanist.

Tschumi's conception of architecture as a form of knowledge corresponds to the Renaissance Humanist idea of art and Koolhaas' role as ghostwriter of Manhattan corresponds to the Mannerist conception of the artist as a medium. Notions like "collective unconscious of architecture" or "experienced space" are transcendental categories of analysis to which Derrida remained surprisingly blind. The knowledge of mankind and human nature by means of art is a Humanist conception propagated by art history. and raised to the status of discipline by Panofsky.³⁹ Koolhaas and Tschumi always integrated their work in the artistic institution, through their association with artists, art critics and art galleries. They are thus participating to the development of contemporary institutionalized Humanism.

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D. The Structuralist Heritage

The definition of Post-Humanism is a philosophical problem. It is possible here to define only the characteristics of the theories of Koolhaas and Tschumi. Are they perhaps the ones of Post-Humanist architecture? The answering to that question is left to others.

As theoreticians, Koolhaas and Tschumi approach architecture from an intellectual point of view. As an intellectual practice, architecture comes with a discourse defining its place among other cultural productions. With Delirious New York, Koolhaas was addressing his discourse to both the general public and the institution of architecture. His public discourse was advocating that architecture is perhaps the only place left to dream about the future. His message to the institution was opposing the destructive discourse of Manfredo Tafuri and was an attempt to give back to modern architects their pride. The negativity of Koolhaas was essentially a positive thought aiming at triggering a new fascination for architecture. New York was then used as a

powerful evidence of the unsuspected capacities of architecture. His avant-gardism was, as Tafuri had noticed, paradoxically conservative.

The discourse of Bernard Tschumi was directed to the sophisticated public of art and to the architectural institution as well. In performing his work in the artistic sphere, Tschumi wanted to give back to architecture its place in contemporary cultural discourse. His attempt took first the form of a publicist tract promoting the forgotten delights of architecture but it soon became a polemical "coup" aiming at establishing architecture as the leading cultural model of our time.

The second half of the seventies was effectively a moment of rediscovery of architecture. The emergence of Post-Modernism as a stream of thought originated in architecture and spread to other artistic and cultural spheres. However, architecture became caught in a battle of styles and quickly lost the edge to philosophy which took Post-Modernism as a serious problem. Philosophers tried to evaluate what it could mean in theoretical terms for the development of thought and society. Post-Modernism became an umbrella word covering specific cultural tendencies like Post-Structuralism and Post-Humanism interested in the evaluation of the modern heritage of positive reason.

In the following paragraphs, the assumption that the theories of Koolhaas and Tschumi are structuralist is developed. It necessitates a short reflection on the nature of structuralist thought in art and art criticism and its relationship to architecture.

* * *

1) Unconscious and System: Art and Structuralism

Manfredo Tafuri criticized Structuralism for its constant reference to the unconscious and to the idea of system. For him, Structuralism was a dangerous totalizing ideology.

The Structuralist studies of Roland Barthes were often

referring to psychoanalysis and especially to Lacan's Structuralist adaptation of Freud's notion of the "language of dreams". That example shows how the essential contribution of Structuralist thought was to read older theories using the analogy with language with the model developed by Saussure in Linguistics. For the Structuralists, the structure of language was reflecting the structure of the unconscious, and thus, the structure underlying every human creation. That idea that the unconscious was the location of a formidable body of knowledge on the human being was not original to Structuralism.

In effect after Freud, the research on the unknown territory of the mind - the unconscious - replaced the earlier attempts to understand the divine order of the world. The Surrealists made of the exploration of the unconscious a theory. The unconscious was explored with writing during the first phase of Surrealism. In the second phase with the integration of Dali in the movement, art became, for the Surrealists, one of the most effective means to express the repressed side of the human mind. Structuralism gave to the Surrealist project a more "scientific" basis. Barthes' essays were demonstrations of how one could understand human creations as a means of knowledge about the human being. The popularity of Barthes' "Nouvelle Critique" in art criticism marked the seventies. A new cultural magazine like October focused on intellectual readings of art appealing to various concepts and theories developed by different disciplines. In New York, periodicals like Artforum, for which Tschumi worked, were covering contemporary art with a definitive bend for the theory of the "Nouvelle Critique". A recent theory of the seventies art of the seventies conceives the role of the art critic as the one of a producer giving its intelligibility to the autonomous and exclusive work of art.⁴⁰ As the dominant intellectual model of the seventies, Structuralism represented the movement to criticize in the progressive circles of literary theory and in

philosophy. The advancement of Structuralist critique in art can be perceived as a form of modern Humanism, a secularized version of Renaissance Humanism.

* * *

2) Structuralism, Architecture and Art

Structuralism affected architecture in three directions: typological studies, urban semiology and "Nouvelle Critique". The analogy with language produced researches on the structure of architectural language and on the meaning of architecture. These researches gave birth on the one hand, to a formalist theory of architectural language which main tools were typology and morphology, and on the other hand, to urban semiology which tried to find the meaning of architecture. The third influence of Structuralism was the development of the "Nouvelle Critique" in the field of art. In effect, the analogy with language and the two approaches it suggested were more popular in architectural criticism than the "Nouvelle Critique". That phenomenon can be attributed to the fact that architectural criticism is performed mostly by architects-critics looking for tools to conceive buildings.

Both Koolhaas and Tschumi were deeply influenced by Structuralist thought. Koolhaas adopted the typological theory which is certainly the most important contribution of Structuralism to architecture. His method is not fundamentally different from that of the Neo-Rationalists' use of pre-modern urban types. In fact, at La Villette, in using the Dutch rural field model, Koolhaas was, perhaps for the first time, using a model that was developed before 1920. His opposition with the Neo-Rationalists is usually seen as an ideological strife. Fundamentally, both positions being established on metaphysical premisses, their argument could be seen instead as a matter of divergent tastes. The Structuralist influence on Koolhaas was mainly architectural. In effect, the omnipresence of the unconscious in Koolhaas' theory and the constant attempts to make opposites meet are

more Surrealist than Structuralist. Koolhaas never used semiology to find meaning to architecture. For Tafuri, architecture had a meaning that semiology could unveil. Koolhaas dissociated meaning and forms. Therefore, meaning is never induced by architectural forms; meaning is given to the work by means of a mythical narrative, which implied for Barthes the mix of poetical and historical languages.

Tschumi conceived his theory with the tools of the Nouvelle Critique. From 1970 to 1978, he followed Barthes step by step. Very soon, Barthes understood that architecture was not a code having a definite set of meaning like Tafuri believed. Urban semiology could only be an endless chain of metaphors like Lacan's psychoanalytical studies. Tschumi's theory was built on that premiss. Then Barthes reflected on the problem of the modern avant-garde and stated that the uselessness of the text was its means of resistance to capitalist exchange. Tschumi transposed the theory in architecture with a sophisticated model that transformed completely the nature of Barthes' argument. In 1978, Barthes introduced the theme of deconstruction in his work and as did Tschumi. In fact, all the references that Tschumi alludes to in his texts are found in Barthes. Bataille, Eisenstein, Nietzsche, Sade, Lacan, Kafka, as well as themes like eroticism, pleasure, uselessness, fragments, madness and combinatory process are all present in Barthes' texts. Tschumi followed the mainstream of Structuralist criticism and tried to translate it in architecture.

Like François Truffault in cinema, Tschumi was a critic coming to production with an arsenal of theoretical concepts. Tschumi's intention was to produce a work that critics would analyze and substantiate with the tools of the "Nouvelle Critique". The world of art was better endowed with that sort of critics. As late as 1980, Tschumi complained about critics of architecture for their intellectual backwardness. Nevertheless, Tschumi succeeded with the help of his

connections in art criticism. Just as Barthes was able to attain a larger public by the collusion of the most intellectual of the journalists and the most journalistic of the intellectuals, so Tschumi established himself in the world of architecture with his alliance with the most intellectual of the critics. Tschumi's strategy was made evident with La Villette when he integrated in the design team the art critic Kate Linker, a specialist of art affected by "architectural imagism".⁴¹

Rem Koolhaas did not neglect the art scene either. All his important projects were given an artistic presentation through paintings, watercolors, silkprints, etc.

Koolhaas and Tschumi were not responsible for the new infatuation for architecture that marked the second part of the seventies. They were nevertheless very active protagonists and used the situation to their advantage. The originality of their contribution included a process of de-familiarization of architecture appealing to a sophisticated discourse and a powerful use of architectural drawing. While Koolhaas defined the center of a self-conscious modernist theory using structuralist typology, Tschumi aimed at the expansion of the field by working on its limits.

Nonetheless, their respective approaches share many common views like the notion of program as a plot, an overtly anti-paternalistic conception of design, a theory of transformational typology, and a determinist vision of history. Koolhaas invented the notion of retroactive manifesto to disguise Tafuri's notion of operative criticism into a more positive concept. Most of Tschumi's manifestoes were also retroactive. The notion of import-export, the combinatory process of design, the definition of architecture as a form of knowledge are all historical concepts of architectural theory.

A major point separates Koolhaas and Tschumi: it is the notion of utility. For Koolhaas, the most satisfying thing in

architecture is that it is useful. For him, usefulness gives to architecture its social role. For Tschumi, the uselessness of architecture is both its pure manifestation and its mean to resist to modern society. The uselessness of architecture is the ultimate transgression of the traditional definition of architecture. The most architectural objects are ruins. Architecture, as a form of reification of human existence is, in the end, the transgression of time and the survival of the author.

* * *

3) Two Models for Architects

Besides their parallel careers and similar interests and strategies, Koolhaas and Tschumi project different images which are producing a debate among the critics of architecture. Tschumi's success at La Villette was seemingly due to an original mix of contemporary philosophical thought and modernist models. Nonetheless, Tschumi's method is more fashionable than truly original. In effect, for the La Villette competition, many French architects worked with contemporary theoretical concepts. Some even worked in collaboration with philosophers of renown. Some of the thematic gardens of La Villette are conceived by teams including contemporary thinkers: Eisenman worked with Derrida and Buren with Lyotard.⁴² Tschumi has never been able to seduce the French architectural press perhaps because his game is too obvious in the French context where it is now common to identify one's work with a philosophy and where the popularity of Barthes is overwhelming. The French context is comparable to Tafuri's definition of the architectural practice of the Age of Reason when philosophers were legislators guiding the work of architects-executors. Tschumi even wanted to assume both roles in La Villette with his attack on the concept of "folie". Derrida agrees but this is not the case of more conservative critics like the art historian Hubert Damisch whose commentary on Koolhaas' second building - a dance

theatre in The Hague - was a covered criticism of Tschumi who is never mentioned in the article.⁴³ Damisch insisted on three points on which Koolhaas is distinct from Tschumi. For Damisch, when Koolhaas claims a right to use the unconscious, it is to create, not to be later psychoanalyzed by critics. For him, Koolhaas fakes and foils (*déjouer*), he works against the regression of architecture, not to its deconstruction. Finally, contradicting fundamentally Tschumi's theory of space(s), Damisch stated that the only space that exists is built space. Koolhaas against Tschumi? It is Goulet against Frampton, Damisch against Derrida.

Beyond their similitude, Koolhaas and Tschumi present two models for contemporary theoreticians: the one of a traditional modern architect pursuing the unconscious project of architecture and the one of the architect-philosopher using architectural language to think the present. However, both models imply that any theoretician of architecture must be a superlative communicator.

Notes to Part 4 - A Post-Humanist Architecture?

1. They were the renovation of Le Louvre, the Institut du Monde Arabe, the Museum at the Gare D'Orsay, the Tête de la Défense, the new Opéra at La Bastille and a new building for the Ministry of Finance at Bercy. See: Lipstadt, H. "A Paris for the 21st Century?" in Art in America, Nov. 1984, pp 104-119; and Chaslin, F. Les Paris de François Mitterrand, Paris, 1985.
2. "OMA, La Villette Competition: Hypothesis and Demonstration" in UIA-International Architect, No 1, 1983, pp 32-37.
3. "Bernard Tschumi, La Villette Competition: The Programme for a New Type of Park" in UIA-International Architect, No 1, 1983, pp 27-31; and Tschumi, B. Cinégramme-folie, Le parc de La Villette, Princeton Architectural Press, 1988.
4. It is important to note that Tschumi's project for La Villette was elaborated over a long period of time and that many formal elements of the first entry of the competition were modified later. Most important, we are describing here the winning scheme of the competition that was in fact a modified version of Tschumi's first entry. In effect, in the second round of the competition, Tschumi made seemingly a major change in adding the second covered gallery that was not present before December 12, 1983. That change was perhaps made after Tschumi saw O.M.A.'s design.
5. Tschumi, B. "Le parc des folies" in L'architecture d'aujourd'hui, No 227, Juin 1983, pp 92-95.
6. Noviant P. & Vayssière, B. "L'indétermination et la foi" in AMC, No 6, Décembre 1984, pp 30-31.
7. Tschumi, B. "Le parc des folies" in L'architecture d'aujourd'hui, No 227, Juin 1983, pp 92-95.
8. Boyarski, A. "Interview" in La case vide: La Villette, Architectural Association, London, 1985.
9. Tschumi, B. "Le jardin de Don Juan ou la ville masquée" in L'architecture d'aujourd'hui, No 187, octobre-novembre 1976, pp 82-83.
10. Goulet, P. "A l'ombre de la rigueur" in L'architecture d'aujourd'hui, No 227, Juin 1983, pp 90-99.
11. Goulet edited later a special issue of L'Architecture d'aujourd'hui on the work of O.M.A.

12. Choay, F. "Critique" in The Princeton Journal, Vol. 2, 1985, pp 211-215.
13. Frampton, F. "Bernard Tschumi's `Manhattan Transcripts': The Football Player Skates on the Battlefield" in UIA-International Architect, No 1, 1983, pp 53-54.
14. Boyarski, A. "Interview" in La case vide: La Villette, Architectural Association, London, 1985.
15. Chaslin, F. Les Paris de François Mitterrand, Paris, 1985, pp 223-225.
16. Tschumi, B. "Concours Parc de la Villette" in Urbanisme, No 197, septembre 1983, pp 22-25.
17. Tschumi, B. Des transcripts à la Villette, Institut Français d'architecture, Paris, 1985.
18. Tschumi, B. "Madness and Combinative", in Precis, Vol. 5, Fall 1984, pp 148-157.
19. Tschumi made two kinds of statements on the point grid solution. He first considered it to be non-hierarchical, then he said that it was for him a means to place the "folies" on the site with a maximum of arbitrariness and indeterminacy. In 1985, Tschumi even stated that he would have liked to use a computer program to locate the "folies" randomly on the site; a drawing of that proposition was made. The latter act showed that Tschumi's speech on the use of the grid as a political act was only rhetorical.
20. Tschumi, B. & Derrida, J. La case vide: La Villette, Architectural Association, London, 1985.
21. Guibert, D. Réalisme et architecture, Mardaga, Bruxelles, 1987.
22. Szambien, W. J.-N.-L. Durand, Paris, 1984, p. 85.
23. Guibert, D. Réalisme et architecture, Mardaga, Bruxelles, 1987, p. 10.
 "Tout projet d'architecture dessiné secrète un espace à la fois concret et abstrait, c'est-à-dire un objet technique exécutable, où viennent se métaboliser à la fois l'histoire de l'architecture, les concepts caractéristiques du savoir contemporain, la biographie du concepteur, et la mémoire culturelle."
24. Benjamin, W. Essais 2, 1935-1940, 1971-1983.

25. When Tschumi wrote in "Le jardin de Don Juan" that Constructivism was a myth or other statements such as: "Architecture is the adaptation of space to the existing structures. No spatial organisation ever changes the socio-economic structure of a reactionary society. The only possible architectural action of a revolutionary nature is rhetorical" ("The Environmental Trigger"), or "[...], it is not a matter of destruction or "avant-garde" subversion, but of **transgression**" ("Architecture and Transgression"), he defines a "political" position that is not exactly that described by Frampton.

26. For example, Frampton did not mention Barthes as one of the major source of Tschumi while Barthes had already been a target of the Situationists in the sixties. See: Raspaud, J.-J. & Voyer, J.-P. L'internationale situationiste, protagonistes/chronologie/bibliographie (avec un index des noms insultés, Paris, 1972.

27. The notion of language games is taken in the work of J.-F. Lyotard. See: Lyotard, J.-F. & Thébaud, J.-L. Just Gaming, Minneapolis, 1985.

28. Tschumi, B. La Villette: Cinégrammes-folies, Princeton University Press, 1988.

29. A perlocutory act is an act that one provokes or accomplishes **by the fact** of saying something.

30. The multiple re-editions of this book cannot be attributed to the interest of art historians alone. Wittkower's book is a classic of architectural education and is found in the library of many architects.

31. Panofsky, E. Idea, Columbia, 1968.

32. Idem p. 50.

33. Interestingly, Alvin Boyarsky, in discussing the atmosphere at the A.A. during the seventies, said that there was a quiet confidence in the future among the teachers and the students.

34. In "Architecture and Limits", Tschumi articulated his theory in a series of tripartite correspondences to which one may easily associate a Scholastic equivalent:

Conceived	Perceived	Experienced	(space)
Mental	Physical	Social	(space)
Language	Matter	Body	(models)
Spirit	Body	Soul	(Scholastic Man)

35. Goulet, P. "...ou le début de la fin du réel: entretien avec Elia Zenghelis" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 3-9.
36. Ungers, O.M. Architecture as Theme, New York. 1982.
37. See Guibert's Architecture et réalisme where is discussed Ungers' hyperrealism.
38. Fragments play a primordial role in Tschumi's theory. See: "The Pleasure of Architecture" in Architectural Design, No 47, March 1977, pp 214-218.
39. Panofsky, E. Meaning in the Visual Arts, Garden City, 1955.
40. Payant, R. Vedute, pièces détachées sur l'art (1976-1987), Laval, 1987, pp 19-28.
41. Linker, K. "Jackie Ferrara's Il-lusions", in Artforum, Dec. 1979, Vol. 18, p. 57-61.
42. Chaslin, F. Les Paris de François Mitterrand, Paris, 1985.
43. Damisch, H. "Cadavre exquis" in AMC No 18, Décembre 1987, pp 21-22.

EPILOGUE

1) O.M.A. 's Practice

O.M.A. started their professional practice simultaneously in the Netherlands and in Greece. Both Koolhaas and Zenghelis left the A.A. and teaching in 1980. They felt that, in order to build, they had to leave academia which was seemingly a client repellent. Koolhaas chose Holland because "if [his] buildings did not work, [he] could hide them".¹

In the Netherlands, Koolhaas worked mainly in Amsterdam, Rotterdam and The Hague. For him, Amsterdam is the pretentious cultural center, Rotterdam the industrial city and The Hague the political center.

In Amsterdam, he designed the plan of a new neighborhood built between the center and its suburbs.² Like in his other projects, he used existing modern types, his project being similar to the urbanism of Gropius and Hilberseimer. He also elaborated the guidelines for the new buildings, which for the most part, were designed by other architects. The main buildings are modified slabs incorporating on the ground and second floor apartments having individual entrances. The upper floor apartments have a common entrance. In this project, he faced the problem of dealing with popular groups and a lot of credit is given to Jan Voorberg for his role of mediator between the architect and the groups. Koolhaas experienced the hard reality of the architect who cannot realize his projects as he conceived them. He said that an architect has sometimes to yield but that he has to do so intelligently.

He based his office in Rotterdam because, like Berlin, it is a city where modern architecture is vernacular and unconscious. For him, both cities had a parallel destiny. They were both destroyed by intensive bombing during W.W. II and have been rebuilt according to modernist theories. However Berlin still keeps its bad connotation while Rotterdam was seen, at least in the fifties and the sixties, as a good

example of Post-War reconstruction and a success of modern urbanism.

In the Netherlands, O.M.A. received many commissions and numerous projects were drawn yet very few were built. In Rotterdam, Koolhaas was invited by the city to submit a project, on the site of his choice, to exemplify the skyscraper's advantages. He chose the most difficult site, a place where nobody wanted to build.³ He proposed to erect a slab which was formally very similar to the design for the Pravda building by the Vesnine brothers.⁴ Next to the site, a steel bridge had to be demolished and Koolhaas suggested to erect it vertically like a Constructivist monument. The project was theoretical yet pragmatic but was never built.

In The Hague, Koolhaas won a competition for an office building (1984).⁵ He also won a competition for the new city hall but five months later, the contract was given instead to Richard Meier.⁶ Koolhaas' project was proposing the radical insertion of a slab building next to the historical center. The design was simple yet its silhouette was complex being similar to the skyline of a mini Manhattan. The project attempted to answer the difficult question of the integration of big modern building into European historical centers. Koolhaas proposed a solution in which the contextual sensibility was not expressed by the play of masses but by the compatibility of materials with the surrounding architecture.

The first project O.M.A. built was a police station in Almere-Haven (1986).⁷ The project was not publicized mainly because of its constructive flaws. The second building of O.M.A. was completed in 1987.⁸ It was a six millions dollars dance theatre in The Hague which necessitated three complete studies over three years due to a change of site.

In Greece, Elia Zenghelis confronted the powerful natural context of the Aegean Sea islands. He saw the existing houses like confetti in the nature. He built his own house and

designed several projects for villas, municipal beaches, a hotel, a cultural park, etc. In his 1981 project for ten villas in Antiparos, he proposed to develop the site along the lines of an infrastructure of suprematist composition in order to oppose the most artificiality to the most naturality.⁹ Zenghelis tried to transpose the metropolitan ideal into a virgin land with the maximum indeterminacy.

Although more than thirty projects were drawn between 1979 and 1985, only the small police station was built by O.M.A. during that period. Nevertheless, most of them were published in Italy, France, England and Netherlands.

In their professional practice, O.M.A. has thus worked on many different projects having different programs and various scales ranging to the small villa to the urbanism plan. Koolhaas and Zenghelis are working independently with their distinct team. The long struggle for modern architecture is now starting to be rewarded. Koolhaas is hoping to build large commissions like his tall office building in Rotterdam and the renovation of a panopticon prison in Arnhem, a project of which he is very proud.¹⁰

The professional practice of O.M.A. emphasizes the serious and pragmatic aspect of architecture but is not without invention. The disappointment some critics have felt in experiencing O.M.A.'s architecture may be the result of many factors. The transposition of dream into reality will probably be as difficult for O.M.A. than their previous passage from the purely theoretical to the practical. A great part of the theory of the metropolis stressed the importance of the program and the unexplored possibilities of programmatic combination. The concrete reality of the practice very seldom offers the chance to the architect to invent new programmes. Perhaps the only chance O.M.A. really had to implement their theory were the lost Parisian occasions of La Villette and Expo 1989.

In 1986, Koolhaas received an important prize for his

activity as promotor of architecture.¹¹ He made a speech on the architectural profession in which he distanced himself from the heroic stance he had developed a year earlier in an article published in L'architecture d'aujourd'hui¹². In his speech, he argued that the enemy of architecture was the undermining from within, that the utopian ideals of the world improvers were doing incredible damage and that "the fatal conclusion drawn by my generation is that from now on architecture would have to live without pretensions, without ideals, without utopias, in short, that architecture would become a modest discipline".¹³ Everything has already been done, there is nothing to invent anymore.

O.M.A. never ceased to exhibit their work in architectural events and art galleries. With the strategic and effective publication of their projects in the architectural press, the art shows are a means to provide their work with an artistic aura also an occasion to produce new theoretical works.

In 1985, Rem Koolhaas was invited to design an installation for the seventeenth triennale of Milan on the theme "The Casa Palestra".¹⁴ He invented a mythical history of the Barcelona Pavilion in which, after various incidents, Mies' building was discovered in East Germany and brought back in Milan to serve as a modern health club. Koolhaas intended to contradict the interpretation of modern architecture as a puritan and lifeless project. The goal of the anecdote was to demonstrate that modern architecture was a deeply hedonistic movement whose abstract and provocative settings were intended to accommodate the experiments of modern life. Koolhaas's project rested on concepts similar to Tschumi's. In effect, with his project "Joyce's Garden", Tschumi had theorized the change of program in architecture as something similar to what Derrida describes as "différance" in language. Koolhaas, in assigning a new program to the Barcelona Pavilion, was illustrating the same phenomenon. Also, in his "Advertisements for Architecture, Tschumi wanted to demonstrate that behind the

purist villas of Le Corbusier was lying a deep sensuality. Just as eroticism is mirroring death, so architecture, in trying to hide death, mirrors the most extreme bacchanals. Koolhaas and Tschumi expressed the same ideas with different means of expression.

* * *

2) Tschumi After La Villette

Before 1986, the year during which he designed two other projects, Tschumi had not designed many "real" projects. If one excepts the four temporary "Twentieth Century Follies" that were built between 1979 and 1981, Tschumi had designed only three other projects: the two propositions for La Villette and an entry to the competition for the "Tête de La Défense" in Paris (1983) for which Tschumi received a third place mention with nine other projects. The first project for La Villette was never meant to be built and was conceived as a theoretical design. Only his winning scheme for La Villette is left as a truly realistic design.

During the months following the competition for La Villette, Bernard Tschumi designed two other projects. They were published in 1986.¹⁵ The first was a design for a County Hall for Strasbourg. Tschumi used modern building types to conceive a rather banal project supported by standard contextual rhetoric. No trace of "combinative", no deconstruction, no madness, no cinema, the project was probably conceived during too short a period of time to be justified by a theoretical discourse.

The second project was a design presented at the competition for the National Theatre for Tokyo. It won the second prize. Essentially, it metaphorically referred to a music staff on which the "notes" were the location of events. The lines of the staff were defining parallel programmatic bands, analogues to O.M.A.'s project for La Villette turned into a building. Apparently, the conceptual diagrams were of no help for the design of the building and they seem to have been made after

the solution was found. The two concert halls were standard modern fan shaped auditoria. The major feature of the building was the common lobby for the auditoria covered by a glass roof.

These two projects are less elaborate than La Villette and demonstrate Tschumi's attempt to work on other metaphors. For five years now, Tschumi works on the building of La Villette.

La Villette represents the summation of ten years of theoretical research and five years of design. One wonders how Tschumi could go further with any other project.

Notes to Epilogue

1. Abrams, J. "Delirious Visions", Interview in Blueprint, No 44, London, February 1988, pp 32-36. During that interview, Koolhaas mentioned that he is currently working on another retroactive manifesto for the twentieth century modern suburbs.
2. OMA "Aménagement d'un quartier, Amsterdam. 1980-81" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 40-45.
3. OMA, "Tour en barre, Rotterdam 1980-82" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 28-31.
4. Koolhaas' design is formally similar however, the scale of his project is enormous when compared with the Vesnine brothers project for the Pravda with was only six stories high and was proposed for a very small lot (6m x 6m).
5. OMA "Immeuble de bureaux, Churchillplein, Rotterdam 1984" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 32-37.
6. OMA, "Hôtel de ville de La Haye" in AMC No 18, Décembre 1987, pp 13, 15-20.
7. Steingenga, M. "Not Without a Scratch" in Forum, Vol. 31, No 2, 1987, pp 2-5.
8. OMA, "Théâtre national de danse, La Haye" in AMC No 18, Décembre 1987, pp 4-12.
9. OMA Projects 1979-1981, Architectural Association, London, 1981.
10. Koolhaas, R. "Project for the Renovation of a Panopticon Prison" in Artforum, Vol. 20, Sept. 1981, pp 41-43.
11. "Major Dutch Award" in Architectural Design, Vol. 56, No 5, 1986, p. 2.
12. Koolhaas, R. "Architecture: pour qui? pourquoi?" in L'architecture d'aujourd'hui, No 238, avril 1985, pp 38-39.
13. Steingenga, M. "Not Without a Scratch" in Forum, Vol. 31, No 2, 1987, pp 2-5.
14. OMA, "La Casa Palestra" in A.A. Files, NO 13, Autumn 1986, pp 8-12.
15. Tschumi, B. "County Hall, Strasbourg. National Theatre, Tokyo. Competition Entries" in A.A. Files, No 13, Autumn 1986, pp 16-24.

CONCLUSION

The study of the theories developed by Rem Koolhaas and Bernard Tschumi provides enough material for answering the initial question of this research: what is the nature, role and aim of theory in the discourse of contemporary architects?

1) Nature

By nature, theory of architecture is a discourse on architecture. As demonstrated by the case study, it is an heterogeneous discourse because it mixes many language games. Contrary to science which isolates its object of study - a mathematician plays only with the mathematical language game - architectural theory, as a discourse of and on culture, puts into play different language games mixing intentions, descriptions and prescriptions. The fact that Koolhaas and Tschumi have chosen to express their thought by means of manifestoes is significative of their involvement in a cultural debate.

According to the theory of the manifesto as a literary genre elaborated by J. Demers and L. McMurray, the manifesto is articulated in three phases that do not necessarily occur at the same time nor in a specific order.¹ These phases are a declaration, an explanation and a demonstration of the principles promoted by the manifesto.

a. Declaration

The declaration is always affirmative. In the architectural manifesto, the declarative phase establishes the intentions of the author under the form of "axioms" and "theorems". The axiom is a self-evident "truth" which is, in architecture, propagated under the form of aphorisms - aphorisms being for Barthes a "mythical" form of speech. Examples of aphorism would be for Koolhaas, "architects have no choice but to be modern", or for Tschumi, "good architecture is a form of re-enactment". Aphorisms are stated as evidence and are never

questioned.

Theorems are less evident propositions which need an explanation and a demonstration. They are initial statements which are proven by a particular reading and a particular practice of architecture. For Koolhaas and Tschumi, a common theorem would be: "architecture is not an ideology". Koolhaas intended to illustrate it by a reading of Manhattan (City of the Captive Globe, 1972); Tschumi substantiated it with an analogy with Barthes' theory of "The Pleasure of the Text" and by a mythical reading of architecture with the fable of Don Juan.

Nevertheless, the declaration of architectural manifestoes is never as scientifically pure as this model may suppose. In the declarative phase, intentions are always juxtaposed to principles, "like a guardian is chained with his prisoner". In Koolhaas' and Tschumi's theories, the over-arching axiom is a statement: "architecture is an intellectual practice". For Koolhaas, that axiom aims at giving back to the modern architect his former respectability and by extension his former role as a decision maker. To attain this goal, Koolhaas' solution is to provide the modern practice with a positive image by means of retroactive manifestoes for modern vernacular architecture. The artificiality of modern life is given a moral value for its progressive development and its capacity to change life and death. For Tschumi, intellectual practice is intended to give more importance to pure theoretical research in architecture, and to dissociate the theoretician's work from the one of the practicing architect: the theoretician does not have the moral responsibilities of the practicing architect. That position enables Tschumi to attack two problems that are central in his work since 1968: the attack against social segregation and the attack against the legislation of architectural language (understood as Barthes explained it in his Leçon). These problems induce automatically two solutions: segregation by means of

homogeneous "sanctuaries" must be opposed by programmatic heterogeneity, which is an organized chaos elaborated by the architect-inventor of new relations. The second solution is the attack on language by means of dissociation of form and meaning, achieved by a discourse on madness, and by the statement of the absence of meaning.

The efficiency of the declarative phase depends largely on the material dimension of the message. To be effective, the declaration must attract attention by its good timing and resounding arguments. An essential characteristic of the declaration is its shock-effect. The shock-effect is achieved by excesses of language and by denunciation. The manifesto has an enemy and insult is the best device to achieve both shock and denunciation. The insult is an act of denomination-condemnation whose power results from the pretention to recognize the specificity of the other. Koolhaas' description of Colin Rowe or Tschumi's attack against the ignorance of architectural critics are both a refusal and a provocation.

Declarative statements are thus a mixture of intentions and values calling for solutions and of statements in need of explanation and demonstration.

b. Explanation

The explanation is an essential phase of the manifesto. It gives a logical coherence to the statements of the declaration. The explanation of the initial theorems always involves a reading of architecture. That reading most often tries to show the unknown or the forgotten aspects of architecture. That reading, mixing historical, metaphorical and prescriptive speech, aims at the de-familiarization of the addressee's usual perception of architecture. The explanation wants to transform the addressee into an accomplice sharing the same views. Like Barthes' myth, the explanatory phase is always a meta-language: it does not talk of, it talks on the real. When Koolhaas assumes the position of Manhattan's

ghostwriter, or when Tschumi's pretends that his works represent the conscience of the discipline, both automatically imply that there exists a point "above" the world, where one can perceive reality. Only faith can accept the existence of that metaphysical point of view.

The appeal to history has two goals: the legitimization of the manifesto's cultural project and the historicization of the enemy's project. When Koolhaas refers to Leonidov, the young and revolutionary architect who was cruelly repressed by a reactionary regime, he identifies his own practice to the political goals of the Russian Constructivists. Similarly, Tschumi refers to Futurists or Surrealists to legitimize his production historically. In fact, the use of the manifesto genre is in itself an attempt by Koolhaas and Tschumi to place their work inside the Modern avant-garde tradition.

Historicization is made when the project of the enemy is denounced as a regressive enterprise. Koolhaas condemned Rowe's contextualism and the Neo-Rationalist nineteenth century urbanism for their anachronism. Similarly, Tschumi attacks the notion of style as something "passé" and irrelevant for the explanation of the state of contemporary architecture. The process of historicization implies a determinist view of history typical of art history, the legitimate daughter of Hegelian theory.

History is also used to explain the historical necessity of the intervention. History is transformed by manifesto authors into a series of commentaries. Historical commentaries appeal both to the authority of tradition and to that of the author. They are narratives presented as a stable and self-evident fact, like a myth, but made to substantiate the project of the author. Historical commentaries take the form of allegories or fables but also of more realistic genre like biography. Koolhaas' story of the pool is an example of allegory. Tschumi's review of Sant-Elia, through his theory of fragments, transforms the biography into a heroic eulogy in

which Futurism anticipated current architectural interests.

The explanation also describes the real and substantiates theorems with existing models. For Koolhaas and Tschumi, typological studies are the most common tool to organize existing models. Models illustrate forms and principles. Koolhaas reproduces Constructivist forms and programs, Zenghelis Suprematist principles of composition, and Tschumi Le Corbusier's point grid and free plan.

The explanation does not want to understand the real but rather it wants to convince of the admissibility of the statement of the declarative phase. The manifesto's logic is one of efficiency: it is more interested in the performance of the words than in their scientific validity. The explanation is essentially rhetorical. In architectural manifestoes, the access to the real is mediated by metaphors and analogies. Thus, historically, the idea of architectural structure has been explained by means of analogies with the human body, natural organisms, music, language etc. A metaphorical language is essentially the replacement of one set of signs by another. Metaphors are never innocent and, in architecture, they play an essential role because they create the link between the descriptive and the prescriptive language games. Koolhaas' analysis of the skyscraper describes it as an atrophied body but, the very categories that he uses in his description - lobotomy, schism, plot - become in his Manhattan Projects principles of design. Koolhaas deduced his principles from the real by the mediation of metaphors. Contrary to Koolhaas, Tschumi's approach is inductive and instead of extracting his principles from the real, he imposes exterior models on reality. That is how he transforms the analogy with cinema into an operative concept with which he generates his projects. Deductive or inductive, metaphors are the essential link between description and prescription.

c. Demonstration

The demonstration can be separated only theoretically from the declaration and the explanation. The demonstration is the architectural project. It illustrates the principles enunciated and substantiated in the declaration and explanatory phases. However, the case study has shown clearly that, in architecture, the declaration and the explanation often occur after the realization of the project. In anticipating the declaration and the explanation, the project embodies the intentions and their rhetoric into a coherent demonstration. As such any project of architecture can be considered in itself a manifesto because, being the origin and the end of theory, it incorporates the three phases of the manifesto. Architectural designs, in preceding the rational argument that sustains them, show how art acts in front of a rational dilemma. When reason stops, action starts and when action stops, reason starts. The discourse developed around Tschumi's "Joyce's Garden" demonstrates clearly that process.

The discourse of architects is thus elaborated along the three poles of the manifesto. It is constantly balancing from description to prescription, from prescription to justification, from justification to aphorism, from aphorism to prescription, etc. However, the critical moment of architectural theory remains the one when the discourse moves from description to prescription by the mediation of metaphors. According to J.-F. Lyotard, that specific situation when prescription is deduced from description is the condition of a theological discourse.² For Lyotard, there is a gap between descriptive and prescriptive speech that only faith can fill. If one accepts Lyotard's proposition, the discourse of architectural theory would be structurally theological. An effective deconstruction of architecture would therefore focus on that inherent characteristic of architectural theory.

The project of architecture is a prescription. In order to be accepted, its needs to be recognized as an authoritative

discourse: faith in the authority of its author is a necessary condition of its success.

d. Notes on the Manifesto

The first type of manifesto to appear historically was the imposition manifesto. It was defined already in a 1694 French dictionary as an authoritative discourse uttered by a powerful person (prince, state, etc.) who was ritually exposing his position on a situation of great importance.³ Later, the apparition of the opposition manifesto perverted the ritual. The opposition manifesto was violently usurping the position of power with an intolerant and imperative discourse using insult, disdain and provocation to sustain its authoritative position. Henceforth, imposition and opposition manifestoes establish a dialectic between strong central power and peripheral power.

In literature, the opposition manifesto was established as an anti-tradition during the twentieth century with Futurism, Dada and Surrealism. For the anti-tradition, the creation of a state of crisis was the favorite means to make apparent the other face of life, that is its "dark face", which bears a potential for disorganization and disintegration. It contributed to showing how society maintains itself only by resisting the forces of disintegration. Tschumi conformed to the genre in simulating a state of crisis with his rhetorical paradox of architecture. But what the manifestoes of the anti-tradition finally revealed, was the role of crisis in the auto-regulation of society. The crisis points at the dangers menacing society which, in the long run, reacts in adopting the solution of the manifesto. After that discovery, the aim of the authors of manifestoes is paradoxical. They pragmatically want their discourse to be recuperated for it is the only means to achieve its effects, but most of the time they aspire to occupy the place of the strongest. Paradoxically, the opposition manifesto, in working for the

institutionalization of its aspirations, is at the same time a discourse maintaining the existing structures. Once in possession of power, why give it to others? The meaning of the opposition manifesto being the will to power, its ethic is necessarily its eventual integration to the system.

For Barthes, that situation was the structural paradigm of modernity and the only way the avant-gardes could avoid their contradictory position was to break the exchange with the institution in cultivating the perverse pleasure of a useless text. The manifesto is a trap and Tschumi knew it when he wrote that the manifesto is a masochistic contract that the artist takes with society. His reflection took the form of a "meta-manifesto" whose effect was to neutralize the polemical content of the declarations of his manifestoes: he was at the same time stating an argument and not believing in it.

In literature, it is the interest of the manifesto not to be identified as part of the institution. Its fundamental stake is the possibility of expressing a subversive force and what saves it is faith, the faith which catalyzes action.

In architecture, the situation is different. Architecture is a domain highly structured by norms and building codes. The architectural institution is of course embodied in academia and its system of reproduction of values, but still architectural orthodoxy is first and foremost represented by the professional practice and its system of production and reproduction.

The model provided by the A.A. during the sixties was that of an institution resisting the pressures of the profession. By doing so, it established itself as a bastion of the avant-garde. Its system of education was nevertheless one of reproduction of values, even though they were avant-garde's ones. The dogmatism of Peter Cook is a good example of the way the values are reproduced in architecture. On the other hand, when the I.A.U.S. was founded in 1967, it was principally to react against the poverty of the architecture

conceived within the established system of professionalism. It nevertheless never considered itself against professionalism. Its avowed goal was to create a place where thought on architecture could be developed and then applied with the help of professional agencies. During the seventies, these two places, out of which emerged the architectural manifestoes of Koolhaas and Tschumi, were parallel institutions working respectively in opposition and in connivance with the profession.

It would be abusive to imply that the institutionalization of the avant-garde is a phenomenon of the sixties and the seventies. The Bauhaus is certainly the precedent par excellence to contradict that argument. The structure of architectural practice as a profession is the major reason for the institutionalization of avant-garde research in architecture. There exist only two possible ways of becoming an architect. One is to work in architects' offices and through experience learn the practice; it is essentially a process of reproduction. The other is the acquisition of an academic diploma; academia remains the only place of resistance.

Architecture possesses therefore two kinds of manifestoes, the imposition and the opposition ones and both are integrated in the institution. It is by their interaction that architecture as an institution "progresses". Hence, beyond competition, a kind of alliance is established between imposition and opposition forces. This alliance provides the institution and its tradition with a critical discourse totally integrated to its own structure. It is demonstrated by the example of Koolhaas and Tschumi. Their opposition manifestoes do not put into question the institutional structure of the field. On the contrary, they try to consolidate it. Retroactive and meta-manifestoes are essentially reaffirming the lost goals of the institution. Historical determinism and the definition of architecture as a

medium are means to establish architecture as a mirror of social and cultural production.

e. Notes on the Architectural Avant-Garde

It appears necessary to define the meaning of an avant-gardist practice in architecture today. For Marxist theory, since W. Benjamin, the avant-garde work of art had to be politicized.⁴ The politicization of the work of art meant for Peter Bürger the denunciation of the institution of art.⁵ However, the denunciation has already been made and it is now a historical fact. For him, the avant-gardes are now historical, and any artistic production inspired by the work of the historical avant-gardes is neo-avant-garde. For him, the neo-avant-garde work of art has no political meaning, it is mere fashion. This is not the opinion of B. Buchloh for whom art, as a form of institutional criticism, may exist still today.⁶

The so-called avant-gardes of architecture today do not fit with the Marxist definition. They do not consider architecture an ideological institution that must be attacked and dismantled. Characteristically, Marxist talk about the avant-garde was made by critics, not artists. When critics destroyed the institution of art, they did not suffer. In architecture, the new criticism is done by architects such as Tschumi and Koolhaas: they cannot afford to destroy the activity of which they live.⁷ Tschumi has openly declared that his theory of architectural transgression was not a matter of avant-garde subversion. For Koolhaas, the avant-gardes were the more paranoid among the Constructivist architects, they were those who were captains of the pool. Contemporary avant-garde in architecture is thus defined as a limited group, an elite that established itself as the conscience of the discipline (Tschumi) or as psychoanalysts unveiling its unconscious (Koolhaas). The insistent rhetoric of the New, characteristic to contemporary architectural

avant-garde, aims at pointing the small differences between its work and the tradition of architecture in order to inscribe it in a continuous historical development. The architectural avant-garde works in function of the historical meaning of their production and follows the pattern established by Greenberg for modern art in the fifties. Hence, avant-garde works have two characteristics: they first restate the origin of their position and they are historically determined in expressing the values of the present.

2) Role

The difficulty of distinguishing the aim and the role of architectural theory is the one of finding the difference between what theory wants and what it effectively achieves. The discourse of contemporary architects is a production sustaining a prescriptive theory of cultural production. That theory provide principles determining the production of new objects. Hence, it produces a basis for the interpretation of these objects. This interpretation is made by a community of specialists who verify that theoretical basis in order to validate or invalidate it. Hence, one can conceive the role of theory as a catalyst in the process of institutional interpretation.

The institution is composed of different actors having different language games. Professionals, theoreticians, critics, historians look for the specific aspects of the work of architecture that fit with their respective interests. The interpretations of La Villette demonstrate the different points of view developed by journalists (Goulet), architects (Frampton), philosophers (Derrida), theoreticians (Guibert) and historians (Vidler). The most traditional historians of architecture are looking for formal and theoretical affiliations with earlier architectural productions. The procedure tries to define the historicity of the new work and its meaning for the community of historians and architects.

An architect-historian like Frampton validated Tschumi's design principles because his initial discourse had aims similar to those of earlier works bearing political and revolutionary connotations. The example of Derrida shows that a work can be significant for specialists working in other spheres of culture.

Architecture is a particular field in which the prescriptive and descriptive speeches are intimately related. Authority is conferred by the ability to manipulate many language games. Tschumi's example is perhaps the most obvious, with his attempt to introduce in architecture discourses developed in philosophy, literary theory, cinema, history, music, art theory, etc. The multiplication of points of view provokes the expansion of the field and more notoriety to the work of architecture.

The role of theory in the discourse of contemporary architects is to initiate a discourse on architecture that expands the interests of the institution and by extension its popularity. Furthermore, theory's role is to produce new material to analyze and thus creates the need for specialized skills. These skills are shared and developed by a specialized community organized as an institution controlling the field and assuming its direction. The institution is the place where authority is assessed, transmitted and gained by means of alliances, internal politics and power games.

3) Aim

The aim of theory in architecture is to achieve effects. For Panofsky, the Renaissance theory of art had two goals. It aimed at providing the artist with a set of rules by which he would connect with antiquity and make things that only he could achieve, because of his specialized knowledge. That had for effect to elevate the status of the artist from the one of craftsman to the one of "arte liberale". As such, the role of art theory was pragmatic: it wanted to achieve specific

effects.

Architectural theory is no different. The pragmatism of professional architects is dual. Architects want to build and have commissions; that is why the profession protects its market. Theoreticians share the same goals except that they also want an institutional power. They propose directions of research aiming to fit with the aspirations of the institution. The fact that Bernard Tschumi has been appointed Dean of the School of Architecture of Columbia University demonstrates that theory of architecture is, if not definitively mirroring the aspirations of the institution, at least a means for it to define them. The institution plays the role of validator. It is composed by the community of heterogeneous critics who by their writings are orienting production and the development of the institution. The fortune of any professional critic depends on the wealth of the institution. Thus, most critics work therefore at the consolidation of the institutional apparatus.

Like Renaissance art theory, recent theory of architecture, in proposing the model of the architect-intellectual, is trying to augment the authority of the institution that was radically shaken in the sixties by the failure of the project of Modern Architecture. The debate between Tafuri and Koolhaas illustrates the tension existing between the Marxist position that aims at the destruction of the institution and that of the intellectual architect protecting his right to produce inside the traditional institutional framework. For Tafuri, the intellectual backwardness of the architects was responsible for their diminishing role in the capitalist society. An intellectual elite, having for goal to defend the interest of architects, emerged after 1968.

After twenty years, the problem remains that of evaluating if the intellectual elite of architecture wants power for power itself or for change. A revolutionary avant-garde would try to undermine the institution. Tschumi's recent theory

could certainly be seen by professionals as an attack against the traditional know-how of corporate firms, but the fact that he is building for a government demonstrates the inevitable collusion between architecture and power. That inevitable collusion prevents architects who want to build from having open revolutionary goals. For Rem Koolhaas, the intelligence of Raymond Hood was not to reveal what he thought. Similarly, the constant game of hide-and-seek played by both Koolhaas and Tschumi is a means to please the most "revolutionary" members of the institution and to spare the sensibility of the conservatives.

- Notes on the Institution

The concept of institution was often invoked in this conclusion. Institution should not be understood as a monolithic self-conscious organization having a totalitarian power over the field of architecture. As said earlier, it is the forum where the different cultural movements are competing for authoritative power.

The institutionalization of architecture is its most modern characteristic. Architectural modernity is not a style nor a set of canons: it is the organization of the field in a heterogeneous community composed of the architects and all those producing the meaning of their works. That community is a special group having privileges due to their institutional authority. If one agrees with this definition, there has never been a real Post-Modernity in architecture.

The institutionalization of the architects as a distinct social group started in the Renaissance with the establishment of the field by means of the Humanist artistic theory. It was later consolidated during the Age of Reason which not only gave architecture the highest rank among the arts but also a place among other scientific fields. The organization of the field as a professional practice legally defined was the last step of the institutionalization of architecture. Therefore,

Humanism elevated the status of the architect, the Enlightenment established architecture as a modern field of research, and capitalism confirmed that practice was the exclusive right of a restricted group of professionals.

Any Post-Humanism, Post-Modernity or Post-Capitalism in architecture would mean the dissolution of the field and the end of the architects' privileges. Obviously, nobody in power in the institution is ready to abandon the social status gained by architecture as a Humanist, Modern and Capitalist discipline. The institutional complicity of the "progressive" and "conservative" members of the architectural elite is obviously demonstrated by publications pretending to represent the current state of the debate on architecture.⁸

Architecture, as an intellectual production, has not yet resolved the problem of its isolation into a restrictive private club.

NOTES - CONCLUSION

1. Demers, J. & McMurray. L. Le manifeste en jeu, l'enjeu du manifeste, Longueuil, 1984.
2. Lyotard, J.-F. & Thébaud, J.-L. Just Gaming, University of Minnesota Press, Minneapolis, 1985.
3. Demers, J. & Als. Op. cit.
4. Benjamin, W. Essais 2, 1935-1940, 1971-1983.
5. Bürger, P. Theory of the Avant-Garde, Minneapolis, 1984.
6. From a lecture entitled "Art as a Form of Institutional Criticism" held at M.I.T. during Spring 1988.
7. I owe this idea to Francesco Passanti.
8. The Charlottesville Tapes and The Chicago Tapes

Appendix A

Letter to the Editors
Oppositions, No 9, Summer 1977, p. 117

To the Editors:

I would like to bring to your attention the close parallel between the following two paragraphs. I believe a reference to Kuhn's book would be quite appropriate in this case.

"Most architects work from paradigms acquired through education and through subsequent exposure to architectural literature, often without quite knowing what characteristics have given these paradigms the status of rules or, by inversion, that such paradigms imply subsequent taboos. These paradigm-taboos may be more binding and more complex than any set of rules that might be abstracted from them; they remain entrenched because of the difficulty in unveiling the hidden rules that have guided the particular architectural approaches that have generated them. Rules stay obscured, for schools of architecture never teach concepts or theories in the abstract." Bernard Tschumi, "Architecture and Transgression," *Oppositions* 7, p.61.

"Scientists work from models acquired through education and through subsequent exposure to the literature, often without quite knowing or needing to know what characteristics have given these models the status of community paradigms. . . . Paradigms may be prior to, more binding and more complete than any set of rules for research that could be unequivocally abstracted from them. . . . (There is) the severe difficulty of discovering the rules that have guided particular normal science traditions, (for)

scientists never learn concepts, laws and theories in the abstract." Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2d ed., The University of Chicago Press, Chicago, Ill. (p.46).

Sincerely,
 Mirian Gusevich
 Ithaca, New York

Kuhn, of course, should have been quoted here. I am afraid this was an inexcusable oversight on my part.
 Bernard Tschumi
 New York, New York

Appendix B

Comparison between a text by Philippe Sollers and one by Bernard Tschumi.

Sollers, Ph. Bataille, Paris, 1973.

"La philosophie, pour Bataille, est toujours trop formelle ou scolaire, c'est le mot dont il qualifie Heidegger lui-même. Bataille est intolérable aujourd'hui encore à la philosophie spéculative en ceci qu'il altère le **sujet** et chacun sait que les philosophes ne sont jamais ivres et, en tout cas, ne se sentent pas tenus de communiquer en première personne leurs pratique sexuelles. De même Bataille est intolérable au sujet de la science et même aussi bien, au sujet qui veut maîtriser la théorie du sujet de la science. De même il est intolérable aux «écrivains», aux «artistes», c'est-à-dire, de façon diagonale, à tous ceux qui veulent limiter la question du sujet à des investissements persistants d'objets. La formule que nous pourrions employer, c'est que le sujet de la production, le sujet de la résistance, c'est le narcissisme. Découper un texte, le découper dans sa forme, dans sa formalité et finalement dans son conformisme, on sait que c'est le travail de ce qui forclôt la question du sujet et de ce que j'appellerai sa dépense transversale où, reconnaissant le système, le sujet fait l'expérience de son excès. Bataille dit: `il faut le système et il faut l'excès. C'est le point qui reste incompréhensible.`"

Bernard Tschumi "Questions of Space: The Pyramid and the Labyrinth (or the Architectural Paradox) in Studio International, September-October 1975, p. 142.

"Before leaving this necessarily brief exploration of architecture as a paradox, it is tempting to suggest a way of accepting, while refuting the silence it seems to imply. This conclusion may be intolerable to philosophers, in that it alters the `subject` of architecture, you and I (and one knows logicians are never drunk). It may be intolerable to scientists who want to master the `subject` of science. It may be intolerable to artists who wants to objectify the `subject`. (...)

Like eroticism, architecture needs both system and excess."

Table 1 - O.M.A. The Manhattan Projects

- 1972 - The City of the Captive Globe
by Rem Koolhaas and Zoé Zenghelis
- 1973 - The Egg of Columbus Center
by Elia and Zoé Zenghelis
- 1975 - Roosevelt Island Competition
by Rem Koolhaas and Elia Zenghelis
- 1975-76 - Hotel Sphinx
by Elia Zenghelis
- 1975-76 - New Welfare Island/The Ideological Landscape
by Rem Koolhaas
- 1976 - Story of the Pool
by Rem Koolhaas
- 1976-77 -Welfare Palace Hotel
by Rem Koolhaas
-

Table 2 - Architectural Manifestoes

1974 - Fireworks (1)
1975 - Questions of Space or The Box (2)
1976 - Advertisements for Architecture (1)
1977 - Imports (Joyce's Garden) (1)
1977 - Little Books (2)
1977 - Transcript 1, The Park (2)
1978 - Transcript 2, Border Crossing (2)
1978 - Rooms (2)
1978 - Screenplays (2)

Out of the series:

1976 - Design for La Villette (Competition) (1)
1979 - Transcript 3 - The Fall (2)
1980 - Transcript 4 - The Block (2)

(1) Projects analyzed in Part 3
(2) Projects analyzed in Part 4

Table 3 - Evolution of Tschumi's Trilogy

1969 - Do-it-yourself City

Idea - Object - People (New relations)

- - - - -

1975 - Questions of Space

Conceived - Perceived - Experienced (Space)

- - - - -

1976 - Le jardin de Don Juan

Order - Disorder - Seduction (History of Architecture)
City - Nature

- - - - -

1980 - Architecture and Limits II

Conceived - Perceived - Experienced (Space)
Mental - Physical - Social (Space)
Language - Matter - Body (Models)

- - - - -

1981 - The Manhattan Transcripts and La Villette

Space - Movement - Event
Drawing - Diagram - Photo
Surface - Lines - Points

(Relations: Indifference, Reciprocity, Conflict)

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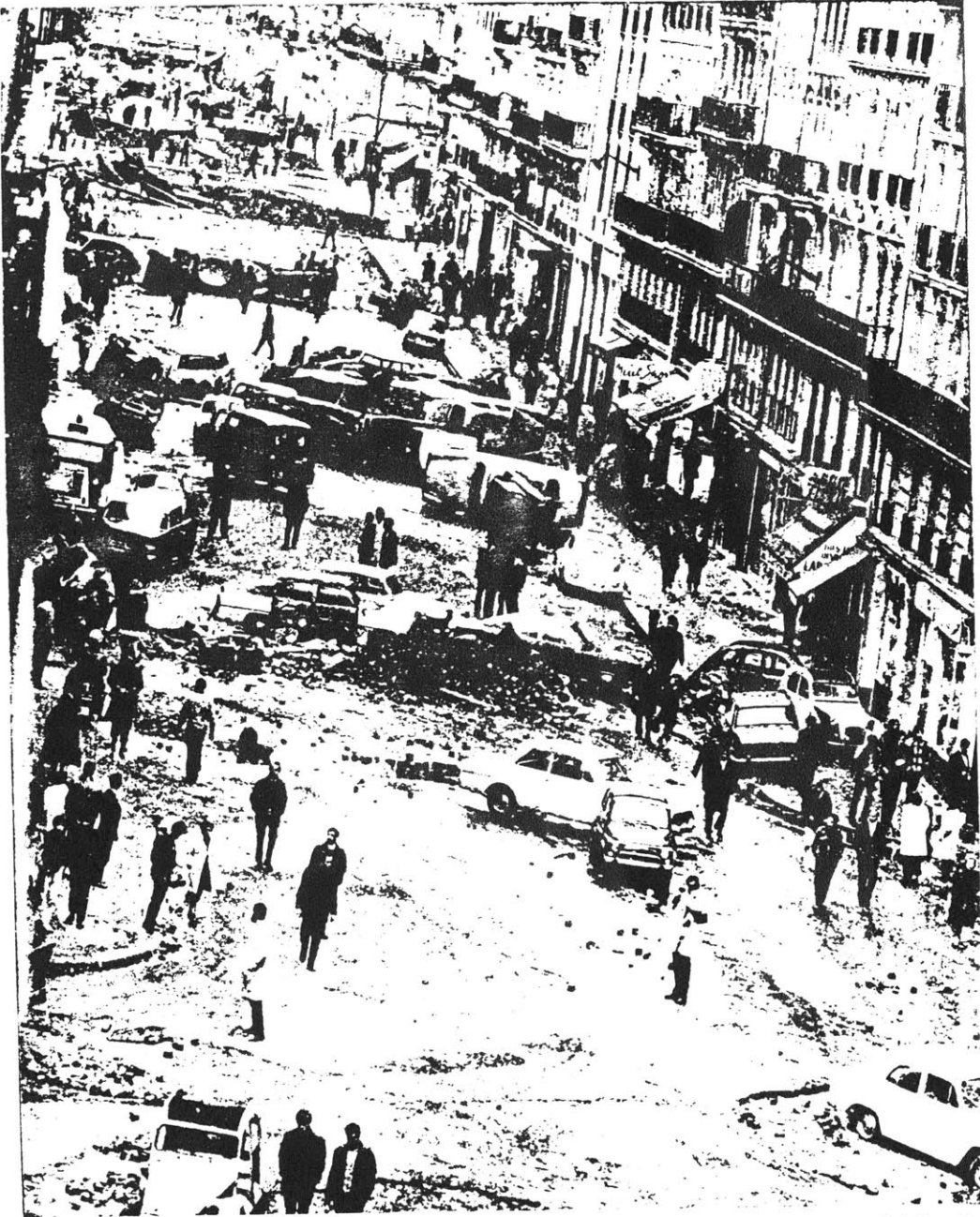
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Paris-pressé l'intransigeant

Photo-Bow

Dix-huit D

ET QUAND PARIS S'EST RÉVEILLÉ...



Paris s'éveille. Il est six heures du matin, rue Gay-Lussac. C'est la désolation. La chaussée a été dépeçée sur une centaine de mètres, des canalisations d'eau ont éclaté. On marche dans la boue, au milieu des poteaux indicateurs arrachés, des poubelles renversées, des voitures cabossées ou à demi-calcinées. Soixante d'entre elles auraient été détruites.

Fig. 1 - Paris, 13 May 1968

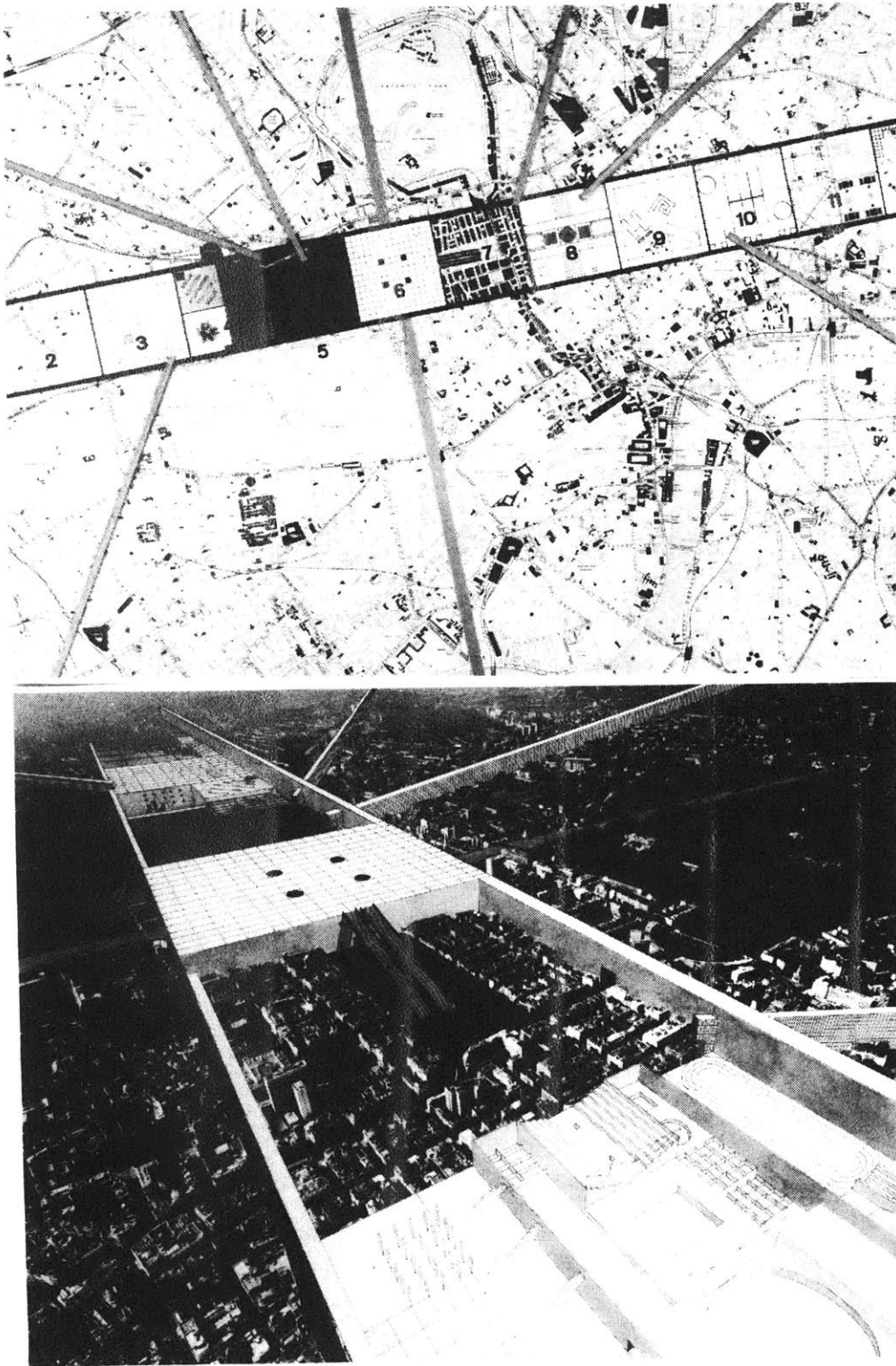


Fig. 2 - Koolhaas and E. Zenghelis (1972)
"Exodus or The Voluntary Prisoners of Architecture"

2A5
2AA-A

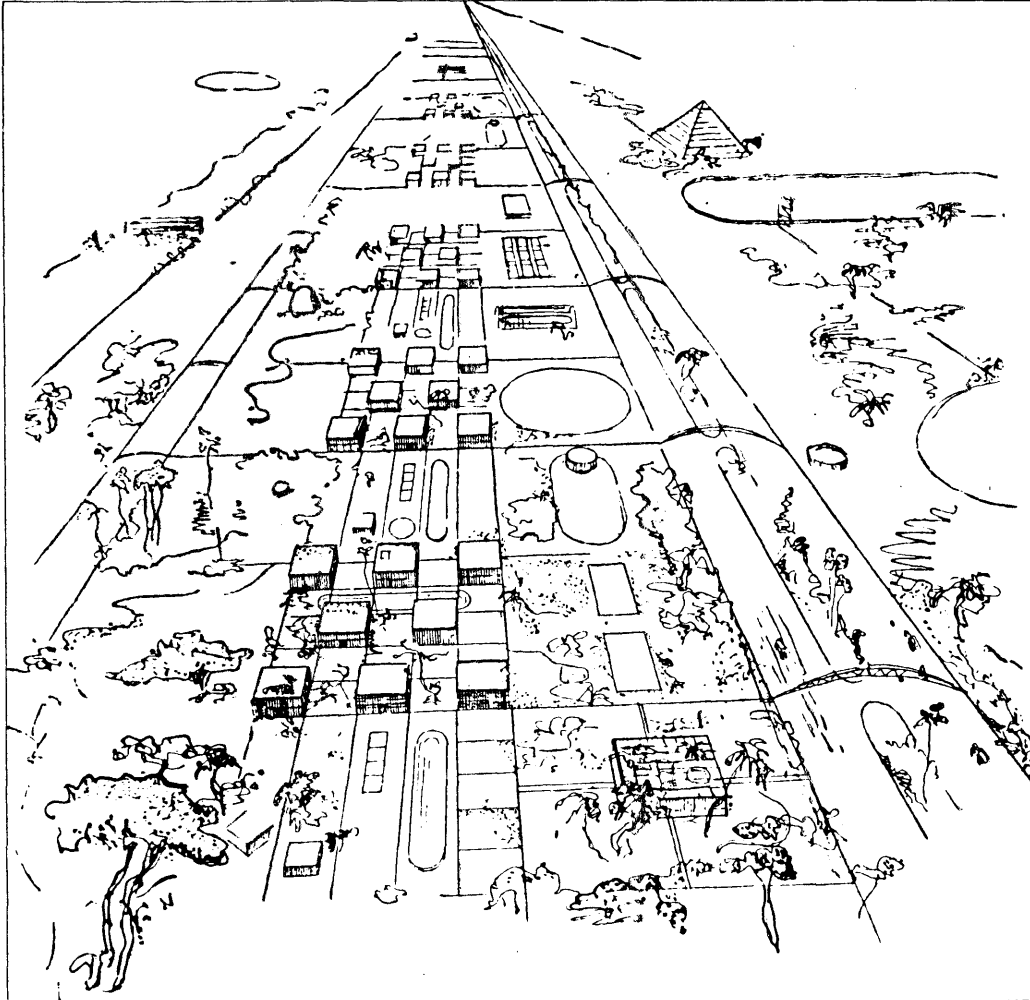


Fig. 3 - Ivan Leonidov, "Magnitogorsk, New Town" (1930)

~~244~~
245

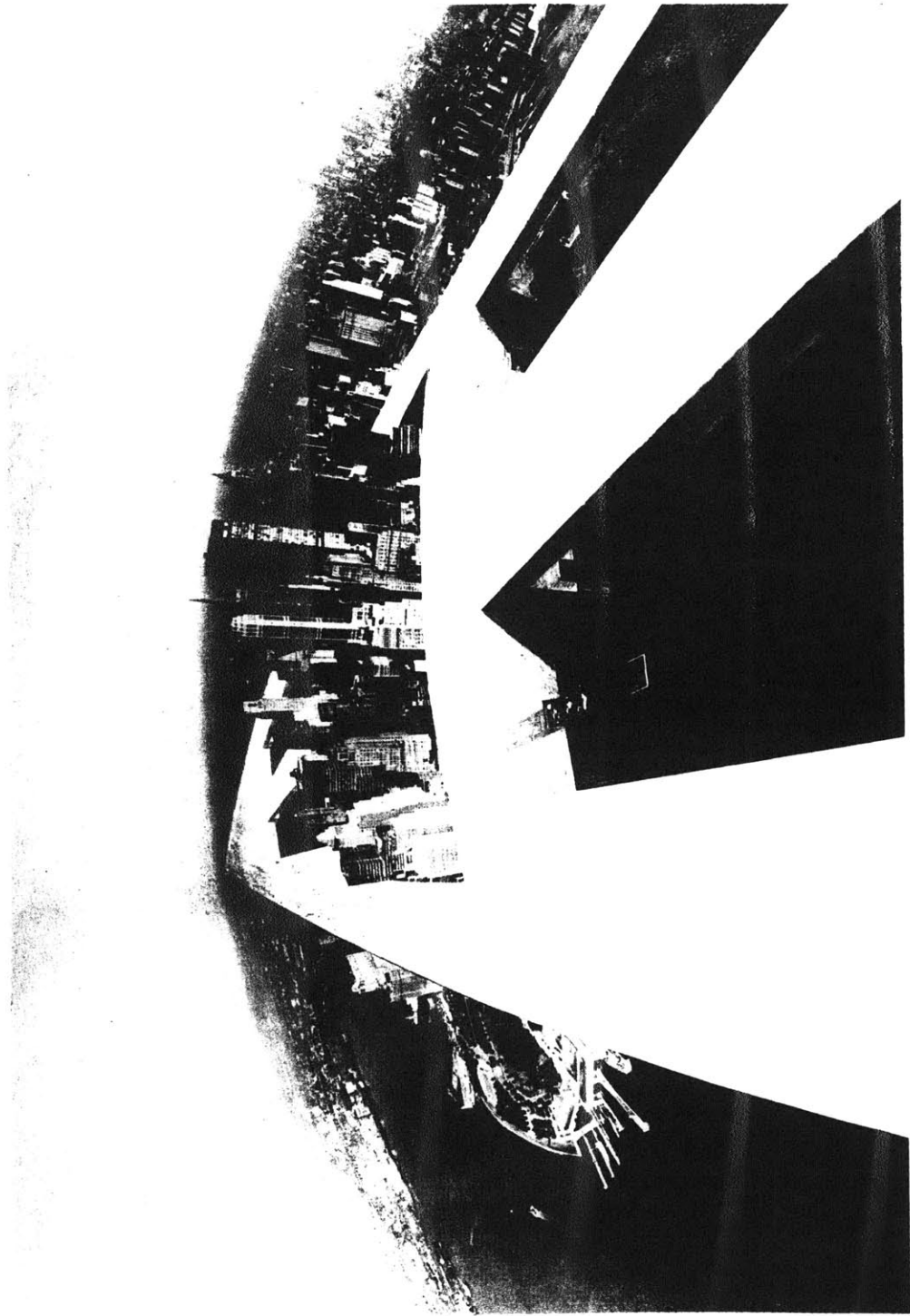


Fig. 4 - Superstudio, "The Continuous Monument" (1969)



Fig. 5 - Madelon Vriesendorp, "Flagrant Délit"

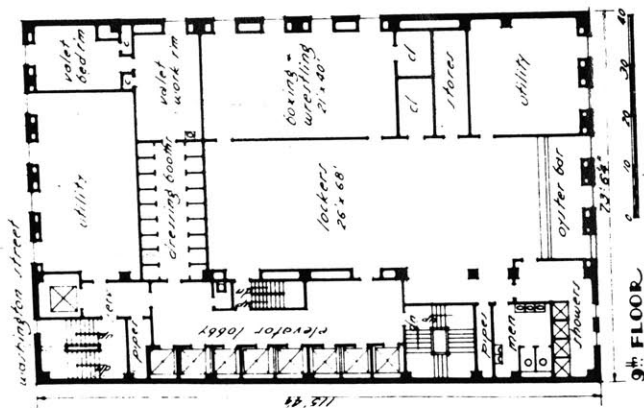
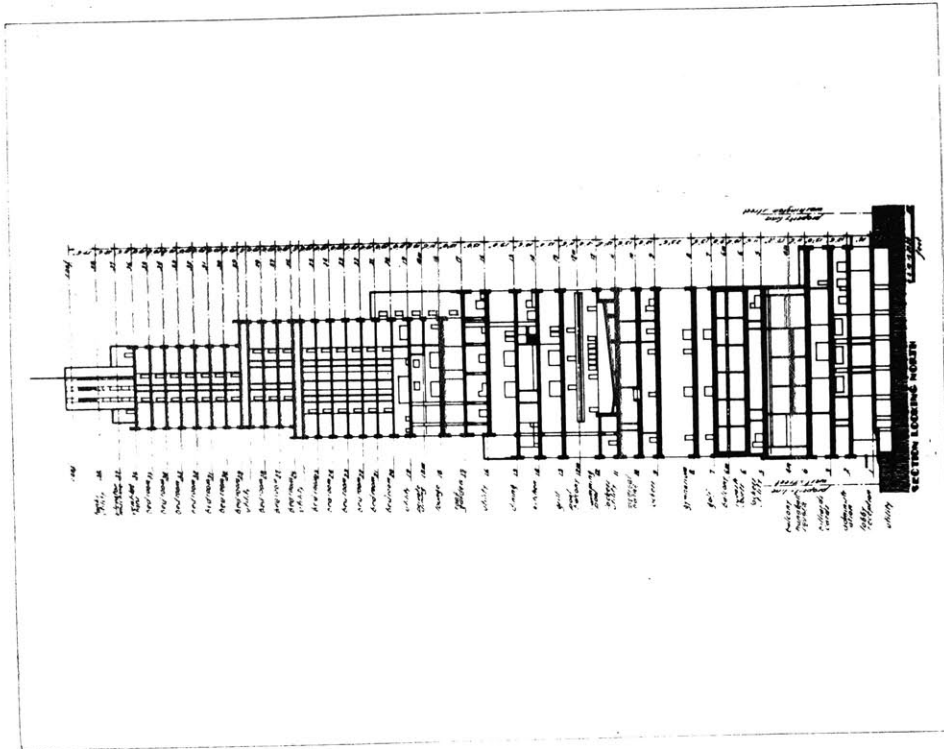
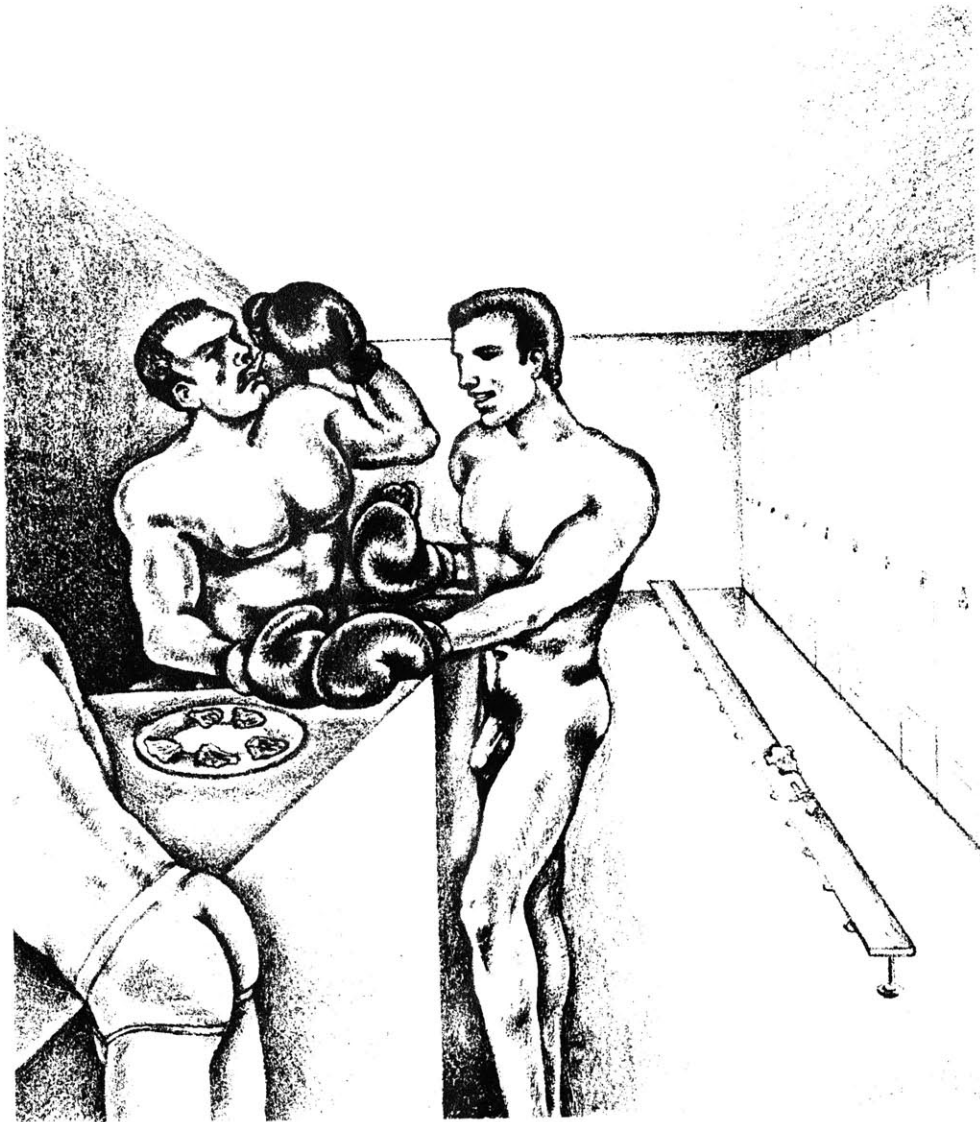


Fig. 6 - "Downtown Athletic Club",
Plan of the 9th floor, Section.



A machine for metropolitan bachelors . . .

Fig. 7 - "Eating Oysters, Naked,
with Boxing Gloves on the 9th Floor"

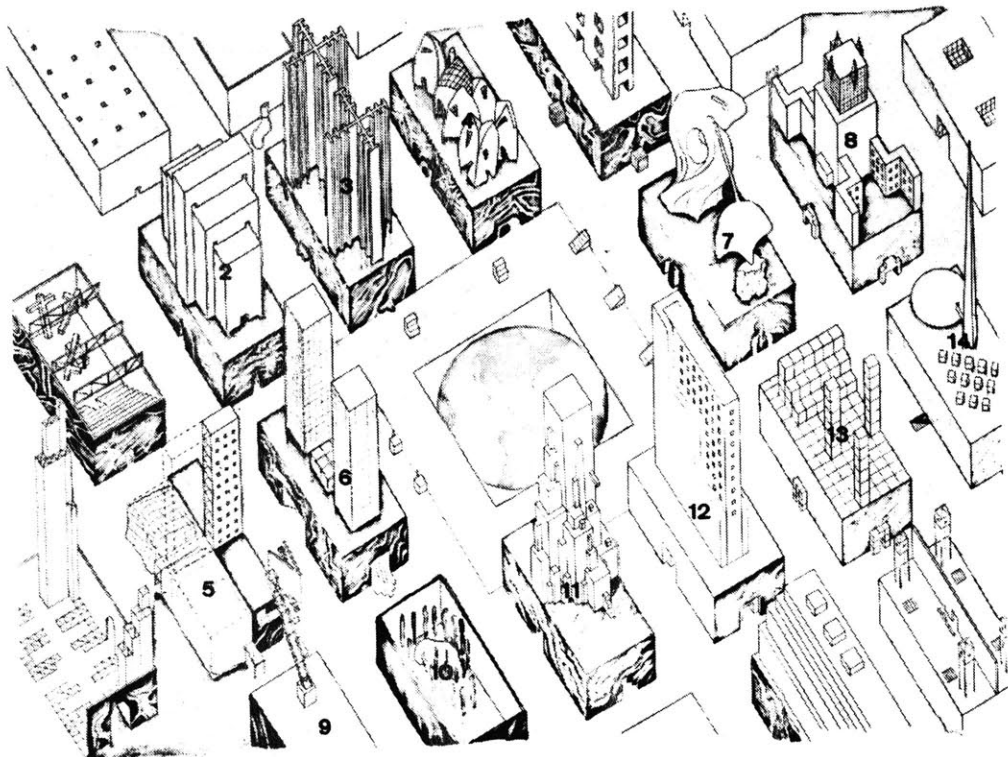


Fig. 8 - Koolhaas and Z. Zenghelis
"The City of the Captive Globe" (1972)

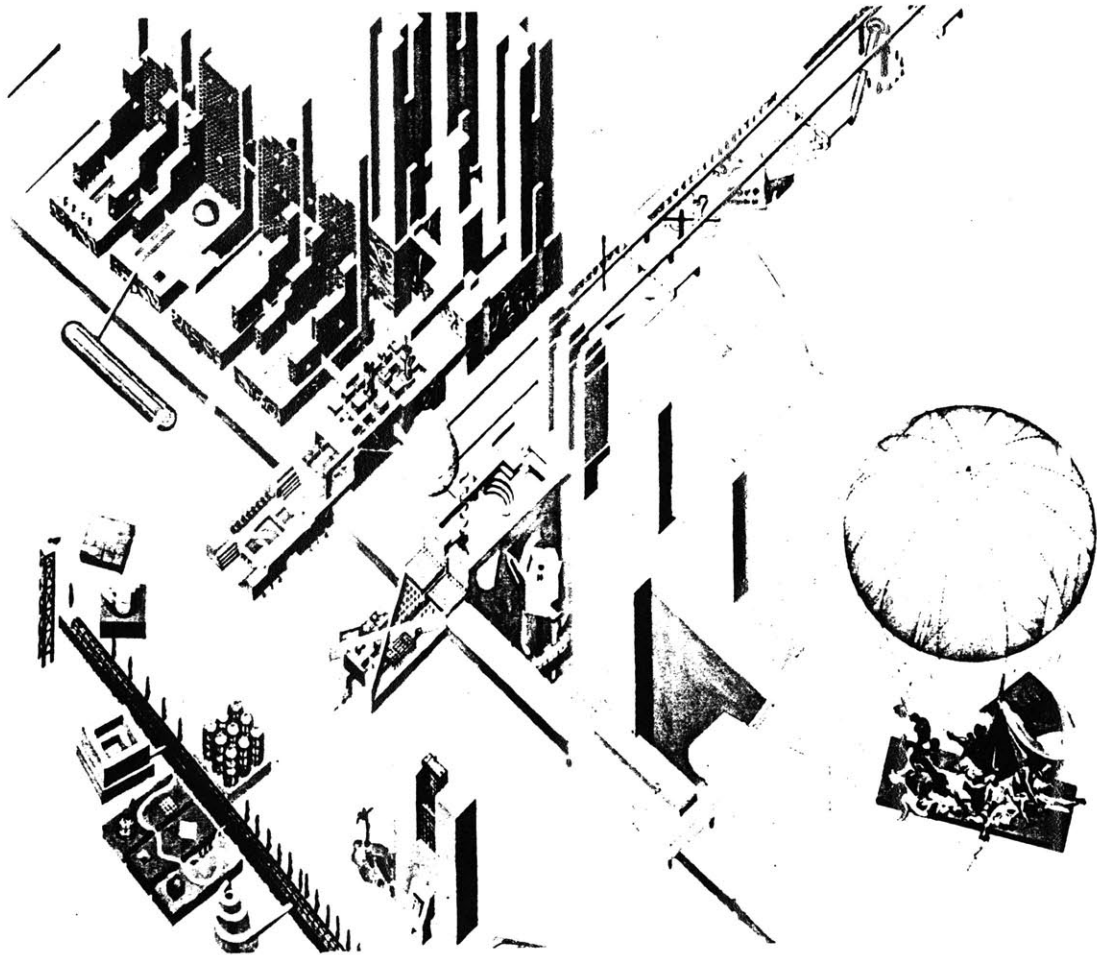


Fig. 9 - E. and Z. Zenghelis
"The Egg of Columbus Center" (1973)

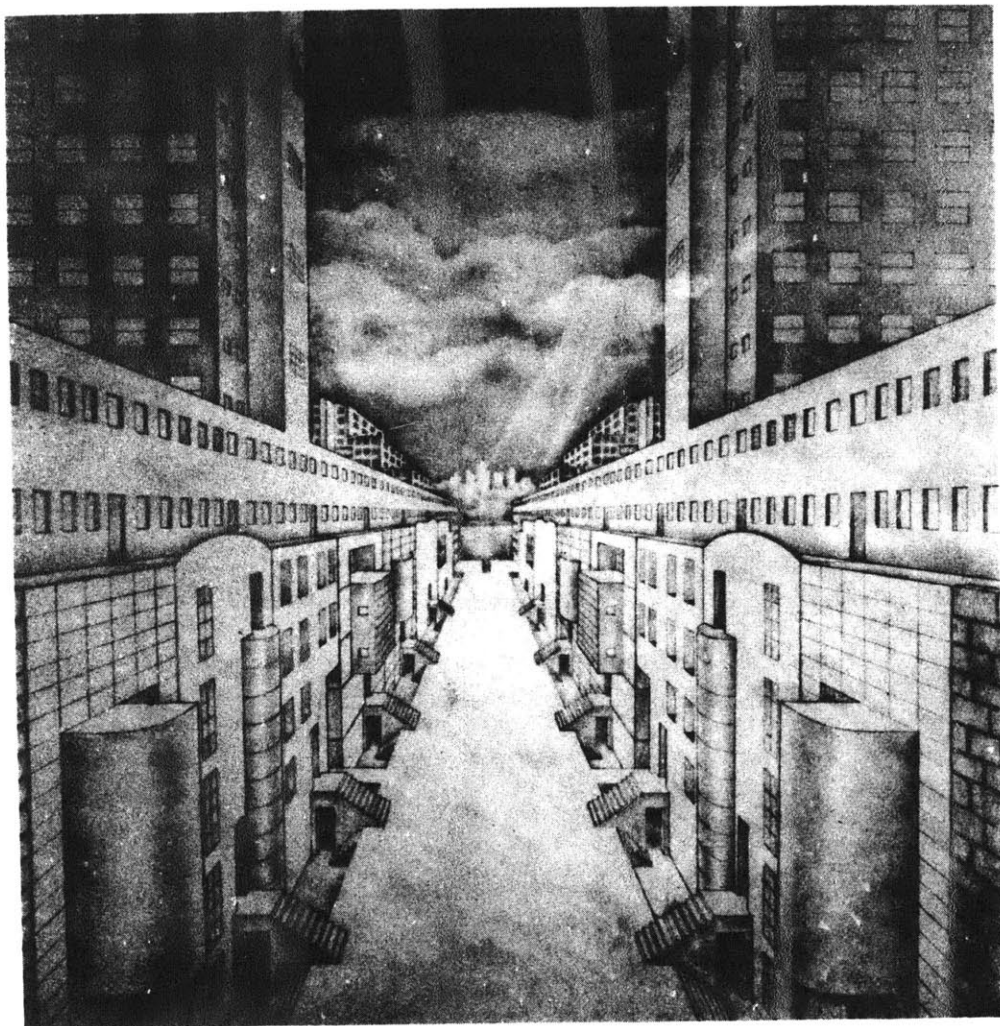


Fig. 10 - Koolhaas and Zenghelis
"Roosevelt Island Competition" (1975)

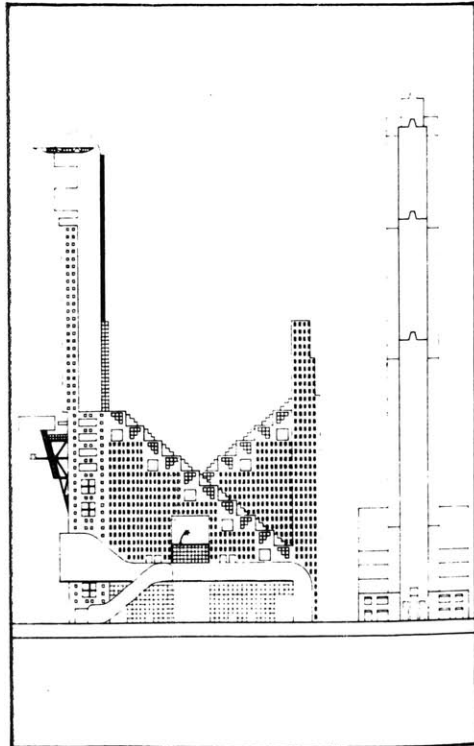


Fig. 11 - Zenghelis, "Hotel Sphinx" (1975-76)

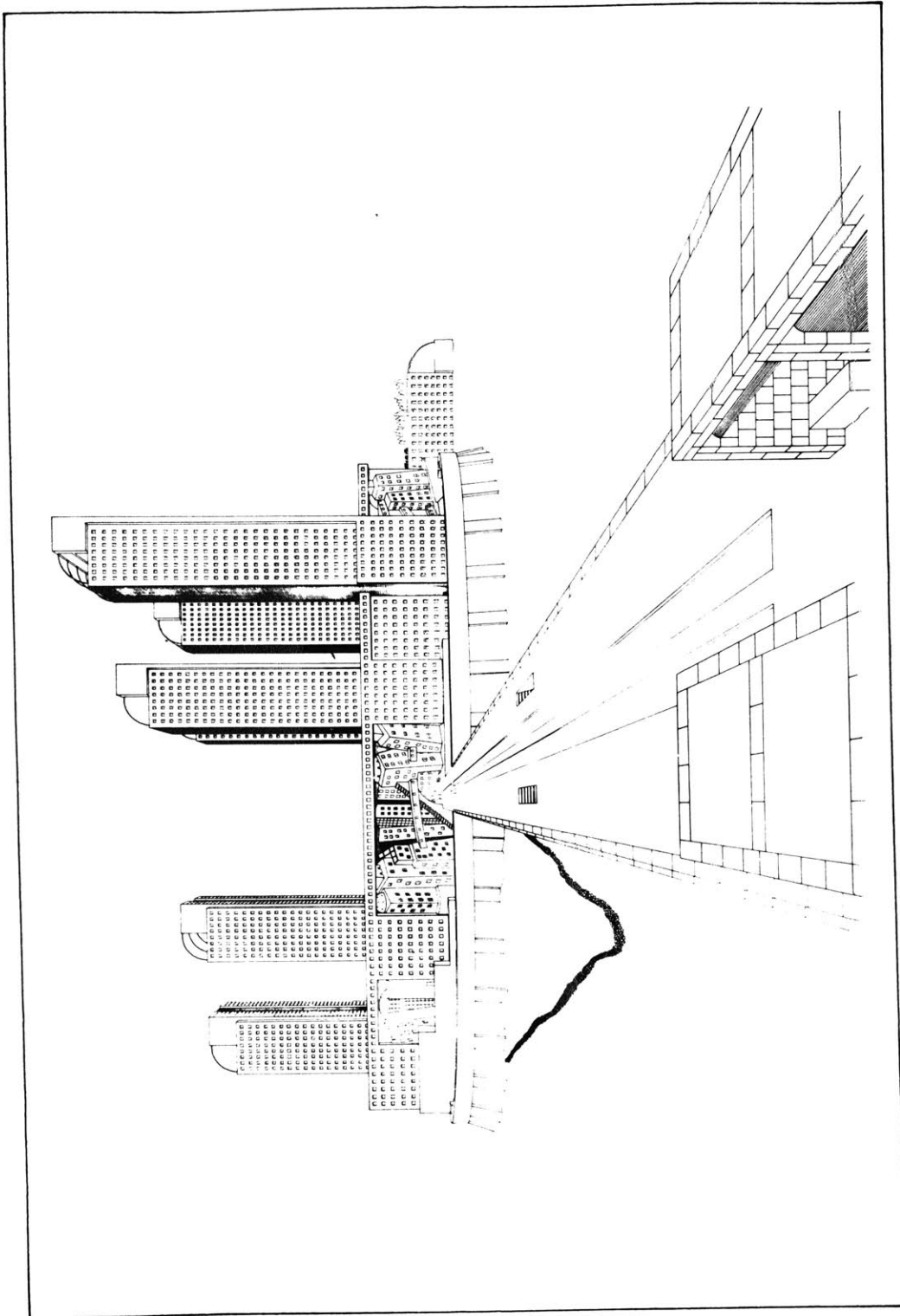


Fig. 12 - Koolhaas, "New Welfare Palace Hotel" (1976-77)

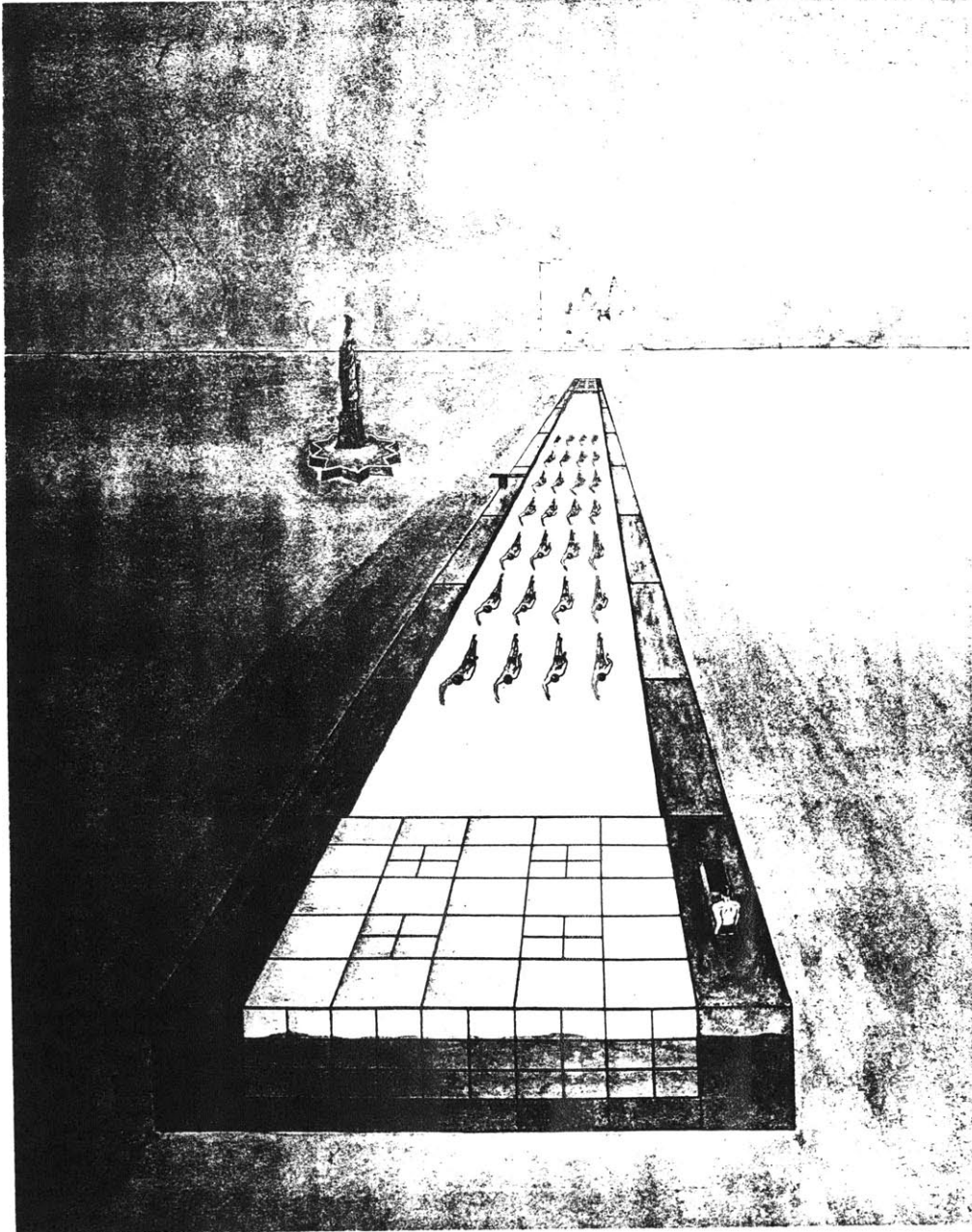


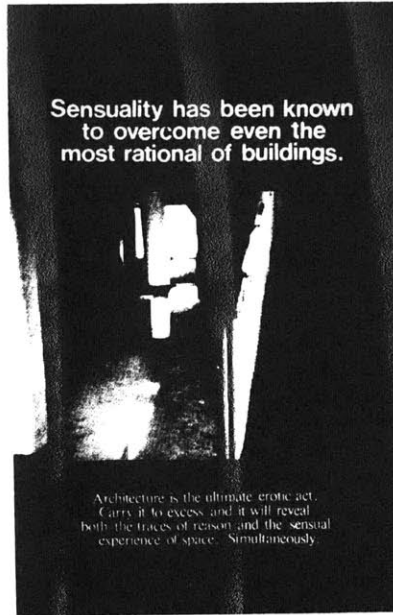
Fig. 13 - Koolhaas and Vriesendorp, "Floating Pool" (1976)

To really appreciate architecture
you may even need to commit
a murder.



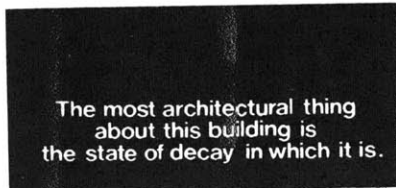
Architecture is defined by the actions it witnesses
as much as by the enclosure of its walls. Murder
in the Street differs from Murder in the Cathedral
in the same way as love in the street differs from
the Street of Love. Radically.

Sensuality has been known
to overcome even the
most rational of buildings.



Architecture is the ultimate erotic act.
Carry it to excess and it will reveal
both the traces of reason and the sensual
experience of space. Simultaneously.

The most architectural thing
about this building is
the state of decay in which it is.



The game of architecture is an intricate
play with rules that you may break or accept.
These rules, like so many knots that cannot
be untied, have the erotic significance of
bondage: the more numerous and sophisticated
the restraints, the greater the pleasure.

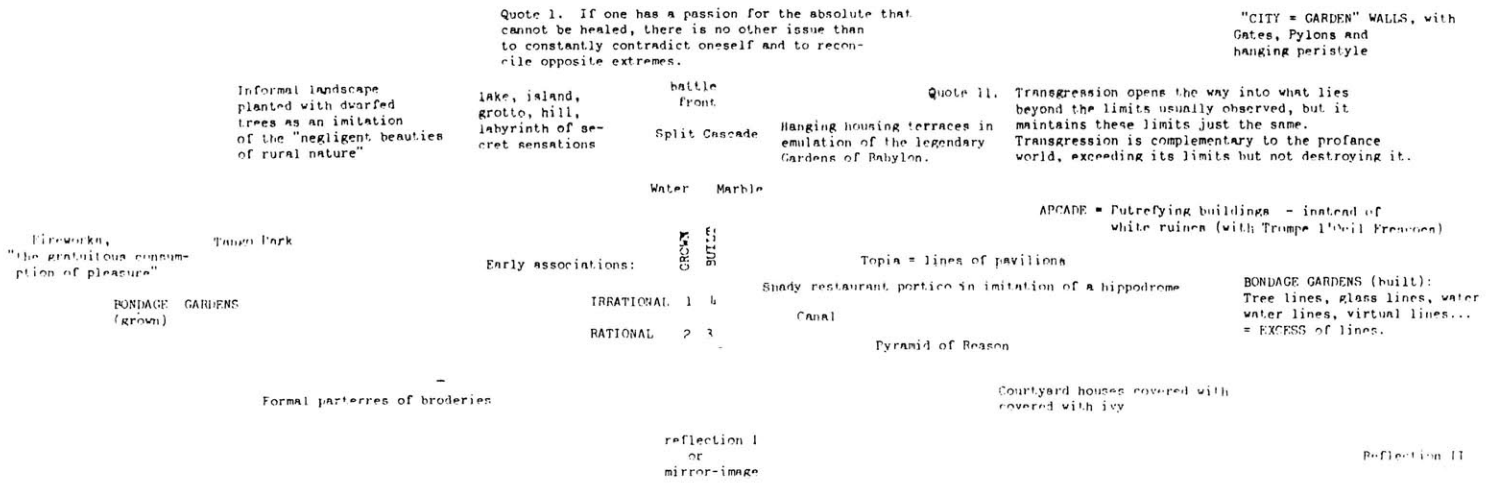
ropes and rules



Architecture only survives
when it repeats the form that
society decries or
When it repeats itself by
transgressing the limits that
history has set for it.

Fig. 14 - Bernard Tschumi
"Advertisements for Architecture" (1976)

Fig. 15 - Bernard Tschumi
 "Design for La Villette" (1976)



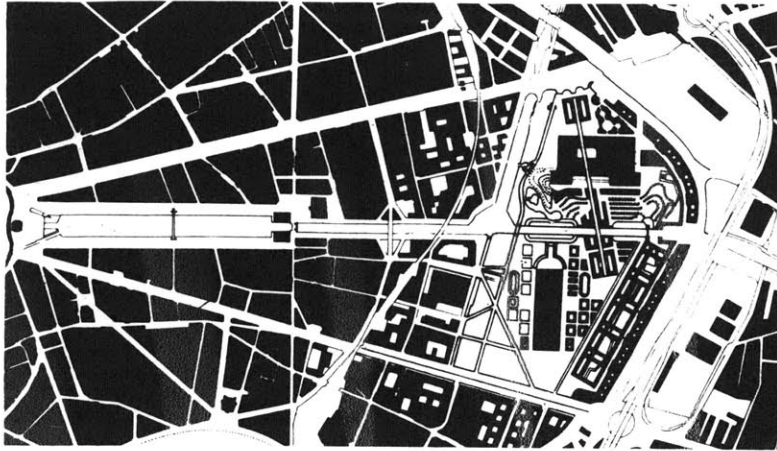
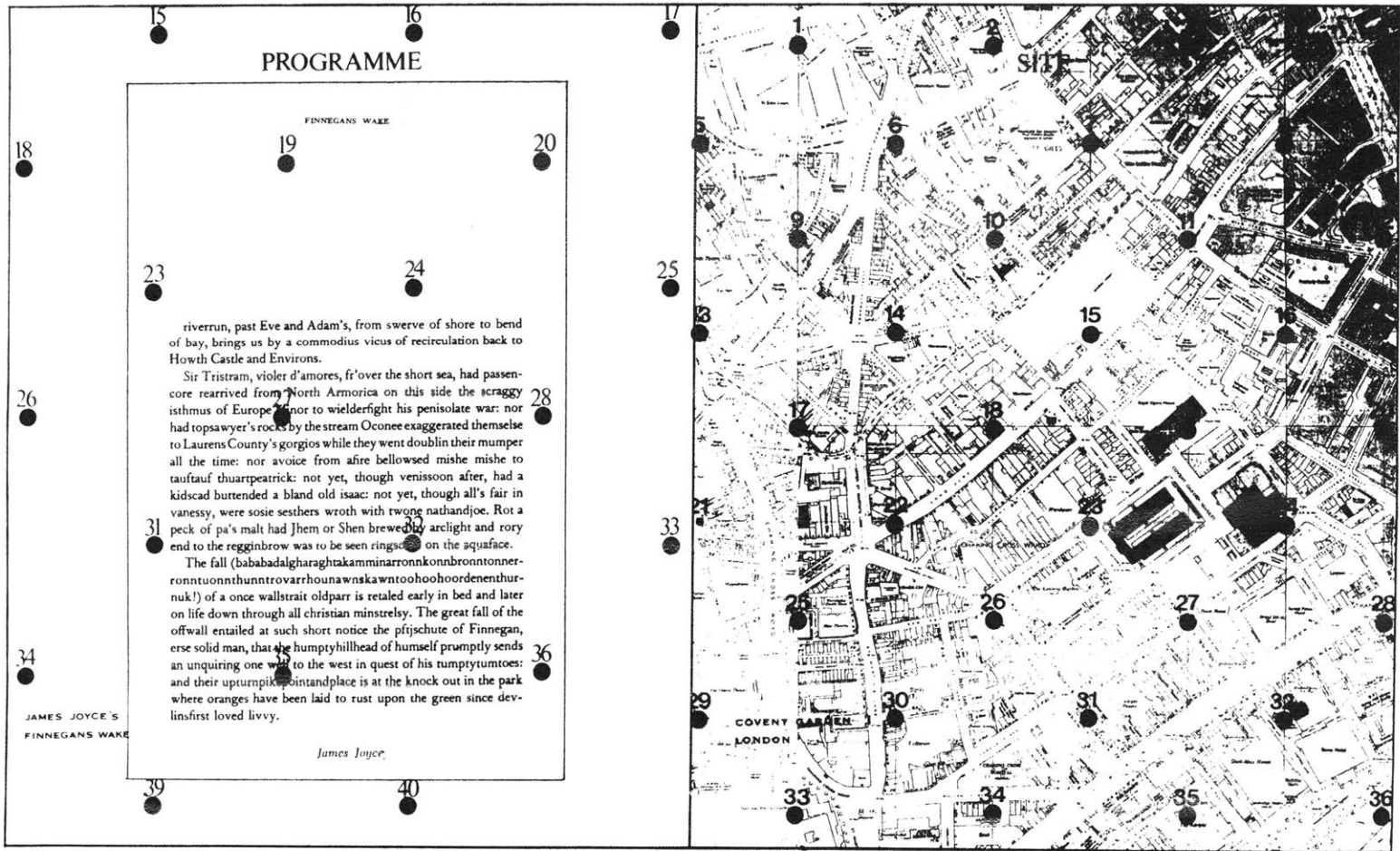


Fig. 16 - Bernard Tschumi
"Design for La Villette" (1976)

Fig. 17 - Bernard Tschumi
 "Program for Joyce's Garden" (1977)



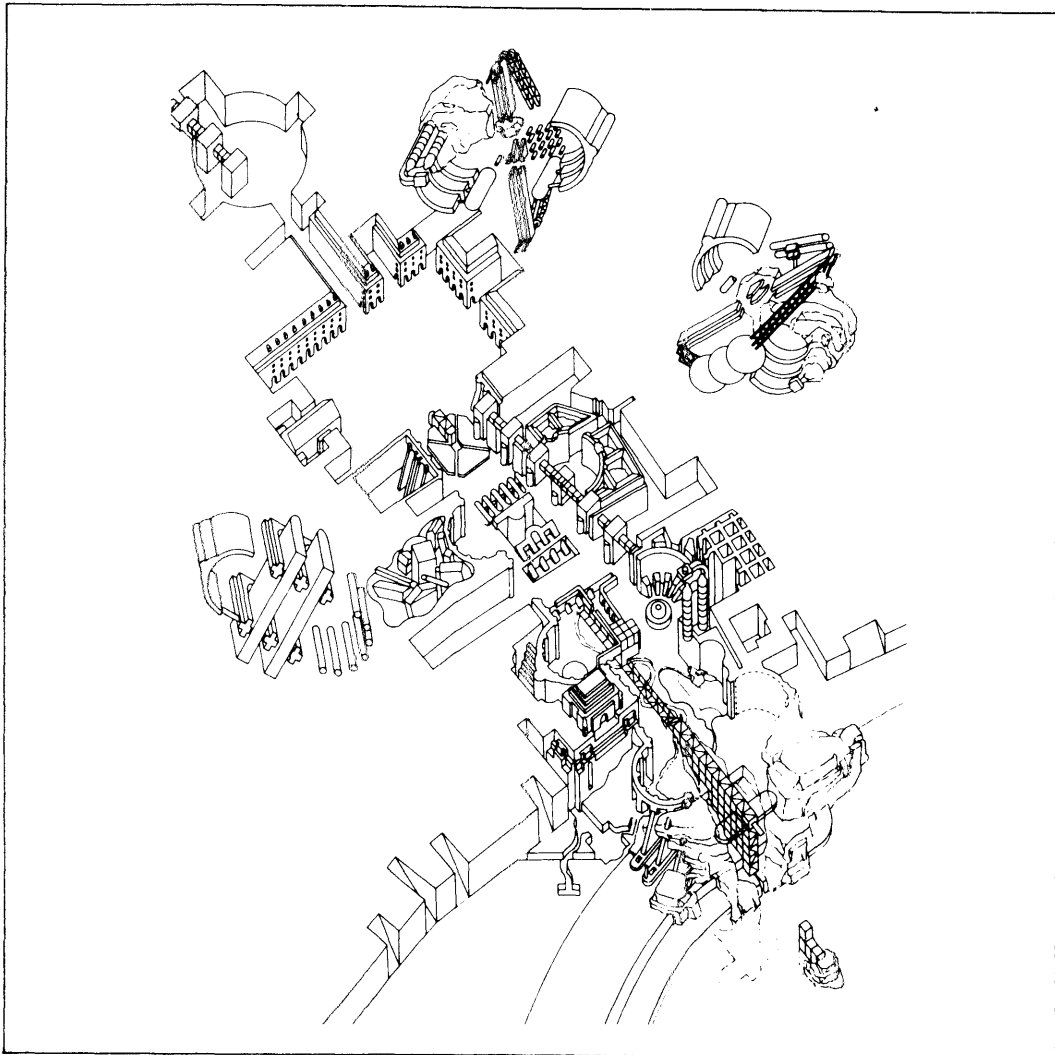
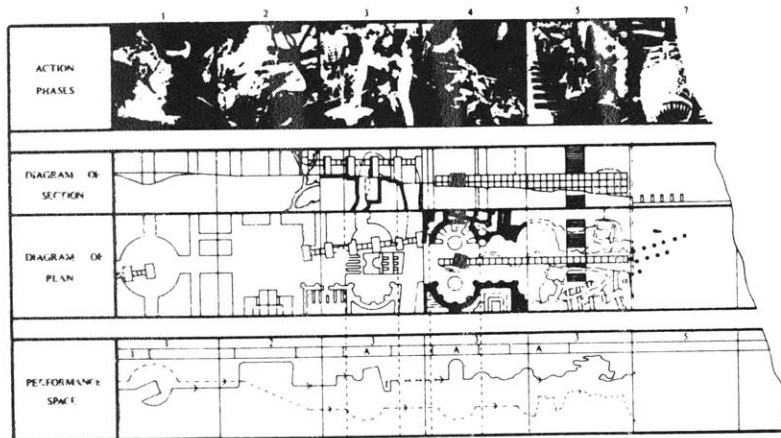
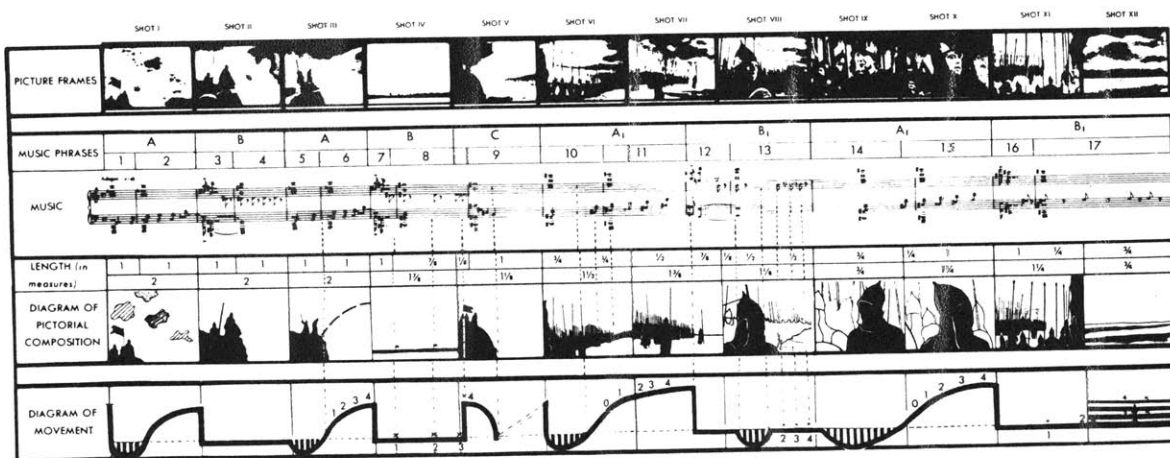


Fig. 18 - Bernard Tschumi
"Joyce's Garden" (1977)



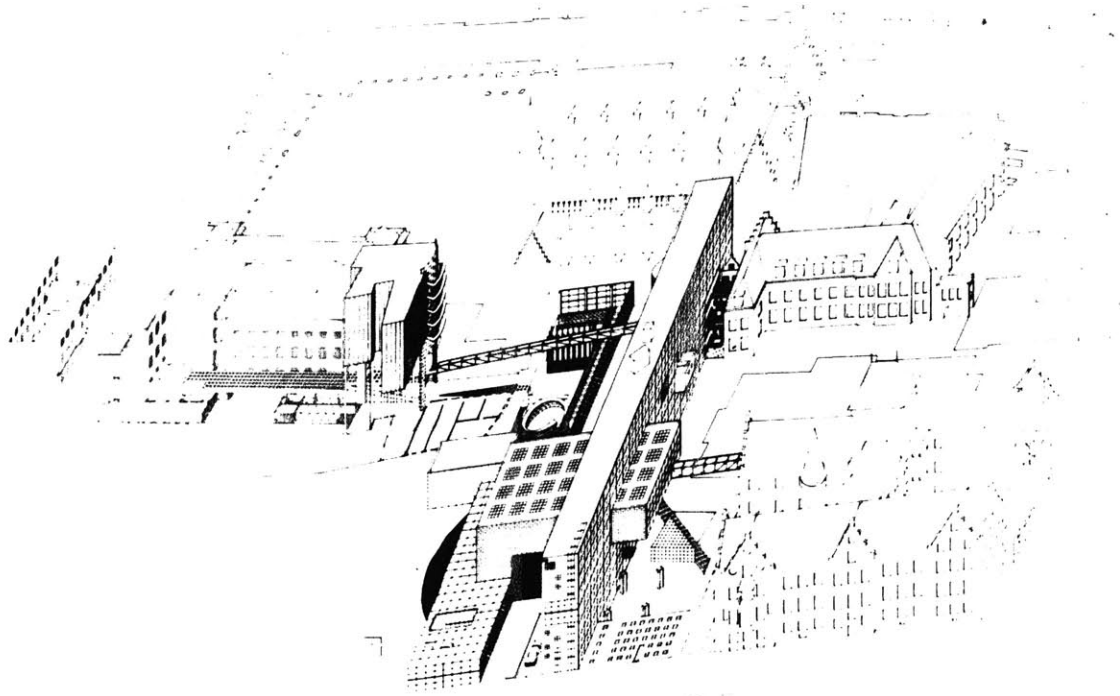
1977, *Joyce's Garden*
Hommage à S. Eisenstein.

Fig. 19 - Bernard Tschumi
"Homage to Eisenstein" (1977)



S. Eisenstein
Notation pour le film *Alexandre Nevsky*.

Fig. 20 - S. Eisenstein
Notation for the movie *Alexander Nevsky*



The Hague: Binnenhof and new insertion

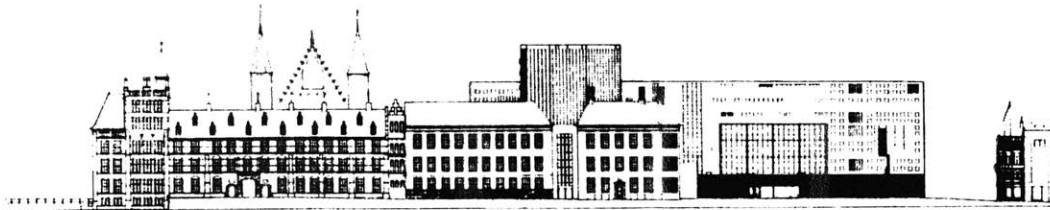
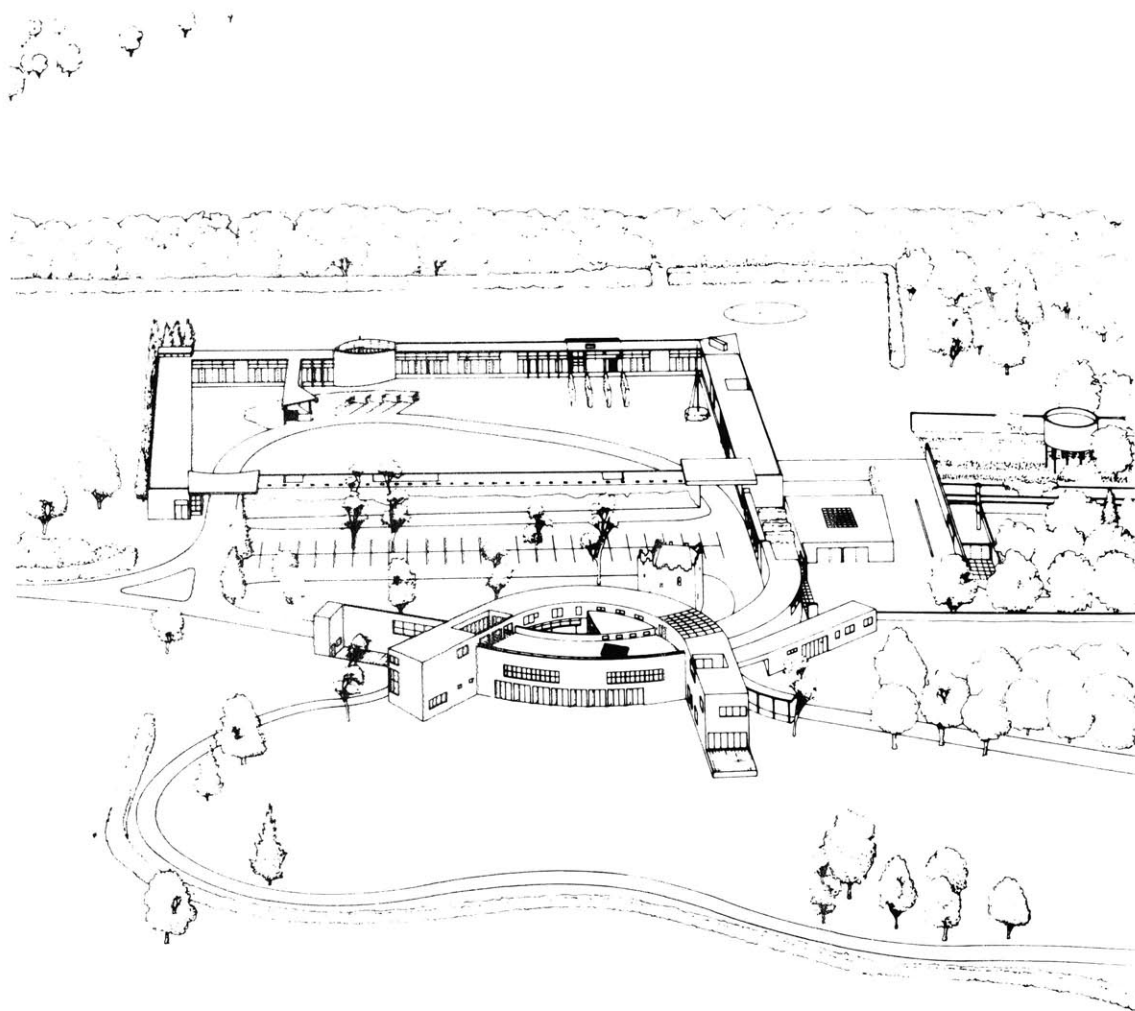
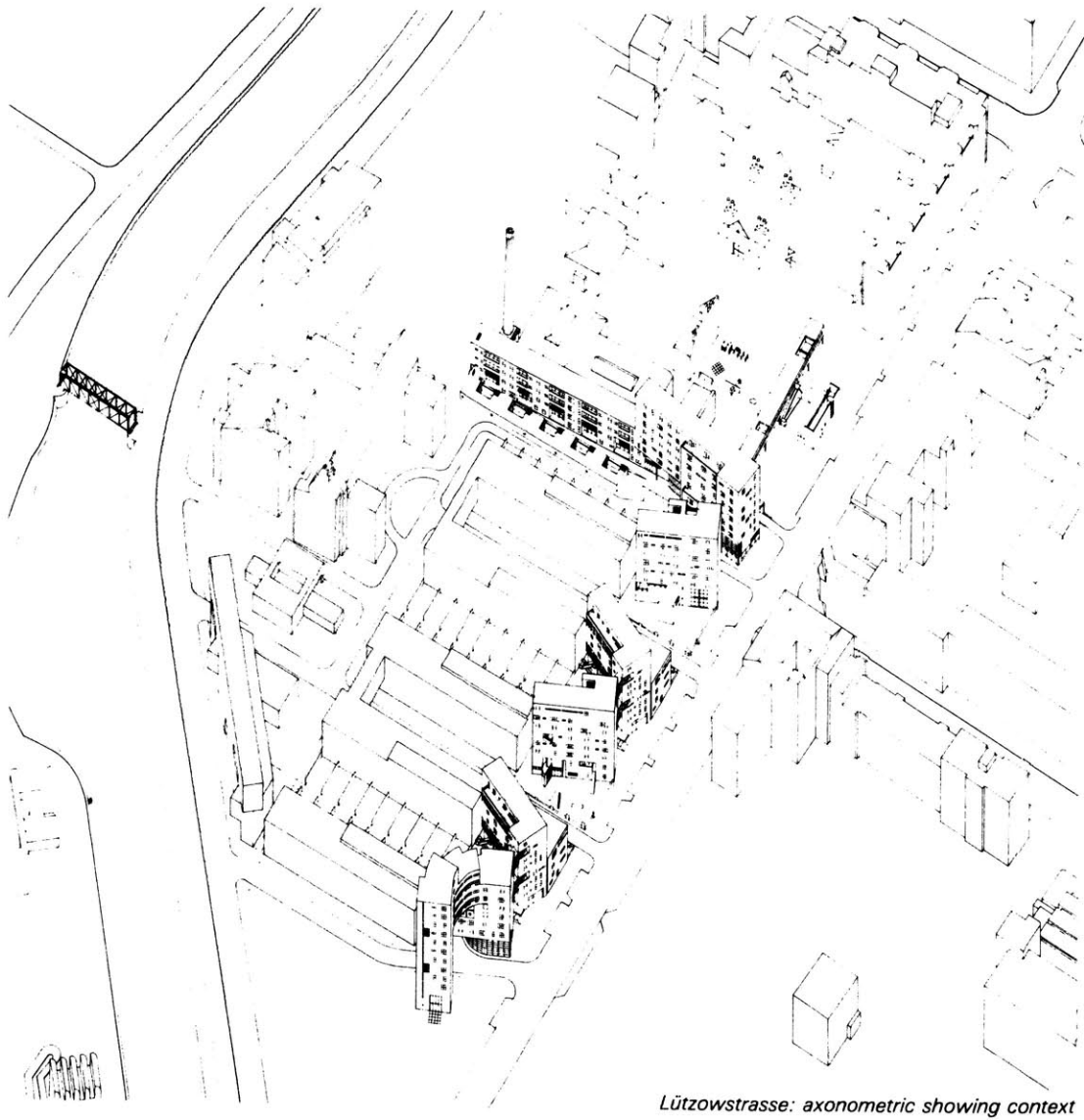


Fig. 21 - O.M.A. (Koolhaas-Zenghelis-Hadid)
"Dutch Parliament Extension" (1978)



Dublin: bird's eye view of both houses

Fig. 22 - O.M.A. (Koolhaas-Zenghelis)
"Residence for the Irish Prime Minister" (1979)



Lützowstrasse: axonometric showing context

**Fig. 23 - O.M.A. (Zenghelis)
"Lützowstrasse" (1980)**

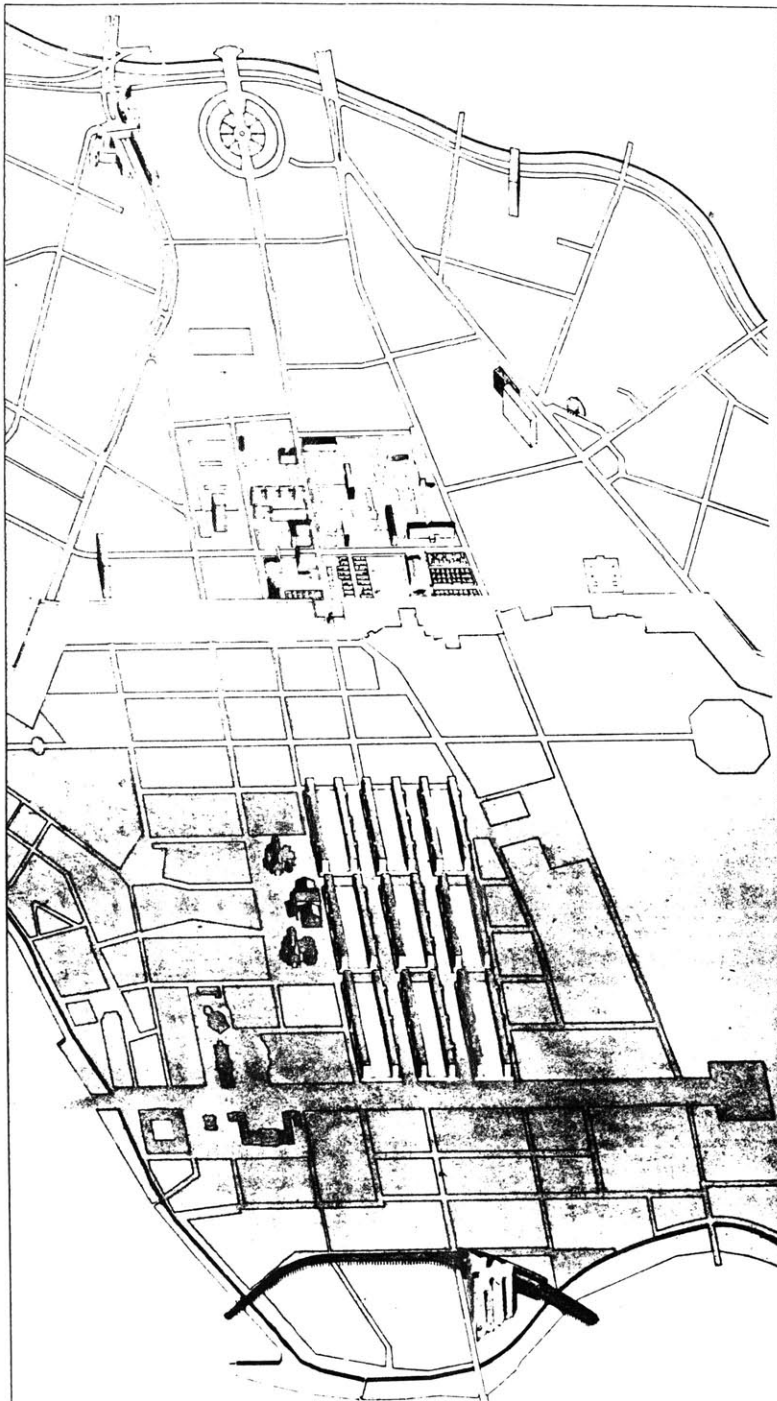


Fig. 23 - O.M.A. (Koolhaas)
"Kochstrasse-Friedrichstrasse" (1980)

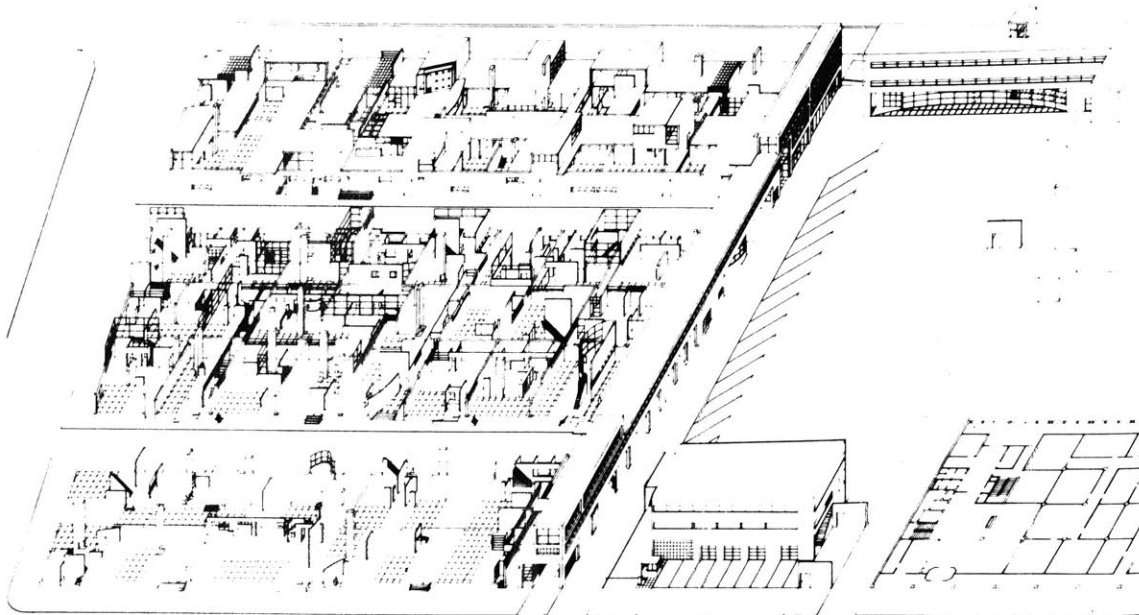
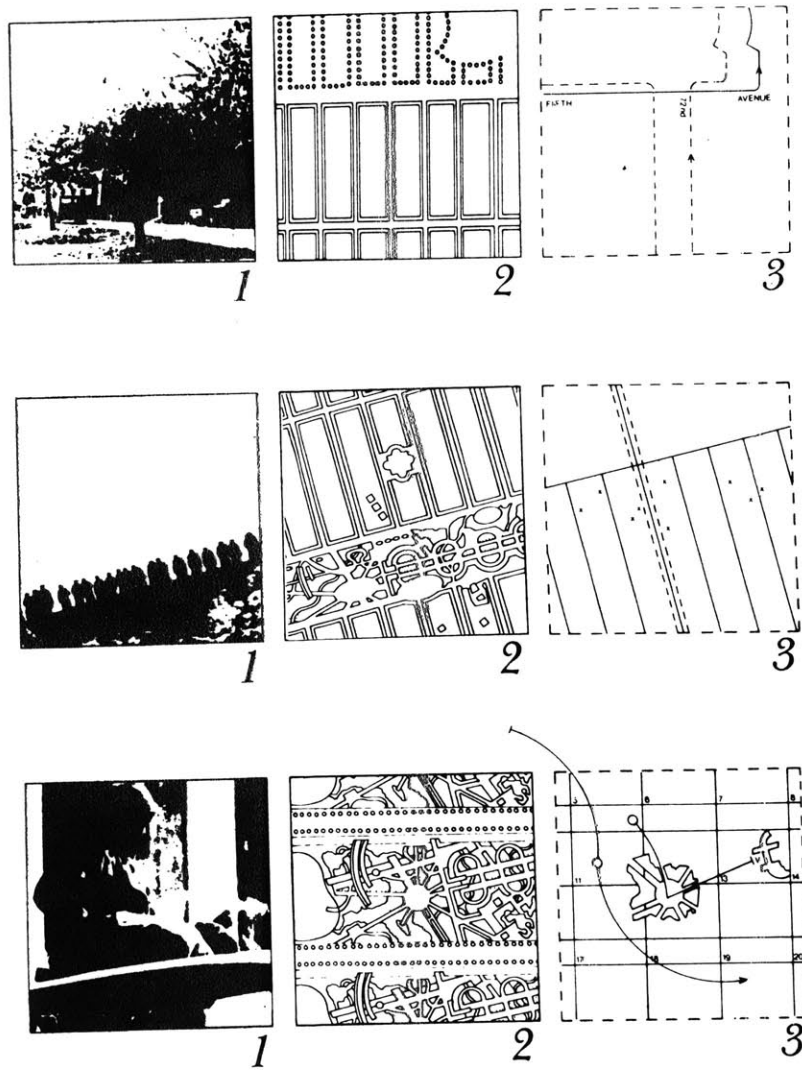


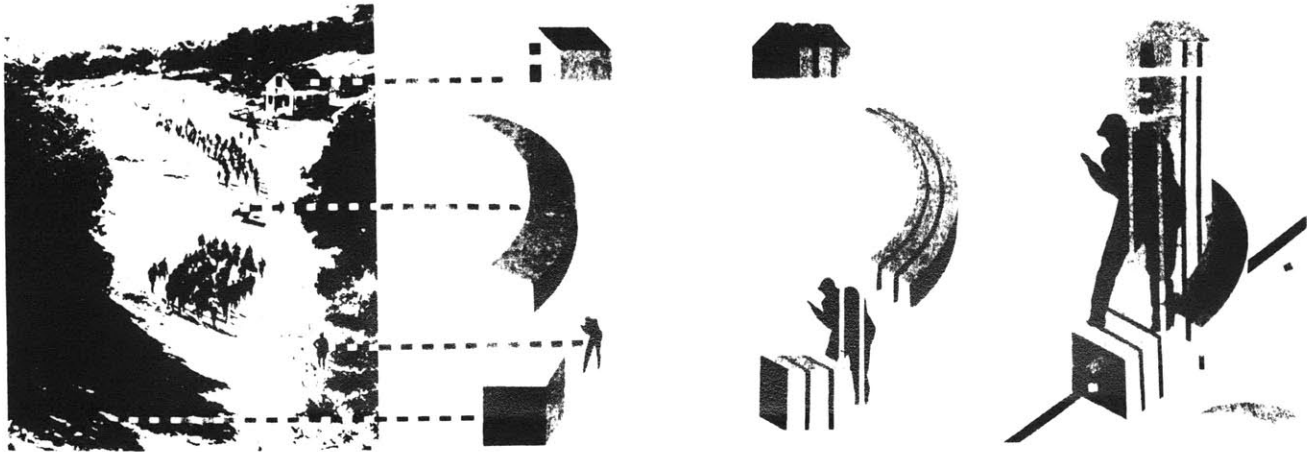
Fig. 24 - O.M.A. (Koolhaas)
"Kochstrasse-Friedrichstrasse" (1980)



The Park, 1977. 24 panels, ink and photographs, 13x17 in (Extract)

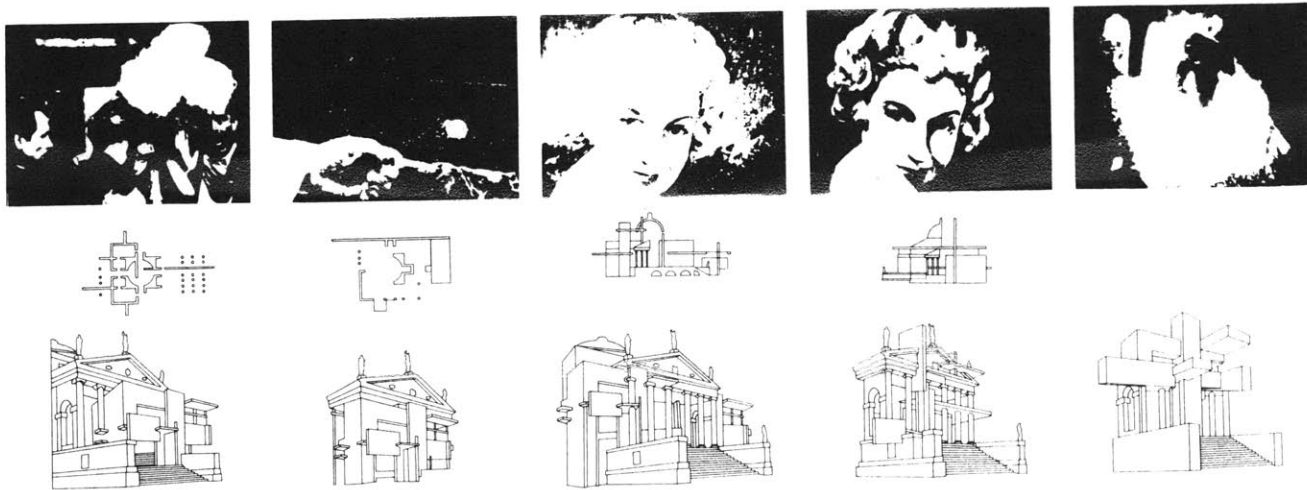
Fig. 25 - Bernard Tschumi
 "Manhattan Transcript 1" (1977)

Fig. 26 - Bernard Tschumi
 "Screenplays" (1978)



1978, Screenplay (*Naissance d'une nation*, Griffith)

La figure : la maison, l'homme.
 Le mouvement : la poursuite.
 L'abstraction : le cube.



1979, Screenplays (*Citizen Kane*, Orson Welles)

Superposition de la Villa Rotonda (A. Palladio)
 et de la maison à Utrecht (G. Rietveld).

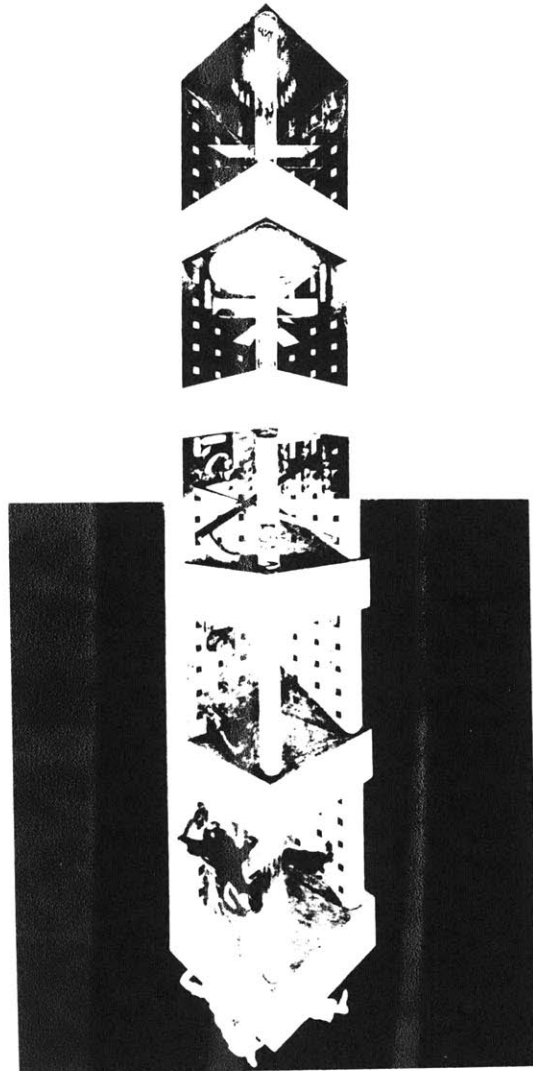
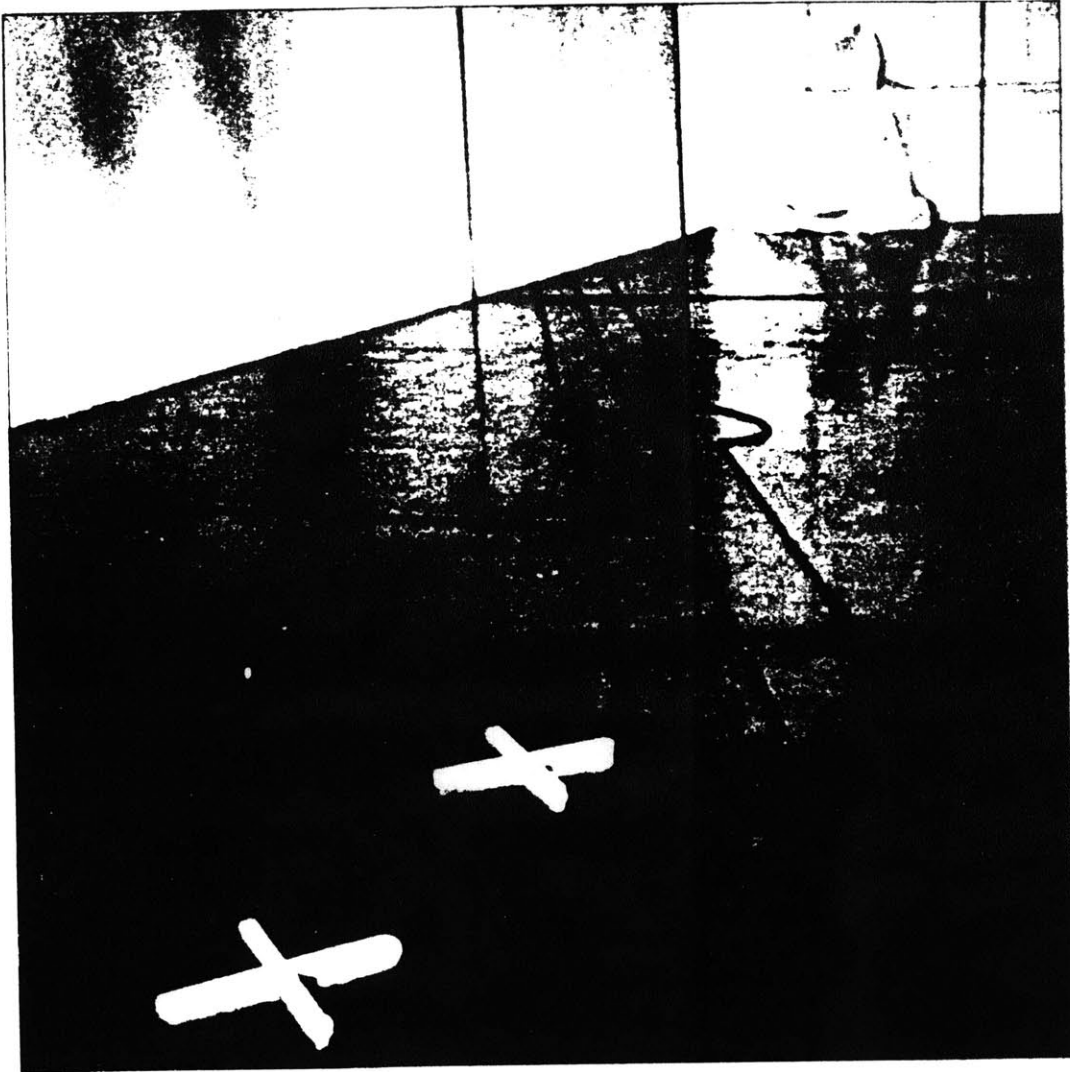


Fig. 27 - Bernard Tschumi
"Chicago Tribune Tower" (1980)



The Room. Installation at Artists' Space, 1978

Fig. 28 - Bernard Tschumi
"The Room" (1978)

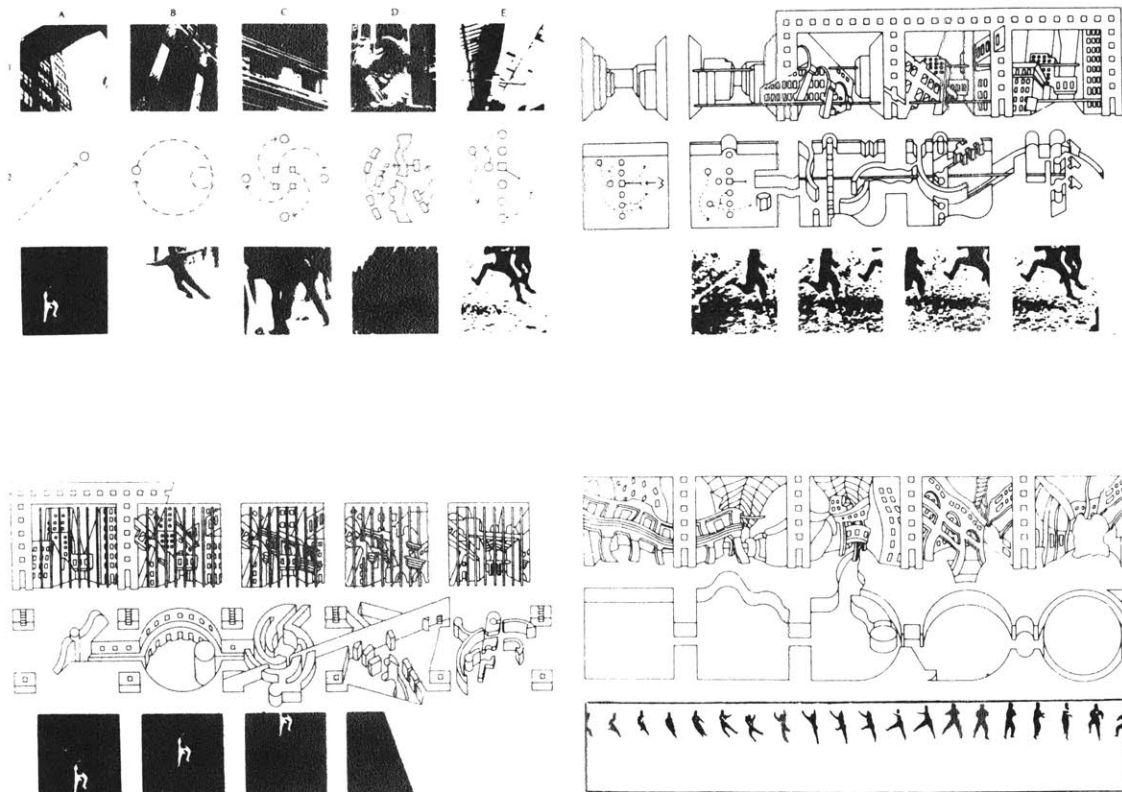
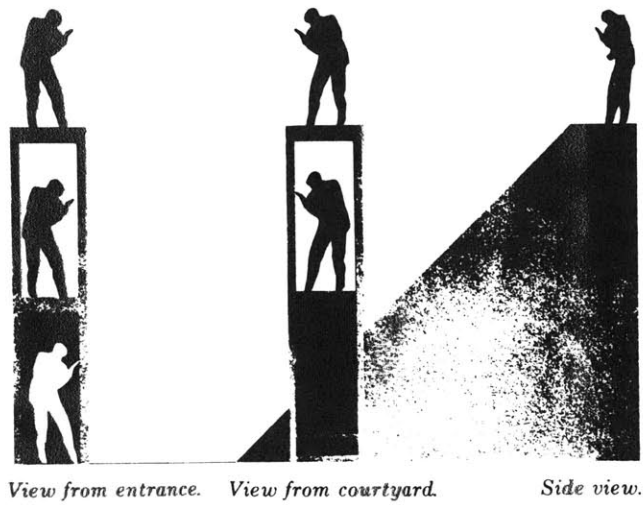


Fig. 29 - Bernard Tschumi
"Manhattan Transcript 4" (1981)



View from entrance. View from courtyard. Side view.

STAIRCASE FOR SCARFACE, 1979

Fig. 31 - Bernard Tschumi
"Staircase for Scarface" (1979)

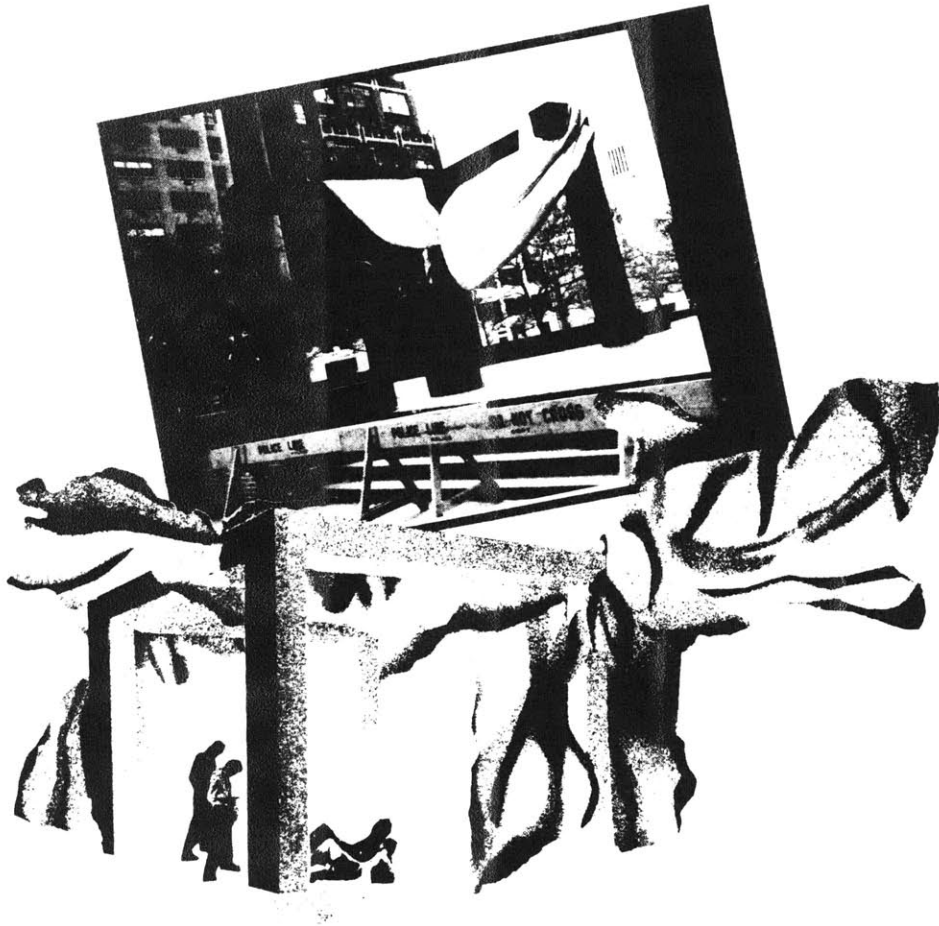
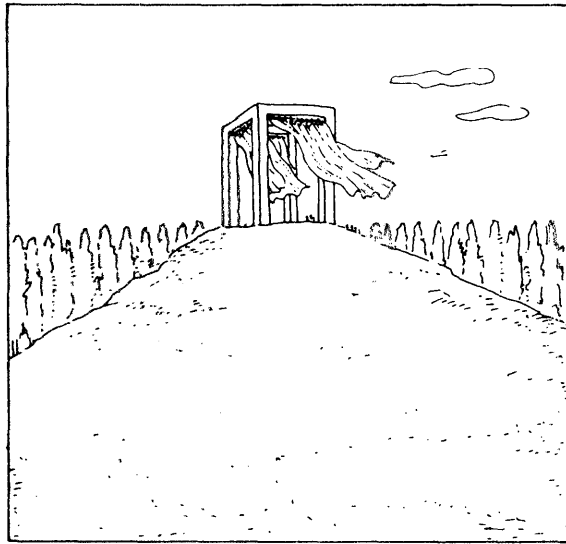


Fig. 32 - Bernard Tschumi
"Textile Follie" (1980)



LA COLLINE DES VENTS

Fig. 33 - Léon Krier
"Pavilion on the 'Colline des vents'" (1976)

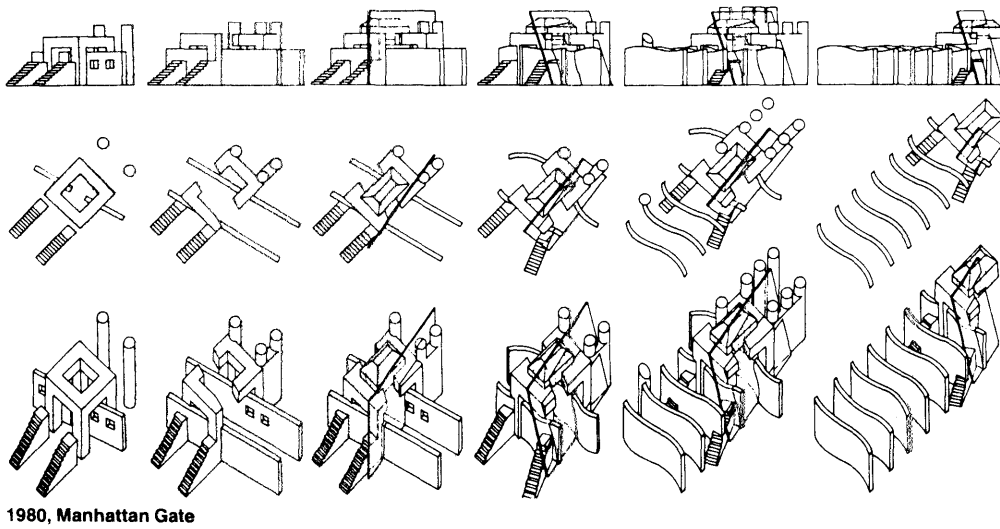
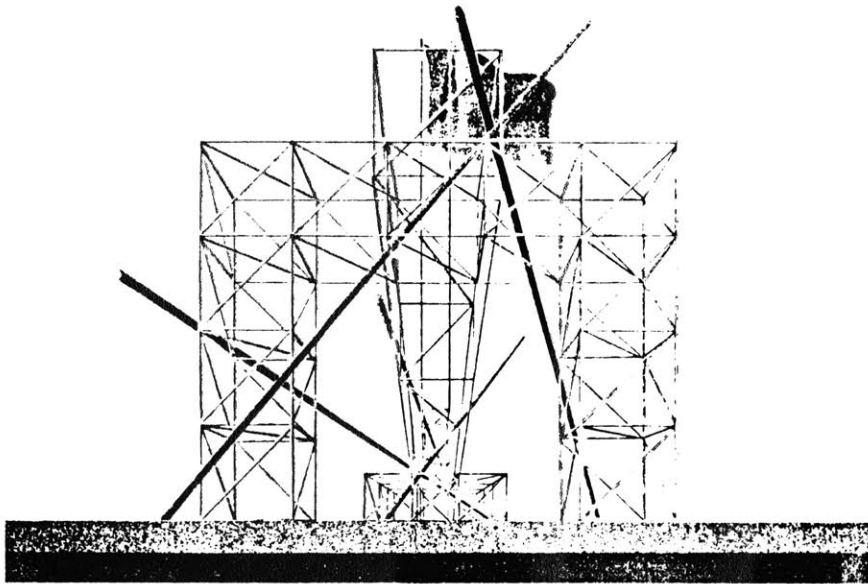


Fig. 34 - Bernard Tschumi
"Manhattan Gate" (1980)



Bernard Tschumi. *The Twentieth Century Follies: Toronto Folly, 1982 - 83*. Pencil on Paper, 1982.

A BALLENFORD CARD

Fig. 35 - Bernard Tschumi
"Toronto Follie" (1982)

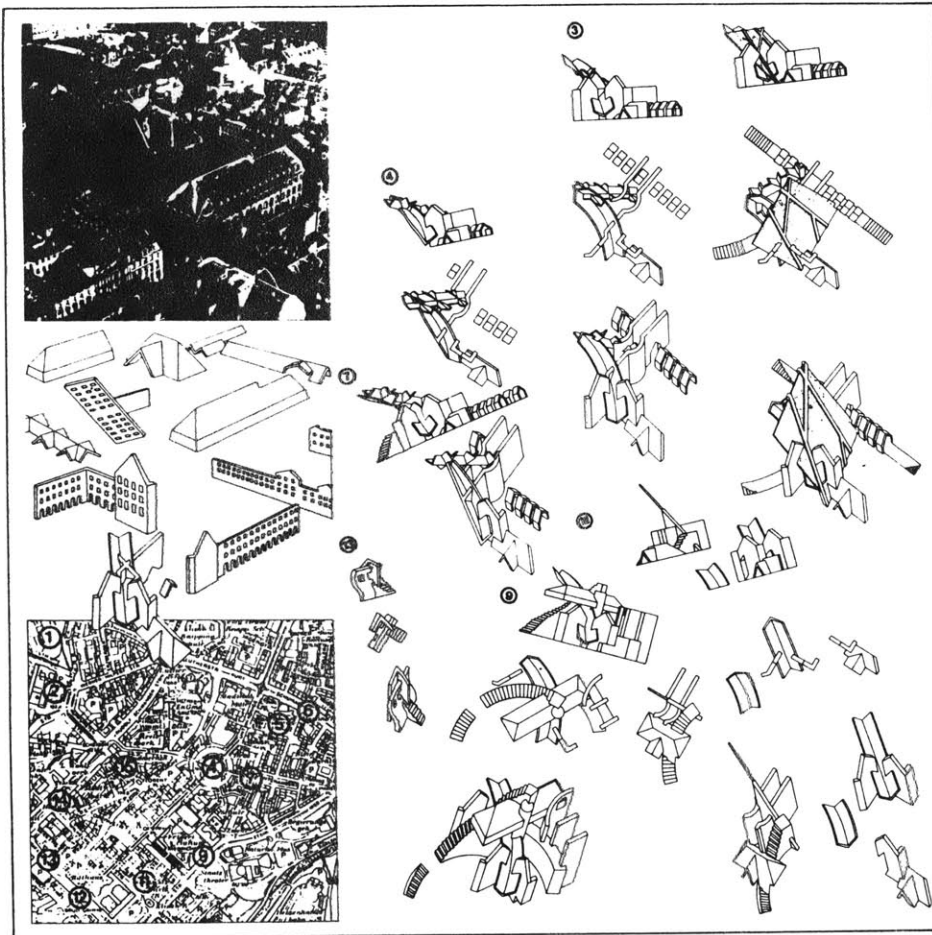


Fig. 36 - Bernard Tschumi
"Kassel's Follies" (1982)

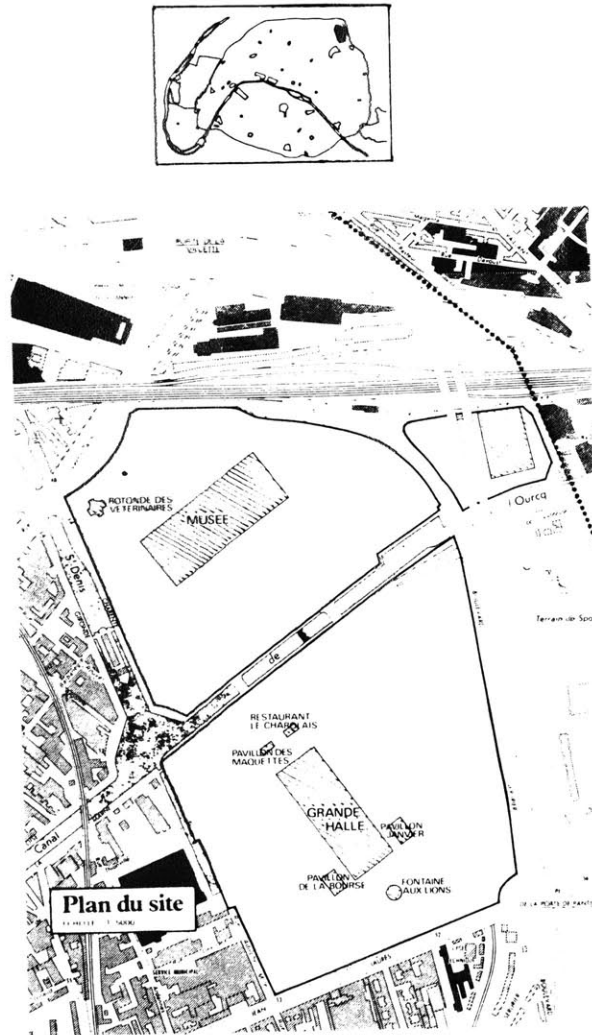


Fig. 37 - "Site of La Villette" (1982)



Initial Hypothesis

Fig. 38 - O.M.A. (Koolhaas-Zenghelis)
"Initial Hypothesis Diagram" (1982)

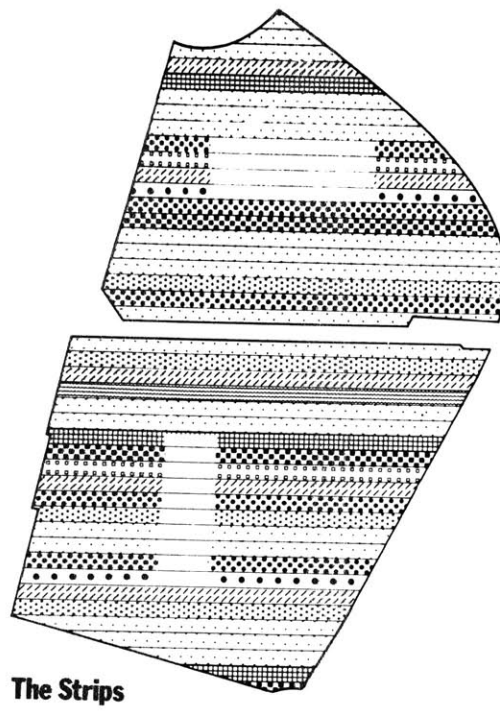
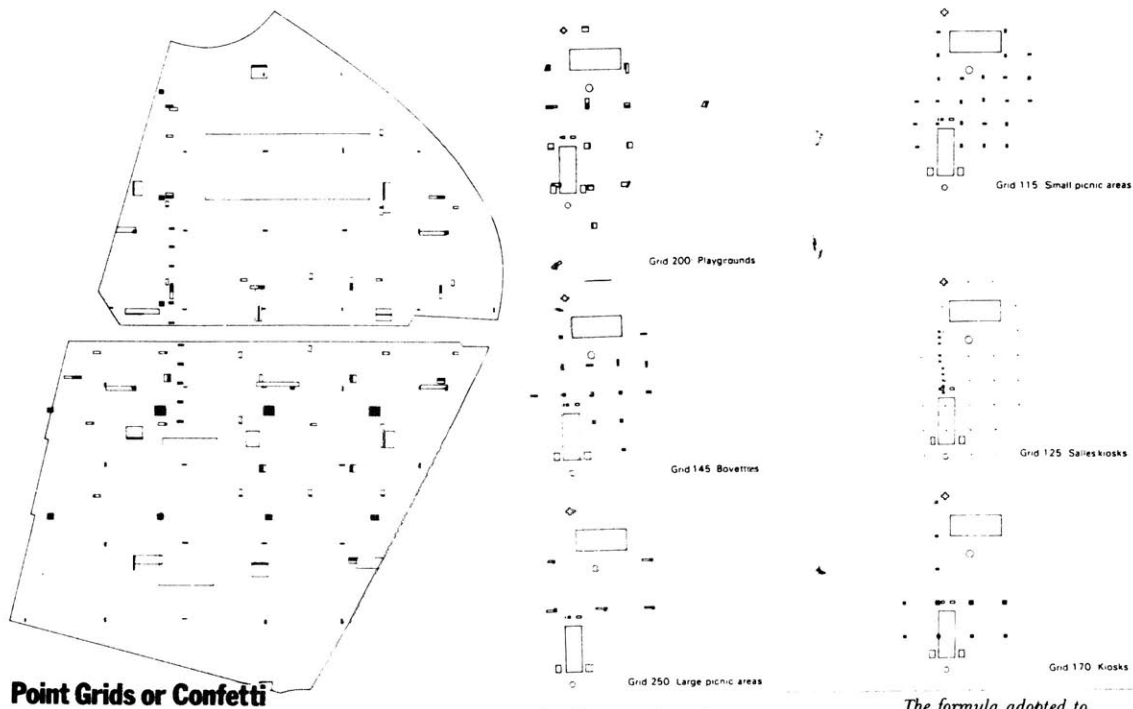


Fig. 39 - O.M.A. (Koolhaas-Zenghelis)
"Strips" (1982)



Point Grids or Confetti

The diagrams above show each of the various Point Grids or 'Confetti' of facilities required to service the Park. Some of the facilities required to service the Park could not be subordinated to the system of 'Strips'. These facilities were subjected to a mathematical formula. From this formula a separate grid was derived for each type of facility (kiosks, playgrounds, etc) to ensure their even distribution across the whole Park. The various facilities are located on the nodes of their respective grids

Grid 170: Kiosks (pavilions/bandstands with public telephones, toilets, etc)

Grid 200: Playgrounds

Grid 125: Sales kiosks

Grid 145: Buvettes (snack bars)

Grid 250: Large picnic areas

Grid 115: Small picnic areas

The formula adopted to establish the distribution grid of each type of facility over the available area of 320,000m² given for the Park (Zone A) is:

$$\sqrt{\frac{A-a}{n}}$$

(where 'A' = Zone A
where 'a' = 'built' or 'sheltered' area
where 'n' = number of units provided)

In the diagrams the black area represents the 'built' or 'sheltered' portion of each facility, which is centred on the grid. The adjacent outdoor area extends in the direction which best serves the 'host' zone, or strip. Therefore, to establish

Grid 170 (kiosks):
The brief required 10-12 units totalling 1,200m² comprised of 200m², 100m², 50m² units

Number provided: 11 kiosks (3 at 200m², 4 at 100m², 4 at 50m², totalling 1,200m²)

Calculation:

$$\sqrt{\frac{320,000 - 1,200}{11}}$$

= 170.24
ie: Grid across site for Kiosks
= 170m x 170m

Fig. 40 - O.M.A. (Koolhaas-Zenghelis) "Confetti" (1982)

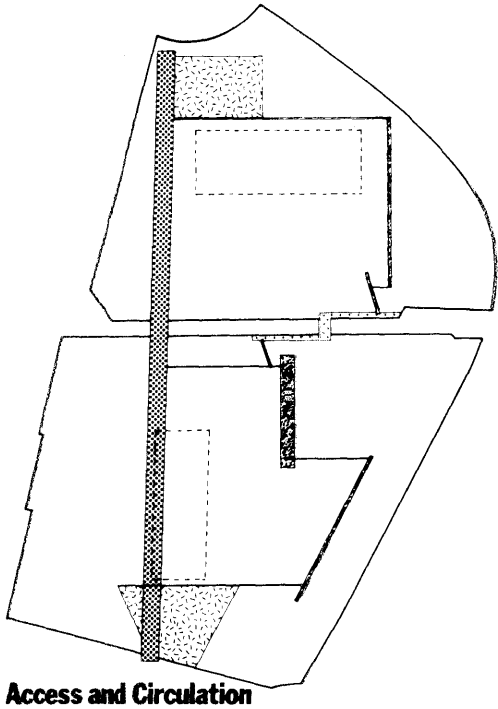


Fig. 41 - O.M.A. (Koolhaas-Zenghelis)
"Access and Circulation" (1982)

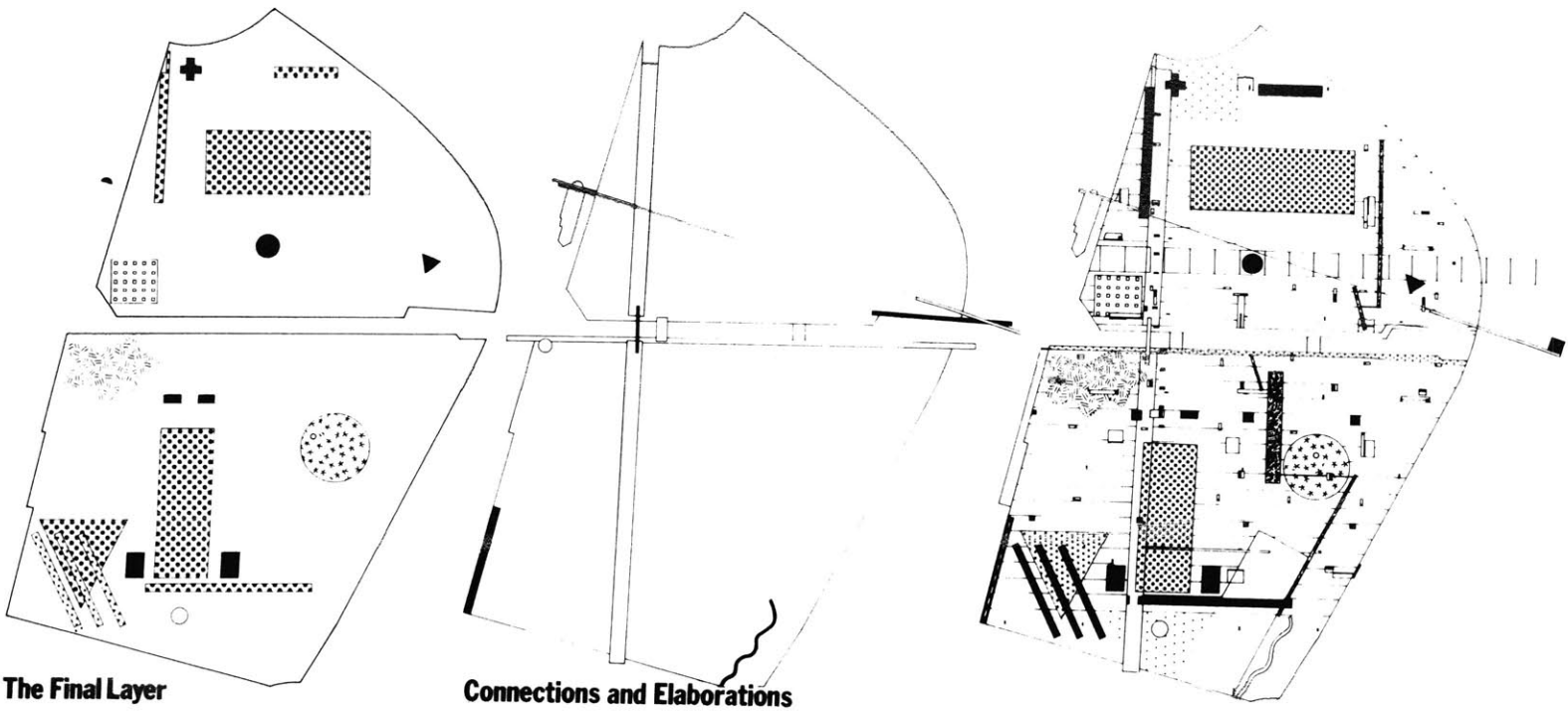


Fig. 42 - O.M.A. (Koolhaas-Zenghelis)
"Final Layer, Connections and Elaborations"

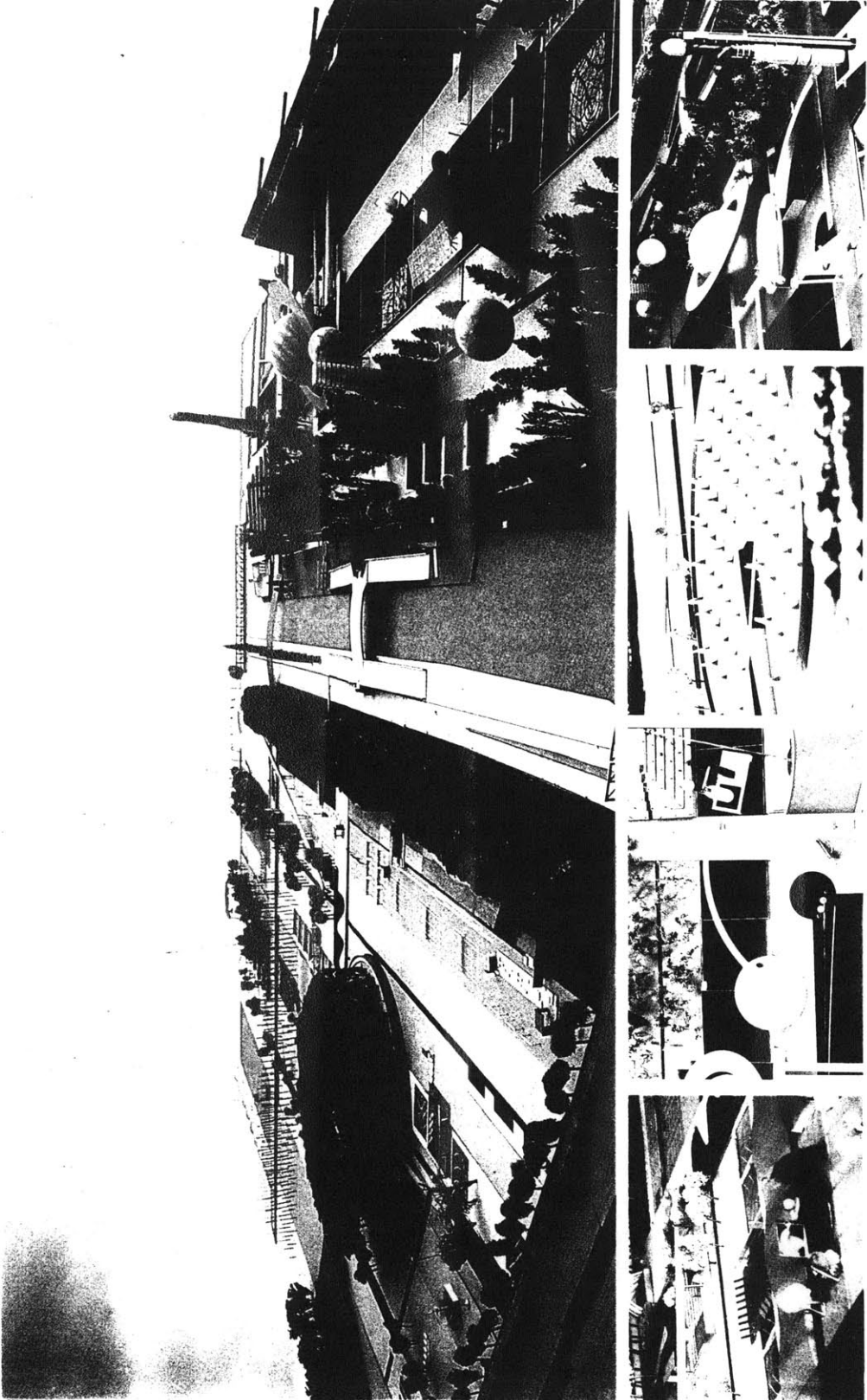


Fig. 43 - O.M.A. (Koolhaas- Zenghelis)
"Photos of the Model"

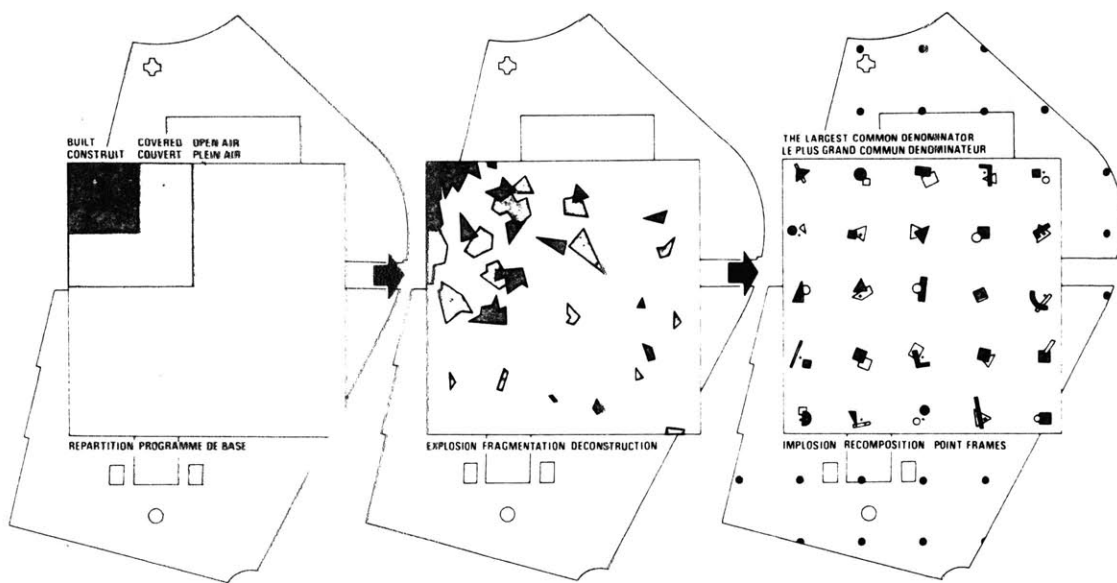


Fig. 44 - Bernard Tschumi
 "Diagrammatic Explosion" (1983)

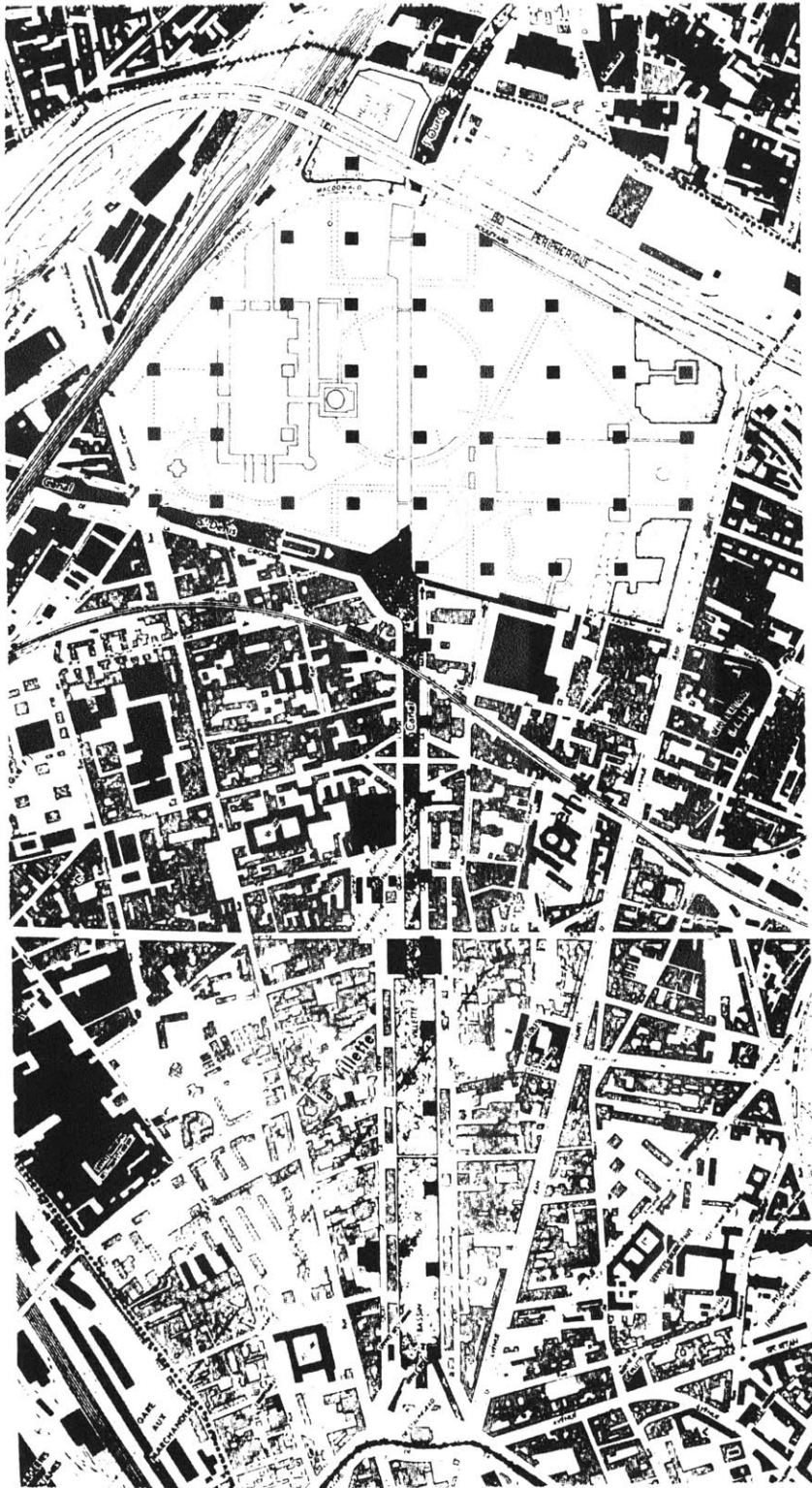


Fig. 45 - Bernard Tschumi
"Figure-Ground Plan" (1983)

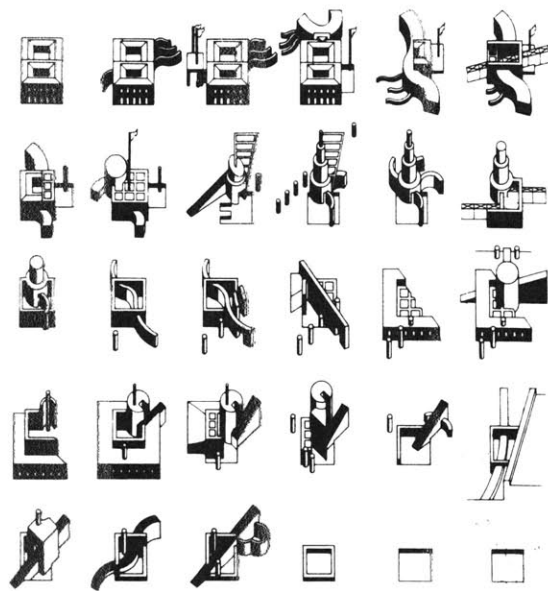


Fig. 46 - Bernard Tschumi
"La case vide" (1982)

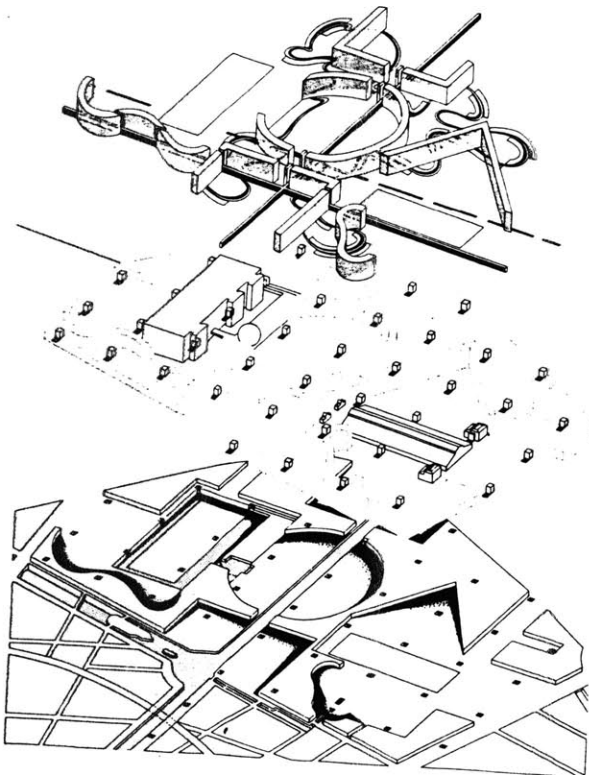
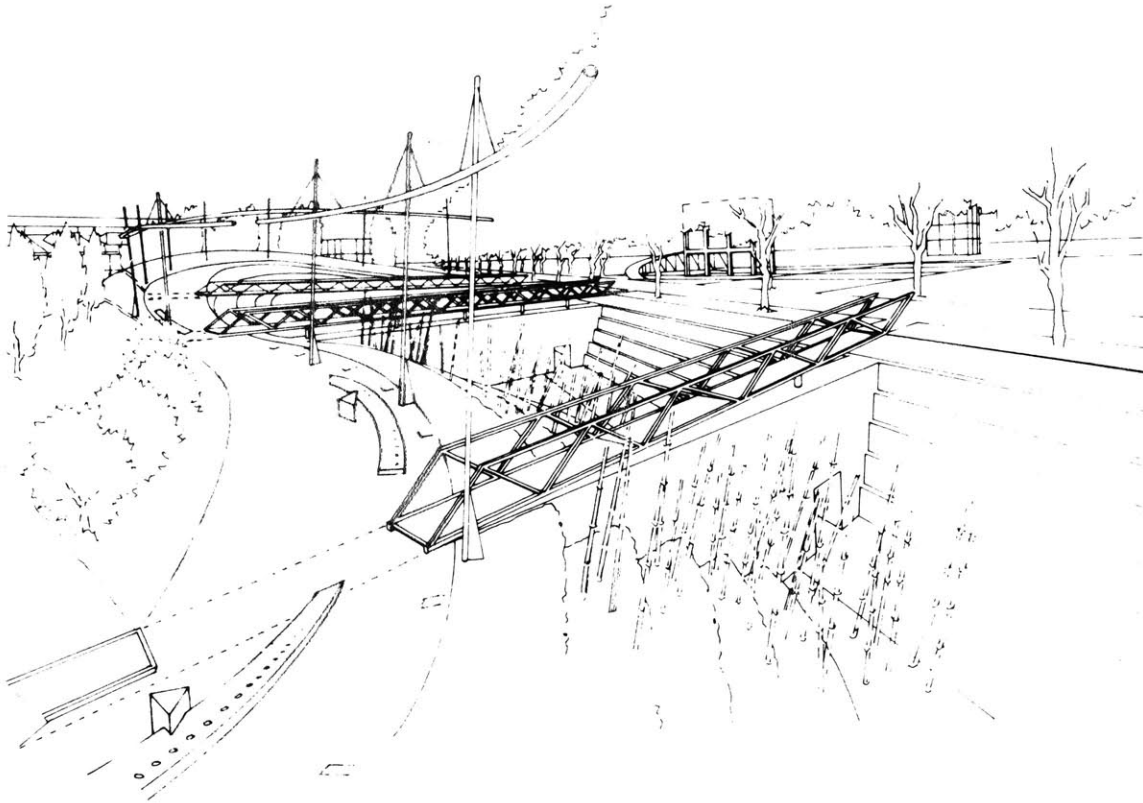


Fig. 47 - Bernard Tschumi
"Superposition" (1982)



CINEMATIC PROMENADE WITH 1) ALUMINUM CATWALKS THAT DELINEATE THE FRAMES OF SUCCESSIVE SEQUENCES. 2) A BLUISH-GREEN NEON CURVILINEAR STRIP SUSPENDED FROM ALUMINUM MASTS AND 3) FLUORESCENT SPOTS ON LONG GREY-BLUE ARTIFICIAL "STONE" BENCHES

Fig. 48 - Bernard Tschumi
"Cinematic Promenade" (1983)

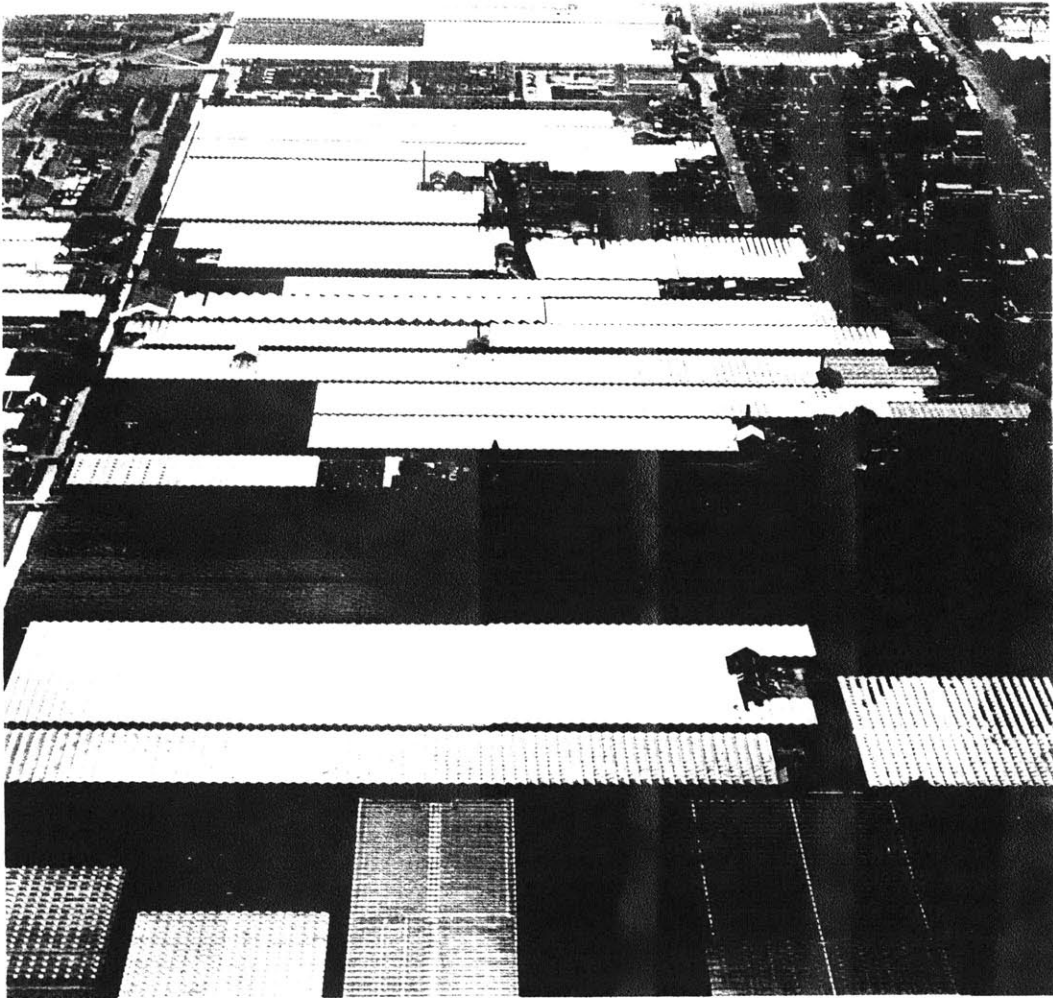
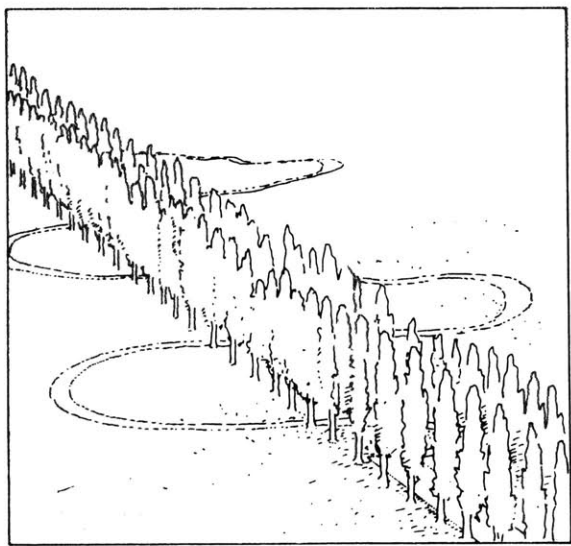
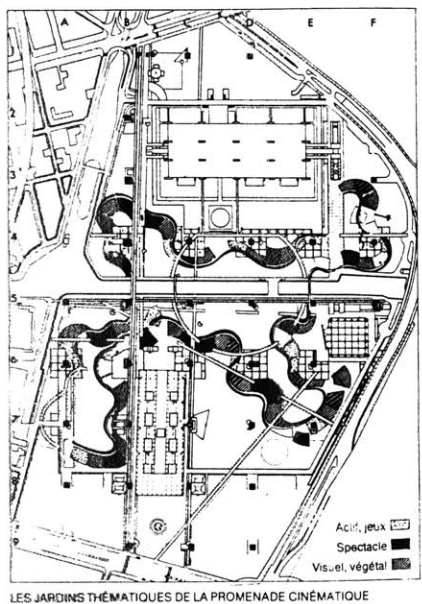


Fig. 49 - "Dutch Rural Fields"



LA PROMENADE ÉNIGMATIQUE

Fig. 50 - Léon Krier
 "La promenade énigmatique" (1976)

Fig. 51 - Bernard Tschumi
 "Sketches" (1982)

Concepts d'organisation spatiale appliqués au parc >

Concepts d'organisation à grande échelle (échelle urbaine)
 Bernard Tschumi agit sur le parc comme il agit sur la ville, car un parc est aujourd'hui plus une partie de ville qu'un morceau de campagne. Ainsi le rappel du tracé régulateur des grandes compositions urbaines à grande échelle est intervenu au début de l'étude comme contexte de référence :

1. - La trame : Millet (Manhattan, Barcelone) ; 2. - Concentrique, ville médiévale, ville idéale ; 3. - Axes baroques (Rome) ; 4. - « Clusters » ; 5. - Zoning ; 6. - Collage, Piranesi, C. Rowe ; 7. - Composition à la Malévitch ; 8 et 12. - Hilbersheimer ; 9. - Le Corbusier, type plan Voisin ; 10. - Le Corbusier, type Alger ; 11. - Ville idéale Pékin (murs).

1. Trame: Millet (Manhattan, Barcelone)
 2. Concentrique: ville médiévale, ville idéale
 3. Axes baroques (Rome)
 4. 'Clusters'
 5. Zoning
 6. Collage: Piranesi, C. Rowe
 7. Composition à la Malévitch
 8. Hilbersheimer
 12. Hilbersheimer
 9. LC, type Plan Voisin
 10. LC type Alger
 11. Ville idéale Pékin (murs)

un seul tracé possible (sur l'échelle de dessin, en réalité à l'échelle du terrain)
 le tracé des zones (LC-Alger)
 le tracé des zones (50's magazine)
 le tracé des zones (la plan des traces)

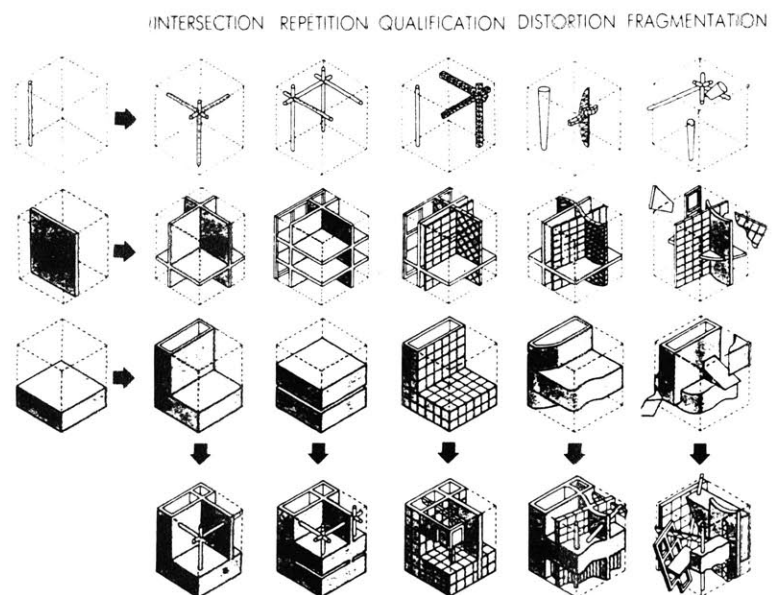


Fig. 52 - Bernard Tschumi
"Combinative Diagram" (1984)

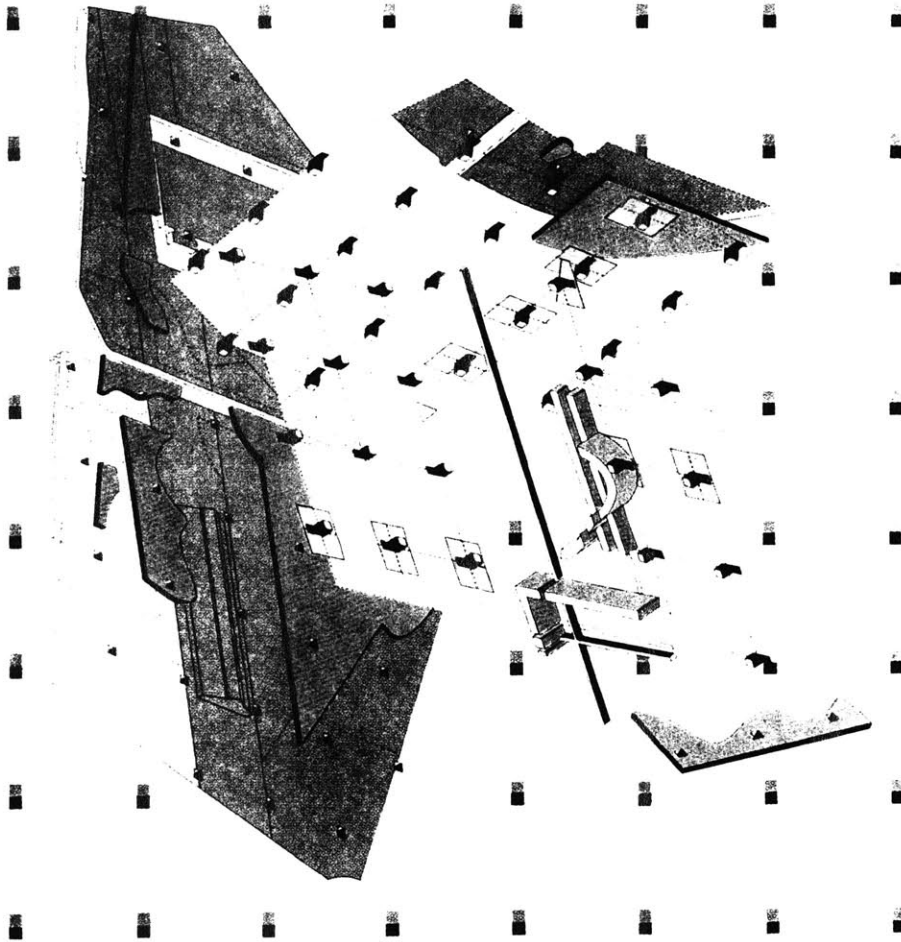


Fig. 53 - Bernard Tschumi
"Deconstructive Diagram" (1985)

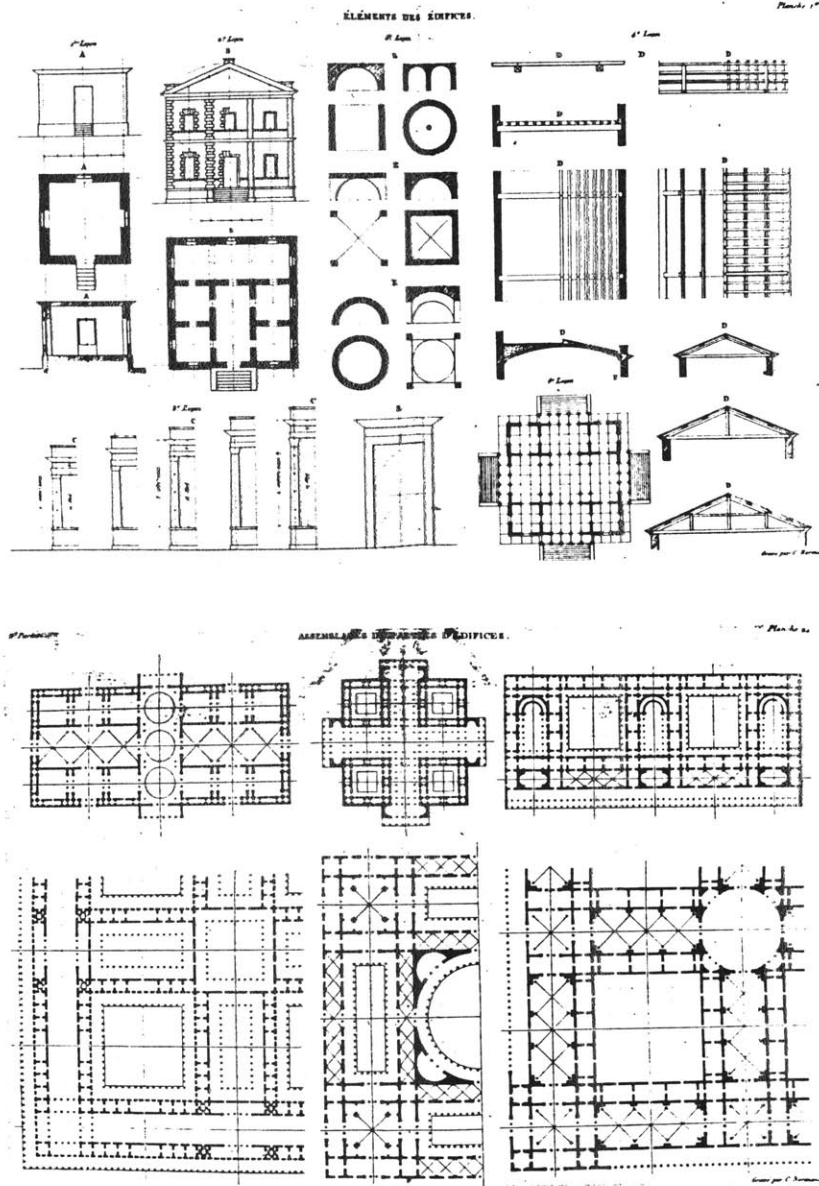


Fig. 54 - J.N.L. Durand
"Parts and Combination" (1809)