#### **ARCHIVES**

# EXQUISITE CORPSE a tower for the public in the era of exhausted modernity

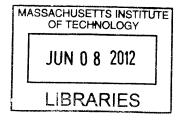
by Sungwoo Jang BS Yonsei University, 2005

#### SUMMITTED TO THE DEPARTMENT OF ARCHITECTURE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARCHITECTURE AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY June 2012

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# Acknowledgement

The ambition of my thesis would have been unlikely to come to fruition, were it not for the influence of some teachers: Nader tehrani, Arindam Dutta and David Freidman. Superlative administrative and psychological support from a people enabled me to accomplish the whole course: Cynthia Stewart. The project has benefited substantially from a friend who spent huge amount of time discussing issues of life while smoking: my best friend, Curtis Roth. Also, I deeply appreciate who helped building the model: Kian Yam Hiu Lan, Miho Chu, Yuna Kim, Yoonhee Cho, Yushiro Okamoto, Huang Zhe, Otto Ng, Mavis Yip and Sunmin May Hwang.

I again want to express my deepest respect to my thesis advisor, the best designer I've ever met, Nader Tehrani - I learned so much during thesis and studio. And with my whole heart, Soomin Shin, you are the man.

# Exquisite Corpse : a tower for the public in the era of exhausted modernity by Sungwoo Jang

Submitted to the Department of Architecture on March 9. 2012 in partial fulfillment of the requirements of the degree of MASTER OF ARCHITECTURE

#### Abstract

Towers in Manhattan, especially in business areas, have historically used a single overarching system in order to visualize images of their corporate identity and immerse the public in the image of development. While using one system, the architect has tried to organize various unexpected behavior with those system. Thus, the grid system, whose representational value was important as much as its economic value, not only deformed the physical form of different function, but also prevented certain functions which did not match with their corporate identity to be incorporated into the tower.

However, entering into an era of uncertainty due to economic crisis, 9/11 terror and etc., resulted in overarching system to become obsolete not because of its lack of efficiency, but because those systems have lost its representational value as an emblem of progress. As vision of progress have lost its momentum to suppress other values, in the era of exhausted modernity, it is unnecessary to deform the physical form of each function, in other words, each program can be incorporated into the tower without losing its irreducible form. Also, programs which takes a huge part of our culture that have been excluded can be introduced – or, the re-union of Apollo and Dionysus in city culture.

In this situation, the grid system needs to operate not as an overarching system which represses the irreducible form of each program, but rather a tool that orchestrates multiple different forms that produces the collection of programs to become an image of a deceptive whole. By doing so, different functions will not only be legitimized to be incorporated within the typology of tower, but also it would produce an image based on the heterogeneity, thus becoming a new ethic.

> Thesis Supervisor: *Title : Nader Tehrani* Professor of Architecture

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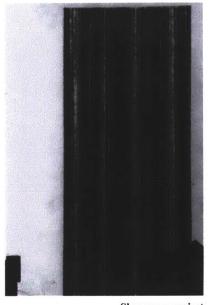
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### Introduction

#### Signifying Nature of the Building

Like all products of culture, buildings cannot escape their signifying nature, in other words, neither a functional object nor an image can be considered "neutral," or lacking intention or meaning.<sup>1</sup>

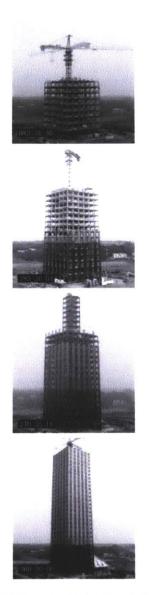
In his book Delirious New York, Rem Koolhaas explained that towers have been produced by a system in which interior functions and the exterior façade have been dissociated due to the uncertainty of the function and deep open space. While taking full advantage of the dissociation of the exterior façade, towers in a condensed city, such as New York, have worn a cloth which signifies the economic system of each period. Chicago tribune tower competition in 1922 only required exterior image of the building and a few floor plans as a requirement, which shows that the representation value was as important as its use value. The Beaux-Art Ball in 1931 where architects were wearing their own building clearly shows how architects understood the exterior as a form of a representation. During the Cold-War era, architects in the US, especially the ones who designed towers in urban areas, tried to produce an overarching system which could control the chaotic activities of the inhabitants within the grid in order to project the vision of the city. For them, it was necessary to immerse the public in the image of development, in the city as a programed network of communications, the subject of which is always the



Skyscraper project Mies van der Rohe charcoal drawing 1922



Tribune Tower Competition 1922



In 2011, Chinese construction company built a rapid build system, to the point where they can construct a new 30-story tower block in just 15 days. The major conception of tower became efficiency rather than its vision.

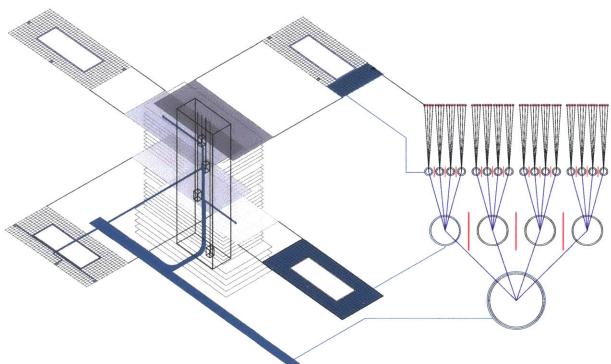
"necessity" of the capitalist plan of integration.

Koolhaas detected a radical decoupling of envelope and interior organization that gave rise to "a mutant architecture" that combines the aura of monumentality, thus becomes a signifier of vision, while maintaining the uncertainty of inner function within the generic open plan. He explained, "the genius of Manhattan is the simplicity of this divorce between appearance and performance: it keeps the illusion of architecture intact, while surrendering wholeheartedly to the needs of the metropolis."

#### Exhuastion of Modernity

Although Koolhaas's argument might have manifested the needs of the market economy, it has also presented some problems recently, namely, that the illusion of architecture has been stripped and no longer signifies the aura of monumentality, as Koolhaas promised. The skyscraper's progress consistently faces its own limit and decline. Especially after the events of 9/11 and subsequent economic crisis, the skyscraper no longer defines the phallic gesture of Western superiority and progress over other cultures. In other words the skyscraper is today obsolete not because of its lack of functionality and efficiency, but rather, as a modern emblem of progress it has entered into a stage of uncertainty. The upward thrust of the skyscraper no longer calls forth emancipatory ideals, rather today it may in fact appear not only conservative but also reactionary as witnessed by, for example, the occupation movement in Manhattan areas.

Which requires the question: what form of architecture will replace its spatial efficiency? How to build architecture for everyone when one no longer believes in the socio-political utopian ideals, when one goes beyond politics?



Congestion has not been mixed

Koolhaas's inception of the culture of congestion based on density-focused architecture argues that the uncertainty of inner function within the generic open plan would produce a revolutionary lifestyle. At the point where the 1916 zoning law was introduced, the culture of congestion became an enterprise, an indication of the culture of the 21st century. Koolhaas described the "ideal performance of the skyscraper" in its initial stages as a concept as 84 disconnected virgin sites stacked on top of each other- "a new form of unknowable urbanism". As models of this descent manifested itself within the grid, thus presenting itself as one of Manhattan's most intense themes- "a city in a building." He had introduced key characters and themes of a city within a city exemplifying the financial viability of the skyscraper and representing congestion on all possible lev-

#### Predicament of current stacking typologies

Instead of producing a Culture of Congestion which are based on the interaction of distict floor functions, or realities, current overaching single system neither facilitates the difference inbetween the floors, nor interaction between floors which belies the Koolhaas's concept of Culture of Congestion. Rather, current grid system facilitates individualization of each inhabitants.

els. As a hybrid building, the building wasn't assigned a hierarchy, nor did it follow a specific typology, but parts of the mountain were assigned to necessary functions, what Koolhaas terms the "the vertical schism, which creates the freedom to stack such disparate activities directly on top of each other without any concern for their symbolic compatibility".

However, what he had disregarded was that the condition of the city, which is horizontal stitching, is totally different with the condition of the tower, which is vertical stacking, due to the stubbornness of the ground which does not produce the interaction of each floor. Even though there are some possibilities that the functions within the same floor can interact, the distinct separation of each floor blocked the interaction of different floor levels, which ends up not producing the real culture of congestion. Rather the grid system introduced to ease the rent focused on how to divide the floor, as a result, facilitated the disconnection and individualization of each function, which actually disabled the Culture of Congestion.

#### New possibilities

The two stated problems explain the predicament of the tower typology based on a single overarching system - the collapse of the antihistorical bias of the Modern Movement that prevailed until recently, and on the other hand the failure of the deterministic functionalist notions with their corollaries of "systems analysis," and etc, as the generating forces of design.

However, some positive facts do emerge within this problem. First, a theory of system and a typological approach are emerging as a positive method for attaining an architectural solution. Whereas the generic logics of mass production served as a framework for standardized floor plates, new mass-customization strategies would allow the complexity of these projects interiors to manifest themselves in the building's fabrication logic not as a singular system, but as the interaction and negotiation of complex building systems whose combinations and inherent conflicts may serve as the foundations for unforeseen architectural inventions.<sup>2</sup>

Also, program wise, it is possible to reinterpret the Modern Movement as an episode in the history of Western architecture, and, as a result of this, the designer finds the whole past of architecture as material to interpret, to reflect upon, to respond to, and to use. A self-conscious architecture can only, and only willingly, operate with the known: its past, immediate or distant, and the existing world.3 It is, then, a work of reflection, essentially anti-utopian, one that automatically establishes a basis for criticism since criticism is a speculative reflection of the known. Since there are no codes to be subverted other than those that we already have, since it is impossible to get outside languages that are already known, criticism must be produced from within. It challenges the view that design is a purely rational/scientific process, in favor of a more sophisticated understanding of design as the product of a multiplicity of factors rooted in culture. Meaning maintains its reference to the original, while tending to produce a new meaning given in the process of its transformation into another meaning. Not with the intent to destroy meaning, but to produce a new meaning, unfolding the imaginary-symbolic universe that architecture simultaneously proposes and represses, and allowing them to become instruments of criticism from within.

Within these discussions, American architecture acquires special significance because of the peculiarities of its history.<sup>5</sup> It evolved as the product of a constant transformation and reinterpretation of European models, which, when removed from their original contexts, acquired distinctly different meanings. This process of "re-semanticization" suddenly seems to be American architecture's main asset at a moment characterized by theoretical questioning and critical experimentation, because that "heretic" tradition contains inherently liberating and demystifying possibilities, if used consciously and systematically. It is in this context of "demythification," criticism, and liberation of the designer's potential that our work should be seen as part of current architectural developments in the United States.

#### Montage of different forms and functions

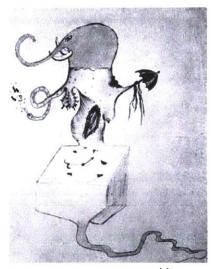
When the tower with its single overarching system became obsolete due to its formal and programmic limitations, it loses its force or momentum to deform the physical form of each function. In other words, each program can be incorporated into the tower while maintaining its irreducible form, since there is no need to suppress the function's inherently peculiar form in order to the organize different shapes within the singular system to project a singular identity. Also, a program which forms a huge part of our culture, but has been excluded due to its incompatibility with the city's vision, functions, such as crematory and collabrium can be introduced in to the tower. Thus, new design tower typology must embody the difficult unity of inclusion rather than the easy unity of exclusion as a critique of the dominance of formal unity. In the end of this process, the tower will become a combination of different forms and programs which would create complex annexations. Thus, the question becomes, how to combine the different forms and reality becomes a critical issue, so that the material differences of the assembled fragments can to produce alternative realities within the limits and conventions of realist representation.

If the relationship between the different forms and programs are re-interrogated in constructing the tower, in other words, if architect operates to synthesize systems or logics not to mollify or suppress the difference, which is a modernist technique, but to annex the difference and intensify the inner complexity, a system which embraces the complex interactions of multiple systems simultaneously will no longer be driven towards the conventional notion of the tall building as a singular icon, but will find means of both expressing and producing the excesses of the tower's heterogeneous condition, while still operating within the stringent economic and constructional logics of tower construction.

Thus, there needs a logic of "cross-sytemization," that would promote inherent conflicts which may serve as the foundations for unforeseen architectural inventions which occur as an effect of architectural program and performance together with form, rather than form alone. To this end, this alternative strategy would escape from architecture's selfannihilation and silence, and become o ne that might accelerate and intensify the encounter between the systems.

#### Exquisite Corpse

Exquisite corpse (from the original French term cadavre exquis), is a method by which a collection of words or images is collectively assembled. Each collaborator adds to a composition in sequence, either by following a rule or by being allowed to see the end of what the previous person contributed. The more the relationship between the two juxtaposed realities is distant and true, the stronger the image will be -- the greater its emotional power and poetic reality. It can relate contrasting and otherwise irreconcilable elements; it can contain opposites within a whole; it can accommodate the valid non sequitur; and it can allow a multiplicity of levels of meaning, since it involves changing context – seeing familiar things in an unfamiliar way and from unexpected points of view. It breaks through



exquisite corpse by, andre breton, tanguy, duchamp, max morise

the naturalized appearance of reality by attending to its paradoxical seams, to the fact that it has been sewn up from incompatible fragments and irreconcilable orders.

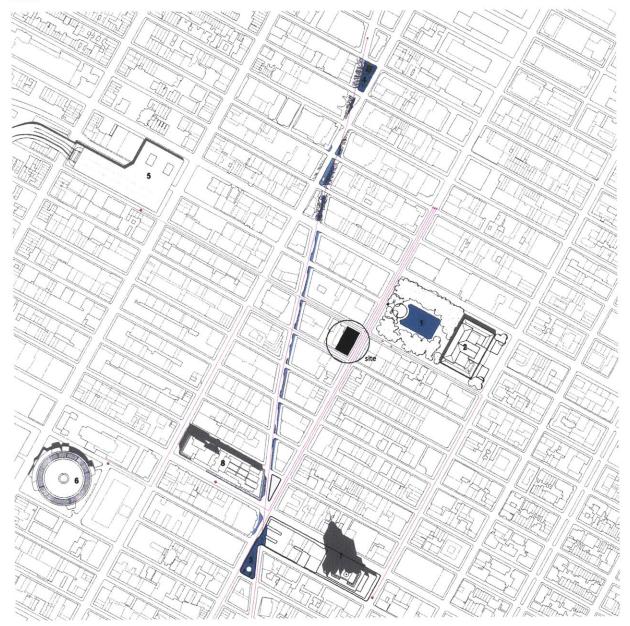
#### Superadjacency as new tower typology in Manhattan

Using an Exquisite Corpse technique as a system to accommodate the distinct formal and programmic properties, building a tower typology would montage distant functions that have never been joined to each other, and would accomplish a new distribution that was in the realm of the possible but was not openly effected. It is the power of the implications of totality that apparent irrationality of a part will be justified by the resultant rationality of the whole, or characteristics of a part will be compromised for the sake of the whole. While thriving on unprecedented configurations of elements, the architecture abolishes the gaps between seemingly irreconcilable fragments by resolving their incompatibilities along carefully designed seams. For the effectiveness of montage greatly depends on the plausible integrity and verisimilitude of the alternative reality it seek to construct. Indeed, the appropriated elements are readjusted so as to properly fit in their new context without, however, losing their formal autonomy.

#### The grid as Space in-between

Thus, the way of designing architecture should be reversed. Rather than the project being initiated by devising a system where the programs would squeezed in later, the programs should be installed into the right position while maintaining its irreducible form. And the subsequent process of making a grid system that would reconcile the difference of the irreducible forms so that the different shapes could be montaged and become a coherent whole will be implemented. This implies a break away from the contemporary concept of spatial continuity and the tendency to erase every articulation between spaces, between one space and another. Instead the transition, the grid that seams the different forms, must be articulated by means of defined in-between places which induce simultaneous awareness of adjacent form and program. An in-between space in this sense provides the common ground where conflicting polarities can again become twin phenomena. If the program or structure dictates a combination of two elements within any of the varying scales of a building, these are multiple systems which exploit the duality, and more or less resolve dualities into a whole.

Site



Site Plan

- 1 Bryant Park
- 2 New York Public Library
- 3 Herald Square
- 4 Time Sqaure
- Port Authority Bus Terminal
- 6 Penn Station
- 7 Empire State Building
- 8 Macy's

5

Exquisite Corpse : a tower for the public in the era of exhausted modernity



The Site

The site is located at very important cultural area where not only tourist but also the residents or office workers are gathered. Bryant park is adjacent to the site, and the site is also located where commercial functions, a public square, and a public transportation axis meets. The site not only connects multiple squares, such as Herald Square and Time Square, but also brings peoples from the Port Authority and Penn station, thus it has the potential to become a center of cultural activities. Most of the surrounding buildings are business towers which have been constructed with singular systems to reflect both the corporate image and the prosperity of the city.

#### Bryant Park

Bryant Park is a 9.603 acre (39,000 m<sup>2</sup>) privately managed public park located in the New York City borough of Manhattan. Bryant Park is one of the signature examples of New York City's revival in the 1990s. The park is filled with office workers on sunny weekdays, city visitors on the weekends, and revelers during the holidays. Daily attendance counts often exceed 800 people per acre, making it the most densely occupied ur-

location - 1042 6 Ave, New York, NY 10019

Site info

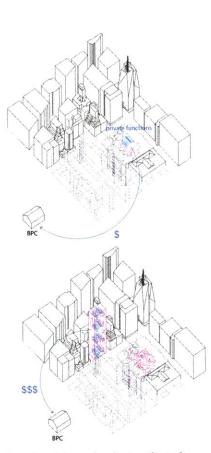
area - 2350m<sup>2</sup>



Diverse activities of Bryant Park

ban park in the world. One of the park's most impressive features is a large lawn that is the longest expanse of grass in Manhattan south of Central Park. Besides serving as a "lunchroom" for midtown office workers and a place of respite for tired pedestrians, the lawn also serves as the seating area for some of the park's major events, such as the HBO/Bryant Park Summer Film Festival.

#### Predicament of Bryant Park and new possibilities

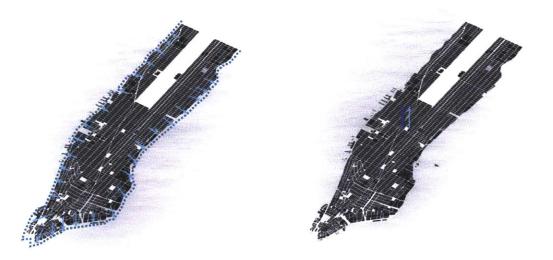


Invasion of the semi -private entity to the public realm and a solution to preserve the public space

Although Bryant Park is a public park, BPC accepts no public funds, and operates the park on assessments of surrounding property within the Business Improvement District, fees from concessionaires, and revenues generated by public events. The number of events at the park has grown significantly, and this has caused some consternation by people who fear that the park will be dominated by private entities and will thus be inaccessible to the public. BPC believes that the revenue paid by sponsors of events is necessary to keep the park well-maintained. For example, a private fashion show took over the park for two weeks twice yearly until February 2010. BPC is particularly frustrated that the fashion shows dominate the park during two crucial times: in late summer, when the weather is perfect for park visitors; and in early February, necessitating the early closure of BP's popular free-admission ice-skating rink. These incident reveals that there needs to be some cultural space that can co-work with Bryant Park which would accommodate and absorb many cultural activities to preserve the nature of the park as always being open to the public. Also, the activities are limited to outdoor cultural activities, which do not cover extensive cultural activities. The fact that Bryant Park is the most densely occupied and widely used urban park shows that if there are multiple cultural facilities adjacent to the park, there will be a higher chance that people would have more opportunity to enjoy the cultural mix in the urban area.

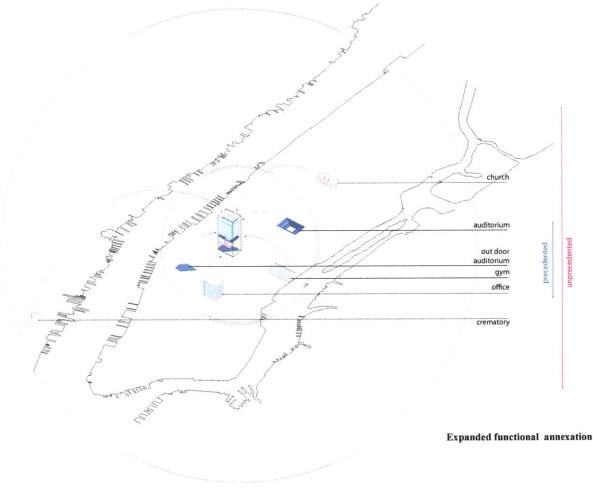
Vertical public tower

However, the manhattan's condition extremely expensive land prices and the fact that there is no land to expand since it is surrounded by the river makes the only way to expanded towards the sky or ground in order to build anything. It is with an ever-growing population in a metropolis that the tower then becomes inevitable, forcing an upward extrusion of the grid to accommodate as many programs as possible, and maximize possible profit. As a result, in order to incorporate diverse functions which would support the park and city culture, a vertical public tower becomes the only solution.



Vertial Expansion Since Manhattan is already filled with buildings and surrounded by the river, the only chance of expansion seems to the sky or to the ground

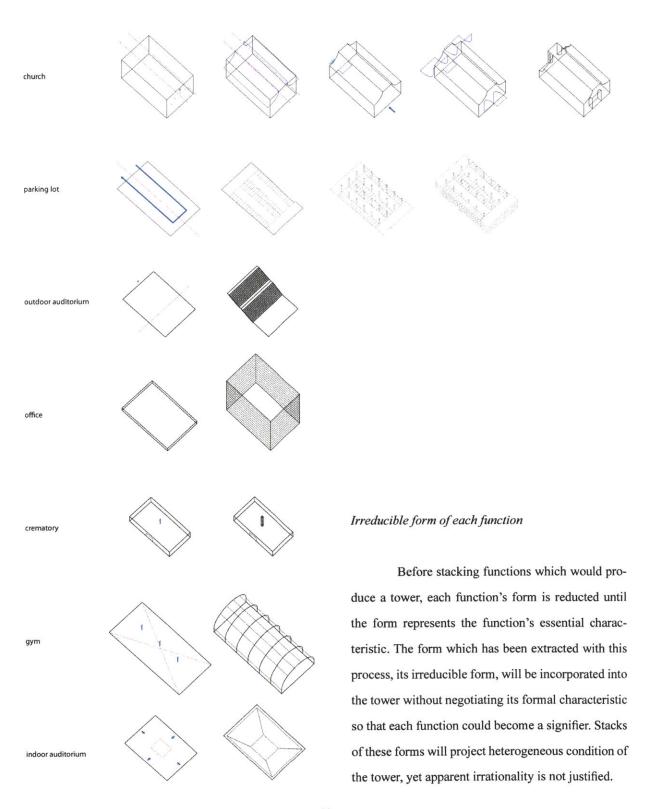
# Program

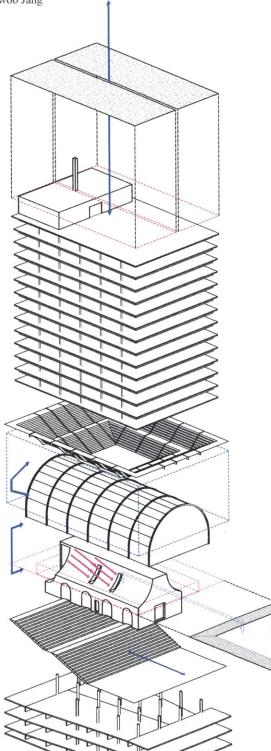


Introduction of New Functions

Since the tower is not aiming to project prosperity or vision, in addition to common functions that have been incorporated in the tower, which are indoor and outdoor auditorium, a gym, a swimming pool, a mall, a parking lot and office space, functions that have never inhabited a tower - a church (religion) and a crematory (death) - are also annexed in the tower in order to cover every aspect of human culture. This enables an extensive cultural aspect, which has not been affected in the metropolitan city, to be montaged within the tower, thus creating a new unprecedented

#### Exquisite Corpse : a tower for the public in the era of exhausted modernity

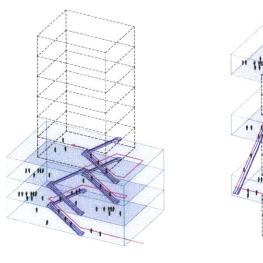




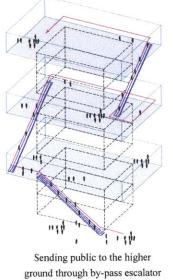
New logic and a new possibility of stacking

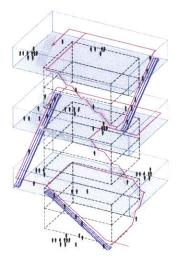
Each function can be arranged through both the functional relationships of each program and the new possibility of interaction that has been produced by the irreducible form. This enables a juxtaposition of two distinct programs, such as a church and a swimming pool through the ceiling, and also produces a large unprecedented space where people can look down at the gym while still have an access to the colosseum. Not only using the irreducible form of each function, but also utilizing irreducible gaps inbetween those functions, while preserving inside space as a private realm, in between space can be used as public area. Compared to the conventional use of function which was only accessed or interacted through the ground level, the stacking of multiple functions and construction of new grounds around the functions enables not only that every side of the wall but also ceilings can be used as a place of interaction. Thus, there exists more of a chance to facilitate the culture of congestion that operates both horizontally and vertically.

Exquisite Corpse : a tower for the public in the era of exhausted modernity



Common use of Escalator



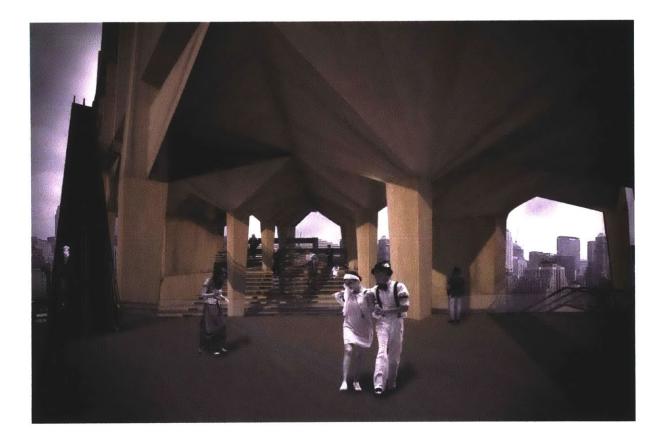


Combination with Stair to provide multiple choice of circulation

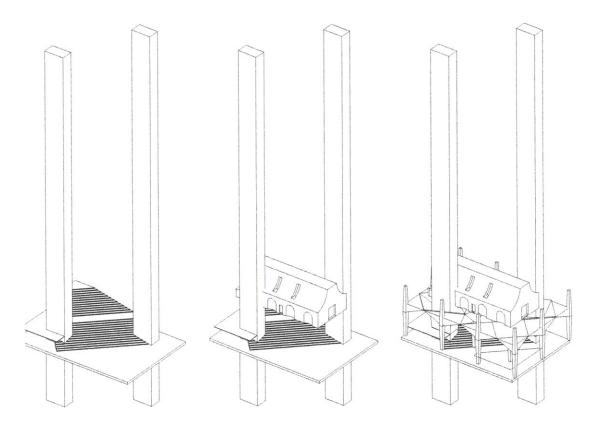
**Circulation Stratagy** 

#### Circulation - New possiblility of the escalator

There are six functions (private) and five inbetween spaces (public). Rather than connecting every floor with elevators and stairs, escalators which connect only the public spaces and skip private functions enable people to navigate the public space without much effort. At the same time, private functions which are located in between the public functions are entirely or partially exposed, so that people who use the escalator can see the activities in the private space, and can determine whether they want to keep moving to other public functions or visit the private functions. The escalator that connects the public areas allows the tower to be used for private functions.

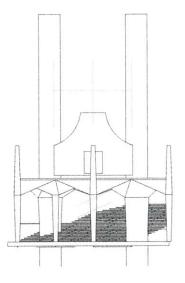


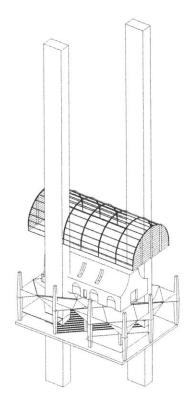
# The New Role of the Grid

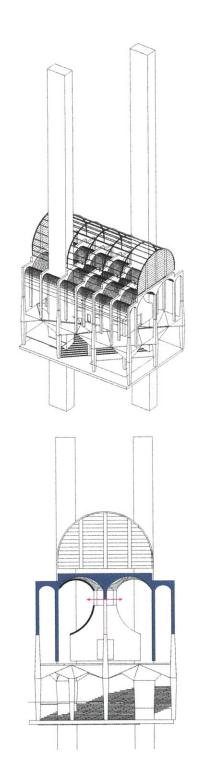


Grid as a role of Exquisite Corpse

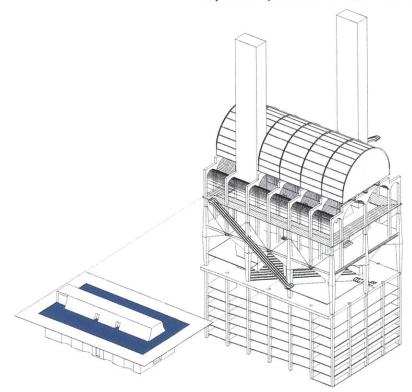
In addition to the role as a pure structure, the grid system works as a tool that eliminates the gap between different configurations of each form of the function. By doing so, formal incompatibility has been resolved through the grid that seams the irreconcilability while not compromising the figure of the functions.



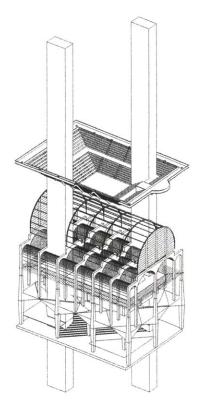


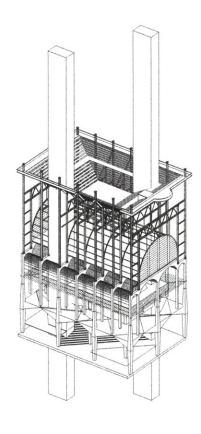


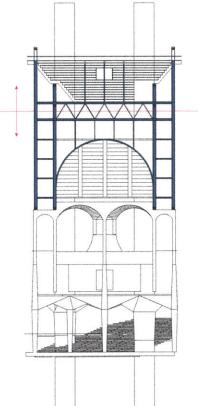
 $\mathbf{Exquisite}\ \mathbf{Corpse}$  : a tower for the public in the era of exhausted modernity



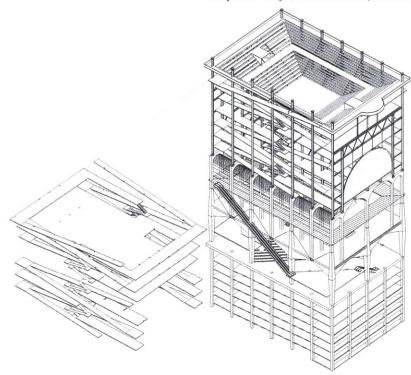




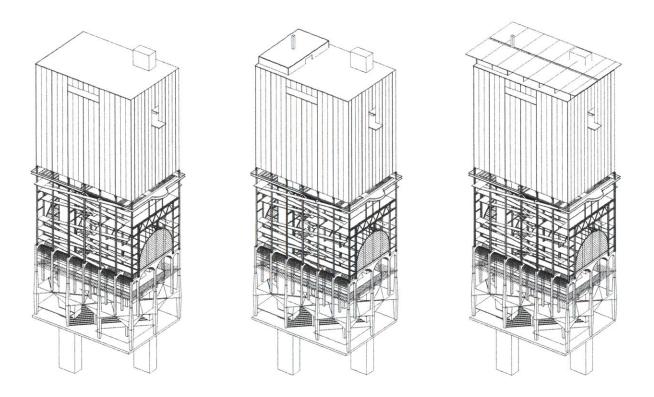




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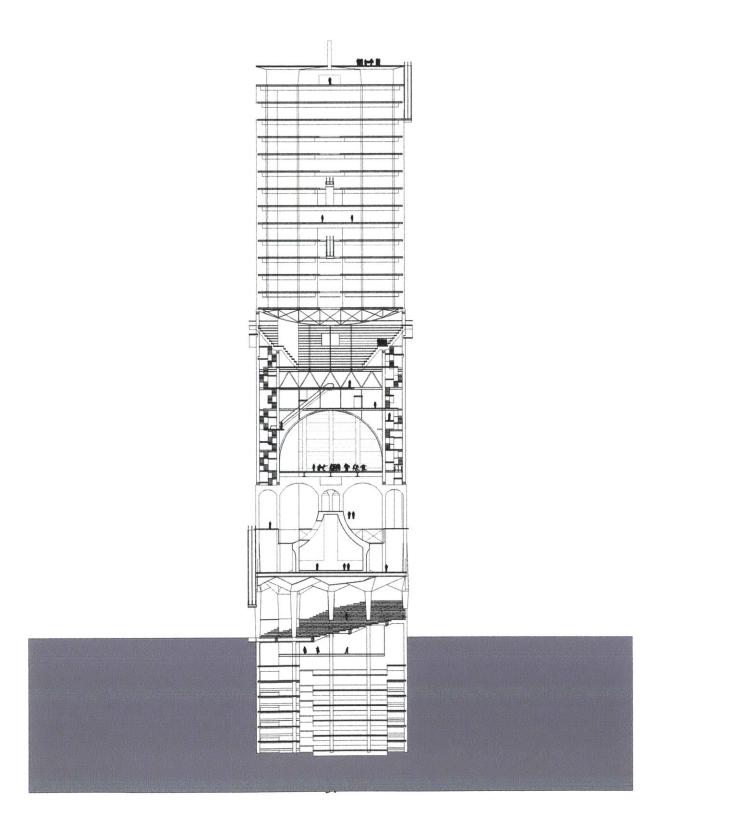




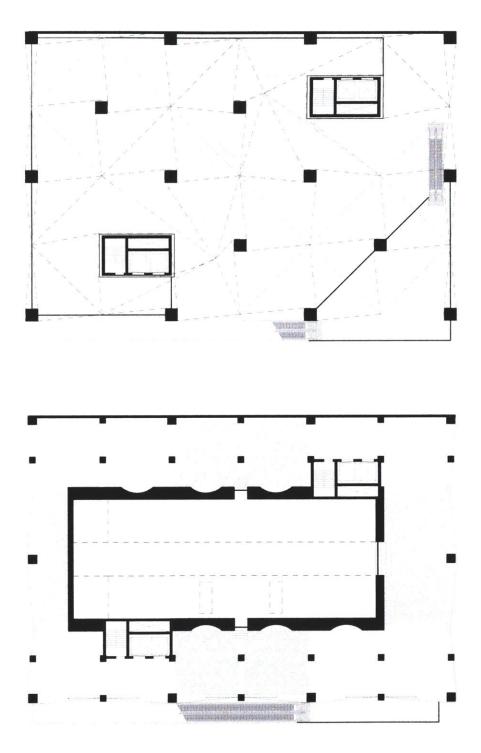
It is the power of the implications of totality that apparent irrationality of a part will be justified by the resultant rationality of the whole, or characteristics of a part will be compromised for the sake of the whole - the exquisite corpse has been completed.

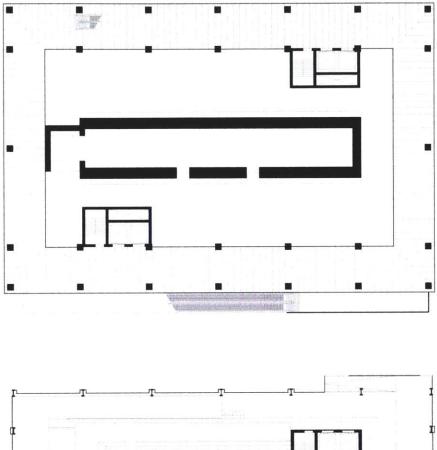
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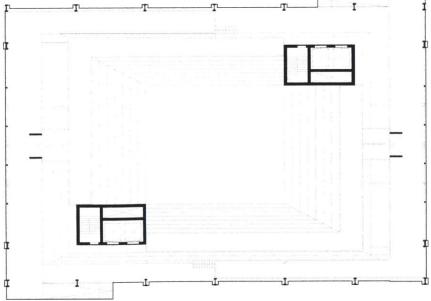
# Drawings



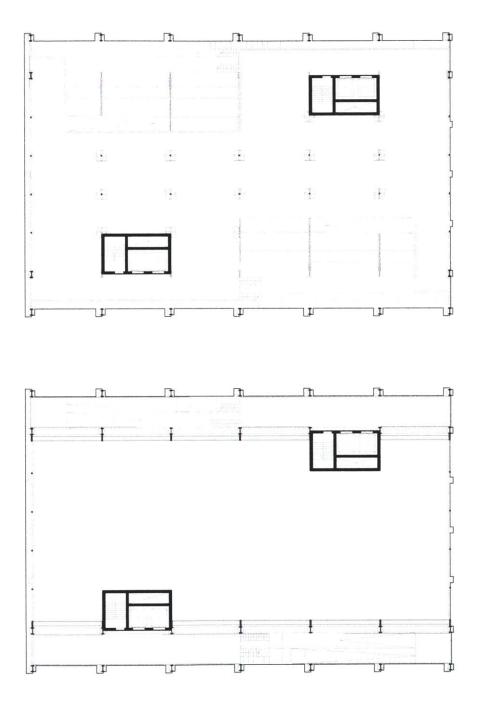
 $Exquisite \ Corpse$  : a tower for the public in the era of exhausted modernity

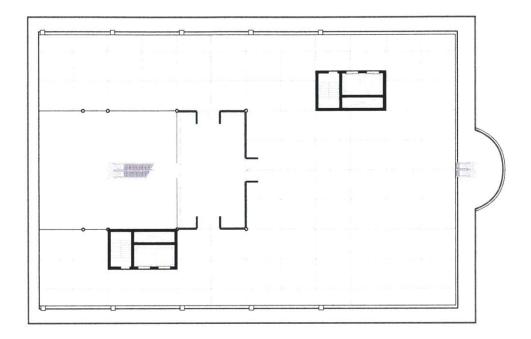


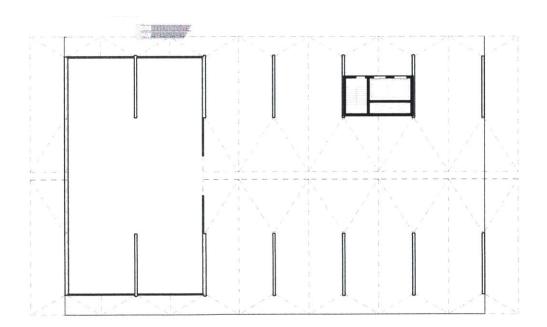




Exquisite Corpse : a tower for the public in the era of exhausted modernity







 $\label{eq:corpse} Exquisite \ Corpse: a tower for the public in the era of exhausted modernity$ 



# Reference

- 1. Silvetti, Jorge. "On Realism in Architecture." Harvard Architecture Review vol. 1, 1980 pp. 11.
- 2. K. Michael Hays, "Unprecedeted Realism." Princten architectural Press, 1996 p.121
- 3. Ibid., p.138
- 4. Ibid., p.121