

The Preliminary Review of 20th Century Design Thinking and City Building

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Abstract

Historically, the city building is an essential representation of our civilization. The design thinking of city building not only states the foundation of social organization but the outline of our mindset. Contemporary design thinking is undergoing tremendous transformation because of the development of information technology, transformation of economic system and cultural atmosphere, and the overall concern about the sustainability issues. The city building which reflects our mindset of our civilization is especially noteworthy. However, contemporary trends in city building receive many criticisms owing to their heavily depending on related goals of economic development, thus seems to put too much resources, talents and energy on marketing and advertising, for various events, fairs, constructions and reconstructions. Some current design thinking seems to direct human being toward some impatient goals. Some seem to concern only for temporary persuasion and conviction. This situation evokes the idea of writing this paper, which tries to retrace historical design thinking of city building, review contemporary cases of city building and look into various issues of current urbanization, thus setting some basic concepts for our minds to settle down for this seemingly impatient new urban environment.

Keywords: Design Thinking, City Building, Cultural Atmosphere, Sustainability, Urbanization

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1. The Creation of Contradictory Space

Current trends in design world seem to engulf various complicated design thoughts which signifies a new era resulted in continuous revolution of our civilization. In the beginning of the 21st century, the human world undergoes a tremendous transformation. In some specific sector like 2008's economic turmoil, the phenomenon might be called a mutation.

Architect Siza writes "It is therefore urgent... that we extend information early on and to everyone, to bring to an end the myths of specialization, of communicable complexity of all the different specialisms... Information is the first step in opening eyes which look but not see." (Siza 1997, pp.27-28) The flood of information creates a mutation of our 'mental space' (Lefebvre 1991). Henri Lefebvre states: *No limits at all have been set on the generalization of the concept of mental space....We are forever hearing about the space of this and/or the space of that: about literary space, ideological space, the space of the dream, psychoanalytic topologies...Thus Michel Foucault can calmly assert that "Knowledge is also the space in which the subject may take up a position* (Lefebvre 1991, pp.3-4).

These talking about information and mental space might help us understanding the contemporary design concept of simulation, which often breaks down meaning and creates new series of events. By the aid of computers, our conception of space is radically overturned. New forms of labyrinths and structures distort traditional Euclidean space and dissolve physical dimension. This is a design thinking formed to overcome our mental structure and reconstruct space-time relationship (Puglisi 1999).

In terms of space-time relation, David Harvey states in his article "Money, Time, Space and the City": *Space can be overcome only through the production of a fixed space, and turnover time can be accelerated only by fixing a portion of the total capital in time. The fixed spaces and times can be overcome only through creative self-destruction....Processes as diverse as suburbanization, deindustrialization and restructuring, gentrification and urban renewal, through to the total reorganization of the spatial structure of the urban hierarchy, are part and parcel of a general process of continuous reshaping of geographical landscapes to match the quest to accelerate*

turnover time (Harvey 1989, p.192). Harvey's urban experience provides an insightful and holistic notion in city formation, and its argument adds economic and social concerns on the overall design thinking.

To combine urban experience and city artifact, in *The Architecture of the City*, Aldo Rossi states about the complexity of the urban artifacts. The political, religious and economic structures that define a precise urban formation can not be replaced by some simple terminologies like "organic" or "rational". We too often use some specific words like "organism", "organic growth" or "urban fabric" to describe related characters of the formation, but these words seems to simplify the evolution process of cities and create only vague sensation toward the formation of city (Rossi 1982).

Another inspiring design thinking comes from Peter Eisenman: *In all of the design arts, we are experiencing a paradigm shift form the mechanical to the electronic; from an age of interpretation to an age of mediation....Contemporary media undermine the essence and aura of the original, indeed the every nature of reality. Media environments, such as advertising, or synthetic realities such as Disney World, have now become so potent that they form a new reality....Architecture can no longer be bound by the static conditions of space and place....Architecture must now deal with the problem of the event. People go to rock concerts not to listen, because they cannot hear the music, but in fact to become part of the environment. There is a new type of environment being projected, composed of light, sound, and movement* (Eisenman 2007, p. 13). The statement argues that the rock concert with extraordinary sound and lighting aims to deny physical presence, but the architecture can suggest an alternative event with sign and object.

Related concept is posted in David Harvey's *Spaces of Hope*. In the book he vigorously argues the "Dialectical Utopianism" (Harvey 2000) with the concept of building an utopianism that is obviously spatiotemporal. The term "spatiotemporal" shows that the space and time cannot meaningfully be separated. Harvey further explains that the separation of space from time can often be confusing within the social sciences.

To conclude, this sector points out some essential arguments that show the nature of contradiction in current spatial design thinking, as well as contemporary political, economic and cultural atmosphere that influence the transformation of design thinking in spatial context.

2. The Utopia and Design Thinking

The Utopia and the idea of a city are essential for design thinking. The ideal cities proposed by various modern architects are the solid evidences for that statement. One of the most extraordinary examples is Le Corbusier's ville radieuse. There are many arguments concentrating on this extraordinary plan. One of the most dialectic statements is Rem Koolhaas's: *It is Le Corbusier's all-consuming ambition to invent and build the New City commensurate with the demands and potential glories of the machine civilization. It is his bad luck that such a city already exists when he develops this ambition, namely Manhattan. Le Corbusier's task is clear: before he can deliver the city with which he is pregnant, he has to prove that it does not yet exist. To establish the birthright of his brainchild, he has to destroy New York's credibility, kill the glamorous sparkle of its modernity* (Koolhaas 1994, pp. 249-251). After further investigation, Koolhaas argues that Manhattan may have many merits which people often ignore, and Le Corbusier's denigrating description of Manhattan is likened to identikit portrait of an alleged criminal assembled by the police from photographic fragments.¹

For Corbusier, Manhattan is a petrified city of middle age. This specific middle-age image is obviously pictured in Fritz Lang's movie *Metropolis*, which is produced in 1926 depicting a broken utopian scenario. The broken utopian scenario is re-visioned again and again in various movies and cultural studies. This leads us to pay attention to the essential meaning of the utopian.

In *Architecture and Utopia*, Manfredo Tafuri defines utopia as "progressive thought" (Tafuri 1976) which "single thing receives its significance only from some other thing that is ahead of it or above it, from an *utopia of the future* or from a norm that exists above being." In other words, the pure utopian concept never looks back to

the past examples or ideologies. The utopia is a system of orientation intends to break the relationships of the existing order. It is a model immersed in the real dynamics of politic-economic processes, and its character of experimental anticipation projected into the future (Tafuri 1976).

However, the book *Utopia* was conceived in 1515 by an Englishman named Thomas More. The name *utopia* comes from Greek words meaning ‘Noplace’, which in the book is a newly discovered island somewhere in the New World. The word *utopia* also connects to another Greek word, *eutopia* – ‘happy’ or ‘fortunate’ place. The commonwealth of Utopia is a highly attractive place in some ways but a highly unattractive one in others. More invents a commonwealth that is both good and bad. Somehow *Utopia* is enigmatic and doesn’t have definitive answer to the author’s actual intention. The book starts with fact and continues into fiction.

Before More, Plato’s *Republic* and Aristotle’s *Politics* are entirely presented with arguing points, while the More’s *utopia* consists of fictional travelogue. The book’s imaginary society is presented in the form of a speech by a fictional personal. The fiction tends to preserve the ambiguous quality (More, 1989).

Since More coined the word “utopia”, it has been reinvested innumerable. One of the insightful arguments proposed by E.M.Cioran is: *To spend months recording the dreams of a better future, of an “ideal” society... From the start, one discerns in it the (fruitful or calamitous) role taken, in the genesis of events, not by happiness but by the idea of happiness, an idea that explains—the Age of Iron being coextensive with history—why each epoch so eagerly invokes the Age of Gold. Suppose we put an end to such speculation: total stagnation would ensue. For we act only under the fascination of the impossible: which is to say that a society incapable of generating—and of dedicating itself to—a utopia is threatened with sclerosis and collapse* (Cioran 1987, p.81). With this in mind, the idea of utopia as a stable final destination is challenged with an on-going process which is always under the dynamic of evolution. This continuous anticipation of the Age of Gold produces three inspiring urban utopias around the beginning of twentieth century.

First is Ebenezer Howard’s Garden City. Howard is a theorist, organizer and

inventor. He hoped that the Garden City would be a model of reasonable decentralization and cooperative socialism. It was envisioned as a totally new city in the midst of unspoiled countryside. The land would remain the property of the community, which would have the population of 30,000 surrounded by “greenbelt”. The garden city would have the traits of efficiency, health and beauty and attract people from swollen city like London. The countryside would be marked with hundred of new communities where small scale cooperation and direct democracy could flourish (Fishman 1982). In reality, Howard’s garden city model was experienced at Letchworth and Welwyn in UK. Howard’s multi-centered society is different from centralized bureaucratic planning which practices by most of the contemporary governments. However, Howard’s concern to leave the city development to the citizens themselves and the restrictions of outside control, as well as his refuse to recognize the existing cities as the context for planning make the planner’s role similar to the founder of a new society. Furthermore, ‘*the transformation of the environment becomes the central act in the creation of a new civilization*’ (Fishman 1982, p. 88).

Second is Frank Lloyd Wright’s Broadacre City. The new city concept pays much attention to individualism and organic architecture. Besides, Wright wanted his native country become a nation of individuals. The plan of Broadacre City takes decentralization beyond the small community to the individual family home. The center of society has moved to thousand of homesteads. Everyone has the right of as much land as he can use; a minimum of an acre per person. Most people work part-time on the farm and part-time in the small factories, offices or shops. A network of superhighways joins with the scattered elements of society. Decentralization would make it possible for everyone to live his chosen life style on his own land. In short, the concept of a new lifestyle is the essential core for Wight’s Broadacre City. His commitment to the specific idea of individuality is articulated by his highlighting on the close relationship between the individuality and its embedded stable community. The individual depends on a stable community, but his freedom to inquire is always a possible threat to the community. The Broadacre City is designed to overcome this paradox, a city without mental and material walls but still a stable one. In his design,

Wright accepted the idea of Jeffersonian tradition which gives a moral essence to small-scale agrarian life (Fishman 1982, pp. 91-155). Nevertheless, his embrace of individuality created by an agrarian background is challenged by the metropolis and its engendered concept: *As Sociologist Robert Park has convincingly argued, the metropolis—with its freedom born of anonymity, its innumerable juxtapositions of groups with radical different values and experiences...is the natural environment for individualism* (Fishman 1982, p.159). Finally, Wright's idea city is still a hope of straightforward individualism, and its implementation faces tremendous difficulty because of the fast concentration of population to the metropolis. In order to create an ideal city, Wright's followers might have to abandon the city. This is the dilemma.

Third is Le Corbusier's concept of city formation. Basically, Corbusier had conceived three inspiring plans for the future city. In 1922 he designed a "plan for a contemporary city of three million inhabitants". He attempted to point out the planning issues afflicting main city by using conceptual terms, and he made four axioms: 1. town centers must be made less congested; 2. town centers must be more densely built up; 3. means of transport must be increased; 4. there must be an increase in open spaces (Jenger 1996, p. 49). In the Contemporary City, the idea of segregated housing was clear: elite in the center and proletariat at the outskirts. In 1925, he designed the Voisin plan with Paris in mind. It was a try to move from theory to practice. He proposed that the crowded Right Bank business district be demolished, and eighteen skyscrapers surrounded by fine apartments and gardens would replace it. The skyscrapers were aimed to make Paris a world center for administration. The Plan Voisin was the peak of Corbusier's fascination with big business. He saw the international corporations as the columns of great new era and the government's role would be limited to update the building codes and smooth the construction process. Around 1933, Corbusier conceived the idea of the Radiant City, which kept main principle of the Contemporary City: a combination of collective realm of administration and individualistic realm of family life. Comparing to the Contemporary City, the Radiant City had power to regulate private firms, and the hidden hand of free competition would create the most efficient organization. In the Radiant City all productive life is managed from above according to one plan, which

replaces marketplace. In other words, Corbusier no longer shared the idea of “natural economic order” with Howard and Wright. An administrative hierarchy formed by the *syndicat*, the group of workers, and selected managers has replaced the state. Corbusier used the term and structure of syndicalism to approach his vision of a well-organized world. (Fishman 1982, pp. 163-263) However, Corbusier’s ideal city is represented by three main concepts in designing city: the Contemporary City, the Voisin Plan and the Radiant City. Each has its specific design thinking and cultural context.

As visionary and theorist of city formation, Howard, Wright and Le Corbusier tried to define the ideal form of advanced future society. They had a similar supposition that this form could be identified and achieved, but each envisioned the ideal city through the viewpoint of his own specific theories and personal character. Their plans have reshaped many contemporary cities, and they could be still influential in the future.

To conclude, the design thinking of utopia might be concluded insightfully by Carroll William Westfall’s definition: *an Utopian conception in its fully developed form might be defined as a unified vision which includes:*

1. *a carefully considered artistic theory or attitude toward art integrated with*
2. *a fully developed political and social structure conceived of as extant in*
3. *a locus independent of time, place, history or accident* (Rowe 1987, p.213).

3. The Commercial Strip Redefining and Fantasy City

When Kevin Lynch wrote his famous *The Image of the City*, he defined that the city image derives from five elements: Paths, edges, districts, nodes and landmarks. He also stated that most people interviewed consider paths are the predominant city elements. Taking Boston as example, Lynch found out people who knew the city better had usually mastered part of the path system; these people thought more in terms of specific paths and their relationship (Lynch 1960, pp. 46-49). Later this observation was further testified and articulated by Robert Venturi’s *Learning from Las Vegas*. The commercial strip in Las Vegas is chaotic and its order is not noticeable,

but Venturi still pointed out two types of order on the Strip: the obvious visual order of street elements and the difficult visual order of buildings and signs (Venturi, Brown and Izenour 1972, pp.19-20).

He described that there is an order along the sides of the highway and varieties of activities are juxtaposed on the Strip. Therefore *immediate proximity of related uses, as on Main Street, where you walk from one store to another, is not required along the Strip because interaction is by car and highway* (Venturi, Brown and Izenour 1972, pp. 20-34). This emphasis on car and pass way is also evident in Lynch's writing which described a person recounted her pleasure: *You cross Baldwin Avenue, you see all of New York in front of you, you see the terrific drop of land...and here's this open panorama of lower Jersey City in front of you and you're going down hill, and there you know: there's the tunnel, there's the Hudson River and everything... I always look to the right to see if I can see the ...Statue of Liberty...Then I always look up to see the Empire State Building, see how the weather is* (Lynch 1960). The happiness of going someplace is obvious in the answer. However, when we drive a car, the cityscape speeding out as objects and signs unveils in front of us. In Lynch's picture, we see the topography, the path structure, landmarks and directorial relationships. In Venturi's scenario, we see signs, symbols and iconography. Starting from the simple paths, which is part of Lynch's elements of city image, Commercial Strip, different from Main Street, transforms into an unique design concept and forms some distinguishing cities such as Las Vegas.

The essential meaning of Commercial Strip lies on its signs and iconography. The main purpose of signs in Commercial Strip is high-speed communication and maximum meaning. Besides, Venturi adds concept of Pop Art into the street scenario. He argues that the Commercial Strip involves contradictions of scale and context, which should have awakened architects from prim dreams of pure order. We can draw the complex and contradictory from everyday's vulgar and disdained landscape. (Venturi 1966, p.104) In terms of the texture of city formation, Venturi's complexity and contradiction of commercial strip encounters with the pleasure and profit in the contemporary city formation: *In his book, "The McDonaldization of Society", Sociologist George Ritzer (1993) argues that we have increasingly moved toward a*

rationalized society which adheres to the principles of the fast food restaurant. Four pillars support the immensely successful McDonald operational model: efficiency, calculability, predictability and control...by substituting nonhuman for human technology...Among the type of business which follow this formula are them parks, shopping malls, professional sport venues and tourist resorts (Hannigan 1998).

With the formula in mind, adding with strategies of image-making, the design thinking of city regeneration is done in many international cities. The amazing success story of Bilbo impresses many people from different countries and backgrounds. The city was a declining industrial one two decades ago, but it has transformed into a regional center of tourism and culture. Leading by Frank Ghery's outstanding Guggenheim Museum, the rebirth of Bilbo is not achieved by the single monument, but by a visionary blueprint concerning incorporated development and transportation network.

The city was suffered by misguided development strategy and a increasing of traffic, but it nevertheless maintained its economic importance and a specific sense of identity. Following a traffic alleviating plan and an international competition, the dignified metro started to be built according to Norman Forster's scheme in 1990. Eleven stations opened in 1995 and other phases were following. The stations are formed with spacious units that prevent claustrophobic situation. The Bilbo Metro employs Foster's well-designed and well-functioned transport buildings to the fabric of a historical city, and suits it well. The Abando Interchange, originally designed by world-renowned Wilford with James Stirling, is not realized yet, but its erection will create an extraordinary urban node, adding a new monument for Bilbo.

There are other impressing projects, such as a celebrated Calatrava's bridge, joining this urban regeneration effort, but the Guggenheim Museum catches the most spotlights from international presses. Since the erection of this Frank Ghery's museum, it seems that the museum becomes a favorite engine of urban redesign and regeneration. Before erecting the museum, European's strategy on regenerating deteriorating industrial city had already emphasized on filling the void with culture, such as a museum, a sports arena or a concert hall. This pattern had been repeated in Barcelona, Paris, Helsinki and countless other cities. It is common that as an

industrial urban area loses its industrial base, the financial management, tourism and culture replace it and become the leading urban industries.

The urban flagship development, such as Bilbao's Guggenheim Museum, is part of urban regenerating strategies that focus on cultural infrastructure and place making. Most of the people prefer its positive impacts in revitalizing a declining area with old heritage and memory. Some people argue that the new museum might rapidly erase local history and memory, and replaced those precious inherited lifestyle and aura with tourism and quick-income; other people argue that this kind of Museum will become MacDonald-like museum branch mushrooming everywhere and eventually lose its uniqueness. Although there are these kinds of negative concerns, it seems that most people still take its positive side and consider the museum an architecture projecting itself into the future, as well as creating a strong identity for its located region.

There are certain praises for the museum. Most of them talk about the museum may bring the past and present together and its root in culture. Other praises emphasize on economic renewal and revenue gain. However, the uniqueness of the museum's design, the publicity it generates and the economic role it plays all contribute to this European museum-led urban regenerating phenomenon. There are similar projects such as Kunsthau in Graz, Imperial War Museum North in Manchester, Lentos Art Museum in Linz and many other examples.

4. The Evolution of Design Thinking in City Formation

The sector picks up some crucial issues and events influencing modern city formation, in order to reflect the transformation between traditional and modern design thinking. Because of vast range of the comparative design thinking, the sector also concentrates on specific designers whose contemporary design thinking echo traditional context.

The sector starts with Rob Krier's Leinfelden street reconstruction project in 1971. He presented a linear megastructure with an assemble hall with a u-shaped plaza by way of a shopping street, an open courtyard, a covered galleria, another

courtyard, another shopping street, and an open market to a garden beside an existing church. The galleria was to be a multi-leveled interchange among the metro, car parking, bus station, shops, offices, housing and so on (Broadbent 1990, pp. 176-178). The project reflected a collection of urban types, and this employment of traditional urban types was to be showed on his other designs of urban space.

Robert Krier's Leinfelden represents Urban Typology study. His English version of *Urban Space* in 1979 covers 350 plans of European cities, which are used as analysis examples of urban space. Krier defines urban space as all types of spaces between buildings in towns and their localities. His study gives a profound insight of the decay of urban space in the 20th century town planning. Krier sees the city itself as formed essentially of urban spaces in the form of streets, squares and other open spaces. He shows the urban spaces of Europe generally have three main forms: square, circular or triangular, and each has its adaptable forms. The physical form of the city is determined by relationships among the streets, the open spaces, the elevations and the sections. One of the best examples employing these Typologies is Leinfelden urban project (Broadbent 1990, pp. 190-194).

On the other hand, Leo Krier demonstrated his talent in some reconstruction plans such as the "Appeal to the Citizens of Luxembourg to Reconstruct the City." He condemned modern town planning's crime of destroying traditional European cities and landscapes, and argued that the city can only be built in the form of streets, squares and quarters of familiar dimensions. He also argued that the most destructive factor in modern planning was the concept of zoning. To avoid zoning's unhealthy consequence, he proposed reviving the Quartier, which is an area up to 33 hectares and consists of all urban functions. The Quartier owns the size of pre-industrial urban community with some 10000 to 15000 people. Each Quartier would be autonomous on the functional and cultural level. With this in mind, Leo Krier divides Luxembourg into 23 Quartiers (Broadbent 1990, pp. 194-197).

His idea includes that a new architectural culture must be based on a highly developed and professional manual and material culture. Leo Krier's ideal city is a small and self-sustaining community. The formation of Quartier Should be added with necessary new streets, squares and monuments. Many ideas developed for

Luxembourg recur in Leo Krier's plan for La Villette in Paris in 1976. The plan is divided into two Quartiers, which are designed to become the city with the city of Paris, where all urban functions are gathered in one district. There is a hierarchy of streets in the plan, and the layout of the main axis is similar to the sequence in the Leinfelden project, with two-storey colonnades lined with the linear boulevard.

In 1977, Leo Krier started the project of school for St Quentin en Yvelines. The project keeps Leinfelden's axial plan with four different shaped enclosing courtyards. The central octagonal library, the twin gate-houses, the assembly hall, the portico, the temple-like restaurant, colonnaded courtyards, various pediments and pyramidal roofs all signify the essential concept of typology. Nevertheless, the employment of building type in city formation often is blamed by its lack of social and practical connotation.

Parallel with Krier Brothers' concepts, Aldo Rossi argues the building type and its connection to the evolution of our civilization. He states that human being builds houses to provide more favorable surroundings and better artificial climates, and architecture exists along with the city, which is embedded in the formation of civilization. In short, Rossi's thinking is about that the construction of architecture results from reason, and the construction of the city results from architecture. Cities are made of various elements which mean different building types. Furthermore, the urban spaces between the buildings also have their types.

Years later, Krier brother and Aldo Rossi's theories have been partly transformed into Duany and Plater-Zyberk's Seaside project, which uses some specific buildings types but pay much attention to prescribe a strict building code. Seaside's architects define eight different developing lot types, which is supported by an analysis of attractive towns of American Deep South, along a master plan including a Central Square, a Town Hall, a School, a Post Office, a Hotel, a Beach Pavilion, a Club and so on. Seaside is the plan which Rossi and Krier's Rationalism is added with Empiricism and Pragmatism (Broadbent 1990, pp. 323-324).

In Europe, Rob Krier and Christoph Kohl's office is one of the few European firms practice design concept similar to 'New Urbanism'. The term becomes

well-known mainly owing to Prince Charles' book *A Vision of Britain* and the mentioned project Seaside (Keier.Kohl.Architects 2006, pp. 266-279). Some critics argue the Seaside is an artificial, sterile, isolating and nostalgic town, as well as a creation of false past. Actually, New Urbanism is not only a collection of historical forms, it also tries to work out a set of planning rule to attain mix use, social mix, greater building density and architectural variety. It provides an alternative to the suburban development against urban sprawl, with the strategies of pedestrian-friendliness, promoting public transportation and reducing automobile traffic. It is a practice that dominance of city planning over architecture. New Urbanism also attempts to regenerate existing suburbs by ways such as establishing new centers or by reshaping dying shopping malls. Besides, it also concerns with the revitalization of inner cities.

To conclude, this sector deals with the urban design thinking of Krier Brothers, Aldo Rossi and New Urbanism. The evolution of their design concepts reflects the contemporary interpretation in traditional urbanism. Their design thinking show the concept of using past forms, pieces and structures in contemporary cities. The main purpose of their works lies on the connection of continuing past and promising future. The strategy to achieve this purpose is reusing the old parts of architectural treasures and redefining the old parts in order to engender new meaning. Krier brothers and Rossi belong to Neorationalism. Their proposals emphasize on streets, squares and types, recomposing urban fragments in a new context. However, some critics argue that Neorationalist schemes have been removed from the sociopolitical concerns of contemporary urban circumstances.

5. Conclusion

Although contemporary city formation heavily depends on orthodox methods such as zoning, systems of economic incentives, and land use and building control devices. The concise study finds out that there are always some alternatives on design thinking. Some of them provide inspiring design processes to approach optimistic future; others try to renew and redo contemporary planning and design methodology.

Urban land and buildings are valuable commodities because of the arrangement of transportation systems, accessibility and the specialization of functions. The economic and social issues accompanied with global city development, especially the huge population migrating from countryside to the city, are looming in the near future. This concentration of population in specific global megapolises should be an urgent phenomenon deserving strong attention. This urban phenomenon could generate fresh design thinking, which should be based on various backdrops such as those mentioned in the study. With this in mind, the study could offer a comparative start point to understanding the background of future city formation, in addition to its original goals.

Notes

1. See *Delirious New York*, pp251-252; in *La Ville Radieuse*, p. 133, Corbusier states that the skyscrapers in Manhattan is “tumult, hairgrowth, first explosive stage of the new middle ages....”

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