Final Paper

Landscape Concepts in Transformation:

From Park to Architecture

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Landscape in Luxembourg City was featured by not only natural topography where valley winding through the city divides different plateaus, but also artificial landscape which is the modification of the natural landscape.

Manmade modifications, including city settlements, engineering projects, and historical reinterpretation of landscape by fortifications, have emphasized the diversity of landscape. City settlements, when looking into diversity of uses, density of construction and organization between different systems, happen mainly on plateaus while in the valley the building type and atmosphere resembles village where residential buildings are in predominance but remain in low density. Bridges and elevators counteract the discontinuity of land and make connection between valley and plateaus, and between different plateaus across the valley. In performance those engineering projects enable a modified reading of landscape. Fortifications usually happen at the point where vertical contradictions in landscape is seen. This layer of modification brought to a more manifest landscape by enhancing height difference with city walls and towers, and by constructing congenially with comparatively flat surface on natural landscape.

Modified landscape stood out as characteristic of the city in terms of visual impression as well as a way of organization which constructed the form of the city and continuously define the activities of city dwellers.

Based on the above observations in Luxembourg, the paper is going to see how landscape was understood in its conceptual development, and what the role was played by landscape in both urban design and architectural design as to solve problems on scale of a city.

Introduction

Landscape as a term firstly used in English, meant a genre of painting in 16th century and migrated into a way of seeing the world in 17th century, that a landscape is 'a portion of land which the eye can comprehend at a glance'.[1] By 18th century, it referred to a land which looked at in the lens of naturalistic ideal and a mode of subjectivity. And in 19th century, landscape aimed at refashioning the land and making it looked like a painting.[2]

The understanding of landscape and concepts in landscape design expanded in parallel with theory. Neoplatonic axiom that 'art should imitate nature'[3] was the observance of landscape designers before 1800, and the design practice usually took on the form of painting and landscape design was closely related, if not fully complied to, gardening. Landscape theory evolved in early 18th century and a virtuous role emancipated by public behaviors was considered to be achieved by painting.[4] This rational idea of landscape design was intermitted by the start of 19th century, and private satisfaction rather than public virtue was believed to be the main concern of painters.

Landscape design has undergone a progressively change in definitions in architecture discourse, under the influence of theoretical challenges, and the upheaval and fall of industrial economy. Within the

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[1] Jackson (1986), P.3

[2] Waldheim (2016), P.94

[3] Turner (1996)

[4] Turner (1996)

school of thought of Ideal Art Theory in 18th century, 'nature' means the natural environment with reference to idealized Eden. Yet its meaning expanded to include the world of forms[5]. When it came to 20th century, it experienced a renaissance while ecology coming into concern and becoming base of projects worldwide. Later with the input of postmodernists, the focus shifted from ecology towards the relation between nature and culture. The emergence of landscape urbanism pushed forward the formulation where nature is understood as culture construct, and landscape architecture stressed more on utilizing ecology as a model for understanding the complex interactions between nature and city, instead of simply imposing its functional mechanisms. It made a promise of alternating the reactionary traditional urban form into one which simultaneously embodies environmental health, social welfare and cultural aspiration,[6] through a synthesis of ecology and design culture.

Existing examples are going to be examined in this essay to capture a scheme of concept expansion in landscape design, and to demonstrate the possibility of interpreting landscape urbanism in architectural design after the former has broken out of the constraint of picturesque idea. When trees are in preponderance in neither visual presentation nor organization, the essence of spatial sequence and treatment of ground proved to be intrinsic of landscape design and thus are the idea to be applied in architecture.

Landscape urbanism

The origins of landscape urbanism could be traced to critiques towards modern architecture and planning, which reveal modernists' incapability to produce meaning and livable public realm and inability to communicate the ideal that city as historical construction of collective consciousness.[7] The decline of modern architecture coincided with the crisis of industrial economy in US, and left a legacy of decentralized urban form due to the structural conditions of industrialized modernity, which postmodern architectures failed to address or change.

The dissatisfaction towards an urban form of decentralization triggered the rethinking of urban planning and landscape. Contemporary landscape urbanism transformed from focusing on ecological system in congenial with an image of nature to engendering order for urban field by imposing infrastructure systems with the stress on creating livable public realm. In the changing contemporary process of urbanization with dynamic and sometimes contradictory urban conditions, landscape was understood as a medium structurally related to transformations in architectonical space and economical order and capable of situating to open-endedness and responding to temporal changes and transformation demanded by urban process.[8]

The capability of landscape to involve as a medium of organization and as a possible to solution to problems on urban scale relies in the inadequateness of design discipline. The foundation of design discipline has a structural inclination towards growth, expansion and ongoing development and epistemologies invested into models of growth. This results in a professional bias in favor of architecture proceeding urban procedures.[9] At the wake of limited growth, a fundamental question raised for historical formation and current methodology of architecture and planning.

The ideological foundation produced unsolvable blind spots due to their inconceivable nature in the profession, for instance, urban decay. Architecture found itself unable to respond in the illumination of decentralization and de-densification, dispersion of urban events, and friction of social interrelation. Found in Rome before Baroque as formerly urban, and Detroit as a recent case, the efforts of restoring

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[5] Turner (1996)

[6] Waldheim (2016), P.51

[7] Waldheim (2016), P.14

[8] Waldheim (2016), P.88

[9] Waldheim (2016), P.110

the deteriorated building fabric and diffused social interactions back into its prosperity by means of architectural design proved to be in vain. Yet landscape emerged as a way to reconstruct partly the social and spatial order.

Such as its origin, landscape has a long history in the context of urban shrinkage, and offers a cultural medium of design that puts existing description and future interventions in accordance, while making succession and cultivation exits to be mutually exclusive.

Landscape urbanism deprived landscape design of architectural components while proposing landscape as a system with organizational property. However, the development in landscape theories later shifted again towards incorporation of architecture and re-appropriated it as landscape. Architecture before elimination and after reintroduction in landscape design is different in its essence and significance, as in the former it is only decorative objects in a sea of organizational forces while in the latter it is a way of organization itself.

Projects from mid-20th century have witnessed a transformation in the concepts of landscape urbanism. In the design of Parc des Buttes-Chaumont, nature was the predominance as in the tradition of picturesque, whereas the effort of 'imitation' was blended with technology innovations. In the competition for Parc de la Villettein Paris in 1980s, landscape was requested to be functional framework which accommodates future changes. In early 1950s in Detroit, landscape took the efforts of reducing the impact of traffic and creating livable public space in decentralized urban settlement turned to landscape. And the lessons learnt from suburbanization with landscape was carried further into city planning of downtown Fort Worth as an implicit conceptualization.

From all the projects demonstrated, one thing is in common, that landscape is exceeding the stereotype of an imitated natural setting which is left over on urban surface in the tide of construction, to become a synthesis between city, architecture and nature. It is not necessary that the complex could be perceived visually, and might not look natural either, but the thinking process which takes problems on urban scale into account makes a landscape broader than simply a park in architectural meanings. The relation between architecture, urbanism and landscape transformed from their exclusion in historical definitions to a blurred interweaving in which landscape undertakes the role of urban formation while architecture could be a condensed interpretation of landscape.

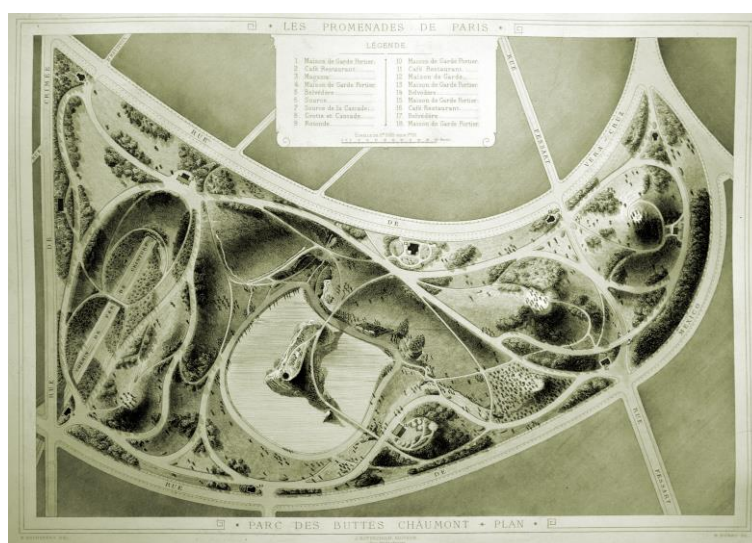Parc des Buttes Chaumont | Paris | 1867 | beyond pictureque garden

Image: Parc des Buttes Chaumont Alphand 1867. From Wikipedia_ Parc des Buttes Chaumont

Sitting on the periphery of 19th century Paris, the park used to have a sinister reputation in its history: close to site displaying bodies of hanged criminals, being a refuse dump, a slaughter house for horse and a sewage disposal since 1789, and one part of the site as quarry of gypsum and limestone.[10] In 19th century when Alphand started to plan the park, the site was surrounded by smoke belching factories and working class tenements.[11]

Under the influence of Napoleon III, Alphand proposed an idyllic park with a desire to outshine precedent British park and Picturesque style was employed, but there were also as much conciliatory measure for anti-British sentiments that the park stroke towards awareness of modernization from the traditional retreat in nature.

Specific local determination of its geography resided in the reflection or even exploit of the potentials inherited.[12] Topography of the land was carefully treated by Alphand, reinforced by his belief that design concept and inherent qualities of landform should be of direct relation.[13] The design directly embraced characters of quarries whose featured are kept in the steep cliffs among the vast greenery. The very chaos of nature and forced landscape in the old Paris 'allowed a violent picturesque to devolve'.[14] The conscious approach to remnants of site touched the legacy of sublime of picturesque apart from its well-established aesthetic convention.

On the first sight the park revealed itself through extensive greenery field, as an oasis on the periphery of Paris. Symmetrical sinuous paths meander through the field, creating an organic geometrical pattern. The park is centered by an artificial lake, besides which rockets high cliffs with Temple de la Sibylle on top. As a picturesque experience, visitors gradually moving along the site, absorbed into greenery, encountered with grottos and waterfalls, connected to the cliff by bridges overlooking the lake, and by climbing up 173 steps, finally managed to the high point of the park.

But what is not congenial with typical picturesque idea is that all artefacts such as benches, railings, rain shelters, and bridges are made of concrete other than true material of their representation. The hint of an industrial world, if still gentle and inconspicuous in those accessories, it is manifested on height of cliff. A glance from top immediately denied the park as wholly picturesque pastiche which is a retreat from urban life, but on the contrary, the park is extended fabric of industrialized Paris through an awareness evoked by visual experience after attaining height; and what had been understood as lying beyond, was implicitly within the confine of the city.

The park thus outshines a distinctive shape to urban experience of nature, and thus disclosed itself as industrial products though encasing within idioms of picturesque.[15]

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[10] Wikipedia_ Parc des Buttes Chaumont

[11] Girot (2013)

[12] Appleton (1867), P.274

[13] Komara (2002), p46

[14] White (1992), p395

[15] Komara (2002), p54

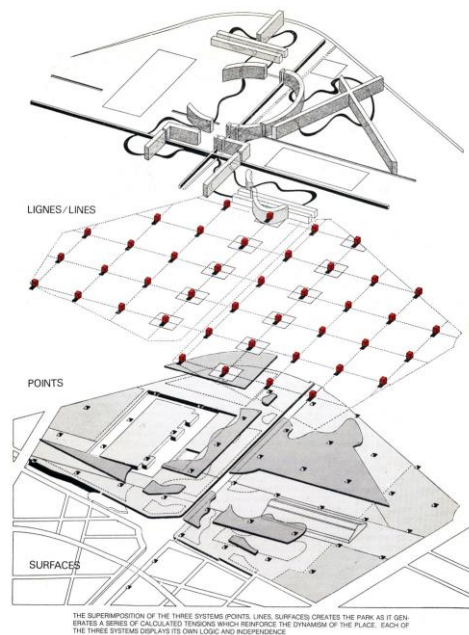Parc de la Villette | Paris | 1982-83 | landscape as framework for future

Image: Parc de la Villette Bernard Schumi. From New Age Architecture

If Parc des Butte-Chaumont embodied a gesture towards the potential of landscape expanding from pure visual nature to incorporate cultural concerns, the entry submissions for Parc de la Villette proved to be the first projects which reveal the potential. Similar with Parc des Buttes Chaumont, Parc de la Villette again reclaimed deserted part of the city with noxious past, and proposed landscape as a way to counteract to existing situation and the projects were intended to be a park.

But in contrast to Parc des Buttes Chaumont, landscape design in Parc de la Villette entered into the realm of urban process, rather than being a garden imitating nature, or an object, imposed into the city. The competition in 1982 put ideal submission as an urban park on the site of previous slaughterhouse and is awaiting for public activities to be programmed. The park is therefore expected not as typologies for park and traditional cities, but as a basic framework for urban transformation and as a medium relating infrastructure and public events. As Koolhaas put it, 'the underlying principle of programmatic indeterminacy as a basis of the formal concept allows any shift, modification, replacement, or substitution to occur without damaging the initial hypothesis.'[16]

Bernard Tschumi, the winner of the competition, presented a leap in landscape urbanism design by challenging concepts of both architectural and landscape design. Being opposed to stylistic concerns in architectural discourse, as seen in 70s, he argued that activities in the city be analyzed and programmatic justification be constituted as much as forms or styles, to nurture public events. And impeaching about most traditional picturesque parks where certain activities are expected in unprogrammed greenery, he targeted on a user-defined park.

The park is a framework made from rigid grids with a construction, called follies by the architect, at each intersection. 35 deconstructvist follies formed 10 theme gardens either literal or ambiguous, that are open for interpretation by allowing people to investigate, relax and meditate. Those follies, being a center of informal program which is awaited to be filled in by activities, are unique from each other, but in the same time consolidates into a referential guidance to retain a sense of space with dimensional and organizational quality. Although greenery was still the preponderance, the large expanse of land is

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[16] Koolhaas (1998), p.41

conceived as a complex, stressing the issue of demolition of Parisian abattoir and the making of postindustrial city.

Tschumi immigrate from a picture of nature to infrastructural organization of the city by denying any fixed program in his design. It is a framework without designated programs, as well as in the follies, but it assimilates public events to create possible guideline for future urban planning. The park therefore is an integral part of the city, marked by its exchange of information and intake of city life, breaking from the bounding box of traditional parks as confined space imposed in the middle of the city.

Lafayette Park | Detroit | 1950s | landscape as organization

Image: Plan of Lafayette Park Hiberseimer. From Detroit Urban Design

The conceptual leap in landscape design was brought to life in Detroit when Hiberseimer and Victor Gruen was assigned to develop suburb and downtown areas by means of landscape and architecture. In their works, the former revealed emphasis on urban-organizing equity inherent in landscape design, in line with but expanded from Parc de la Villette, and the latter was stressed with the lesson learnt in landscape.

As early as 1920s, Detroit evolved as a motor city, congenial with automobile industry as in most of North American cities, began a process of decentralization following Henry Ford's advocate that inhabitants should be moved outside city to leave space for transport infrastructure on a large regional scale.[17]

Detroit Vacant Land Survey authored by City Planning Commission reported declination of population and disinvestment under way since 1950s. In this context Hiberseimer was commissioned a project of urban renewal of one of the reduced downtown neighborhoods which later came to be known as Lafayette Park in 1955, which was intended as a mixed-income and mixed-race development, counteracting to the immodest proposal of large scale demolishment of city fabric and replacement of wild nature. In this project, landscape as a form of urbanism, is informed by ecological and infrastructural considerations and could make possible the decentralization, depopulation and dissipation of architectural fabric which could not be anticipated by projects confined in the scope of individual constructions.

In Hiberseimer's plan, architecture is replaced by landscape and transportation infrastructure as a medium for spatial organization and urban order. Landscape as a central amenity in a form of park stressed social relations and environment. Hiberseimer fully accommodated automobiles but reduced their impact on public landscape by delimiting encroachment of roads and reducing intersections of side walk and mobile lanes to achieve a minimal necessity for pedestrian to cross a road. The planning also

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[17] Waldheim (2016), P.89

forwarded the multiple housing types with mixed height, each has a unique spatial and visual relation between interior and exterior that serves it. Majority of inhabitants are spread over a thin slab, strategically decreased density.[18]

Therefore landscape was designed on both regional scale and human scale, as large communal landscape is given to private or shared courtyards to make spatial definition, and formed the primary framework for organization and spatial coherence of sites when matured. At put by Waldheim, landscape is now 'offering cultural milieu and medium of design, and a new disciplinary framework for approaching sites of the formerly urban.'[19]

Northland | Detroit | 1950s | Architecture read as landscape

Image: Northland Centre, Detroit, 1954. From REURBANIST

Faced with the same situation with Hiberseimer, Victor Gruen in 1950s interpreted similar idea in a reversed approach, in which architecture appropriated as landscape to function as a medium of organization.

He believed that the environment was found unsympathetic with most architectures located in, and incongruity was the rule rather than exception. As a result very rarely that buildings could exercise its full effectiveness without being disturbed by the surroundings.[20] Gruen identified the inadequate surrounding as 'sub-cityscape', one of the types of cityscape, which covers all undesired elements such as gas station, shacks, shanties and car lots, and degrading facades of suburbia. Sub-cityscape is what fills up areas between cities and suburbs, between towns and towns, and is spreading over to take up suburb spaces in all directions.[21] The negative impact of poorly cultivated environment incurred designs that could bring possibility of modification, over those being immolated to coexist with the deteriorating sub-cityscape.

Thus he argued in his lecture, that 'architecture's most urgent mission today is to convert chaos into order' by taking considerations of all man-made elements which formed the environment.[22]

He distinguished landscape as an environment with predominantly nature, different from cityscape which is that with man-made structure as preponderance. Despite of the different use of terms, Gruen's

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[18] Waldheim (2016), P.110-111
[19] Waldheim (2016), P.93
[20] Greun (1955)
[21] Greun (1955)
[22] Greun (1955)

understanding of city planning is in line with landscape urbanism and sharing similar concerns as to restore the dispersed city fabric by inviting activities.

The design of shopping malls in Northland was his answer to the question rooted in the urban conditions in United States, and especially the suburban chaos in Detroit. Long rows of one story structures along arterials created inconvenient route for customers and thus hindered shopping activities, accelerating devastation of a ground and propagation of commercial slums. The proposed new building typology aimed at replacing strip shops with integrated shopping center, and provoking conscious planning efforts in individual building projects.

Whether the desired effect could be achieved by separated sphere of activities and compartmentalized functions in different building blocks, the shopping mall design is in line with landscape urbanism. It can be seen as a framework stressing urban issues on a widening scale, setting up spatial and social orders and integrating into environment. It is in accordance with Tshumi's framework, but with a condensed interpretation on level of architecture.

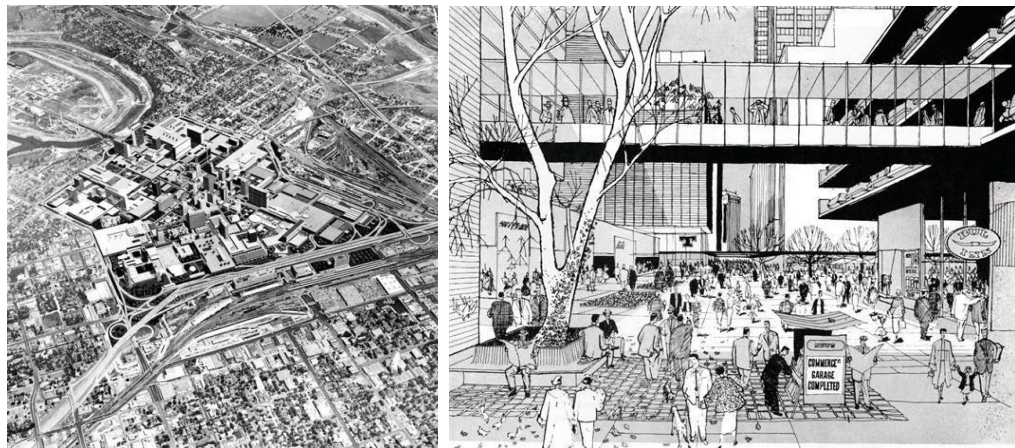## Fort Worth Master Planning | U.S.| 1950s | landscape condensed in architecture

Image (left): Aerial View of Fort Worth. From: The Journal of the American Institute of Architects

Image (right): Planning of Fort Worth, Street-level rendering, showing pedestrian bridges and parking. From: The Journal of the American Institute of Architects

The ideas of Northland, such as the arrangement of car parks and ring road, reduction of impact of automobile in city center, and performance of shoppers in the artificial environment, could be ideally relocated into Fort Worth with redesign. The business in Fort Worth, as it was in many American cities, witnessed a dismay in traffic congestion in city center.[23] In contrast to Northland which, as a suburbia project, intended to modify the unbundled constructions with deteriorated quality, the project in Fort Worth was a planning project in downtown area to inverse the tendency of population excoriating to suburb.

Gruen proposed a plan in 1956 for 'a Greater Fort Worth Tomorrow' by making a downtown area free of automobile traffic. A freeway belt runs around the old city with huge car parks attached to inner rim of highway belt. All the cars bypassing the city by underground network of tunnels, and no car is allowed beyond the designated parking area. Roads in the old town will be converted into pedestrian plazas, accompanied by plots of greenery, malls, sidewalk café, fountains and pools.[24] To assist a vigorous

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[23] Time (1963)

[24] Fort Worth Star-Telegram (1956)

downtown center, compactness and diversity are considered and offices are made in walking distances to stores.

Similarly with that Northland, the urban project was treated with the same concerns of landscape on scales of urban organization as well as architecture. Downtown area is confined in the natural boundaries of river and railroads on its three sides, and in congruity, highway belt will be within the same boundaries on underdeveloped rim. When shoppers leave their car, they are absorbed into a maze of malls, parkways, and courtyards created in and between shops, stores and restaurants. It is an interior landscape giving comfort and ease, while demonstrating spatial variations and diverse activities.

Question raises regarding to reasons of appropriating Fort Worth master planning to landscape design. When landscape loses its visual quality inherited from picturesque traditions, how can it be recognized as landscape? If landscape is no longer the predominance in a project in terms of visual impact as well as way of organization, how does the appropriation of architecture to landscape be convincing?

The project mentioned nothing about trees, park or landscape as medium of organization, setting the criteria of this project different from all the projects mentioned above. Yet the relation between Fort Worth master plan and landscape urbanism is intrinsic. By making a pedestrian-only space, the rigidity in spatial definitions of modern city planning such as sidewalk, motorway and cycle lane, was released. The ground was given an attention as a vast undefined field in landscape, with artificial straight lines and steps ceasing to exist, together predefined use, and users moving around without confine. The treatment to ground and revitalization of movement featured the link to landscape design.

Conclusion

What is consistent in all the projects mentioned above is the attention to spatial sequence, apart from the making of ground. The sinuous routes adorned with shelters, caves, lakes, cliff, stairs and finally the temple, have dedicated to an elegant approach throughout site to reach a view point, following the tradition of British gardens. The follies set on grids in Parc de la Villette have in contrary broke up the linear sequence but contributed to the balanced, even-proportioned space dispersion, but still allowing an idea of place by uniqueness in visual encounter. Instead of a homogenous greenery area, Hiberseimer's vast landscape was specified by the variety of visual relations between residential units and environment that supports it, and between interior and exterior. Gruen interiorized the spatial sequence in his wholesale shopping mall design, by creating an enclosed ground facilitating all the exploration, and further expanded the sequence to urban design, by directing visitors through car park, corridors, malls and open spaces.

From Parc des Buttes-Chaumont to planning of Fort Worth, natural elements such as trees, water, rock and slope are gradually deprived of their importance in landscape design, while concerns with ground and spatial sequence remain. Landscape design is a modification on top of the nature while keeping the traits of it or reinterpret it. Thus is not explicitly necessary for a landscape design to take on a naturalistic guile, which is only extrinsic to the essence of attention to ground and sequence in relation between natural elements and architectural languages. Architecture in the above projects have similar role in articulating spatial sequence, either it be linear progression or balanced dispersion, and in giving identity to the certain spot in the vast landscape of greenery, or cityscape of artificial interventions.

Parallel to concepts change, landscape design have gradually transformed in the aspects of visual dominance, significance in urban ecology and functional organization. When taking on the role as a cultural medium of organization and framework for design, landscape could look alternatively than simply naturalistic garden, but interweave with the domain of architecture.

Treatment to ground and considerations of spatial sequence remain consistent while the precondition of major elements of landscape design, such as trees and greenery area, which used to be bundled up with naturalistic garden idea, are being reduced or even lost. The domain of landscape design and its input in architecture have thus opened up. Whether a landscape project remains in the format of a park,

it could take up responsibility originally urban or architectural, and could be explored in its expression without infringement to the essence of landscape. And when architectural design is being appropriated to that of landscape, there is a need to design ground and its relationship with architecture and spatial sequence within the building or city at the early stage of design.

The above projects utilized landscape as a way to reverse the current situation (discarded quarry, noxious slaughterhouse or chaotic suburbs) and reorganized the land to have new relation to the city so as to achieve the reclamation. In the contrary, the project in Luxembourg City will reclaim the discarded underground space not by opposing to current situation, but to incorporate an underground complex into well-developed center city to benefit dwellers and integrate systems of the city.

The project in Luxembourg will be an architecture project with thinkings of landscape condensed into architecture in terms of treatment to ground and spatial sequence, the former respect the already modified landscape by making meaningful new relations, while the latter enhance user's understanding of space and position by making clear architectural articulations. In contrast with Tschumi's project where architecture formed a grid of homogeneity, and in line with Gruen's design in Fort Worth where architecture itself formed landscape, the composition of architectural elements in Luxembourg project is coherent with microsites and different existing spaces.

Reference

Adolphe Alphand, *Les Promenades de Paris: histoire - description des embellissements*. Connaissance et mémoires, 1867

Jay Appleton, *Some Thoughts on Geology of the picturesque*, in *the Journal of Garden History*, vol 6/03, 1986

Ty Cashion, *the New Frontier: A Contemporary History of Fort Worth & Tarrant County, Chapter 6: 1950-1959: Greater Fort Worth.* Historical Publishing Network, 2006

Christophe Girot, *Immanent Landscape*, in *Harvard Design Magazine*, no. 36, Cambridge 2013. Retrieved from website: http://www.harvarddesignmagazine.org/issues/36/immanent-landscape

Victor Greun, *Cityscape and Landscape*, from magazine *ARTS & ARCHITECTURE*, September 1955.

John B. Jackson, *Discovering the Vernacular Landscape, Chapter 1: the World Itself*. Yale University Press, 1986

Ann E. Komara, *'Art and Industry' at the Parc des Buttes Chaumont*, School of Architecture, University of Virgina, 2002. Retrieved from website: http://libra.virginia.edu/catalog/libra-oa:10514

Rem Koolhaas, Bruce Mau, Jennifer Sigler (editor), *Congestion without Matter*. The Monacelli Press, New York, 1998

Robert E. Somol (author), Julia Czerniak (editor), *All Systems GO!: The Terminal Nature of Contemporary Urbanism*, in *CASE: Downsview Park Toronto*. Cambridge, MA: Harvard University Graduate School of Design, 2001)

Manfredo Tafuri (author), Barbara Luigia La Penta (translator), *Architecture and Utopia, Design and Capitalist Development*. MIT, 1976

Tom Turner, *City as landscape*, London E&FN Spon, 1996. Retrieved from website: http://www.gardenvisit.com/history_theory/library_online_ebooks/architecture_city_as_landscape/landscape_architecture_theory

Charles Waldheim, *Landscape as Urbanism, A General Theory*. Princeton University Press, 2016

Norval White, *Guide to the Architecture of Paris*. Scribner, March 1992

Archdaily: Parc de la Villette. http://www.archdaily.com/92321/ad-classics-parc-de-la-villette-bernard-tschumi. Last visited on Dec 19, 2016

Detroit Urban Design: 005 Lafayette Park. http://detroiturbandesign.blogspot.nl/2011/01/005-lafayette-park-example-in.html. Last visited on Dec 23, 2016

The Journal of the American Institute of Architects: Plan for Downtown Fort Worth. http://www.architectmagazine.com/project-gallery/plan-for-downtown-fort-worth. Last visited on Dec 19, 2016

Time: The City: A Private Subway. Published in 1963. http://content.time.com/time/magazine/article/0,9171,828025,00.html. Last visited on Dec 19, 2016

New Age Architecture: Parc de la Villette Bernard Schumi. https://commons.mtholyoke.edu/architectualblog/2015/12/12/parc-de-la-villette-bernard-tschumi/. Last visited on Dec 23, 2016

REURBANIST: The Father of the Shopping Mall, Victor Gruen, was an Urbanist.
http://reurbanist.com/2013/05/the-gruen-effect-victor-gruen-and-the-shopping-mall/. Last visited on Dec 23, 2016

Wikipedia: Northland Centre. https://en.wikipedia.org/wiki/Northland_Center. Last visited on Dec 21, 2016

Wikipedia: Parc de la Villette. https://en.wikipedia.org/wiki/Parc_de_la_Villette. Last visited on Dec 19, 2016