SITE AS A GENERATIVE FORCE TO ARCHITECTURAL THEORY

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ABSTRACT

SITE AS A GENERATIVE FORCE TO ARCHITECTURAL THEORY

In recent architecture literature, the debate on context seems to have given way to a discussion that sees "site" as a strong conceptual alternative to "context." One can trace this development back to the 1940s when the debate on context gradually emerged in response to rebuild war-torn European cities. The recent discussions on site, preserve important fragments of the debate on context that emerged after World War II, flourished in 1960s and arguably disappeared after the 1980s. The discussion on "site" was also enriched by the expansion of the notion of landscape by a ground-breaking shift in landscape architecture after the 1980s, as a result of poststructuralist questioning of binary oppositions, like urban versus rural, or nature versus culture. By the 1980s, the extended notion of landscape which included the natural as cultural construct, led to the introduction of a broad range of formulations, such as the temporal, multiscalar, performative, adaptive and relational understandings of site. These developments indicate a recent convergence between architecture and landscape architecture with respect to urbanism.

This study is a critical investigation into why "site" became an important target in the late 20th and the early 21st century for architecture and landscape architecture by putting that this did not randomly emerge. The thesis also reflects on the recent formulations of site might provide a rich territory for speculation on the relationship between site, architecture and landscape architecture both with reference to theory and pedagogy.

ÖZET

MİMARLIK TEORİSİNE OLUŞTURUCU GÜÇ OLARAK ARAZİ

Son dönem mimarlık yaznınında "bağlam" tartışmaları, "arazi"yi bağlam yerine güçlü bir kavramsal alternatif olarak gören tartışmalara doğru yol almıştır. Bu gelişmenin izleri, 1940'larda İkinci Dünya Savaşı sonrasında yıkılan Avrupa kentlerinin yeniden inşaasına yönelik olarak aşama aşama ortaya çıkan bağlam tartışmalarına kadar sürülebilir. Arazi üzerine tartışmalar, İkinci Dünya Savaşı sonrası ortaya çıkan, 1960larda çeşitlenen ve 1980 sonrası ortadan kaybolan bağlam tartışmalarının önemli parçalarını içerir. Arazi üzerine tartışmalar, kente karşı kır ya da doğaya karşı kültür gibi ikili zıtlıkların postyapısalcı sorgulaması sonucu peyzaj mimarlığında çığır açan değişikliklerin meydana gelmesi ile 1980ler sonrası içeriği genişleyen peyzaj kavramı ile de zenginleşmiştir. 1980lerle birlikte, doğalı kültürel bir yapı olarak ele alan genişleyen peyzaj kavramı, arazinin, zamansal, çok-ölçekli, performatif, uyumlanan ve ilişkisel anlamlarına yönelik geniş kapsamlı formülasyonların üretilmesine neden olmuştur. Bu gelişmeler, yakın zamanda, mimarlık ve peyzaj mimarlığı arasında kentleşmeye ilişkili olan bir yakınlaşma ortaya çıkarmaktadır.

Bu çalışma, geç yirminci yüzyıl ve erken yirmibirinci yüzyılda, mimarlık ve peyzaj mimarlığı için "arazi"nin neden önemli bir hedef haline geldiğinin tesadüf eseri olmadığı ortaya koyan eleştirel bir sorgulamasıdır. Bu tez, aynı zamanda arazinin son dönemdeki formülasyonlarının, arazi, mimarlık ve peyzaj mimarlığı arasındaki ilişki üzerine kuram ve pedagojiye ilişkin spekülasyon yapmak için zengin bir alan sunduğunu ortaya koymaktadır.

Dedicated to Nature for giving all the inspiration...

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CHAPTER 1

INTRODUCTION: "FROM SITE TO CONTEXT, FROM CONTEXT TO SITE TO SITE: WHAT HAPPENED TO CONTEXT?"

"Thinking of the city as a formal gestalt has been the most continuing underlying theme in studio procedure (Cornell University Urban Design Studio). Reducing the complex city to black and white (figure/ground) drawings which polarize mass and space, is the principal tool of analysis and design. Wayne Copper's (a student in the studio) figure ground plan of Wiesbaden has become almost a symbol of the studio because inherent in the plan are the polar opposites of urban form... Half the city is predominantly solid with spaces carved out of it; the other half continuous space with texture of object buildings; urbs, exurbs, thesis, anti-thesis; traditional city, modern city; here uniquely synthesized as a single duality." \(^1\)

In 1966, Colin Rowe and Fred Koetter wrote "Collage City", arguing that the urban context can be understood and intervened by way of seeing the urban plan in terms of figures and a ground the pattern of which helps identify modern versus traditional urban textures. They were highly concerned with modernist visions of and modern architecture's relation to urbanism, partially as a result of reconstruction efforts in European urban environments after the Second World War. Rowe and Koetter attempted to analyse the urban context by means of figure ground patterns of cities as a single unity.

Thirty years later, Rem Koolhaas would argue that "(Atlanta) shifted from center to periphery so quickly and so completely that the center/edge opposition is no longer the point. There is no center, therefore no periphery." He declared there is no all-encompassing definition of context and "fuck context" which could not be predicted and controlled in the 21st century city. Today, mobility and fluidity increase, economic activities and processes are globalized, geographically diffused global firms are outsourced in abroad sites, and internal peripheries emerge where "economic activities

¹ Colin Rowe, "The Present Urban Predicament", in *As I was Saying: Recollections and Miscellanous Essays vol 3*, ed. Alexander Caragonne, (Cambridge: MIT Press, 1996), 24.

² Colin Rowe and Fred Koetter, *Collage City*, (Cambridge: MIT Press, 1978).

³ Rem Koolhaas and Bruce Mau, S, M, L, XL (New York: Monacelli Press, 1995), 836.

⁴ Rem Koolhaas, "Bigness, or the Problem of Large", in *SMLXL*, ed.Rem Koolhaas and Bruce Mau (New York: The Monacelli Press, 1995).

are spatially dispersed at the metropolitan, national, and global level"⁵. In this conjuncture, "the advice of Collage City sounds archaic. It is impossible to characterize contemporary cities via binary opposites like figure vs. ground, mass vs. void, center vs. periphery or city vs. landscape. Sites of 21st century cities are decentralized, horizontally and even vertically distributed, involving cultural, social, political, economic, infrastructural and ecological conditions that are "layered, tangled and mutually dependent". All these developments indicate not only a physical rearrangement but also a conceptual shift in the relationship between city, architecture and landscape.

Recently, the elements of contemporary urbanism "re-array themselves in an urban-landscape system" in which the urban and landscape elements are dissolved within indistinct, fragmented agglomerations. This new territorial structure demands new conceptual formulations of context, organization and scaling for architecture. In recent literature, the debate on context seems to have dissolved within or given way to a discussion that sees "site" as a strong conceptual alternative to "context," or to put it briefly, context is replaced by site. After the 1990s, the term site has been more frequently used in articles, books and journals in theorizing the relationship of architecture to a given location. For instance, several special issues were dedicated to the exploration of "site" by well-established architecture periodicals: Daidalos dedicated its vol. 73 (1999) to "Architecture Goes Landscape", Architectural Design magazine titled its vol. 186 (2007), to "Site/Non Site", and OASE its vol.80 (2009) published a special issue "On Territories". In 2005, two authors from the disciplines of landscape architecture and architecture, Carol Burns and Andrea Kahn, published their book, "Site Matters: Design Concepts, Histories and Strategies", focusing on the conceptual redefinition of site.

The growing interest in site is not specific to architecture. Recent landscape architecture theory puts landscape that is capable of responding to change and transformation since it has similar characteristics with contemporary urbanization. By shifting its focus to the wholistic idea of landscape as an urban-landscape system since

⁵ Saskia Sassen, "The Global City: Introducing a Concept", Journal of World Affairs 11, issue 2 (2005):

⁶ Nina-Marie Lister, "Insurgent Ecologies: (Re)Claiming Ground in Landscape Urbanism", in Ecological Urbanism, 524-535, ed. M. Mostafavi and G. Doherty (Lars Müller Publishers, 2010), 525-526.

René van der Velde and Saskia de Wit, "The Landscape Form of the Metropolis", Delft Architecture Theory Journal, Issue 5, (2009): 55.

⁸ Carol Burns and Andrea Kahn, Site Matters: Design Concepts, Histories and Strategies (New York: Routledge Publications, 2005).

the end of 1980s, landscape architecture started to see the urban environment not as an antithesis of landscape but as an active agent that shapes it. Since the 1990s, with the emerging landscape urbanism movement as its leading component, the discipline especially focused on multi-scaled and multi layered natural-cultural networks in a given site as the spatial and temporal terrain that the discipline should shape. Architects like Vittorio Gregotti⁹, Kenneth Frampton¹⁰, Sanford Kwinter¹¹, Stan Allen¹² and Rem Koolhaas¹³ led the realization of a theoretical framework around the *site*, via related terms like *territory*, *field* and *landscape* to establish a common ground between architecture, city and landscape. These parallel developments seem to have created a recent convergence towards urbanism in the two disciplines and a relationship that has not previously existed.

This study is a critical investigation into the recent convergence of the disciplines of architecture and landscape architecture under the conceptual framework generated around the term "site". It questions why "site" became an important target for theoretical exploration for architecture and landscape architecture in the late 20th and the early 21st century.

The thesis questions:

- why the term site became a concept of interest to the discipline of architecture recently.
- why site is seen as a relevant concept to replace *context* in architecture theory.
- why contemporary landscape architecture theory is seen as a new inspirational framework for architectural theory.

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⁹ Vittorio Gregotti pointed out importance of territory for architecture in his articles: Vittorio Gregotti, "The Form of the Territory", *OASE Journal of Architecture*, 80 (2009 (1981)); Vittorio Gregotti, "Territory and Architecture", *Architectural Design Profile* 59, no. 5-6 (1985)

¹⁰ Kenneth Frampton figured out landscape as an alternative emancipatory agent to architecture in Kenneth Frampton, "Towards an Urban Landscape" *Columbia Documents of Architecture Theory*, vol 4, (1995): 83-94.

¹¹ Sanford Kwinter introduced landscape's event generated form to architecture in Sanford Kwinter "Landscapes of Change: Boccioni's Stati d'animo as a general Theory of Models", *Assemblage 19*, (1992).

Stan Allen proposed moving from objects to fields for a reassertation of the context, complexity and indeterminacy of the contemporary city. Stan Allen, "From Object to Field," in *Architecture After Geometry*, *Architectural Design*, vol 67, no.1/2, (Jan-Feb 1997).

¹³ Rem Koolhaas offered landscape, not architecture, as the primary element of urban order for indeterminate process in city. Rem Koolhaas, "*IIT Student Center Competition Adress*", (Illinois Institute of Technology, College of Architecture Chicago, March 5, 1998), quoted in Grahame Shane, "Emergence of Landscape Urbanism", in *Landscape Urbanism Reader*, ed. Charles Waldheim (New York: Princeton Architectural Press, 2006), 56.

- how specific pedagogies on site, their new instruments and representation techniques are relevant for architecture?

Methodogically, in attempting to answer these questions, the thesis hold a discourse analysis. The historical overview on the theoretical discussions on site is based on articles, books and theoretical discussions of the practice. The pedagogical inquiry on site explores new methods, instruments and representation techniques in the selected design studios based on the studio syllabus, studio works, studio books, booklets and publications.

In the last stance, the thesis intends to point to how architecture and landscape architecture can benefit from this convergence and especially how the dynamic, fragmented, multiscalar and polysemic formulations of site may reflect on architecture.

1.1. Scope of the Study

Throughout the thesis I will argue that the tendency to perceive site as a strong alternative to context in architecture is partly due to the abandonment of the contextualism in response to the rise of poststructuralism within architectural theory and in landscape architecture theory, after the 1980s, as the meaning of landscape started to cover a much broader territory. I believe that it is more rewarding to see the debate on "context" in relation to the historical development of urbanism rather than seeing it merely as a critical and arguably a reactionary response to avant-garde modernism in architecture. By shifting the focus from one-sided arguments between contextualism versus anti-contextualism, to the discussion about the notion of site, would enable architecture theory to provide a wide array of possibilities for framing the theoretical formulations of context, site and landscaped. Thus, I reframe this theoretical change in the form of a historical inquiry. To understand the recent convergence of the two disciplines; one has to understand the history of the debate on context in architecture and landscape architecture and how the concept was made instrumental to their education and practice.

Therefore, the chapters of the thesis are organized under, first, a historical overview of the theoretical development of the debate on context and second, of leading pedagogical practices in the two disciplines that are connected to the debate on context to understand how the methods, instruments and representation techniques were changing in shaping the two disciplines.

"Context" is a difficult and highly abstract concept to define as much as one that is powerful and useful. The dictionary defines context as; "connection of words" "the parts of a discourse that surround a word or passage and can throw light on its meaning" 14. Describing the context becomes directly relevant to construct meaning and also establishes the framework within which something is situated.

The theoretical framework that I draw in this thesis starts with the emergence of the debate on context in architecture after WWII. The term context received a specific meaning within architectural theory as a result of Colin Rowe's contextualism during the 1960s, which has connections to the idea of Townscape developed by the late 1940s¹⁵. Thus, the historical timeline reaches back to the 1940s and concludes in the present. The theoretical discussions revolving around context were based on the discussions on urbanism. These discussions include critical re-evaluation of modernism at the second half of the century generated by Townscape with various attempts by Hubert de Cronin Hastings, Gordon Cullen, Ernesto Rogers, Carlo Aynomino, Aldo Rossi, Colin Rowe those who were searching for how to attain historical continuity in traditional cities, gathered around Architectural Review magazine and Casabella Continuità magazine in Italy. It shows how these efforts put the emphasis on traditional cities and, in a way, contributed to the flourishing of the concept of context in a certain way. The thesis also focuses on critical responses influenced by phenomenology on a more site specific and experience-based description of context developed by Vittorio Gregotti and Kenneth Frampton. It elaborates on how Gregotti and Frampton and contributions of predecessors of architects inspired by phenomenology and a consequent understanding of context, like Christopher Alexander, Kevin Lynch, Christian Norberg-Schulz widened the scope of debate on context beyond the matrix of the historical city throughout the 1970s. The initial fragmentation of holistic and comprehensive attempts to define "context," and the emergence of site as a strong conceptual alternative accelerated in the 1980s by the work of Rem Koolhaas, Alex Wall, Sanford Kwinter, Stan Allen, Andrea Kahn and Carol Burns who argued that

¹⁴ Carol Burns, "On Site: Architectural Preoccupations in Andrea Kahn, ed., *Drawing Building Text*, 146-167 (New York: Princeton Architectural Press, 1991), 158.

¹⁵ Before 1940s, conceptual frameworks revolved around context were largely location-based geographical unit, concerning environmental concerns on site such as climate, sun direction, humidity, etc. Since 1940s, Hubert de Cronin Hastings and his co-editors, gathered around *Architectural Review'* magazine, introduced "Townscape" to advocate dense and complex spatial enclosure and the visual richness of traditional cities to enrich the visual, spatial and social qualities of cities.

neither the contemporary city nor other forms of global urban agglomerations can be comprehended as a whole.

The methodological framework that I draw for landscape architecture is quite similar. What I included as the theoretical discussions of context in landscape architecture focuses on the notion of context rather than its contents (the elements). The theoretical debate in landscape architecture does not directly address "context" as the debate in architecture does, since landscape itself is considered as context per se. That is why I frame the theoretical discussions on context in landscape architecture around the changing notion of landscape. The thesis includes the initial expansion of the notion of landscape that was initially equated with "nature" into a phenomenon that is understood via ecology by Ian McHarg's ecological design methodology in the 1960s and continued with Richard Forman and Michel Godron's landscape ecology, integrating ecological principles with spatial landscape patterns. McHarg led the expansion of the understanding of landscape from the scale of garden and park design to the scale of regional planning. McHarg's regional planning perspective that was extended by landscape urbanism and by the poststructuralist questioning of binary oppositions between nature and culture led to a radical shift in the discipline at the end of 1980s. With the writings of Ann Whiston Spirn, John B. Jackson, John Dixon Hunt, James Corner and Elizabeth Meyer, considered landscape, not as the antithesis to human intervention, but one system among many in urbanized environments¹⁶. When the meaning and scope of landscape was expanded, protagonists such as James Corner, Charles Waldheim, Mohsen Mostafavi, Chris Reed and, Elizabeth Meyer started to see landscape as part of a larger system of environmental intervention, one that works alongside urbanism. Within this recent vision, landscape architecture drives inspiration not only from ecology¹⁷ and the natural sciences but also from humanities,

.

¹⁶ See John Brinckerhoff Jackson, "Concluding with Landscapes", in Discovering the Vernacular Landscape, ed. J.B. Jackson, (New Heaven: Yale University Press, 1984), 145-158; John Dixon Hunt, Gardens and the Picturesque: studies in the history of landscape architecture, (Massachusetts:MIT Press, 1992); Anne Whiston Spirn, Granite Garden: Urban Nature and Human Design, (New York: Basic Books, 1984); Elizabeth Meyer, "The Expanded Field of Landscape Architecture" in Ecological Design and Planning, ed. George Thompson and Frederick Steiner, (John Wiley Press, 1997); James Corner, Recovering Landscape: Essays in Contemporary Landscape Architecture, (New York: Princeton Architectural Press, 1999); Charles Waldheim, "Landscape Urbanism: A Genealogy", in Praxis: Journal of writing+ building 4, (2002).

¹⁷ Since past few decades, ecology discipline introduces open, complex, self-organizing, cyclic and dynamic ecosystems approach which attributes dynamic, adpative, resilient systems to landscape architecture.

environmental design and phenomenology¹⁸. In response to 21st century sites characterized by rapid change, networks of communication, knowledge, resources, finance, and migration, landscape is given a dynamic, temporal, multi-scalar and polysemic reading situated between broader networks of ecology, infrastructure, material flow and specific scales of site.

To cover this transformation, the thesis explores not only the theoretical discussions on context but also elaborates how the different formulations of context are reflected in the operational aspects of the disciplines in novel instruments and techniques of design and representation. Academic institutions are hosts of intellectual, political, economic and social relationships and provide spaces of confrontation to the changing ideological, intellectual, political, relations in society. In architecture, where conceptual exploration does not find a counterpart in architecture practice, architecture pedagogy offers an "experimental space between instrumentality and conceptual speculation", 19. To understand the relationship between the conceptualizations of context and their instrumentality, I found it right to explore specific pedagogies that contributed to the debate on context in architecture and landscape architecture education. attempting to elaborate on these pedagogies I briefly recontextualize the work of the leading figure and the academic environment where this pedagogy is shaped together with methods, instruments and representation techniques. The leading figures mentioned in thesis Colin Rowe, Kenneth Frampton, Rem Koolhaas, Ian McHarg, James Corner and Mohsen Mostafavi were all worked both in academia and in practice; experimenting their specific theories in their design studios with students.

In architecture, I focus on the debate on context in three American schools of architecture: Colin Rowe's Contextualism (1963-1988) in Cornell University, K. Frampton Phenomenological influenced pedagogy in Columbia University (1972-1988) and Rem Koolhaas' work that argues against the contextualism in Harvard University (1996-2000). All these schools provided specific methods, techniques and instruments to the debate on context. These schools are part of a historical lineage that more or less following each other within the debate on context. Colin Rowe embodied his theory of contextualism into a pedagogy in Cornell University in the 1960s. The critical re-

¹⁸ At the end of 1980s, landscape architecture transferred phenomenology influenced approaches in architecture and site specific art practices of 1960s to landscape architecture and focused on site, specific character and sensous qualities of site and experience.

¹⁹https://www.architectural-review.com/today/radical-pedagogies-in-architectural-education/8636066.article

evaluation of modernism at the second half of the century generated by Townscape was partially adapted into contextualism by Colin Rowe in which "context" acquired a more specific meaning. In the 1970s, Kenneth Frampton offered a phenomenology-influenced response to mainstream global modernism which one can see as the initial fragmentation of context into site in Columbia University. In the 1990s, Rem Koolhaas rejected context as a totalizable notion, that is reconstructed around specific aspects of site, partially inspired by poststructuralist critique in Harvard University. By means of elaborating on these three discussions on context, I aim to trace the historical development 'from site to context', and 'context to site in architectural theory.

The specific pedagogies in landscape architecture on the extended notion of landscape that does away with the nature-culture or landscape-urban opposition are grounded in Ian McHarg's ecological planning method that he developed in University of Pennsylvania in the 1960s. Ian McHarg's perspective on the expansion of landscape from garden and park design to regional planning which was still influential until the early 1980s was evolved by James Corner's landscape urbanism in Harvard School of Design and Mohsen Mostafavi's "machinic landscapes" in the Architectural Association's Landscape Urbanism Program (2000-2004). These figures played an important role for developing the meaning and scope of landscape by shifting the discussions on landscape from natural systems only to a larger scope within which human ecologies are included. Thus, Ian McHarg, James Corner and Mohsen Mostafavi contributed to the current understanding of site as a dynamic, relational, multiscalar, operative, performative phenomenon by developing new cartography techniques to represent sequential and temporal aspects of landscape.

1.2. Outline of Chapters

The thesis is thematically organized in five chapters. After the introduction, the second chapter maps out the debate on context in architecture in direct connection to urbanism, particularly after the Second World War up to the present. This chapter is divided into two parts. The first part is based on the theoretical debate on context. It shows how conceptual frameworks revolved around context began with environmental concerns on site, largely as a location-based geographical unit, and after WWII transformed into a debate on postwar urban reconstruction concerned partially by preserving historical urban environments and partially in reaction to modernist

urbanism generated by the Architectural Review's Townscape campaign in the UK, and then turned back again to site, this time within a postmodern perception of sites as parts of a dynamic, fragmented and multiscalar networks. The second part of the chapter follows with an elaboration on three American schools of architecture that provided specific methods, techniques and instruments to the debate on context. It is categorized under a leading figure, the pedagogy, theory, method and instruments of context: This part starts with Colin Rowe's contextualism in which the context was given a specific, but limited meaning via the figure-ground analysis of traditional and modern urban patterns in Cornell University, and Kenneth Frampton's phenomenology influenced formulation in order to create a sense of resistance to global forces of modernization via critical regionalism and Rem Koolhaas' rejection of total context, in Harvard University as something impossible to pin down within the global speed of urban transformation.

The Third Chapter focuses on context in landscape architecture theory which is the development of which is mainly based on what landscape is. In order to further clarify this, this chapter is developed in two parts. The first part clarifies how landscape architecture moved from seeing the landscape as part of nature and as something that beautifies the city to development of the current understanding of landscape as a temporal, relational entity which embodies multiple meanings. The radical shift in landscape architecture was at the end of the 1980s, as a result of the poststructuralist questioning of binary opposition between nature and culture which was constructed after the Enlightenment. After then, landscape was not considered as antitheses to the human systems anymore but one system working among others within urbanized environments. Writings of John B. Jackson, John Dixon Hunt, Anne Whiston Spirn, Elizabeth Meyer, James Corner and Charles Waldheim contribute to understanding of landscape not antitheses to the human systems but as parts of the same ecological system. The second part of the chapter focuses on pedagogies, methods and instruments of three important schools of landscape architecture education that have a common lineage for the development of reigning contemporary landscape architecture theory in the "West", 20. This chapter indicates how Ian McHarg grounded the roots of dynamic

²⁰ I am aware that there are other landscape architecture schools that are highly influential for development of contemporary landscape architecture theory and education such as Chritophe Girot's theory of motion and Video techniques in ETH, C.M. Steenbergen's research by design approach in TUDelft, Richard Stiles' LENotre: Landscape Forum project for landscape planning education in TUWien and from the East, Proff. Dr. Kongjian Yu's Turenscape in Peiking University. These schools

and broader understanding of landscape via ecological planning method University of Pennsylvania (1954-1984)and how it was revised and extended by James Corner's performative landscape (*landschaft*) in Harvard University (1997-2004), and by Mohsen Mostafavi's operative landscape (*machinic* landscape) at Landscape Urbanism Program in the Architectural Association (2000-2004).

The Fourth Chapter, elaborates emerging concepts and approaches on site in architecture and landscape architecture since the WWII by putting the discussions in the same historical line. It thematically orders emerging theories and concepts of site in architecture and in landscape architecture that are discussed in Chapter 2 and Chapter 3. This classification clarifies deeper understanding of recent discussions of site on how site constructs a framework for polysemic meanings, how the phenomenology influenced formulations embody site, how to understand the multicontextual linkages of site oscillating between specific to global, how to handle site as a temporal phenomenon and the tension between earlier formulations on form and recent emphasis on strategy and process. The aim of the chapter is to develop a better and deeper understanding of formulations of site by putting the connections between the disciplines. Thus, these thematic categorizations do not mean that the formulations are separated from each other. Furthermore, the ideologies and positions behind these themes are related to, sometimes dissolved into each other. The thematic categories are: Site as a Relational Construct, Site as a Multiscalar Phenomenon, Site as a Temporal Phenomenon, Site as Form vs. Strategy.

In 'Conclusion: Affirmations and Limitations', the study concludes with why site became a strong conceptual framework for the 21st century cities; why it reemerged as a conceptual framework both for architecture and landscape architecture
disciplines and replaced context in architecture theory recently. It reviews the study by
putting how the concept of site is related with characteristics of 21st century cities
where material and immaterial information, capital and physicality, spaces and flows
intermingled in complex relationships and dynamic formations. It also speculates on
how the recent dynamic, fragmented, multiscalar and polysemic formulations of site
might be of benefit to both architecture and landscape architecture and particularly may
influence architecture and architectural production. It puts the potentials, limitations and

are not included in this thesis since this thesis covers the pedagogies that are directly in the same lineage with Ian Mcharg about extending the notion of landscape.

future possibilities of landscape architecture's dynamic, relational, fragmented, multiscalar understanding of site for the discipline of architecture.

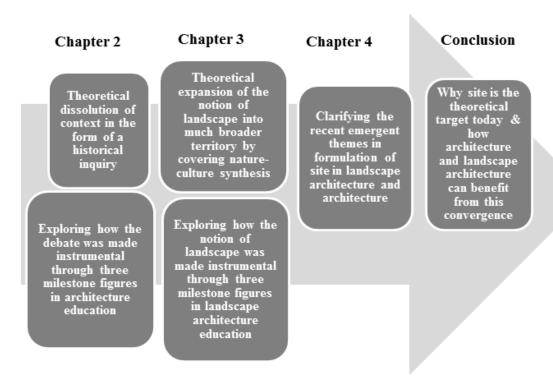


Figure 1. Flow of the thesis in chapters.

CHAPTER 2

THE DEBATE ON CONTEXT IN ARCHITECTURE THEORY AND ITS PEDAGOGIES SINCE WWII

This chapter aims to understand why the diversified vocabulary on site is frequently used in architecture theory recently. By going back to 1940s, the thesis conveys how emergent discussions on "site" preserve important fragments of the debate on context which arguably dissolved after the 1980s. To identify the fragments of the debate on context in the recent formulations of site, this chapter maps out a brief history of debate on context in architecture theory from its emergence after WWII, to its flourishing in 1960s, to its impasse at the end of 1980s with discussions on site with a more diversified vocabulary which sees "site" as a stronger conceptual alternative to context. To identify the change in the formulations of context and site this chapter focuses on the theoretical discussions and to detect how these theories found their own methods, instruments and representation techniques, it looks into methods and techniques produced in architecture education.

This chapter is elaborated in two parts. The first part clarifies the development of the debate on context in architecture theory within three overlapping eras: contextualism, phenomenology influenced architecture and post structuralism. The first part conveys how the formulation of context at the first half of twentieth century as environmental factor evolves into as attributes of historical urban environments at the second half of the century generated by Townscape. The section shows various attempts by Hubert de Cronin Hastings, Gordon Cullen, Ernesto Rogers, Carlo Aynomino, Aldo Rossi, Colin Rowe those who were searching for how to attain historical continuity in traditional cities, gathered around Architectural Review magazine and *Casabella Continuità* magazine in Italy. It shows how these efforts put the emphasis on traditional cities and, in a way, contributed to the flourishing the concept of context. Second, the thesis puts how oppositions against avant-garde currents of twentieth century, led emergence of theory and research in environmental psychology and phenomenology by Christopher Alexander, Kevin Lynch, Christian Norberg-Schulz throughout 1970s and blended into the critical responses against global culture by Vittorio Gregotti and

Kennneth Frampton. This section puts how these theories widened the scope of debate on context beyond the matrix of the historical city and lead to emergence of more site specific and experience-based description of context. Third, since the end of 1980s, culminating within the rise of post-modernism and its reflection on discourses urbanism, holistic and comprehensive attempts to define "context", seem to have dissolved into a discussion that sees "site" as a strong conceptual alternative. Rem Koolhaas, Alex Wall, Sanford Kwinter, Stan Allen, Andrea Kahn and Carol Burns helped to elaboration of dynamic, dispersed and fragmented sites of 21st century. Figure 2 shows the development of the debate on context in architecture theory within three overlapping eras from emergence to dissolution: contextualism, phenomenology influenced architecture and post structuralism.

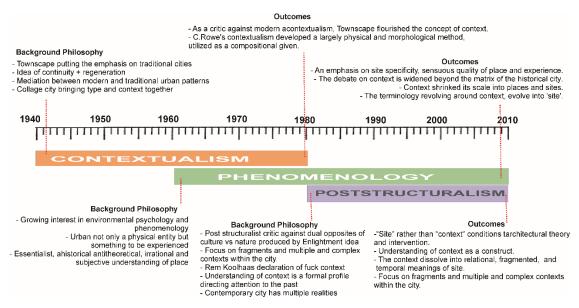


Figure 2. The development of the debate on context in architecture theory within three overlapping eras.

The second part investigates specific pedagogies in architecture in relation with debate on context which provide specific methods, techniques and instruments to the debate. This part focuses on three lines of pedagogies in American Schools of Architecture which are also summarizing the episodes of debate on context: Colin Rowe's Contextualism: Cornell University (1963-1988), K. Frampton sensuous and experience-based formulations of context in Columbia University (1972-1988) and Rem Koolhaas' collapsing of total context in Project on the City Studio in Harvard University, (1996-2000). The leading figures that are involved in this part led the discussions on context instutionalized and instrumentalized in leading schools where a

strong theory and discourse on debate on context are produced. All these schools provided specific methods, techniques and instruments to the debate on context. These schools followed a historical lineage about the episodes of debate on context which are all response to avant-garde architecture's apathy towards contextual givens. Colin Rowe was the first figure who transferred the debate on context into his pedagogy of contextualism in Cornell University in the 1960s in which "context" acquired a more specific meaning. In 1970s, Kenneth Frampton provided a phenomenology influenced formulation as a response to modern architecture's institutionalized theory and aesthetics which one can see as the initial fragmentation of context into site in Columbia University. In 1990s, Rem Koolhaas' rejected a total context that is reconstructed around specific aspects of site as a poststructuralist critique in Harvard University. These three schools elaborate episodes of the debate on context 'from site to context', and 'context to site.

2.1. Re-evaluation of the Debate on Context in Architecture Theory

2.1.1. From Site to Context

The emergence of the debate on context is associated with a "substantial critique of modernist practice" in order to relate the individual building to its urban surroundings. With the discussions on how to rebuild war demolition of European cities after the World War II, the debate on context were increased to formulate how to integrate new objects to the traditional cities. Before WWII, context was used synonymous with environment and it was largely involving environmental factors such as climate, sun direction, wind which were considered as the main generators of a type of house or a settlement. Until the 1910s, it was theorized in the formulation of the vernacular and since then, modern regionalist attempts combined modern rational use of materials with local materials and local production techniques. In his book "Four Approaches to Regionalism in Architecture in Architectural Regionalism". Elefterios Pavlides labels these approaches as modern regionalism as the "functional adaptation of

²¹ Andrian Forty, "Context", in *Words and Buildings: A Vocabulary of Modern Architecture*, ed. Adrian Forty, 132-135 (London: Thames and Hudson, 2000), 132.

²² Elefterios Pavlides, "Four Approaches to Regionalism", in *Architecture in Architectural Regionalism: Collected Writings on Place, Identity, Modernity and Tradition*, ed. Vincent B. Canizaro, (New York: Princeton Architectural Press, 2007),

primary forms of vernacular architecture to climate and site". F.L. Wright's organic architecture in Barnsdall House and Struges House²⁴, Richard Neutra's site ingestion²⁵ and Oscar Niemeyer's Lagoa House²⁶ were based on environmental factors as contexts generate their designs.

At the first half of the twentieth century, some architects demanded for a "radical urban change of the nineteenth-century post-industrial city" ²⁷ such as E. Howard's Garden City, Italian Futurist, CIAM and so on, who believed in the progressive ideals of the Enlightenment. As a response to these demands and critical reevaluation of modernism at the second half of the century²⁸, large palette of alternative visions and strategies emerged declaring for rehabilitation of cities. After WW II, architecture profession started to discuss on how to equip itself for the reconstruction of demolished cities and how to build sensitivity to the historical characteristics of premodern urban environments. Architecture theoretician Dirk van den Heuvel explains that a shift "from environment to context" ²⁹, as changing the focus from the biological environment to the urban context. Adrian Forty defines the same shift as "from the positivist to the culturalist"³⁰ to refer to replacement of rational inputs of nature with cultural and historical elements of the existing urban fabric.

In the 1940s, the strongest feature of postwar agenda was generated by Hubert de Cronin Hastings and his co-editors, gathered around Architectural Review' magazine who introduced "Townscape" to enrich the visual, spatial and social qualities of cities in reaction to CIAM modernism. Townscape was a reaction towards nuclear threat after the world war which Hasting evaluated to be an opportunity to develop a utopia transforming the human nature. Owing to his personal conservative politics, he exalted

²³Elefterios Pavlides, "Four Approaches to Regionalism", in Architecture in Architectural Regionalism: Collected Writings on Place, Identity, Modernity and Tradition, ed. Vincent B. Canizaro, (New York: Princeton Architectural Press, 2007), 239.

²⁴ F.L.Wright integrated characteristics of local material, topography, and nature into villas for a unified composition what he called 'organic architecture'.

²⁵ By site ingestion, Neutra incorporate site into the house by site interpenetrating into the house.

²⁶ Oscar Niemeyer has synthesized Le Corbusian free plan with vernacular traditions of his native Rio.

²⁷ Erdem Erten , John Pendlebury and Peter J. Larkham, Alternative Visions of Post-War Reconstruction: Creating the modern townscape, (New York: Routledge Publications, 2015), 2.

²⁸ The periodization of twentieth century as early twentieth century and second half of the century (after second world war) period were defined by E. Erten of which he referred as a consensus in architectural historiography. See Erdem Erten, John Pendlebury and Peter J. Larkham, Alternative Visions of Post-War Reconstruction: Creating the modern townscape, (New York: Routledge Publications, 2015).

²⁹ Dirk van den Heuvel explains the shift from environmental considerations to urban context as shifting from environment to context. Dirk Van Del Heuvel, "Another Sensibility- The Discovery of Context", OASE Journal. No 76, (2008): 25.

³⁰ Adrian Forty, Words and Buildings: A Vocabulary of Modern Architecture (London: Thames and Hudson, 2000)

Townscape, an attempt to reinterpret irregularity of 'picturesque' as the "aesthetic outcome of a libertarian attitude to democracy"³¹. In the urban context, such democratisation meant the "coexistence of new and the old, the modern and the traditional"³². Thus, Hastings advocated the dense and complex spatial enclosure and the visual richness of traditional cities as positive attributes of historical and traditional urban environments.

The practical underpinnings of Townscape were developed by Gordon Cullen, the art editor of the Architectural Review, taught at Birmingham (1953-1954) and Bristol Universities. Cullen introduced analysis of curving streets of historic towns under the concept of *serial vision* that the scenery of town is revealed in "series of jerks or revelations". He displayed his analysis through raw and sketchy drawings which were drawn from the view of a moving person: on 'here' and 'there' and 'existing' and the 'revealed view' (Figure 3). Gordon Cullen compiled the Architectural Review's Townscape series and produced and published his book "Townscape", that includes practical application of town analysis. In the book, he focused on the visual relationship that the street, buildings, trees, lampposts, sidewalks, and all the elements that construct any town.



Figure 3. Gordon Cullen's drawings of Evesham. (Source: Gordon Cullen, "Midland Experiments: Evesham", The Architectural Review, February 1954).

³¹ Hubert de Cronin Hastings, *The Alternative Society: Software for the Nineteen-Eighties* (London, David & Charles Limited, 1980): 103. Quoted in Erdem Erten, "I, The World, The Devil and The Flesh: Manplan, Civilia and H. de C. Hastings", *The Journal of Architecture*, vol 17, no:5, (2012): 708.

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³²Erdem Erten, "I, The World, The Devil and The Flesh: Manplan, Civilia and H. de C. Hastings", *The Journal of Architecture*, vol 17, no:5, (2012): 708.

³³ Gordon Cullen, Townscape, (New York: Reinhold Pub. Corp., 1961), 9

³⁴ Gordon Cullen, *Townscape*, (New York: Reinhold Pub. Corp., 1961).

In addition to the Townscape, based on the English picturesque, there was a parallel development to context in Italy with a similar focus on the historical context. The representatives are Ernesto Rogers, Aldo Rossi, Vittorio Gregotti, Saverio Muratori, Carlo Aymonino³⁵, Giancarlo De Carlo who were accumulated under the umbrella of journal of *Casabella Continuità*.

Ernesto, the leading figure of Casaballe Continuita, drew attention to responsiveness of architecture to location, in his editorial text in the magazine in 1954. He criticized both orthodox modern architecture's formalism and modernist architect's tendency of "treating every scheme as a unique abstract problem and their indifference to location" ³⁶ to control their work. By using the word '*le preesistenze ambientali*' (surrounding pre-existences) or '*ambiente*' to refer to context, Rogers suggested dialogue with the surrounding. This *preesistenze ambientali*' included not only the natural surroundings, but also those historically created by human. Rogers pointed out history that was indissolubly linked to '*Preesistenze ambientali*', as the essential element for architecture. For him, to achieve historical continuity, an "architect must be able to insert his own work into the preesistenze ambientali and to take it into account dialectically" ³⁷.

Carlo Aymonino wrote for the Casabaella Continuita from 1957-65, by focusing on city from a different perspective. He ranked city as the evidence of architectural intelligence and considered buildings merely as a piece of larger urban pattern with specific functions. Thereby, as the constant elements in city, he analyzed and catalogued apartment plans from traditional to modern European and American cities in his book "L'Abitazione Razionale: Atti de Congressi CIAM 1929-30" to identify typologies of social housing. He is one of the early examples of a typological approach to architecture and urbanism. The Italian architect Aldo Rossi was inspired from Aymonino's typology and, accordingly, evaluated the historical figures of architectural history as types. They met when Rossi was teaching in Venice in the 1960s and collaborated in Studio AYDE (1967-70), on the design of Monte Amiata housing blocks in Milan.

³⁵ Carlo Aymonino was Italian architect and urban planner who was one of the initial figures introduced typology into architecture theory.

³⁶ Adrian Forty, Words and Buildings: A Vocabulary of Modern Architecture, (London: Thames and Hudson, 2000).

³⁷ Ernesto Rogers, Gli Elementi del Fenomeno Architettonico (1961) Guida editor, Naples, 1981. Quoted in Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, (London: Thames and Hudson, 2000).

Rossi wrote his well-known book "Architecture of the City" in 1966 (published in English in 1982) as a critique against Journal Casabella Continuita editors' stance on historical continuity. Rossi criticized Ernesto Rogers' *le preesistenze ambientali* for ignoring "history of land development and the collective consciousness' of the city" Rossi also aimed to sustain historical continuity; but in a different manner from Rogers by focusing on urban form of traditional cities. His main goal was identifying timeless typology of urban forms. That is why he considered architectural forms themselves as 'types', independent of their functions. According to Rossi, types are historical constants that adapt to the historical context, and are paradoxically ahistorical as the formal basis of architectural design. For him, type of urban form and architecture of the city as "fundamental artifact of human culture and repository of the collective memory" were contextual elements in city.

To sum up, since 1940s, against modern radical urban transformation, the intellectual groups those who were supporting rehabilitation of postwar cities were gathered around Architectural Review magazine under Townscape in UK and *Casabella Continuità* magazine in Italy. In their book "Alternative Visions of Post-War Reconstruction" ⁴¹, Erten, Pendlebury and Larkham showed that, Since WWII, in reaction to the modern architecture's object-centred focus, "townscape reframes post-war reinterpretation of civic design and resurging interest in visual planning within a new historical context" ⁴². Townscape initiated a critical re-evaluation of modernism which put the emphasis on traditional cities and, in a way, contributed to the flourishing the concept of context.

In 1966, "context" acquired a more specific meaning with Colin Rowe's theory of *contextualism* which he developed in Urban Design Studio at Cornell University. Rowe understood the urban context via its form that is the distribution of masses on urban space and advanced a formal spatial analysis partially inspired by the Nolli map and its inversion, termed figure-ground analysis. Largely inspired from the townscape movement and Rudolf Wittkower's teaching on the Renaissance and the Baroque, Colin

³⁸ Aldo Rossi, *The Architecture of the City* (Cambridge: The MIT Press, 1972).

³⁹ Adrian Forty, Words and Buildings: A Vocabulary of Modern Architecture (London: Thames and Hudson, 2000).

⁴⁰ Joan Ockman, Architecture Culture 1943-1968, (New York: Rizzoli, 1993), 393.

⁴¹ Erdem Erten , John Pendlebury and Peter J. Larkham, *Alternative Visions of Post-War Reconstruction: Creating the modern townscape*, (New York: Routledge Publications, 2015).

⁴² Erdem Erten , John Pendlebury and Peter J. Larkham, "Introduction: On Alternative Visions, in *Alternative Visions of Post-War Reconstruction: Creating the modern townscape*, eds. Erdem Erten , John Pendlebury and Peter J. Larkham, 1-13 (New York: Routledge Publications, 2015), 5.

Rowe wrote "Collage City" with Fred Koetter in 1973, published in 1978. By criticizing modern utopianism, Rowe and Koetter explored the how the new object should be inserted to traditional city by considering the existing urban environment. He believed that "both present and future are to be no more than a continuation of the past". Different from premises about the debate on context, Rowe not only focused on the historical forms but also considered modern forms to mediate between the two.

Implicit in Rowe's position is his critique of modernist idealism largely based on functionalism and the dominance of program in creating architectural form. To overcome this idealism, Rowe proposes a compromise where the ideal type is modified according to the context. Rowe identified two opposing positions in architecture: worship for program and worship for paradigm. He matches program⁴⁵ with utopia and paradigm⁴⁶ as well as with tradition. Program derives from ideals equated into a schema and paradigm related to continuation of past via typical and the typological ideals. Rowe criticized both worship on program and worship on paradigm and offered departing from both of these positions. He suggested a typological concern demanding for a tradition in which site conditions and program modify each other. The collage city is bringing these two together.

Figure 4 shows the background philosophy and outcomes of contextualism that contributed the emergence of the debate on context. Townscape and contextualism put the emphasis on the traditional cities and led the flourishing the concept of context. Figure 5 summarizes the disciplinary exchange, people and literature in contextualism that enriched the discussion.

⁴³ Colin Rowe and Fred Koetter, *Collage City*, (MIT Press, Cambridge MA, 1978)

⁴⁴ Colin *Rowe*, "Program versus Paradigm", *Cornell Journal of Architecture* 2 (1983): 19.

⁴⁵ Rowe defines program as: "a definite plan or schema of an intended proceeding: an outline or abstract of something to be done". See Colin *Rowe*, "Program versus paradigm", *Cornell Journal of Architecture* 2 (1983):19.

⁴⁶ Rowe defines paradigm as "universally recognized scientific achievements that for a time provide model problems and solutions to a community practitioner". See Colin *Rowe*, "Program versus paradigm", *Cornell Journal of Architecture* 2 (1983): 19.

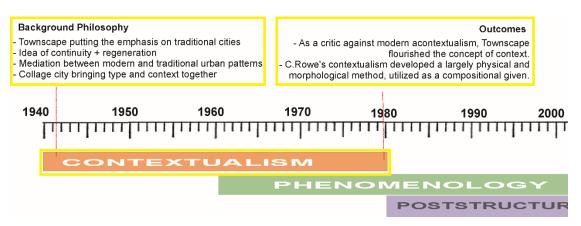


Figure 4. The background philosophy and outcomes of contextualism.

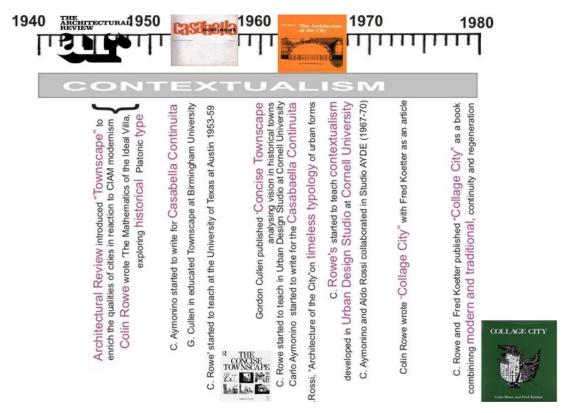


Figure 5. The disciplinary exchange, people and literature in contextualism.

2.1.2. Influences of Environmental Psychology and Phenomenology on Debate on Context

One can see the 1960s as the golden years of debate on context when the debate was triggered by avant-garde currents of the early 20th century and their wide palette criticism pulled into this discussion. The end of the 1960s, there was a growing interest in environmental psychology paying special attention to urban not only as a physical entity but something to be experienced with sensual and emotional impact. In 1960s the representative institution of environmental psychology was Berkeley University School

of Environmental Design that had a grounded theory⁴⁷ and research on how behavior and satisfaction of users were shaped by the environment. At that period of time, in Berkeley, sociology, psychology, systems theory, mathematics, and computer modelling were inspirations for design theory⁴⁸. Christopher Alexander was one of the early researcher in Berkeley who combined his mathematics education with cognitive studies and formulated context beyond the matrix of the historical city. Since 1963, he observed patterns of towns and neighbourhoods, houses, gardens and rooms from the view of city dweller by adapting a set of problem solving theory in computer sciences and computer diagrams to architectural design. In 1964, he wrote his book "Notes on the Synthesis of Form"⁴⁹, on analytically exploring formal patterns in villages in India and found out the correspondence between context and form. Different from previous understandings of context, Alexander defined context not deriving from features of historical cities, but from physical and cultural variables of the environment. As architecture historian Adrian Forty⁵⁰ states, he used the word context synonym with environment to refer to physical and cultural factors. In the book, Alexander formulated a method that is based on analytical exploration of specific features and physical conditions (the context) and analytical research on formal responses to these conditions⁵¹. For Alexander, "context defines the problem",⁵² and design finds out solution to this problem by means of form. Synthesizing form means exploring form to identify what kind of form respond well (or fit in Alexander's words) to a context. He puts a schema of exact forms suggested for specific conditions – specific contexts.

Another figure who introduced environmental psychology into architecture was Kevin Lynch. In the beginning of 1960s, in MIT, urban planner Kevin Lynch considered the city from the perspective of city dweller's perception focusing on the citizens' mental images of urban experience. Kevin Lynch is a Marxist urban planner who develops his critique against modern city in which orientation or mapping out the

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⁴⁷The theoretical background about how behavior and satisfaction of users were shaped by the environment İn Berkeley was inherited by Carl Sauer who searched discovering images people have about different geographies in Berkeley University in 1920s.

⁴⁸ Jennifer A. Wolch and Anthony J. Cascardi, "The Global urban Humanities Initiative: Engaging the humanities and environmental design in pedagogical innovation", *Berkeley Planning Journal* 26,no.1. (2013).

⁴⁹ Christopher Alexander, *Notes on The Synthesis of Form*, (Cambridge: Harvard University Press, 1964). ⁵⁰ Andrian Forty, "Context", in *Words and Buildings: A Vocabulary of Modern Architecture*, 132-135 (London: Thames and Hudson, 2000), 134.

⁵¹ The analytical approach of Alexander derived from his interest on set and problem solving theory in computer sciences. He adapted computer diagrams to architectural design.

⁵² Christopher Alexander, *Notes on The Synthesis of Form*, (Cambridge: Harvard University Press, 1964), 15.

city and the self is trouble. Lynch carries the traces of Townscape in his formulation of urban image and spreading it from MIT, and mixing it with psychology of perception. In his book "Image of the City". Kevin Lynch focused on physical-spatial qualities of the urban form that influence clear citizens' mental images of urban experience. For Lynch, pedestrians developed cognitive maps of urban spaces not merely via the physical characteristics of the city, but by means of a two-way process affected by physical characteristics and an internal learning process. In Lynch's studies, context is understood as an amalgam of the cognitive images related to the urban environment. Hence, a good city form leads to a clear urban image. The apparent clarity or memorability of urban space, termed 'legibility' by Lynch, is the main requirement for a better environmental image. Lynch passes over individual differences and focuses on "public images". Carried by a large number of inhabitants. Throughout the book, he investigates ways of developing the environmental image.

Throughout 1960s, the studies in environmental psychology were enriched by phenomenology discourse as the study of human situations, events, meanings, and experiences as they spontaneously occur in the course of daily life⁵⁵. According to architecture historian Jorge Oter-Pailos, with its emphasis on sensory experience as an "essentialist, ahistorical antitheoretical, irrational and subjective flight from all scholarly conventions and discourse"⁵⁶, the flourishing of *architectural phenomenology*⁵⁷ is depended on two promises: rejection of intellectual theory and rejection of scenographic images from history⁵⁸. Architecture phenomenologists are independent architects largely following key texts written by German philosopher Martin Heidegger, especially his essay "Building, Dwelling, Thinking"⁵⁹. In the essay, which still remains very influential for architects, Heidegger argued that sites have the ability to "gather and

⁵³ Kevin Lynch, The Image of the City, (Cambridge: MIT Press, 1960).

⁵⁴ Ibid, 7.

⁵⁵ R. von Eckartsberg, "Existential-phenomenological research", in *Phenomenological inquiry in psychology* ed. R. Valle (New York: Plenum, 1998), 3.

⁵⁶ Jorge Oter-Pailos, *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern*, (Minneapolis: University of Minnesota Press, 2010), xiii.

In his book chapter, "Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern", architecture historian Jorge Oter-Pailos coined the term "architectural phenomenology" to refer to phenomenology influenced formulations in architecture. Throughout the thesis, I preferred to use this phrase to refer to phenomenology influenced architecture. Jorge Oter-Pailos, *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern* (Minneapolis: University of Minnesota Press, 2010).

⁵⁸ Ibid, xi.

⁵⁹Martin Heidegger, "Building, Dwelling, Thinking", trans. Albert Hofstadter, in *Martin Heidegger: Basic Writings*, ed. David Farrell Krell, (New York: Harper Collins, 1977).

preserve the fourfold of man divinities, sky and earth"⁶⁰ where the dweller creates a "poetics of place"⁶¹. It was the character of place that gives this poetic quality to the dwelling and the experience of the dweller. Against understanding of the world merely visual, Heidegger explored the essence of things beyond how they show themselves That is why, Heidegger offered understanding of things through senses, emotions and bodily experiences.

Christian Norberg-Schulz is an architectural phenomenologist, following footsteps of Martin Heidegger, and attempted to develop a phenomenology of place. In 1976, with his essay "The Phenomenon of Place" Norberg-Schulz stated that humans felt at home in places where they felt the ability to connect with the physical character of a geographical setting. For Norberg-Schulz, every site was unique as a place, and every place presents a different experience of space which he calls "qualitative differences" Accordingly, locality and particular spatial identity is especially essential for Norberg-Schulz. He defined origin of human experiences in nature. Rather than looking at the historical buildings, he offers to go back to original source in the landscape to find the original experiences of *genius loci* 10 show the qualitative differences and unique experiences, Norberg Schulz suggested visual diagramming and aerial photography 10 to refer to the direct experience of the landscape (Figure 6). Norberg-Schulz also engaged with basic architectural elements like wall, floor, ceiling which are differentiated through tectonics and material. He regarded material and tectonics for their abilities to manifest the character of place.

⁶⁰Martin Heidegger, "Language in the Poem: A Discussion on Georg Trakl's Poetic Work," in *On the Way to Language*, trans, by Peter D. Hertz, 159-160 (New York: Harper & Row Publishers, 1971):159. ⁶¹ İbid.

⁶² Christian Norberg-Schulz, "The Phenomenon of Place", *Architectural Association Quarterly* 8, no 4, (1976): 3-10.

⁶³Christian Norberg-Schulz, "The Phenomenon of Place" (1976), in *Theorizing a New Agenda for Architecture*, ed. by Kate Nesbitt, 412-428 (Princeton: Princeton Architectural Press, 1996), 418.

⁶⁴ Christian Norberg-Schulz inherited the term 'genius loci' from Roman concept to refer to spirit of place.

⁶⁵ Christian Norberg-Schulz influenced by the work of Kevin Lynch and his studies in urban image. His sympathy towards photography is related with Lynch's analysis of urban images.

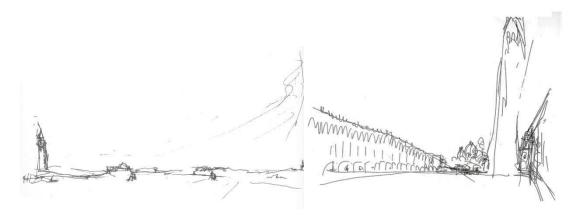


Figure 6. Drawings of Sverre Fehn, by Norberg-Schulz. (Source: http://veredes.es/blog/en/el-club-de-los-paraisos-perdidos-borja-lopez-cotelo/)

Throughout 1980s, architectural phenomenology was blended into the critical responses against globalization, its spatial organizations and its culture of homogenization. In the beginning of 1980s, Italian architect, Vittorio Gregotti synthesized phenomenology with politics of Venice tradition which embraces neorationalism and neomarxism into architecture. According to architecture historian John Ockman⁶⁶, Gregotti was influenced by Rossi's cultural and geographical specificity of urban places and Roger's preexistenze ambientali. But, he extended these thoughts to the territorial scale by theorizing the term 'territory' as geographical totality of site, with topography, ecology of a region, its history and culture. For him, territory referred to the site's geographical and historical origins as the contextuality which were shaped by "sum total of all things and their past configurations". Gregotti introduced an 'anthropogeographic' approach to architectural design in which anthropology is a mean to bring together sociological, ethnological, and psychological elements together. Against homogenization, he offered the term spirit of specific terrain⁶⁸ which he extended the concept of genius loci by claiming not only physical characteristics but also historical origin and cultural experiences influencing sense of place.

Later, in 1983, Kenneth Frampton specified Gregotti's approach under his theory of *critical regionalism*. With the influence Gregotti's formulation of spirit of territory or specific terrain⁶⁹, Frampton proposed combining regional typologies and

⁶⁷ Vittorio Gregotti, "Territory and Architecture", *Architectural Design Profile* 59, no. 5-6 (1985): 342 ⁶⁸ Vittorio Gregotti, "The Form of the Territory", *OASE Journal of Architecture*, 80 (2009 (1981)): 9

⁶⁶ Joan Ockman, *Architecture Culture 1943-1968*, (New York: Rizzoli, 1993).

⁶⁹ According to Kate Nesbitt, Vittorio Gregotti, is one of the figures central to critical regionalism. Kenneth Frampton, is affected by Gregotti's antropolgical view to architecture. See Kate Nesbitt, *Theorizing a New Agenda for Architecture*, (Princeton: Princeton Architectural Press, 1996).

site-specific 'topographies' what he called a "resultant place-form" in resistance to globalization's threat to regional cultures. This resultant place- form is the integration of a new intervention with the existing environment to the ecological, climatological, and symbolic aspects⁷¹. Frampton supported cultural legacy; "a way of building sensitive to the vicissitudes of time and climate as a middleground between neo-historicism and neo-avantgardism". That is why he was standing between modern and regional architecture. Steven Holl, Juhani Pallasmaa, David Leatherborrow are contemporary architectural phenomenologists subscribing theory and Tadao Ando, Steven Holl, Peter Zumthor, Daniel Libeskind are the well-known independent architects providing phenomenology based practices.

Architecture historian Jorge Oter-Pailos interprets architectural phenomenology as an early phase in the intellectual development of postmodernism since it refuses any theoretical ground, and its rupture from history. Thus, architectural phenomenology is lack of a comprehensive theory or self-identified group of architects. However, as the phenomenological studies in architecture increased, the city started to be evaluated in terms of its unique characteristics deriving from site specificity, sensuous qualities and experience. Figure 7 shows the background philosophy and outcomes of phenomenology influenced architecture contributed to the debate on context by focusing on site, specificity of site and perception and experience of place. Figure 8 summarizes the disciplinary exchange, people and literature in architectural phenomenology that led the context becoming site-specific and the terminology revolving around context, evolving into 'site'.

⁷⁰İbid, 382.

⁷¹ Kenneth Frampton, "Ten Points on an Architecture of Regionalism: A Provisional Polemic", in *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, And Tradition*, ed. Vincent B Canizaro (New York: Princeton Architectural Press, 2007) 375-386.
⁷²Ibid,386.

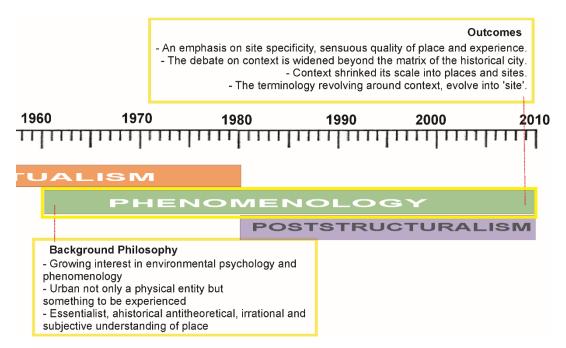


Figure 7. The background philosophy and outcomes of architectural phenomenology.

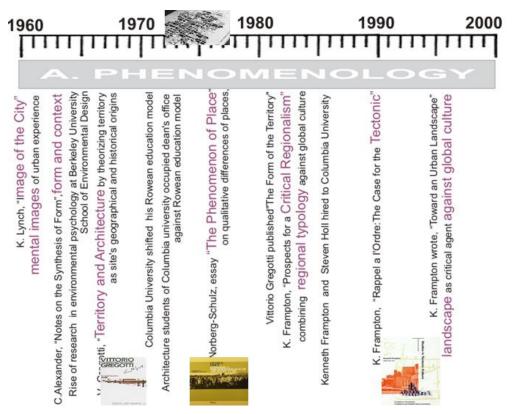


Figure 8. The disciplinary exchange, people and literature in architectural phenomenology.

2.1.3. A Return back to "another" Site

Frampton's critical regionalism might be seen as the last grasping of the phenomenology of place and the post-1960s insistence on context. Within the developing theoretical agenda of globalization after the 1980s, holistic and comprehensive attempts to define "context" seems to have dissolved, arguably with the visible impact of post-structuralism on architectural theory. Culminating within the rise of post-modernism and its reflection on discourses urbanism in 1990s, the debate on context seems to have dissolved.

Sites of twentieth century is characterized by rapid change linked via networks of communication, knowledge, resources, finance, and migration; dispercing of urban into peripheries as fragments of "glocal network metropolis" and dynamicism of cities. In coming to terms with the globalized operations of his architectural practice, Rem Koolhaas pointed to the impossibility of an all-encompassing definition of context, simply declaring "fuck context" for the flukes, accidents and imperfections of the 21st century city which could not be predicted and controlled. Instead of holistic understanding of context, the debate on context were given way to a discussion that sees "site" as a strong conceptual alternative to "context" within a theoretical discourse strongly influenced by post-structuralism. As Sandy Isenstadt stated, in 21st century, context conceived a "formal profile directing attention to the past" while, site, on the contrary is a more "open and abstract, more flexible and receptive (reactive) condition of the contemporary environment".

Architecture theorist Mark Wigley was aware of this evolution and he wrote two articles which are seemingly independent but related to each other. In 1994, in his article "On Site"⁷⁷, he indicated how site is essential to construct identity in architecture. By giving examples from architectural theory and practice, Wigley pointed out that site is a project itself where architect could project the ideals onto it. His article showed the potentials of site by itself, whenever it is not undermined by architecture. In his second

77 Mark Wigley, "On Site", Lotus International, no.81 (June 1994): 113-116.

⁷³ Saskia Sassen, Global City: New York, London, Tokyo, (Princeton: Princeton University Press, 2001).

⁷⁴ Rem Koolhaas, "Bigness, or the Problem of Large", in *SMLXL* eds.Rem Koolhaas and Bruce Mau (New York: The Monacelli Press, 1995).

⁷⁵ Sandy Isenstadt, "Contested Contexts", in *Site Matters: Design Concepts, Histories and Strategies*, eds. Carol Burns and Andrea Kahn, 157-184 (New York: Routledge Publications, 2005), 157.

⁷⁶ Manuel Gausa, *The Metapolis Dictionary of Advanced Architecture*, (Barcelona: Actar, 2003). Quoted in Esin Komez Daglioglu, "Context Debate: An Archaeology, *Architectural Theory Review*, (2016): 5

article "Whatever Happened to Total design?"⁷⁸, 1998, he explores total design concept in architecture in which "the architect is in control, centralizing, orchestrating, dominating". By exemplifying many figures in architecture theory such as Gropius, Henry van der Velde, Frank Lloyd Wright, Nikalaus Pevsner, Henry-Russell Hitchcock, Ian McHarg, Christopher Alexander, he showed that in postmodernism, total design is not killed; instead it is evolving into something else. The dream of total design has moved into the media: exploded in fragments across interior, landscape and site. Wigley pointed out the emergent discussions on site as an extension of total design; or context lets say.

Apparently, Rem Koolhaas was the first architect who realized evalution from context to site (or landscape). In 1988, he put it "architecture is no longer a primary element of an urban order...increasingly landscape is the primary element of an urban order". As a response to fragmented, uncontrolled site, in his second entry to for Park de la Villette Competition, 1982, Koolhaas reinterpreted urban site as indeterminate, dynamic and fragmented. Thus, he focused on *programming of urban sites* for this everchanging, dynamic and fragments of urban agglomerations. Figure 9 shows how Koolhaas distributed the program strategically and over land as diagrammatical representation of generative strategies of human events on site. In his scheme, Koolhaas suggested the juxtaposition of unplanned relationships between park programs in which *programmatic indeterminacy* is the basis of concept of the project rather than a finished design.

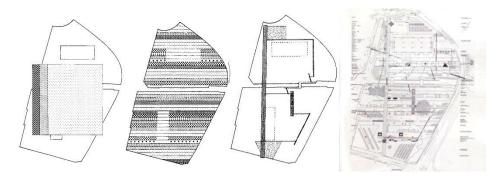


Figure 9. Drawings of Rem Koolhaas for Park de la Villette Competition, second winning entry.

(Source: http://oma.eu/projects/parc-de-la-villette)

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Mark Wigley, "Whatever Happened to Total Design?", *Harvard Design Magazine*, (Summer 1998), 5.
 Rem Koolhaas, "*IIT Student Center Competition Adress*", (Illinois Institute of Technology, College of Architecture Chicago, March 5, 1998), quoted in Grahame Shane, "Emergence of Landscape Urbanism", in *Landscape Urbanism Reader*, ed. Charles Waldheim (New York: Princeton Architectural Press, 2006), 56

Koolhaas was not the only figure who reinterpreted architectural program in the dynamic and fragmented sites of 21st century. Architect Alex Wall focused on programming of sites which were active surfaces in contemporary metropolis in his article "Programming the Urban Surface". Alex Wall defined site's dynamic surface as a living, adaptive and connective tissue. Rather than designing, he suggested programming the urban surface by offering some strategies: multi layering surface, folding with smooth geology, providing nonprogrammed use, impermanence for future demands and improving movement through a new and public type of urban corridor⁸¹. Wall's approach on programming provides a new design perspective that is not only regarding programming architecture, but also the sites.

In architecture field, the discussions on site were fragmented similar to the theme itself. As a response to dynamic, rapid changing and horizontally distributed vast open areas of post-industrial sites, architecture discipline started to re-interpret sites. Architecture theorist Sanford Kwinter, in his article "Landscapes of Change" focused on what formal strategies architecture could learn from morphological change of landscape in a dynamic system. It explained the operations and forms in such a dynamic system in relation to topographical or geographical conditions. By considering site far beyond the reach of the eye, with the term morphogenesis, he focused on dynamic and multiple rather than static and single formal strategies on site. He evaluated forms as continuous events, "particular evolutionary segments of one or another dynamical system" system for the eye of the epigenetic landscape and phase space, involving possible shapes evolving and appearing on it.

In 1997, architect Stan Allen also reconsidered the dynamic, dispersed and fragmented sites of 21st century in his article, "From Object to Field"⁸⁶. He depicted the deficiencies of classical and modern compositional techniques, and introduced *field* theory for a reassertation of context in contemporary urban space. The name, field

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⁸⁰ Alex Wall, "Programming the Urban Surface" in *Recovering Landscape: Essays in Contemporary Landscape Architecture, ed.* James Corner, 233-249 (New York: Princeton Architectural Press, 1999)
⁸¹ Ibid, 244-246.

⁸² Sanford Kwinter, "Landscapes of Change: Boccioni's Stati d'animo as a General Theory of Models", *Assemblage 19*, (1992) 52-65.

⁸³ Ibid, 62

⁸⁴ Epigenetic landscape is introduced by Conrad H. Waddington, "*Strategy of the Genes*". Epigenesis refers to process of how form emerges gradually but dynamically out of a formless or homogeneous environment.

⁸⁵ Sanford Kwinter, "Landscapes of Change: Boccioni's Stati d'animo as a General Theory of Models", *Assemblage 19*, (1992): 59.

⁸⁶ Stan Allen, "From Object to Field," in *Architecture After Geometry*, *Architectural Design*, vol 67, no.1/2, (Jan-Feb 1997).

theory, derived from the infrastructural elements of modern city linked together in openended networks. Allen offered to focus on continuous fields rather than objects; "forms between things rather than form of things".87 Allen questioned Colin Rowe's discrimination of figure from the ground and he developed a position where the distinction between figure and ground is lost, architectural object emerging from the field itself as an effect and the site is understood as dynamic container of multiple contexts. Stan Allen lately, specified the field conditions in his essay "Mat Urbanism" 88 with an emphasis on the organization of the project to create an open field with buildings. Through mat urbanism, Allen focused on organizational strategies of mat urbanism whose "formal composition is governed by internal connection of part to part"89. Mat urbanism's structure allows addition or subtraction over time and occupation of the site over time. Field Theory is an inspiring idea for architecture that considers the relations between urban forces at work on site and their compositional responses. Figure 10 shows *moire* patterns that Allen exemplified as field conditions produced by the superposition of two regular fields. Allen identified *moire* patterns as field conditions that are figural effects produced by the superposition of two regular fields

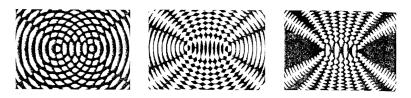


Figure 10. Stan Allen's moire patterns as field conditions. (Source: Stan Allen, "From Object to Field," in Architecture After Geometry, Architectural Design, vol 67, no.1/2, Jan-Feb 1997).

In 2005, landscape architect Andrea Kahn⁹⁰ and architect Carol Burns⁹¹ wrote a book, "Site Matters: Design Concepts, Histories and Strategies", which is a collection of articles on multiple understandings of site. They claimed that site must be understood

⁸⁷ Ibid: 24.

⁸⁸ Stan Allen, "Mat Urbanism: The Thick 2-D", in CASE: Le Corbusier's Venice Hospital, ed. Hashim Sarkis, 118-126 (Munich: Prestel, 2001). ⁸⁹ İbid, 122.

⁹⁰ Andrea Kahn is the figure who especially studies about representation of dynamic sites. As a Adjunct Associate Professor of Architecture and Urban Design at Columbia University where she has been on the core faculty of the Master of Architecture and Urban Design program since 1992

⁹¹ Carol Burns is the Harvard graduated architect and partner of Taylor& Burns architecture Office.

⁹² Carol Burns and Andrea Kahn, Site Matters: Design Concepts, Histories and Strategies (New York: Routledge Publications, 2005).

as a broader phenomenon than context, that is open and relational. Kahn and Burn suggested that many horizons to understanding site are possible – historical, philosophical, rhetorical, legal; analytic, formal, descriptive, aesthetic; strategic, tactical; social, economic, political. Architectural historian Sandy Isenstadt, mystified site's understanding in his article "Contested Contexts", what he defined context as what role we want to assign to site. It was a concept we construct and reconstruct again and again, due to our goals in design. 21st century's context was a relational understanding, putting its meanings into many horizon of understanding.

To clarify this argument, in her article "On Site: Architectural Preoccupations⁹³, Carol Burns tried to establish a clear conceptual basis for the notion of site within architecture by seeking an answer to the question of "how can a site inform building and architecture?"94. For Burns, architecture discipline avoids admitting or taking responsibility towards site by considering it as neutral. She offered taking control by conceiving site as political, ideological, and temporal as a whole "constructed by its specific circumstances". In a similar manner, in her article "Defining urban Sites" 96, Andrea Kahn investigated ways to develop understanding of sites within multi frames, multi contextual, multi scalar openings under the terminologies of mobile ground, site reach, site construction, unbound site and urban constellation. These terminologies led to extending site thinking into many ways: conceiving urban sites as dynamic and provisional spaces; participating in many differently scaled networks; shifting the boundaries of site into fields of influence and effect and operating horizons of forces on site by considering interactions between variable forces (physical, social, political, economic etc.) across multiple scales. The writings of Carol Burn and Andrea Kahn led a broader description of site not only a physical entity, but a contextual, conceptual, temporal, multiscalar and a relational phenomenon.

Figure 11 shows the background philosophy and outcomes of poststructuralist discussions on site that was directly related to dissolving of the debate on context. The context dissolve into relational, conceptual, temporal meanings of site as an outcome of post-structuralist discussions. As a result of this, currently, "site" rather than "context"

⁹³ Carol Burns, "On Site:Architectural Preoccupations", in,., *Drawing Building Text*, ed. Andrea Kahn (New York: Princeton Architectural Press, 1991), 146-167

⁹⁴ Ibid, 147.

⁹⁵ Ibid, 163.

⁹⁶ Andrea Kahn, "Defining urban Sites", in *Site Matters: Design Concepts, Histories and Strategies*, eds. Carol Burns and Andrea Kahn (New York: Routledge Publications, 2005), 281-296.

conditions the relationship of the architectural theory and intervention. Figure 12 summarizes the disciplinary exchange, people and literature in dissolving of the debate on context.

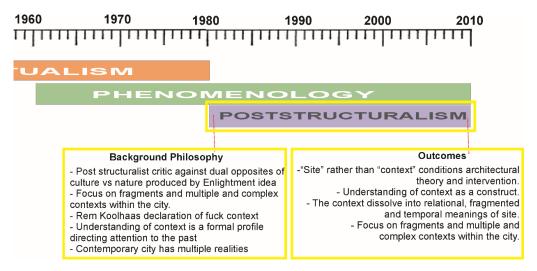


Figure 11. The background philosophy and outcomes of post structuralist discussions on dissolving of context.

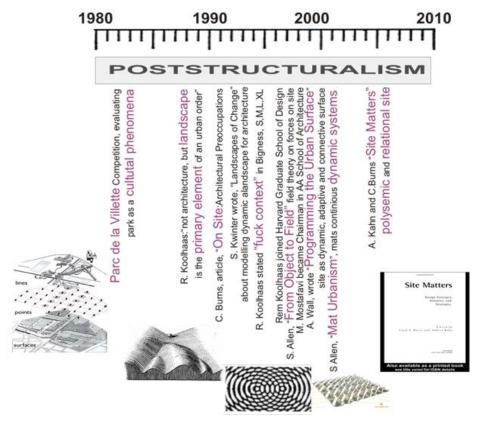


Figure 12. The disciplinary exchange, people and literature about post structuralist discussions on site.

2.2. Three Milestones in Architecture Education about the Debate on Context

2.2.1. Colin Rowe and Contextualism, Cornell University (1963-1988)

Cornell University has a preeminent role on the development of context and contextualism in architecture discourse and pedagogy. In 1972, in his lecture 'Architecture as Townbuilding' in Cornell University, Peter Smithson claimed that "a design for a building or building group could not be evolved outside of context" Since 1940s, Smithson criticized neoclassical tradition's tradition of "abstraction" design of buildings as simple mechanisms- and he evaluated context as the natural extension of the tradition of modern architecture. For him, "the neoclassical tradition was not unlike the International Style, a detached tradition of pattern books and forms to be imitated without consideration of local specificity". 98

30 years later, a figure from Cornell University, Colin Rowe interested in the issue of context but in a different manner to Smithson. Colin Rowe criticized detachment from the local specificity similar to Smithson. While Smithson criticized neo classical tradition's acontextualism by abstracting through the patterns and forms of classical forms, Rowe charged modernism for its modern architecture's totalitarian thought as acontextualism. While Smithson evaluated context as the natural extension of the tradition of modern architecture, Rowe saw context as an extension of existing traditional urban fringe. Colin Rowe developed theory of contextualism after 1960s In Urban Design studio at Cornell University from 1963 until 1988. Colin Rowe's education of *contextualism* was "an extension of townscape and the classical tradition" in which the issue context has received a more specific meaning with it.

⁹⁷ Dirk Van Del Heuvel, "Another Sensibility- The Discovery of Context", *OASE Journal*. 76, (2008), 22.

⁹⁸ Ibid 39

⁹⁹ William Ellis, "Type and Context in Urbanism: Colin Rowe's Contextualism", in *Oppositions* 22 (1979):227.

2.2.1.1. Early Works

Rowe's earlier works and writings provided morphological approach to form of an individual building. In his first well known essay "Mathematic of the Ideal Villa", 100, in 1947, Rowe focused on Platonic type of villa in the case of Palladio's Villa Capra and Le Corbusier's Villa Stein to indicate their similar aesthetic principles based on mathematics and ideal proportions. In this article, Rowe criticized Le Corbusier for "recontextualizing the Classical tradition of architecture", by absorbing both manneristic and classicizing devices. Rowe finished his master thesis in 1947 under the supervisor of Rudolf Wittkower at Warburg Institute. According to architecture historian Anthony Vidler¹⁰², Rowe's historical comparison was inspired from his master thesis advisor Rudolph Wittkower's historical interpretations at Warburg Institute and his formal analysis was derived from Wittkower's advisor Heinrich Wöfflin's comprehensive comparison between form and principle. Influence of Wittkower was clear in Rowe's treatment of Palladio. One of Wittkower's essay, "Principles of Palladio's Architecture", 103 focused on such kind of analysis of Villa Palladio as Rowe later did in his article 'The Mathematics of the Ideal Villa'. The diagrams of modular grid, columnar comparison what Rowe called diagrammatic comparison, were quite similar to Wittkower's diagrams. But in the treatment of Palladio, the difference between Rowe and Wittkower was that Rowe was not proposing any direct affiliation between the late Renaissance architect and the modern architect; he admits that the villas of Palladio and Le Corbusier were "in different worlds" 104. Rowe himself turned to the "Renaissance as the touchstone of a developed architectural manner", 105. On the one hand, Wöfflin's analyses were formal analysis, advanced by Vienna school. In the formal tradition of Wöfflin, the argument was generated by juxtaposition and comparison of forms to identify structure of internal relations. Rowe's explorations on the internal relations of form were derived from Wöfflin's approach.

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¹⁰⁰ Colin Rowe, 'The Mathematics of the Ideal Villa", Architectural Review, (1947).

¹⁰¹ Joan Ockman, "Form without Utopia: Contextualizing Colin Rowe", *Journal of the Society of Architectural Historians* 57, No. 4 (Dec., 1998): 449.

Anthony Vidler, "Mannerist Modernism: Colin Rowe", in *Histories of The Immediate Present Inventing Architectural Modernism*, 1930-1975, 60-104 (Cambridge, MA: MIT Press: 2008):86.

¹⁰³ Rudolf Wittkower, "Principles of Palladio's Architecture," *Journal of the Warburg and Courtauld Institutes* 7 (1944): 102—22

Anthony Vidler, "Mannerist Modernism", in *Histories of the Immediate Present: Inventing Architectural Modernism*, ed. Anthony Vidler, 61-106 (Cambridge, MA: MIT Press, 2008), 78. ¹⁰⁵ Ibid, 85.

By the 1960s, Rowe focused on using formal analysis to identify type. Rowe returned to history as a key to identify *parti-types*. By criticizing modern architecture for excluding "any repetition, any copying, any priori, any employment of precedent" Rowe focused on discovery and invention of the past forms. Rowe preferred to use the premodern history as a source of formal invention. Rowe's affinity towards history was related with staying away from modern architecture's order what Rowe formulated as "the predominance of the normative, the typical and the abstract" In his article "Mannerist Modernism: Colin Rowe" architecture historian Anthony Vidler 109 claimed that Rowe turned to history as a key to the "isolation of specifically modernist moves in architecture as well as more traditional survivals" 110.

Rowe's formal invention of history was not only related with Wittkower's influence, but also with his studying with Henry-Russell Hitchcock at Yale University. In early fifties, Rowe went to study with Henry-Russell Hitchcock at Yale University where the "Bauhaus *e'migre'* Josef Albers was propagating his influential theory about color relativity and visual perception in the art school" Rowe influenced from Henry-Russell Hitchcock who saw modern painting, especially cubism and neoplasticism, as a model for modern architecture in 1950s. The goal of modern painting was to orient the discipline "away from functionalist criteria toward aesthetic ones" Architecture historian, John Ockman in his article, "Form without Utopia: Contextualizing Colin Rowe", established a direct relationship between Rowe's support for frontality, opticality and structured ambiguity with modern painting's attitude towards putting formal values over functional ones.

Rowe's initial concern was more object-based configurations that were established upon modification of an ideal form – type. Rowe started configuration of his analysis and design over an ideal object. However, rather than considering the ideal/type as given, Rowe introduced transformation of the type when exposed to a

¹⁰⁶ Ibid, 86.

¹⁰⁷ Colin Rowe (1972), "Introduction to Five Architects", in *Architecture Theory since 1968*, ed. Michael K. Hays, 72-85 (Cambridge, MA: MIT Press, 1998), 76.

Anthony Vidler, "Mannerist Modernism: Colin Rowe", in *Histories of The Immediate Present Inventing Architectural Modernism*, 1930-1975, 60-104 (Cambridge, MA: MIT Press: 2008). ¹⁰⁹ Ibid. 85.

¹¹⁰ Ibid.

¹¹¹ Joan Ockman, "Form without Utopia: Contextualizing Colin Rowe", *Journal of the Society of Architectural Historians 57*, No. 4 (Dec., 1998), 450.

¹¹² Ibid.

¹¹³ Joan Ockman, "Form without Utopia: Contextualizing Colin Rowe", *Journal of the Society of Architectural Historians*, 57, No. 4 (Dec., 1998).

different context. The ideal object was projected onto site and transformed its composition with respect to existing site conditions and environmental differentiations. In the end, the ideal object/ideal building synthesized and recontextualized and turn into circumstantial and a new one. Hence, Rowe had a position in between type and context. Opposed to the ideal object (what modern architecture defined as type), the outcome of Rowe's design was what he calls differentiated building. The differentiated building might respond to many pressures without losing its image. Site context was flexible and various; sometimes it was the existing urban fabric, sometimes it was the traffic situation, or orientation, or type of the building (whether symbolic, civic building or private), or height of the buildings around.. In Rowe's model, there was an idea of change. The changing object was the ideal type when it exposed to "imperfect' context",114. Henceforth, Rowe's approach to context was morphological.

2.2.1.2. Collage City

After the 1960s, Rowe's set piece investigations on context were replaced by exploration on architecture of the city in the whole city or in larger city parts which were led by his book "Collage City" 115. Collage City was written in 1973, published as an article in 1975 and later as a book in 1978 by Colin Rowe and Fred Koetter. The book was a critic against modern utopianism and utopian aesthetics, starting the discussion through the ideas and images produced by Superstudio, Archigram and Le Corbusier. The authors criticized Superstudio and Archigram's technological extravaganzas of "egalitarian grid with a total idea" and Le Corbusier's buildings for being deprived from "local details, resulting with Disney-like entrepreneurs of future" 117

Rowe and Koetter criticized utopian aesthetics that was reducing all references into a single controlling idea. Rowe and Koetter's anti-utopian thoughts were inspired

¹¹⁴ The two antithetical propositions of 'ideal type' and 'imperfect context' are deriving from projection of Popper's fragmentary and contingent knowledge and Lionel Trilling's Lionel's contradictory view of society into architecture. Trilling introduced humanist's contradictory and dialectical view of society that simultanesously exalts two opposing propositions: the ideal of perfect social justice and the worth of social continuity. See William Ellis, "Type and Context in Urbanism: Colin Rowe's Contextualism", in Oppositions 22 (1979).

Colin Rowe and Fred Koetter, Collage City, (MIT Press, Cambridge, Massachusetts, and London, England, 1978).

¹¹⁶ Colin Rowe and Fred Koetter, "Collage City" (1975), in Theorizing a New Agenda for Architecture, ed. Kate Nesbitt, 266-293 (New York: Princeton Architectural Press, 1996), 266... ¹¹⁷ Ibid.

from philosopher Karl Popper's response against simple inductivist visions of science and utopianism. In "Open Society" Popper criticized utopia dictating the form of the future that cannot be anticipated from today. Instead, Popper advocated tradition's necessity in society for betterment of social environment and framing the atmosphere of the society. Similar to Popper, Rowe and Koetter described utopia, total design (total architecture), total politics; providing strict ultimate solutions by eliminating the options. Against total and faultless solutions of utopia, Rowe and Koetter supported plural democracy, civil liberties, individualism, which was realized in collage city. In Collage City, Rowe and Koetter evaluated city where cultural, political aspirations and aspirations of citizens shape the built form. In fact, Rowe's preference of collage aesthetics was the technique to realize the plural, democratic and individualist society.

Against the problems of utopia, the book offered collage technique that was "aggregation of small and even contradictory set pieces" in "integrating disparate cultural impulses and hybridizing fragments of history" Rowe and Koetter transferred their theory into design, in Roma Interrotta project in 1978. Colin Rowe and Fred Koetter designed Roma by combining city's morphology, people and politics. The collage technique was a strategy for contextualizing things against total architecture, democratically integrating opposite cultures in society and hybridizing fragments of history. Here, buildings were seduced from their context to exclude them from a great consequence or "idealized forms adjusted to a context" It was the celebration of not only the eclectic image, but also the complex meanings of architectural history. Thereby, as Rowe and Koetter explained: "The objects can be aristocratic or they can be folkish, academic or popular...collage accommodates both hybrid display and the requirements of self-determination" ¹²². All the dualities were combined into one within a dialectical manner as the representation of dialectics of oppositions in society.

¹¹⁸ Karl Popper: *The Open Society and Its Enemies*, (London, Routledge and Son, 1945).

¹¹⁹ Colin Rowe and Fred Koetter, *Collage City*, (Cambridge:, MIT Press, 1978), 265.

¹²⁰ Joan Ockman, "Form without Utopia: Contextualizing Colin Rowe", *Journal of the Society of Architectural Historians* 57, No. 4 (Dec., 1998), 454.

¹²¹ Thomas Schumacher, "Contextualism: Urban Ideals and Deformations", Casabella, (1971), 359-60.

¹²² Colin Rowe and Fred Koetter "*Collage City*", (1973) in Michael K. Hays, Architecture Theory Since 1968, 88-111, (Cambridge: MIT Press, 1998): 106

2.2.1.3. Synthesizing the Oppositions

Colin Rowe claimed that modern movement produced dual oppositions such as solid vs void, built vs unbuilt, program vs paradigm, conservative vs contemporary, utopian vs empirical, tradition vs utopia, scientific vs artistic. Instead Rowe used the oppositions in a positive way to establish interconnections between opposites. Rowe imagined these "conceptual oppositions ideally informing and enriching one another" in other words; "two-way commerce" Accordingly, he attempted to synthesize of the oppositions and contruct dialectics between opposites. For him, the dialectic between opposites referred to what a good society was: "the necessary conflicts of democracy with law" and "the necessary collisions of freedom and justice" Rowe offered negotiation between the opposites of order and liberty, necessity and contingency, tradition and utopia, the rational science of the engineer and the spontaneous.

Rowe's dialectic approach embodied in the urban space through dialectics of two different strategies: continuity and regeneration. For him, the main exploration was how to achieve continuity while providing regeneration simultaneously, how to provide a harmonic dialectic relationship between the old pattern and the new intervention. For him, context was not fitting in to the historical city; rather integration of the tradition and the modern. Rowe attempted to establish a dialectic relationship between traditional European city with its pattern of open spaces, enclosure of voids, solid mass relations to enable continuity and Le Corbusier's city in the park where isolated building stand free in open space to enable re-generation. The integration of these two images was achieved through change of the modern composition or object as a result of influence of the old traditional pattern.

2.2.1.4. Figure Ground Maps

In his article, "The Present Urban Predicament", Rowe detected illnesses of modern architecture. For him, "modern movement produced objects rather than

¹²³ George Baird, "Oppositions in the Thought of Colin Rowe", *Assemblage*, Issue 33, (1997): 23.

¹²⁵ Colin Rowe and Fred Koetter, *Collage City* (Cambridge: MIT Press, 1978), 97.

¹²⁶ Colin Rowe, "The Present Urban Predicament", in *As I was Saying: Recollections and Miscellanous Essays vol 3*, ed. Alexander Caragonne, (Cambridge: MIT Press, 1996).

spaces"¹²⁷ by considering merely built solid and by ignoring the unbuilt void with inner spaces. For him, that was the biggest reason why modern urbanism lacks of correspondence between architecture and urbanism. Rowe asked the question of "how to make a city if all buildings proclaim themselves as objects, and how many object buildings could be aggregated before comprehension fails?"¹²⁸. Rowe pointed out modern movement that destructed the relation between architecture and urbanism, and the relationship between building and void, garden and building, street and building and façade and the public life.

To understand and revive these relationships, Rowe used figure-ground plans as an adaptation of 1748 Nolli plan. To establish a relationship between old and the new, Rowe analyzed the urban fabric through figure-ground plans in which figures refers to the buildings as private spaces in the city, and ground refers to public elements giving the city its character. Figure ground plan was also a tool to compare between modern versus traditional city for Rowe. Figure ground plans enabled simplification of the complexities of city into two main opposites by interpreting the city as a "formal gestalt" 129. This pattern, showing the opposites, enables to clarify the relationship between solid and void; between modern pattern and traditional pattern of the city. Ideals (type) referred to modern isolated building pattern; continuity (context) refers to traditional city with enclosed spaces. What Rowe offered was the interplay between type and context or modern ideals and continuity in urban form. In order not to overwhelm the solid over void, Rowe proposed combining buildings and in a single duality. Rowe believed figure ground patterns gave the city its character.

2.2.1.5. Rowe's Pedagogical Approach in Cornell University

Colin Rowe's teaching experience started in School of Architecture at the University of Texas at Austin in 1953. He and other younger faculty, John Hejduk, Robert Slutzky and Bernhard Hoesli who corporately referred themselves as Texas Rangers, challenged to the tradition of the school and tried to change the curriculum. The group criticized education in Texas Austin, as a model based on pragmatic and technological concerns of architectural practice. Texas Rangers claimed that

¹²⁷ Ibid, 169.

¹²⁸ Ibid, 171.

Rowe's method of figure ground plan was inspired from principles of Gestalt psychology. Rowe's gestalt confrontation in architecture, derived from his collegue Robert Slutzky in Texas University.

architectural practice was in a functionalist era, focused on technology and pragmatism, and the architectural education was modeling itself off these concerns 130. Rather, the group demanded revitalization of intellectual concerns with an emphasis on "acquisition and development of architectural idea over technical abilities", 131. As a critique to modernism's ignorance of history, Texas Rangers' pedagogical understanding appreciated historical form as a tool for design. The architectural precedent became a critical tool for student's understanding of how space was conceptually structured 132. Rowe's historical imminence initiated with Texas Rangers' approach towards architectural precedent.

By 1959, Texas Rangers moved from the University and in 1962, Rowe started to teach in Urban Design Studio at Cornell University. At Cornell, he focused on urban theory by introducing an urban scale morphological approach to urban design. In Cornell University, Rowe reconciliated "Beaux Art tradition with ideals of modern movement in the field of urban design"¹³³. During teaching in Cornell University, Rowe focused on "adjustment of idealized urban parts (parti) to a context" in the urban scale by using urban collage.

In 1966, Rowe's student, Stuart Cohen initially coined the term *contexturalism* for Rowe's design pedagogy in Cornell. By contexturalism, he referred to Rowe's concern for texture in the urban context. Later on, Rowe's another student, Steve Hurtt changed it into contextualism From 1963 to 1988, Colin Rowe interested in the issue of context by providing a more specific meaning to it in architecture theory and education in Cornell.

The design process in Rowe's Urban Design Studio was based on combining continuity and re-generation. Rowe's studio generally used a complex building, or a group of buildings, or spatial objects that could be defined as the ideal object or type. These buildings had typological identity that were supposed to impose upon a context.

¹³⁰ Daniel Stephen Johnson, Columbia University's Introductory Pedagogy (1986 - 1991), (Unpublished Master Thesis in Architectural Pedagogy at Washington University, 2013), 10.

intellectual foundation of the TR's curriculum is:" (1) That the process of design is essentially the criticism of a given situation,(2) That the power of generalization and abstraction (in the student) must be aroused, (3) That the act of selection assumes a commitment to certain principles, (4) That an academic institution should offer an essential knowledge and an essential attitude." See Alex Caragonne. The Texas Rangers: Notes From The Architectural Underground, (Cambridge, Mass.: MIT Press, 1995), 33.

¹³² Daniel Stephen Johnson, Columbia University's Introductory Pedagogy (1986 - 1991), (Unpublished Master Thesis in Architectural Pedagogy at Washington University, 2013), 13.

^{133 &}quot;Introduction: Architecture in the American university: Cornell, Cooper Union, Columbia", Lotus International 27, (1980):1

¹³⁴ Thomas Schumacher, "Contextualism: Urban Ideals and Deformations", in *Theorizing a New Agenda* for Architecture, ed. by Kate Nesbitt, 294-307 (Princeton: Princeton Architectural Press, 1996), 301.

The design process was based on regeneration of the ideal type. Rowe's student Schumacher¹³⁵ explained the four steps in Rowe's studio as: (1) creating a formal shorthand which explains site pressures, (2) measuring the pre-deformed shapes as an urban design exercise, (3) constructing a design problem against previous analysis, (4) making decisions about how to relate with the context (site context, site pressures). Here, change and the regeneration process constructed the morphological approach of the studio's pedagogy what differentiated Rowe from other pedagogical approaches. . In Rowe's studio, change and regeneration was the essential strategy of design. Architecture theorist William Ellis¹³⁶ put Rowe apart from the Townscape for focusing on the pattern and relationships rather than two dimensional pictures and objects and inserting change to theory of context rather than a frozen history.

During play between ideal (type) and continuity (context), one of Rowe's students, Stuart Cohen¹³⁷ categorized two modes of change in Rowe's contextualism: strategies of response or act of recognition. In strategy of response, students started with a given type or spatial object, then the ideal type deformed when it was inserted into an urban site and to a context, then made it specific to that site.W. Ellis labeled it as "a context, likely to suggest a type" 138.. In act of recognition, students started with a traditional city and modified its parts due to the physical context of the project site. In the studio, the traditional or modern pattern was commonly identified through figure ground plans. By means of figure ground plans, grid collisions, scale of texture, scale and formal differentiation of surrounding buildings were used in decoding the urban context. As Rowe declared, the figure ground plans that were the "most continuing underlying theme in studio procedure" ¹³⁹ as a tool of analysis and design.

Buffalo Waterfront Project, 1969 was one of the most comprehensive projects held in Rowe's Urban Design Studio. The project was a large scale project developed by a group of students in the studio. It focused on rehabilitation and reconstruction of decayed areas of the Buffalo City. The project offered a collage between modernist and

¹³⁵ Ibid.

¹³⁶ William Ellis, "Type and Context in Urbanism: Colin Rowe's Contextualism", Oppositions 22 (Fall

Stuart Cohen, (1974), "Physical context/cultural context, including it all", Oppositions Reader: Selected Readings from a Journal of Ideas and Criticism in Architecture, 1973-1984, ed. K. Michael Hays (New York: Princeton Architectural Press. 1998), 1-40

William Ellis, "Type and Context in Urbanism: Colin Rowe's Contextualism", Oppositions 22 (Fall 1979):243

¹³⁹ Colin Rowe, "The Present Urban Predicament", in As I was Saying: Recollections and Miscellanous Essays vol 3, ed. Alexander Caragonne. (Cambridge: MIT Press, 1996), 24.

historical shapes, old and new, type and context as a response to formal conflicts. The project conveyed Rowe's studio approach in Cornell University, "middle of the road; mediation between the city of Modern architecture and the historical city" ¹⁴⁰. The Buffalo city had an ideal grid patterns previously. As shown in Figure 6, the studio team detected different gridal fragments of the city as parti/types and identified the collision points of these fragments as the focus point of the project. Students defined some problems such as separation of waterfront from city by highway, presence of variety of grids and the intersection of grid of the field with town hall in city center. The projects attempted to solve these problems by rearranging the gridal composition and figure ground pattern of the city. The design strategy of the studio recognized old grid of the city center and extending it along the lakefront diagonal, passing the highway. As Figure 13 shows, the project transferred modernist palette of architectural elements (the gridal pattern of the new plan), but they differentiated it with site context such as resolution of edge and contour lines along the waterfront. At the colliding points of gridal fragments, the edges and contours resolved with respect to site context. Bottom right image in Figure 13 shows that the gridal pattern around the city hall was erased to the hall open and to make it focal point.

¹⁴⁰ Adrian Forty, Words and Buildings: A Vocabulary of Modern Architecture (London: Thames and Hudson, 2000),135



Figure 13. Buffalo Waterfront Project Shadow Plan. (Source: William Ellis, "Type and Context in Urbanism: Colin Rowe's Contextualism", in Oppositions 22, Fall 1979)

To sum up, I can declare that what Rowe defines context is a formal shorthand that is strictly related with solid-void) or gridal composition of the existing urban pattern. Rowe's contextualism is not a frozen historicism that is fitting in to the historical city. In addition to the idea of continuity (of the existing pattern), Rowe integrated the idea of change and regeneration. The change of the ideal object was a formal change when it exposes to a pressure on the site. Rowe's idea of change was incremental and contingent such as Popper's idea on incremental, contingent knowledge. Rowe's method of contextualism is valuable for introducing morphological approach to urban pattern. This morphological approach of his theory and education was what differentiated Rowe from former pedagogical approaches. Rowe's contextualism ended with largely physical, manifesting itself in the morphological outcomes of architectural design, utilized as a compositional given. Rowe's idea of continuity, analysis techniques such as figure- ground analysis and problem solving tools such as collage techniques were basically based upon the formal considerations. However, the political and social background of Rowe's theory was ignored and

Rowe's contextualism was interpreted merely as formalist. Rowe was evaluated as *aesthetic urbanist*¹⁴¹ and Rowe's urban form criticized for "possessing a life of its own; irrespective of use, culture and economic conditions", and "producing a physical continuity of urban form, largely visual and spatial", However, Rowe's figure-ground analysis as a morphological tool were so strong that they still find a room in a wide range of projects in architectural practice even today. His figure-ground maps, collage techniques and morphological approach to context are still widely used techniques in architecture schools. Rowe's contextualism framed the broad phenomenon of context by means of physical patterns of cities.

2.2.2. Kenneth Frampton's Phenomenology Influenced Architecture in Columbia University (1972-1988)

2.2.2.1. Early Works

Kenneth Frampton was educated in Architectural Association in UK (1956), and he became editor of Architectural Design magazine (1962-65), taught in Princeton University (1967-1972)¹⁴⁴ where initial studies in phenomenology influenced architecture started in America throughout 1950s and formulated the curriculum of Columbia University's architecture education from 1972 to 1988.

In his early career, throughout 1960s, Frampton was interested in constructivist aesthetics as an intellectual engagement for him that links aesthetics and politics. Frampton explored production of surplus experience through graphic design. For Frampton, "the visuals were a more direct and effective means of communicating an

¹⁴¹ William Ellis figures out Rowe as an *aesthetic urbanist* such as Camillo Sitte, Patrick Geddes and Daniel Burnham those who are reflecting a less utopian and less technologically agressive view of the city; those who regard urbanism as subject to aesthetic as well as merely technological investigation. See William Ellis, "Type and Context in Urbanism: Colin Rowe's Contextualism", *Oppositions* 22 (Fall 1979):227.

Rowe's student in Cornell, Thomas Schumacher, asserted Rowe's form has its own life. see Thomas Schumacher, "Contextualism: Urban Ideals and Deformations", *Casabella*, 359-60, (1971): 81.

Rowe's student Stuart Cohen defined Rowe with that phrase. See Stuart Cohen, "Physical context/cultural context, including it all", *Oppositions Reader: Selected Readings from a Journal of Ideas and Criticism in Architecture*, 1973-1984, ed. K. Michael Hays (New York: Princeton Architectural Press. 1998).

¹⁴⁴ Princeton University was the leading university in America for studies in phenomenology influenced architecture throughout 1950s where Jean Labatut, Charles W. Moore, Enrico Peressutti and Louis Kahn who were the first figures studying phenomenological studies in architecture.

argument about architecture than writing"¹⁴⁵. Kevin Lynch's images and Norberg-Schulz's visual diagrams were influential for him as the figures who were interested in the visual material. When he was the editor of *Architectural Design* (1962-65), he was interested in graphic design of the magazine's pages. He increased the size of photographs in the magazine to "to transform visual medium (print) into a tactile experience"¹⁴⁶. In his graphic designs, he subjectively interpreted of architectural buildings, transformed photographs and drawings of the building as a way of production of an experience of buildings. There was a message that he gave behind the graphic works. For instance, Figure 14 shows one of graphic design he prepared for AD Magazine. He juxtaposed recent images from constructivist works to show continuity of constructivist aesthetics' from WWI up to 1970s through juxtaposing Dziga Vertov's 'The Man with the Movie Camera'(1929) and Alexander Rodchenko's graphic design works for the magazine, Kino-fot (1922). After his graphic work of *Berlin Grafik!*, his graphic designs conveyed more political messages.

In early 1970s, Frampton was interested in phenomenology, constructivist aesthetics and graphic design as the means to explore 'surplus experience'¹⁴⁷. Frampton's conception of experience was informed by philosopher Hannah Arendt who defines experience as a surplus. In her book "The Human Condition'¹⁴⁸, she analysed human condition referring to three fundamental activities, labor, work and action and the relationship between them. She explored how this experiential surplus links between architecture, life and social reality. Frampton focused on bodily experience which existed before all architectural styles. Related with Arendt's writings, Frampton's theory on surplus experience was a synthesis of architecture and building. It was an attempt to unite architecture and building as action; architecture as a form of building. Frampton wrote his essays "Industrialization and the Crisis of Architecture (1973), and "The Status of man and the Status of His Objects" (1979) as interpretations of Arendt's writings in terms of human conditions' political and historical origins.

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¹⁴⁵ Jorge Oter-Pailos, "Surplus Experience: Kenneth Frampton and Subterfuges of Bourgeois Taste" in Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern, ed. Jorge Oter-Pailos, 183-250 (University of Minnesota Press, Minneapolis, 2010), 206.

Jorge Oter-Pailos, "Surplus Experience: Kenneth Frampton and Subterfuges of Bourgeois Taste" in Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern, ed. Jorge Oter-Pailos, 183-250 (University of Minnesota Press, Minneapolis, 2010), 202.

The expression of 'surplus experience' belongs to Hannah Arendt's formulation of experience as a surplus that Kenneth Frampton deeply influenced and develop his formulation of experience deriving from it

¹⁴⁸ Hannah Arendt, *The Human Condition*, (University of Chicago Press, Chicago, 1958)



Figure 14. Frampton's graphic design for Architectural Design Magazine. (Source: Kenneth Frampton, "Constructivism: The Pursuit of an Elusive Sensibility", Oppositions, 6, Fall 1976)

Architecture historian Jorge Oter-Pailos evaluates 1970s as the years of "tension between theory or history" in architecture to continue with new utopian models or to return to historical precedents. In this era, Kenneth Frampton preferred to focus on history but history of architectural experience. Frampton criticized traditional architectural historians to focus merely on architectural style and "to write only about architecture, never about building"150. That is why Frampton attempted to rewrite history away from architectural style but by decoding history toward the perspective of the experience of architecture. During the late 1970s and 1980s, in articles "Constructivism: The Pursuit of an Elusive Sensibility" (1976), "Place, Production and Architecture" (1980), "Towards a Critical Regionalism" and "Rappel a l'ordre: The Case for the Tectonic (1990), Kenneth Frampton tried for a new historiography. Frampton recasts history as the experiential content of architecture. By criticizing detached mental images from history of architecture that result in consumerist iconography, Frampton supports focusing on values and experiences of historical features. That is why, in terms of his relationship with history and architectural historiography, Frampton was quite different from his antecedents Rowe¹⁵¹, Rossi,

Jorge Oter-Pailos, "Surplus Experience: Kenneth Frampton and Subterfuges of Bourgeois Taste", in Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern, ed. Jorge Oter-Pailos, 183-250 (Minneapolis: University of Minnesota Press, 2010), 233.
 Ibid.

¹⁵¹ In his early career, Frampton pursued a doctorate under Colin Rowe at Cambridge University. They came together in CASE Magazine and Princeton University meetings of architecture.

Cullen, Aymonino, Rogers who demand for history or historical city to be integrated in design. That is why, rather apart from analysis on patterns of historical cities, Frampton embraced Vittorio Gregotti's contextuality about past configurations of geographical and historical origins of a territory. In that, the contextual sensitivity of Frampton was more related to bodily experience with socio-cultural backgrounds rather than a visual composition that is merely conceived through eye.

2.2.2.2. Phenomenology blended with Politics: Critical Regionalism

In his late career, in 1980s, Frampton turned towards the relationship between experience and politics. In 1983, he wrote "Towards a Critical Regionalism", in which Frampton reframed the building culture from a political perspective. Different from other architecture phenomenologists, Frampton linked phenomenologist's specificity of place with Frankfurt School's critical theory. Thus, he linked phenomenological approach with the larger internal dynamics of capitalism. He correlated the phenomena of experience with politics, capitalism and globalization. He aimed to "decode social reality embodied in material culture", which, for him, can be understood in terms of experience. Jameson evaluated Frampton's theory of experience as an attempt to resist the isolation of one sense from the others (e.g., visual vs. tactile) which is the fundamental symptom of postmodern alienation.

Frampton borrowed the term critical regionalism from theorist Alexander Tzonis and Liane Lefaivre, and he popularized the term which led him to internationally renown in the early 1980s. He wrote its theory as a manifesto in 1983 with six assumptions and four years later, revised into ten assumptions. In formulating critical regionalism, Frampton was influenced by Catholic philosopher Paul Ricouer. In his essay "Universal Civilization and National Cultures" Ricouer distinguished between civilization and rooted culture. He warned against universalization that "destructs not

¹⁵² Kenneth Frampton, "Towards a Critical Regionalism: Six Points for an Architecture of Resistance", in *The Anti-Aesthetic: Essays on Postmodern Culture*, ed. Hal Foster, 16-30 (PortTownsend: Washington Press, 1983).

¹⁵³ İbid. 30.

¹⁵⁴ Fredric Jameson, *The Seeds of Time* (New York: Columbia University Press, 1994), 192.

¹⁵⁵ Paul Ricouer, "Universal civilization and Nation Cultures", in *History and Truth*, Charles A. Kelbley, trans. (Evonston, IL: Northwestern University Press, 1965).

only traditional but also creative nucleus of great cultures"¹⁵⁶ For him, rooted culture was cultural resources of the past traditional cultures and all that is transformed by universal civilization of modernism. He accepted foreign influences on culture and puts emphasis on "capacity of regional culture to create a rooted tradition"¹⁵⁷ after this cross fertilization process.

In a similar manner with Ricouer, Frampton criticized universalization that created destruction in traditional cultures, homogenization and commercialization of the built environment and local identity. Critical regionalism was a "dialectical expression" between pure rooted culture vs. what universal modernism produced as a mediating tool between universal civilization and local peculiarities of a particular place. For him, the same tension exists between space/place, typology/topography, scenographic/architectonic, artificial/natural, and visual/tactile ¹⁵⁹. Frampton also criticized both regionalism which was "no more pure" modified, hybridized and commodified by global culture and vernacular architecture for providing a bourgeois taste; not a cultural legacy. At this point, he offered "unattach values and images of local and geographical contexts" from universal progressive qualities of modern architecture. Thus, he refused any "ism" or any historical references. He stated that he demands for "strong desire for identity" or any historical references. he is an essentialist searching for the essence of the pure culture.

¹⁵⁶ Quoted in Keith Eggener, "Placing Resistance: A Critique of Critical Regionalism", *Journal of Architectural Education* 55, No. 4 (2002): 228-237. Original, Paul Ricouer, "Universal civilization and Nation Cultures", in *History and Truth*, Charles A. Kelbley, trans. (Evonston, IL: Northwestern University Press, 1965).

¹⁵⁷ Kenneth Frampton, "Prospects for a Critical Regionalism", *Perspecta 20*, (1983): 148.

¹⁵⁸ Ibid, 149.

¹⁵⁹ Frampton trasferred formulation of the five binaries from Hannah Arendt's book Human Condition (1958) about duality of human condition. See Frampton's article Kenneth Frampton "The Status of Man and the Status of His Objects: A Reading of The Human Condition", in *Hannah Arendt: The Recovery of the Public World*, ed. Melvyn A. Hill, 101-130 (New York: St.Martin's Press, 1979). Frampton himself states that he is influenced by Hannah Arendt's political views.

¹⁶⁰ Kenneth Frampton, "Ten Points on an Architecture of Regionalism: A Provisional Polemic", in Canizaro, Vincent B. *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, And Tradition*, 375-386 (New York:Princeton Architectural Press, 2007), 378.

¹⁶¹ Kenneth Frampton, "Prospects for a Critical Regionalism", *Perspecta 20*, (1983): 147-162. ¹⁶² Ibid. 148.

2.2.2.3. Building as an act of construction: Tectonics

Since 1990s, Frampton turned back to phenomenology again through his seminal article "The Case for the Tectonic" 163 as the key source. He criticized nonarchitectural concepts governing architecture and he focused on physicality, structure and construction of architecture. He investigated tectonics 164, the word from the Greek tekton referring to construction joints, which Frampton saw as "the irreducible essence of architectural form",165.

For Frampton, tectonics is not only joining of parts but also "a fundamental nexus around which a building comes into being"166. It is a device for meaningful joining of parts that is directing mind and senses. Tectonics saw "building as an act of construction; an act of activity", 167. In Martin Heidegger's terms, "a thing rather than a sign" without any style. For Frampton away from any "seperate economic or functional ends" 169, this type of architectonic architecture supports techniques for building and structural durability to climate, topography, light and time rather than modern industry's reduced images or style 170

Frampton's understanding of tectonics carries the influences from Gottfried Semper¹⁷¹ who made a distinction between structural-technical and structural-symbolic; focusing on not only seen but also hidden (representational) qualities of the tectonic. Semper claims that the act and art of construction is essentially a poetic condition. He stated that "without that understanding, without experience, we cannot form a

¹⁶³ Kenneth Frampton, "Rappel a I'Ordre: The Case for the Tectonic", Architectural Design 3-4, (1990):19-25.

Architecture historian Kate Nesbitt identifies two essential aspects in Frampton's critique as an alternative architecture: an understanding of place and tectonics. See Kate Nesbitt, Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995, (New York: Princeton Architectural Press, 1996).

¹⁶⁵ Kenneth Frampton, Rappel A L'Ordre: The Case for the Tectonic, Architectural Design 3-4, (1990), 19-2 166 Ibid, 24.

¹⁶⁷ Kenneth Frampton "The Status of Man and the Status of His Objects: A Reading of *The Human* Condition", in Hannah Arendt: The Recovery of the Public World, ed. Melvyn A. Hill, 101-130 (New York: St.Martin's Press, 1979); Kenneth Frampton, Rappel A L'Ordre: The Case for the Tectonic, Architectural Design 3-4, (1990), 19-25.

¹⁶⁸ Quoted in Kenneth Frampton, Rappel A L'Ordre: The Case for the Tectonic, Architectural Design 3-4, (1990), 19-25.

¹⁶⁹ G. Semper used the term stereotomic from the Greek term to refer to solid, stereos and cutting -tomia). Semper and K. Bötticher are the ones who used the term tectonic in modern sense. See Gottfried Semper, The four elements of architecture and other writings, (Cambridge University Press, Cambridge 1989) and Karl Bötticher, Die Tektonik der Hellenen 1 (1852), 7f. Trans. by Wolfgang Herrmann, The Techtonic of Hellenes.

¹⁷⁰ Kenneth Frampton, Rappel A L'Ordre: The Case for the Tectonic, Architectural Design 3-4, (1990).

meaningful relationship with our constructed environment, That is why Frampton's tectonic does not concern itself only with structural form and material probity but also poetics of construction.

Against reducing architecture into scenography i.e. Robert Venturi's decorated shed or scenography of postmodern historicism, Frampton offered tactility and tectonics, searching for construction details of buildings, structural joints and articulation of building units were search of an "elusive surplus experience" for him. By means of tectonics, he combined architecture act of building and poetic condition. Concerning the technical reality of structure was also an effort "to graphically produce an experience that was in excess of the building itself" and seeing the representational qualities. In short, by means of tectonics, Frampton seemed to combine all his assumptions under one heading: in the act of building.

In his recent writings, Kenneth Frampton focused on landscape as an emancipatory agent against global culture in his articles "Toward an Urban Landscape" "175, "Seven Points for the Millennium: An Untimely Manifesto" 176, "Critical Regionalism Revisited" 177. In those articles, Frampton reflected his theory of critical regionalism into the tension between landscape and global culture, between the global and the local. Frampton identified landscape as the "sole remaining agent capable of mediating the chaos of the megalopolis" and offered "landscape form as a redemptive strategy" for cities. He suggested providing cultural continuity by bringing site history to the surface and against global culture is an inspiration for landscape urbanism. In his book chapter about Frampton, architecture historian Jorge Oter-Pailos stated that Frampton changed his terminology from constructivism, to critical

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¹⁷² Daniel Stephen Johnson, Columbia University's Introductory Pedagogy (1986 - 1991), (Unpublished Master Thesis in Architectural Pedagogy at Washington University, 2013), 35.

¹⁷³ Jorge Oter-Pailos, "Surplus Experience: Kenneth Frampton and Subterfuges of Bourgeois Taste", in *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern*, ed. Jorge Oter-Pailos, 183-250 (University of Minnesota Press, Minneapolis, 2010), 235.

¹⁷⁴ Jorge Oter-Pailos, Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern, (University of Minnesota Press, Minneapolis, 2010), xxxi.

¹⁷⁵ Kenneth Frampton, "Toward an Urban Landscape", *Columbia Documents* (NewYork: Columbia University, 1995)

¹⁷⁶ Kenneth Frampton, "Seven Points for the Millennium: An Untimely Manifesto", *Architectural Review*, (November 1999): 76-80.

Kenneth Frampton, Critical Regionalism Revisited, Agglutinations, (2003).

¹⁷⁸ Ibid.

¹⁷⁹ Kenneth Frampton, "Seven Points for the Millennium: An Untimely Manifesto", *Architectural Review*, (November 1999): 76-80.

¹⁸⁰ Jorge Oter-Pailos, "Surplus Experience: Kenneth Frampton and Subterfuges of Bourgeois Taste", in *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern*, ed. Jorge Oter-Pailos, 183-250 (University of Minnesota Press, Minneapolis, 2010).

regionalism and from critical regionalism to tectonics while they all refer to the resistance against global culture. Recently, it can be claimed that Frampton pointed out landscape as the resistant against globalism. In his last articles, Frampton preferred to change his terminology from critical regionalism and tectonics to landscape recently.

2.2.2.4. Phenomenology Influenced Pedagogy of Kenneth Frampton in Columbia University (1972-1988)

Colin Rowe's pedagogical approach of visual precedency affected many of the architecture schools throughout 1970s. Similarly, Columbia University took Rowean model until 1970s since there is a counter demand occurred against Rowean pedagogy in 1972. Architecture students of the university occupied dean's office and formed an Avery Commune to transform the curriculum into more on socially relevant issues. With the influence of the protests, James Polshek was hired as the dean in Columbia, and assigned the new teachers Kenneth Frampton in 1972 and Steven Holl in 1981 who were faced in the creation of curriculum at Columbia in the mid-1980's.

When Frampton first arrived at Columbia, the University took Cornell as the model for its pedagogy. The school's pedagogy was based on historically reflective understanding of architectural form focused on the study of typology, building types, as in Beaux-Arts tradition. Cornell University, University of Texas at Austin and Cooper Union were three leading schools of the era which grounded their pedagogies on 'functional model' bjectively designed relationships of spaces with primacy of programme. They defined experience as visual entity and architecture as a visual composition that is merely conceived through eye. Thus, types of architectural experiences based "simultaneity, were on interpenetration, superimposition, [and] ambivalence of architectural composition, [and] architectural composition, [criticized the university's work as "pastiche neo-classical schemes and motifs" and as the results of historical abstraction of form taken over Cornell University.

Daniel Stephen Johnson, Columbia University's Introductory Pedagogy (1986 - 1991), (Unpublished Master Thesis in Architectural Pedagogy at Washington University, 2013).

¹⁸² Colin Rowe; Robert Slutzky "Transparency: Literal and Phenomenal" *Perspecta, Vol. 8.* (1963):. 45-54. Quoted from Robert McCarter, "The Transparency of Space Colin Rowe and the Cubists", in *Constructions: University of Florida,*. (University of Florida, 1993), 84.

¹⁸³ Kenneth Frampton. "Columbia in Retrospect: Student Work 1983-84", in The Journal of The Columbia Graduate School of Architecture, Planning, and Preservation, *Precis* 6 (New York, NY: Rizzoli International Publications, 1987).

The phenomenology influenced architecture was projected to education initially by Dalibor Vesely and Peter Carl in University of Cambridge in 1978. Dalibor Vesely was a close friend of Kenneth Frampton. Vesely and Carl focused on "poetics of place" as a way of making architecture with the influences of Heidegger and Christian Norberg-Schulz. In his book "Architecture in the Age of Divided Representation", Veseley stated that one should consider typical human situations in the environment to heal the "fragmented relationship between humanity and his environment" His pedagogy in Cambridge University introduced *situational identity* that covered horizontality (relationship of the horizon) and verticality (upright posture) of human postures in space that provide identity and poetics of the place. Indeed, these situations also included "temporality (the main source of rhythm), regularity of movement and proportionality, and the question of centrality and periphery" Vesely and Carl's pedagogical approach was based on these typical human situations in the building scale.

Frampton's pedagogy broadened the scope of phenomenology influenced architecture education from building to the urban context. Frampton rearranged history, theory and housing courses about the impact of history on the evolution of form 'Comparative Critical Analysis of Built Form' and 'The Case for the Tectonic' which were very essential in Columbia's architecture education for more than ten years. He developed a new pedagogical approach in Columbia University by combining Vesely and Carl's phenomenology of bodily experience with its broader linkages to culture and politics. Until 1980s, Frampton's teachings in Columbia were centred around typological and contextual understanding of architecture. In the design studio, Frampton and his collegues built the program around a typological and Gregottian anthropological approach. He integrated socio-cultural aspects of Housing, Public Building, and Institutional Buildings as the footprints of critical regionalism. Here, the public-private aspects of architecture were incorporated into design as human condition of architecture (similar to Hannah Arendt's human conditions). His studio teaching was identified by combining urban context with Gregottian site-specific 'topographies'. Frampton proposed combining regional typologies and site-specific 'topographies' with a contextual sensitivity towards historically reflective understanding of urban context. To reinterpret typology with a site-specific understanding, Frampton's studio focused

¹⁸⁴ Dalibor Vesely, Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production, (Massachusetts: MIT Press, 2004).

¹⁸⁵ Ibid. 384.

on perimeter block for involving "particular relevance to the present urban and social predicament" Figure 15 shows student work of Pietro Cicognant and Jan Gleysteen's Plan in 1978 about residential pattern types. Frampton's studio explored four residential types: mews block pattern, perimeter block pattern, "carpet" pattern, and superblock pattern were chosen to be interpreted within specific contexts of relationships between street, house and garden. Specific sites are chosen for each study in Manhattan, Brooklyn, Queens and neighbouring suburban areas. This pedagogical approach provided idea of site specificity into the generic concept of type. It led an exploration on history, culture and social specificities of particular sites and their spatial relationships.

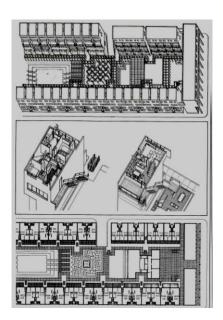


Figure 15. Student work in Kenneth Frampton's studio on Perimeter Block as type'. (Source: Richard Plunz, "The four typologies", Lotus International 27, 1980)

In 1981 Steven Holl was hired to Columbia University who contributed to organization of design studios in Columbia University with Kenneth Frampton. With the inclusion of Steven Holl to the faculty, the University's program concentrated more on bodily experience and phenomenology influenced architecture. Holl stimulated three essential components in architecture: site/circumstance, materiality and concept. Frampton also identified three essential components in architecture: as topos (site), typos (the meaning) and tectonics. For both of them, site is the common and essential component of architecture which they related it with topography of site. For Holl, site referred to a particular situation Site or circumstance, established the

¹⁸⁶ Kenneth Frampton and Alessandra Latour, "Notes on American Architectural Education from the End of the Nineteenth Century until the 1970's," *Lotus* 27 (1980).

importance of place, meaning linked to context. The context was connected to the students' understanding of the earth; the reality of topography¹⁸⁷. Frampton identified site as a kind of construction: an act of subtractive sculpting or carving from site. Figure 16 shows Steven Holl's studio Assignment: on Volumetric Composition about negotiating with site, in 1986. The site of the building was the first condition from which students conceptualize a relationship¹⁸⁸. Steven Holl integrated the relationship with experience through topographic movement or movement in topography in designing a poetic path.

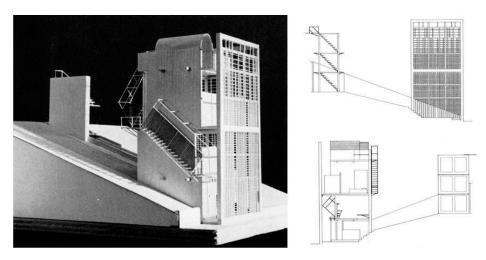


Figure 16. Steven Holl's studio assignment on Volumetric Composition. (Source: Daniel Stephen Johnson, Columbia University's Introductory Pedagogy (1986 - 1991), Unpublished Master Thesis in Architectural Pedagogy at Washington University, 2013)

The new curriculum created by Frampton was based on place and specific typology and Holl's studio contributed to the poetic idea and bodily experience. Both Frampton's and Holl's studio especially preferred to use eye level perspectives, sketches or collage technique, rather than conventional representations of plans and sections to show the potential of the spatial configuration, richness of the content and the intention of the design.

Until the arrival and presence of the new Dean Bernard Tschumi in 1988, Frampton and Holl's phenomenology influenced pedagogy was influential in Columbia University's architecture education. Later on, with Tschumi's focus on computer

Daniel Stephen Johnson, Columbia University's Introductory Pedagogy (1986 - 1991), (Unpublished Master Thesis in Architectural Pedagogy at Washington University, 2013).
 İbid.

technologies, Columbia University embraced computational advancements in architecture education.

To sum up, in Frampton's early theory, the context was replaced by cultural legacy and experiences that are sensitive to the variations of time and culture. He considered the relationship between site's past configurations, geographical and historical origins and current form. On the one hand, this contextual sensitivity does not only concern physical, social, cultural and historical concerns but also perception and experience of place. In relation with experience; it is more about an instant and intrinsic attachment to place. Thus, Frampton's contextual sensitivity was related with experiential and socio-cultural considerations of place theory. In his later works, Frampton inserted the theory of tectonics and the experience of the structure that is providing more concrete grounds. At this point, the context; or the continuity lied in in the constructional form: "as a comparable ground for architecture in terms of continuity and infection" 189. After 1981, with Steven Holl's phenomenology influenced studio education in Columbia University, the focus shifted into more abstract concepts like experience and poetic of place. Place was identified by the poetics and experiences it provided. However, this phenomenology influenced context brings nonrepresentational and abstract phenomenon to architecture. It also carries the the possibility of mystification or transcendentalization of site and context. What make Frampton's pedagogy different in Columbia University was introducing site specificity, quality of place, experience of place and idea of tectonics into architecture education. It also contributed to free hand sketches, perspectives, graphic designs that were pointing out subjective experience of place.

2.2.3. Rem Koolhaas in Harvard School of Design (1995-2000)

Rem Koolhaas, graduated from the Architectural Association School of Architecture, London in 1972 and was awarded a fellowship to study with Oswald Mathias Ungers (1926–2007) at Cornell University for one year. He then became a visiting Fellow at the Institute for Architecture and Urban Studies in New York at the center of theoretical debate and production. During his education at Cornell, he was

¹⁸⁹ Kenneth Frampton, "Rappel A L'Ordre: The Case for the Tectonic", *Architectural Design* 3-4, (1990), 19-2

influenced by Oswald Mathias Ungers' morphological perspective on the city¹⁹⁰. Koolhaas would later criticize Ungers' solid-void models as "a desire for stability which is no longer incompatible" 191. For him the Cornell team, composed of Mathias Ungers, Colin Rowe and Fred Koetter presented the city via binary oppositions. Koolhaas understood the contemporary metropolis as composed of assemblages of separate entities. He saw the contemporary city "not as a whole, but as a series of mutually exclusive 'good' and 'bad' parts" 192. Therefore it was futile to look for a synthesis of oppositional elements within a whole of disparate fragments.

After his visiting fellowship at the Institute for Architecture and Urban Studies in New York in 1973, he wrote his first provocative book "Delirious New York" in 1978, glorifying modernization in New York and how architecture coped with it. Koolhaas was fascinated by New York's culture of congestion as a model for understanding modern architecture and urbanism. For Koolhaas, the failures of modernity presented an opportunity to understand and to exploit it. Thus, he preferred continuing with modernism rather than abandoning it. Koolhaas offered an architecture that was not rejecting modern culture but by working with it. Instead of pursuing a resistance against globalism, Koolhaas sought for the opportunities inside modernism to formulate his position. While Colin Rowe's collage city and Kenneth Frampton's critical regionalism were based on combining fragments and polarities of the modern and the traditional harmoniously, Koolhaas' decontextualized these fragments. Koolhaas stated that "context is a thing of the past" 194. By the end of the 1980s, Koolhaas claimed that modern and the historical fragments in the city could stand together without a demand for harmony and overall coherence by declaring that "aspects of modernism can be made to co-exist with the historical core". At the end of 1980s, by recognizing the speed of urban change and growth and the lack of any

¹⁹⁰ Oswald Mathias Ungers (1926–2007) was a post-war architect and educator whose urban design studies focused on explorations of city with a comprehensive vision. He explored cities with dialectical oppositions considering typology as morphology. He engaged with contemporary city as a response to postwar building boom in 1940s. He claimed that architecture can have a morphological impact on the city form.

¹⁹¹ Rem Koolhaas, "Imagining nothingness", in Rem Koolhaas and Bruce Mau, S,M,L,XL, Jennifer Sigler (ed.) (New York: The Monacelli Press, 1995), 201.

Jorge Otero-Pailos, "Debates: 'Bigness' in context: some regressive tendencies in Rem Koolhaas' urban theory". City, 4, No. 3, (2000).

¹⁹³ Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan, (Thames & Hudson, London 1978).

¹⁹⁴ Jorge Otero-Pailos, "Bigness in context: Some regressive tendencies", in Rem Koolhaas' urban theory, City: Journal: analysis of urban trends, culture, theory, policy, action, (2010 Vol 4:3), 379.

¹⁹⁵ Rem Koolhaas, "Maaskantprijs voor Koolhaas; De wereld is rijp voor de architect als visionair", Archis, No 8, (August 1986): 45-47.

sense of overall unity in cities, Koolhaas argued for differentiation of its parts as separate entities.

In his second awarded entry for the Parc De La Villete Competition, in 1982, the project argued that an 'urban program could be evaluated in the form of a landscape process' and interpreted the landscape as a medium to order the programmatic change for the urban activities in the park. What characterized the project was Koolhaas' the concern for the indeterminate potentials of landscape and the freely programmable aspect of landscape as a surface. Thus the project was strategically designed in order to adapt itself to the indeterminate conditions of the urban context. The programmatic indeterminacy was the basis of concept of the project and he allocated unbuilt spaces in design for juxtaposition of unplanned relations between various park elements. As one of the layers in the design scheme, Koolhaas designed a strip layer as vertical juxtaposition of various programs (as in Manhattan adjacent skyscrapers) which was the layer of change, to responds to changes according to new demands. By means of the strip layer, he preferred to construct multiple links between activities, communicates the periphery of site with unprecedented events. This was a concern for landscape when he offered to provide freedom, spontaneity and indeterminacy to urban life via landscape.

The influence of the competition and his search of Manhattan city can be found in his essay "Imagining Nothingness" written in 1985. In the essay, Koolhaas explored Manhattan City and he defined it as "architectural islands floating in a postarchitectural landscape of erasure", 197. Although Manhattan's grid provided an ordering system, it also enabled evolving unique and autonomous islands at the same time. In the essay, Koolhaas elaborated on the concept of the 'archipelago city' which was first introduced by O. Mathias Ungers in the studio, 'The City within the City', in TUBerlin in 1977, studying Berlin City. By questioning the "formal and formative notion of architecture within the city", Ungers introduced the urban concept archipelago, to refer to the system of fragments in the contemporary city that he called as 'cities within the city'199. In his 1988 essay, "Contemporary City''200, Koolhaas continued analyzing the contemporary American city by shifting his focus from city center to the periphery

¹⁹⁶ Rem Koolhaas, "Imagining Nothingness", in OMA, eds.Rem Koolhaas and Bruce Mau, S,M,L,XL, (Rotterdam 1995), 201.

¹⁹⁷ Ibid. 201.

¹⁹⁸ Lara Schrijver, "The Archipelago City: Piecing together Collectivities", OASE Journal, 71 (2006): 18. 199 Rem Koolhaas, Delirious New York: a retroactive manifesto for Manhattan (Thames & Hudson, London 1978), 296.

²⁰⁰ Rem Koolhaas, "Postscript: Introduction for New Research "the Contemporary City", Architecture and Urbanism 217, (October 1988).

of post-industrial landscapes via the notion of "edge city". By combining the concept of archipelago and edge city, in 1993 in "Beyond Delirious" Koolhaas focused on green archipelago, to refer to the green spaces that were reserved for development for their unrecognized beauty and potential. He explored this idea in his entry to the Melun Senart Competition Project in 1986, by arguing that "a city is no longer defined by its built space, but by its absence or empty spaces" 203. The essence of the project was based on design of system of void rather than mass that will be expected to control the urban development. The voids defined an archipelago of residual islands, each of which could be developed independently of the others. The reason why Koolhaas focused on vast spaces and unbuilt landscapes in the city was for allowing "flukes, accidents and imperfections", ²⁰⁴ in the city, instead of a controlled environment. He believed that urban development and built areas cannot be projected and reasonably controlled ²⁰⁵ and urbanists and architects "have to become irresponsible", against this uncontrollable city. As a result of these ever changing cities, he proposed programming of urban sites rather than blueprint planning. Koolhaas formulated contemporary life of cities in the decontextualized fragments and assemblages of activities that were recomposed by architectural program.

Koolhaas is a well-known figure who links theory with practice. He reflected his theoretical effort on city, program, landscape and indeterminacy into design, via his design office OMA (Office for Metropolitan Architecture), in partnership with Greek architect Elia Zenghelis, Madelon Vriesendorp and Zoe Zenghelis. Architecture historians Harry Francis Mallgrave and David Goodman stated that 1990s was a "shift from theoretical to pragmatic engagement" and for them, Rem Koolhaas was the

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The term edge city was not a discovery of Rem Koolhaas. It was introduced and discussed by Joel Garreau, Joel Garreau, Robert E. Lang and Jennifer LeFurgy, Nicholas A Phelps, David L McKee.and Yosra A McKee. See Joel Garreau, *Edge city: Life on the New Frontier*, (New York, Anchor Books, 1992); Robert E. Lang and Jennifer LeFurgy, "Edgeless cities: Examining the Noncentered metropolis", Housing Policy Debate, 14, no 3, (2003), 427–460; David L. McKee.and Yosra A. McKee, "Edge cities and the viability of metropolitan economies: contributions to flexibility and external linkages by new urban service environments", American Journal of Economics & Sociology 60, no 1. (2001), 171–184; Nicholas A Phelps, "The Growth Machine Stops? Urban Politics and the Making and Remaking of an Edge City". Urban Affairs Review. 48, no 5, (2012), 670–700.

²⁰²Rem Koolhaas, "Beyond Delirious", in *Canadian Architect* 39, (1993): 28-30.

²⁰³Kate Nessbitt, *Theorizing a New Agenda for Architecture* (Princeton: Princeton Architectural Press, 1996), 331.

²⁰⁴ Rem Koolhaas, Mutations: Harvard Project on the City (Actar Publ., 2000), 334

²⁰⁵ Rem Koolhaas, "Project for a Ville Nouvelle", *Quaderns* (October-December 1989): 95

Rem Koolhaas, "Whatever Happened to Urbanism?", *Design Quarterly*, No. 164, Sprawl (Spring, 1995), 28-31

²⁰⁷ Harry Francis Mallgrave and David Goodman, *An Introduction to Architectural Theory: 1968 to the Present* (West Sussex: John Wiley &Sons Publications, 2012).

most influential figure who was responsible for this shift. In OMA's works, Koolhaas produced programming on city, landscape, open spaces and architecture presenting his theoretical position about contemporary life. In Park de la Villette (1982), he combined programmatic indeterminacy with architectural specificity that eventually generated Downsview Park Competition (2000), - landscape was the generating element for the city in which trees and vegetal clusters serve for urban development; in Almere Masterplan (2005), he focused on the fragments in the city, in other words, city within the city and offered agglomeration of distinct "equal" centres, each with its own concentration of facilities; in 11th Street Bridge Park(2017), he combined an infrastructure element, the bridge, with layers of programmatic development, to transform the bridge into moment of intersection.

In 1995, Koolhaas published his well-known book, "S,M,L,XL", 208 in collaboration with graphic designer Bruce Mau. The book was composed of autonomously and thematically organized sections according to size of architectural works without any other common denominator to show the autonomous fragments in the contemporary city and architecture that were involving Koolhaas' architecture works, writings between projects, photos, plans, fictions, cartoons and collages. . The book aimedto "find a new realism about what architecture is and what it can do" 209 in the contemporary situation in which architecture is produced by the provocations of exterior forces and disclosures of the conditions, in Koolhaas' words, it was to "destroy and rebuild architecture"210. In the part titled, 'Bigness', Koolhaas argued that "(Atlanta) shifted from center to periphery so quickly and so completely that the center/edge opposition is no longer the point. There is no center, therefore no periphery."211 He declared that there was no all-encompassing definition of context and "fuck context",²¹² which could not be predicted and controlled in the 21st century city. It was a break with the bigness (as the scale of design) and totality or total context. Koolhaas argued that we should accept that the contemporary city was the result of a clash of unpredictable events rather than the designed end-product of planned development. For Koolhaas, the search for context as a definable totality or a

²⁰⁸ Rem Koolhaas and Bruce Mau, S,M,L,XL. (New York: Monacelli Press, 1995)

²⁰⁹ Rem Koolhaas and Bruce Mau, S,M,L,XL. (New York: Monacelli Press, 1995), xix.

Rem Koolhaas and Bruce Mau, S,M,L,XL. (New York: Monacelli Press, 1995), xix. Rem Koolhaas and Bruce Mau, S, M, L, XL (New YorkL Monacelli Press, 1995), 836.

²¹² Rem Koolhaas, "Bigness, or the Problem of Large" in *SMLXL* (New York: The Monacelli Press, 1995).

controllable whole is doomed to be a thing of the past²¹³ It is a crisis of the whole²¹⁴; a regard for "cultivating the uncontrollable" ²¹⁵.

In the new millennium, Koolhaas and OMA further shifted their emphasis towards non-human ecologies of the landscape that were driving the indeterminate and self-organizing processes in the city. Downsview Competition held in 2000, Bruce Mau and Rem Koolhaas/OMA's winning entry, *Tree City*, served trees as catalyser for the change of low-density metropolitan life. The project was a process-oriented design, in terms of flexible patchwork of planted clusters that were developing the design. Each landscape cluster was "unassigned of program and was to be assigned over the course of park's life to ensure park's survival". The diagrammatic representation of the project also indicated the uncertain and indeterminate processes of design. The ecological and cultural programmatic elements of the park, were displayed as dots with different colors and different scales as the organizational patterns of the design. Since 2000s, the open space design of OMA was started to paid attention not only to the human events as the generator of indeterminate processes in the city, but also to the non-human ecologies generating indeterminate and self-organizing processes of landscape.

2.2.3.1. Rem Koolhaas' Project on City in Harvard School of Design (1995-2000)

Since 1995 to 2000, Rem Koolhaas led a research-based design studio at Harvard's School of Design every semester. In five years' time, the studio studied four projects: the Pearl River Delta in China, the metropolis of Lagos in Nigeria, the ancient Roman city, and shopping in order to come up with an analysis of the role of retail consumption in the contemporary city. Between 1996-1997, the studio studied Pearl River Delta in China.

Koolhaas saw research as a prelude to design. Initially, students designed their research itself. Student teams developed their own research projects from defining the problem, description of research questions, development of a method for the design and to providing design experiments for specific areas. Koolhaas provoked the studio teams

²¹³ Jorge Otero-Pailos, "Bigness in context: Some regressive tendencies", in Rem Koolhaas' urban theory, City: analysis of urban trends, culture, theory, policy, action, *City Journal*, Vol 4:3, 379-389

²¹⁴ John Rajchman, "Thinking big - Interview with Dutch architect Rem Koolhaas", *ArtForum* (Dec, 1994).

²¹⁵ Ibid, 3.

²¹⁶ Alissa North, "Processing Downsview Park: transforming a theoretical diagram to master plan and construction reality", *Journal of Landscape Architecture* 7:1, (2012):12.

to discover the multiple contexts of the city via the physical, cultural, economic and historical layers of the city. The studio assumed a multi-contextual approach to the city under the thematic layers (or contexts) of ideology, architecture, money, landscape, policy, and infrastructure. Every layer put its own inner or interrelations to sub-contexts to explore multiple realities of city.

The outputs of the studio Pearl River Delta were published in the book "The Great Leap Forward" in 2001, as an attempt to show the "complexity of events, mutations and radical changes taking place in this Chinese region and astonishing the urbanity they have generated" Instead of attempting to control the mutations in the city, the studio aimed to reveal mutations via analysis. For the Pearl River Delta, Koolhaas introduced the term 'city with exacerbated difference,' whose character is based on the "extreme differentiation between its parts" that are complementary and in competition with each other. That was how he formulated global capitalism; not bringing homogenization, but differentiation.

The book, The Great Leap Forward *is* a collection of essays recording and describing the rapid territorial transformation of Shenzhen and the Pearl River Delta. In the book, the condition of Pearl River Delta was identified as a tabula rasa because the "history was blotted out and the entire territory has become completely artificial"²²⁰. It made a contribution to understand current elements of chance, the indeterminate events and imperfections in the contemporary urban life and city. The structure of the book imitated the fragmented and multi-contextual structure of the contemporary city (see the outline of the book in Figure 17). In writing the book, each studio team was asked to focus on one thematic layer of the city that were organized as ideology, architecture, money, landscape, policy, and infrastructure. Each team analysed one thematic layer and produced a chapter specific with its own conclusions for a future development. All of the chapters related with research questions, problem and method for the design. Within each chapter, the students produced creative essays, diagrams, statistics and maps as outputs of the studio by mapping existing conditions, and suggesting new ways to shape the city via these mapping exercises.

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²¹⁷ Chuihua Judy Chung, Jeffrey Inaba, Rem Koolhaas and Sze Tsung Leong, *Great Leap Forward: Harvard Design School Project on City*, (Taschen Köln: GmbH, 2001).

²¹⁸ Rem Koolhaas, Mutations: Harvard Project on the City, (Actar Publ, 2000), 280.

²¹⁹ Ibid, 365

²²⁰ Rem Koolhaas, *Mutations: Harvard Project on the Cit*, (Actar Publ, 2000), 309.

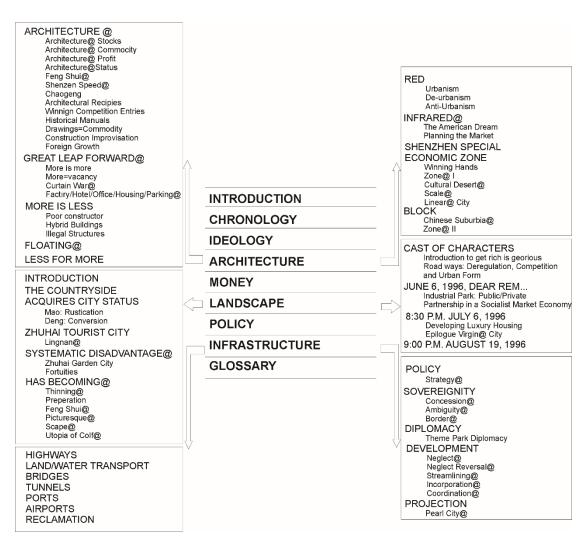


Figure 17. Outline of the book 'Great Leap Forward'.

The main assumption of the studio was dynamism and unpredictability of real estate development in the socialist market economy that produced "a source of freedom" for Pearl River Delta. All the visual tools, verbal descriptions were used to convince the reader to this assumption. What was strikingly innovative in Koolhaas' studio was the visual tools that were formulated as verbal descriptions to explain the specific situation, relations and flows in Pearl River Delta. The studio teams used familiar images such as photographs, advertisements, google earth images, flight route images or meteorological images and diagrammatic representations to improve the research. The research goal was to emphasize urban and real estate developments that were providing the opportunities for the land. Figure 18 (a google earth image) and Figure 19 (an advertisement poster), two images produced in the studio, were to point out rapid urbanization growth and fast development in real estate sector. Right top

²²¹ Rem Koolhaas, Mutations: Harvard Project on the City (Actar Publ, 2000), 309

diagram in Figure 18 was produced by one of the studio team displaying the spatial configuration of rapid urbanization of City of Exacerbated Difference within urban network of Pearl River Delta. This diagram also took part in the book, even it is not easy to understand what it showed. The diagram illustrated the growth tendencies on land, but the results of the analysis were graphically represented as the analysts saw fit to leave the interpretation to the readers. Koolhaas believed that any representation was open to subjective interpretation, just like any data could be given myriad forms of representation. In that sense, the analyses made no claim to scientific objectivity.

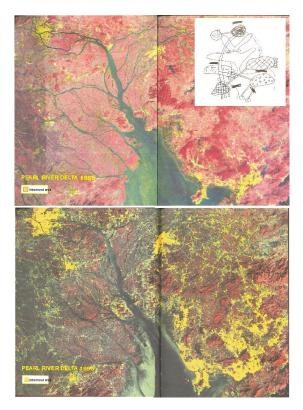


Figure 18. The fast Urban growth from 1985 to 1995 in Pearl River Delta. (Source: C. J. Chung, J. Inaba, R. Koolhaas and S. T.Leong, Great Leap Forward: Harvard Design School Project on City, Köln: GmbH, 2001).



Figure 19. An advertisement image about fast construction sector in Schenzen area. (Source: C. J. Chung, J. Inaba, R. Koolhaas and S. T.Leong, Great Leap Forward: Harvard Design School Project on City, Köln: GmbH, 2001).

Koolhaas paid special attention to diagrams. In Koolhaas' studio, diagrams were commonly used in the analysis stage, or to visualize research questions and the research problems. Koolhaas established a direct relationship between architecture and diagramming. For him, architecture could become "diagramming of everything" - the relationships, proportions, connections, effects. It could "become a way of thinking about anything" ²²³, when it is "liberated from the obligation to construct" ²²⁴. Koolhaas used diagrams to represent the undefined, unrepresentable, hidden qualities such as flows, change and dynamism or for ironical explanations. For instance, in Lagos Project in Harvard School of Design, Koolhaas' studio produced variety of diagrams to represent the ingenious, critical alternative systems of Lagos. The city Lagos, with all its specific characteristics, reverses the common truths of what Western planning defined as city having specific infrastructures, systems, organizations, and amenities. The studio used diagrams for ironical explanations about how the infrastructure systems, especially the highways, turned out to be an efficient type of construction as a line where production processes took place in Lagos. Figure 20 shows the bottlenecks around Lagos area. Thickly drawn lines refer to expressways and neighbourhoods are shown as the white and gray space on the map between highways. Even if, it had a negative connotation for separating the city, the Figure 20 diagrammatized the potential routes that bottlenecks encouraged for detouring and turning of neglected neighbourhoods by providing new secondary arteries. In Figure 21, the diagram shows the potential areas between circular voids of cloverleaves, foundation pads and open areas to be planned and filled. Ironically, students drew attention to these spaces by refilling the vacant land on the diagram with text.

²²² Rem Koolhaas, *Content*, (Köln: Taschen, 2004), 20.

²²³ Ibid. ²²⁴ Ibid.

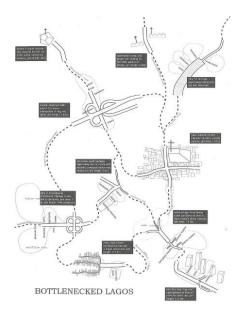


Figure 20. Diagram of bottlenecks around Lagos area. (Source: Rem Koolhaas, Mutations: Harvard Project on the City, Actar Publ, 2000)



Figure 21. Diagram of potential areas between circular voids of cloverleaves, foundation pads and open areas.

(Source: Rem Koolhaas, Mutations: Harvard Project on the City, Actar Publ, 2000)

Pearl River Delta Project was based on exploration of unique contemporary urban conditions, specific situations, systems and for that a particular area. The studio teams used not only visual tools, maps, diagrams, drawings, but also used new terminologies for specific conditions of an area. There was no hierarchy between these instruments; rather, they reinforce each other to improve the power of speculation. To point out the specific situations encountered in Pearl River Delta, the studio produced seventy-five new terms to account for the specific characteristics. These new

terminologies were invented due to the site specific characteristics of Pearl River, indicated as @ in the beginning of the term. The sign, @, identified the copy right taken for the term.

To sum up, Rem Koolhaas' studio pedagogy provided new perspectives, method and instruments on how to understand, identify and represent fragmented, complex, dynamic and multiple contexts of 21st century cities. His research-based design studio aimed exploration of unique contemporary urban conditions, specific situations, systems and relationships that were generating the production of cities for a particular area. What Koolhaas did was more asking questions about how different urban conditions were constructed and received in cities. He preferred to make speculation about divergent, accidental and self-organizing development of cities driven by capital.

Koolhaas saw the contemporary city as accumulation of fragmented phenomenon in relationship with interrelated networks. The studio research was conducted to explore the fragments and multiple and complex contexts within the city. Accordingly, the sites became more important than the city as a whole. Under these circumstances, Koolhaas believed that architecture could not demand for one singular notion and context anymore. There was no total context and there were no hierarchy between fragments. The reason behind Koolhaas' research-based project was to convey that contemporary city has multiple realities. For instance, Pearl River Delta had many connections from local to global and from social to economic to ideological. In Koolhaas' studio, every fragment in the Delta was organized due to the research questions to support the main design idea. The research was organized like the chapters and the chapters were organized towards speculating how free market economy and real estate development improved the economic, social and spatial characteristics of the Delta in the local, urban, regional scales. That is why, all the research was organized to support this assumption. The idea behind this tendency was Koolhaas' understanding of context as a construct.

Koolhaas' studio also had enormous freedom in instruments and in methods to support the existence of multiple realities, rather than grounding on a scientific truth and a rational method. In that sense, for instance, Colin Rowe's understanding of context remains inductionist for paying attention merely to the figure ground patterns of the city as context. His studio produced as many visual images and diagrams as it can, to show that there are abundant of realities in the contemporary city. The representations of the

contemporary city were as it was: accumulating an abundance of realities, multiple views and viewpoints, multiple contexts.

CHAPTER 3

THE DEBATE ON CONTEXT IN LANDSCAPE ARCHITECTURE THEORY AND PEDAGOGY

The aim of this chapter is to understand how contemporary landscape architecture theory contributes to the development of diversified and strong conceptual framework around the term site. Different from architecture, in landscape architecture, the vocabulary on site revolves not around the discussions on context but on what landscape is. The chapter puts how the dense discussions on site in landscape architecture are related with expansion of notion of landscape from merely natural systems to natural-cultural synthesis as a result of the poststructuralist questioning of binary oppositions constructed after the Enlightenment. That is why this chapter focuses on the changing notion of landscape by going back to twentieth century when the discipline institutionalized in Harvard University. It maps out a brief history of expansion of the meaning of landscape in landscape architecture theory from garden to urban in 1960s and from urban to site.

This chapter is elaborated in two parts. The first part maps out the expansion of the notion of landscape from equation with nature into larger system of cultural-natural networks that works alongside urbanism within three overlapping eras: landscape as ecology, landscape as nature-culture and phenomenology influenced landscape architecture (Figure 22). The first part elaborates the philosophical and theoretical background and driving forces behind the recent emergence of dynamic, adaptive, relational, multiscalar and performative landscape by going back to 1960s when landscape started to be evaluated as an ecological and broader system by Ian McHarg. It seeks McHarg's extensions by contemporary theorists Anne Whiston Spirn, James Corner, Charles Waldheim, Chris Reed and Mohsen Mostafavi.

The second part of the Chapter seeks how these theories produced their own methods, instruments and representation techniques in landscape architecture education. It focuses on three important figures of landscape architecture education that have a

common lineage for the development of reigning contemporary landscape architecture theory in the Western world. By the 1960s, the notion of landscape expanded from garden and park design to regional planning perspective by Ian McHarg's ecological design perspective in University of Pennsylvania. James Corner's formulation of landschaft and landscape urbanism in Harvard University and Mohsen Mostafavi's machinic landscapes and dynamic forms in Architectural Associations Landscape Urbanism Program revised and extended Ian McHarg's notion of landscape. These figures played important role for developing current understanding of landscape as hybrid nature-culture ecologies working together within urbanized environments by incorporating their own agendas and methods. This section explores how Ian McHarg, James Corner and Mohsen Mostafavi contributed to the current understanding of site as dynamic, relational, multiscalar, performative landscape.

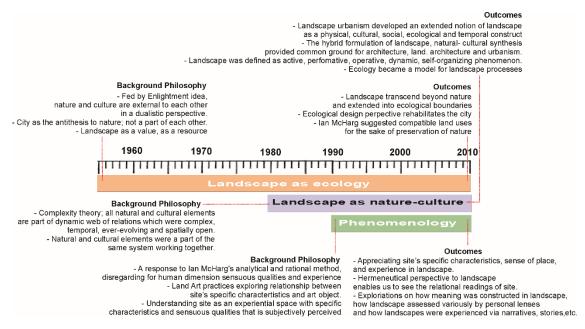


Figure 22. Three main overlapping eras of the extension of the notion of landscape.

3.1. Understanding of Context in Landscape Architecture: from Garden Design to Landscape Urbanism

Instead of the debate on context, the roots of discussions on site are grounded in extended notion of landscape from nature to natural-cultural ecologies. Therefore, it is not surprising that, in landscape architecture, nature and ecology supplied the main foci of the debate on context. We should note that there is no direct debate that addresses "context" as the debate in landscape architecture as architecture does. In landscape

architecture theory, landscape itself is considered as context per se and the debate on context is embedded in discussions on what landscape is and its relationship with humans. The following part explains the changing meaning and scope of landscape from garden to urban after 1960s and from urban to site since the 1980s with the shifting discussions on landscape not only as natural systems but also human ecologies. This part summarizes the evolution of the notion of landscape in the discipline time and the context, accordingly since the beginning of 20th century up to now.

3.1.1. Landscape as the Antithesis to the City

Since the institutionalization of the discipline with Frederick Law Olmsted in the late 19th century, landscape architecture discipline took most of its references from nature to understand the relations in nature and to employ these relationships in design. F.L.Olmsted popularized and institutionalized the discipline at Harvard University in the early 1900s, was the main advocate and pioneer of this attitude. F.L.Olmsted sought for how landscapes could be utilized to remedy the industrialized city to construct an ideal urban environment. For him, landscape was the antithesis to the city; and urban parks were refuges to 19th century cities. Olmsted proposed not only a continuity of parks and open space systems, but simultaneously aimed to improve the quality of the urban environment through flood control and sanitary measures. His idea of urban rehabilitation via pastoral gardens was where the park looked like a piece of untouched nature. Although Olmsted's parks had a pastoral aesthetic as the English gardens of the 19th century, Olmsted reclaimed a social function for nature. Landscape theorist Anne Whiston Spirn, in her article "Constructing Nature: The legacy of Frederick Law Olmsted"²²⁵, assessed the natural scenery of Olmsted's parks "not to be recognized and valued as human constructs",226 but has a social utility at the same time. Olmsted offered to "emulate not imitate" the "physical and biological processes that connect human and nonhuman nature" ²²⁸. In this sense, he defined a distinct relationship between human and nonhumans which are in relationship but not a part of each other. This is the

²²⁵ Anne Whiston Spirn, "Constructing Nature: The legacy of Frederick Law Olmsted", in *Uncommon* Ground: Rethinking the Human Place in Nature, ed.William Cronon, (New York: W. W Norton & Company Inc., 1995).

²²⁶ Ibid, 111. ²²⁷ ibid.

²²⁸ Ibid, 112.

traditional concept between nature and culture produced by Enlightment idea in which humans and culture are external to each other in a dualistic perspective (Figure 23).

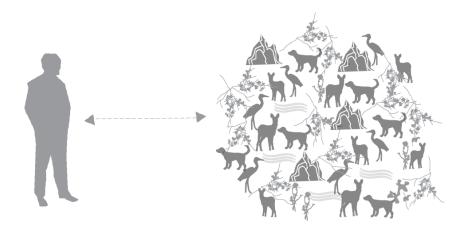


Figure 23. The traditional concept of nature and culture: humans and culture are external – a dualistic concept.

(Source: Martin Prominski, "Andscapes: Concepts of nature and culture for landscape architecture in the Anthropocene", Journal of Landscape Architecture 9:1, 2014)

Throughout 1930s, Garrett Eckbo, Dan Kiley and James Rose, students of Olmsted Jr., advocated democratization of landscape architecture producing *a piece of nature in the city* for everyone by criticizing designing of gardens or parks for an elite group. They were students in Harvard University when Walter Gropius arrived in 1937 and influenced from modern movement in architecture. There was a clash between Olmsted's group demanding landscape architecture as a distinct field in Harvard Design of School and Eckbo, Kiley and Rose who were demanding for adapting modernist vocabulary of architecture into landscape architecture. However, their intervention could not make a radical shift in landscape architecture discipline.

The first radical shift in landscape architecture occurred in 1960s, when the discipline turned its face from nature to ecology to rehabilitate the city. With increasing awareness on environmental problems during the 1960s, ecology as a science started to serve as a remedy to the environmental problems in the world. In 1960s, Ian McHarg introduced his ecological planning method to landscape architecture by combining traditional landscape architecture design techniques with concepts from ecology. When ecology was accepted as the "primary authority for the natural way to design" it led to renewal of the discipline. Although McHarg agreed upon Olmsted's idea about the

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²²⁹ Anne Whiston Spirn, "The Authority of Nature: Conflict, Confusion, and Renewal in Design, Planning, and Ecology", in *Ecology and design : frameworks for learning*, eds. Bart R. Johnson and Kristina Hill (Island Press, 2002), 250.

city is the antithesis to nature, and landscapes as the remedy to the cities. He left aside the aesthetic preoccupations of Olmstead and let the ecological principals to overcome aesthetics of design. McHarg was influenced by biologist, geographer, and planner Patrick Geddes (1854-1932), who initially declared that the "primary structure of urban form was shaped by the landscape, by the planning of parks, gardens, and cultural amenities" By using the words, nature and ecology interchangeably, McHarg, tried to read landscape through information on natural processes which he aimed mimicking in his designs. He suggested opportunities and constraints for various possible land uses that could work in harmony with the ecology of existing natural systems. These land uses were suggested after a long analytical research on landscape elements and values in favor of supporting the nature in the city.

3.1.2. Reading Broader Linkages

Ian McHarg is also an important figure for extending the scale of landscape architecture. McHarg's theory was grounded on systems theory that offers all environments are like systems that are related within a network. With the influence of systems theory, since the 1960s, landscapes are evaluated as connected to each other within larger networks. To identify the ecological systems of nature and the settlements, McHarg considered landscape in the urban and regional scales. McHarg explored the specific characteristics of landscape in terms of exploring landscape resources, values and the landscape elements that are related with each other along ecological regions. By McHarg, landscape architecture and ecology are in close relationships and landscape architecture integrates theories and principles of ecology discipline into its spatial design perspective.

By the 1980s, landscape ecology²³¹ emerged as a new area of research focusing on the relationship between ecosystems and landscape processes. In 1981, Richard Forman and Michel Godron introduced "Patches and Structural Components for a Landscape Ecology", exploring the spatial distribution of heterogeneous ecological

²³⁰ Cited by Carl Steinitz, "Landscape planning: A brief history of influential ideas", *Journal of Landscape Architecture* 3, no 1 (2008): 71.

²³¹ The term landscape ecology was introduced by the German biogeographer Carl Troll at the end of the 1930s who was interpreting distribution of an East-African savannah landscape with the help of aerial photographs.

²³² Richard Forman and Michel Godron, "Patches and Structural Components for a Landscape Ecology", *BioScience 31*, No.10 (1981), 733-740.

areas; their pattern, process and scale such as forests, rivers, meadow, villages etc. The development of landscape ecology as a discipline was supported by foundation of Organization of the International Association for Landscape Ecology (IALE) in 1982; Richard Forman and Michel Godron published their book "Landscape Ecology". In 1986 about the relationship between landscape pattern and ecosystems; in 1984, Z. Naveh, and A. Lieberman published "Landscape ecology: theory and application". about human-influenced landscape patterns and processes as physical, ecological and geographical entities. Forman and Godron's book was accepted as one of most influential book in landscape ecology concerning scale, pattern, distribution of landscape patches and accordingly, ecological systems, energy and species across large land mosaics. As shown in Figure 24, they figured out the how the connections, relations and movements between ecosystems change with respect to landscape forms and patch forms such as scattered patch landscapes, network landscapes, interdigitated landscapes, checkboard landscapes.

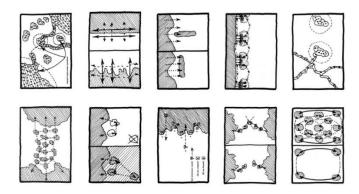


Figure 24. Movement of ecological systems in the patterns of patches, edges, corridors and mosaics.

(Source: Wenche E. Dramstad, James D. Olson and Richard T.T. Forman, Landscape Ecology Principles in Landscape Architecture and Land-Use Planning, 1986)

Since the 1980s, systems theory advanced in complexity theory and became highly influential for the ecology discipline. Complexity theory saw living things as part of a dynamic web of relations which were complex, temporal, ever-evolving and spatially open. This is a dynamic relationship in which all the parts are related with each

²³³ Richard Forman and Michel Godron, *Landscape Ecology* (New York: John Wiley Sons, 1986)

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²³⁴ Z. Naveh and A.S. Lieberman. *Landscape Ecology – Theory and Application* (New York: Springer-Verlag, 1984)

²³⁵ Richard Forman and Michel Godron, *Landscape Ecology* (New York: John Wiley Sons, 1986), 733.

other. Here, natural and cultural elements were a part of the same whole system as illustrated in Figure 25.

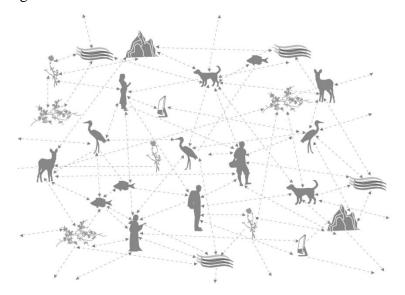


Figure 25. The world of living things, all part of a dynamic web of relations. (Source: Martin Prominski, "Andscapes: Concepts of nature and culture for landscape architecture in the Anthropocene", Journal of Landscape Architecture 9:1, 2014).

In 1989, Felix Guattari revised the relationship between nature and ecology and extended the scope of ecology in his article "Three Ecologies" Guattari introduced the term *ecosophy* as a concept of the three interacting and interdependent ecologies of mind, society, and environment against traditional environmentalist perspectives separating cultural systems from natural systems. By means of three ecologies, the notion of ecology expanded to include social systems and human dimension in addition to existing natural systems. Architect Mohsen Mostafavi influenced from Guattari's *Three Ecologies* and introduced *'ecological urbanism'* into landscape architecture by offering ecology driven urbanization. He proposed a holistic approach to worldwide environmental crisis by "conjoining conditions between ecology and urbanism" Ecological urbanism helped to see landscape from ecological, social, economic perspectives that could influence city in a formative and radical way.

Julia Czerniak and George Hargreaves reinterpreted ecology not only as a theory of natural systems but also ecology of parks in the city. In their book "Large Parks". ²³⁸,

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²³⁶ Felix Guattari, The Three Ecologies, trans.by Chris Turner, *Material Word, New Foemations 8* (1989): 131-147

Mohsen Mostafavi, "Why Ecological Urbanism? Why Now?",, in *Ecological Urbanism*, eds. Mohsen Mostafavi and Gareth Doherty, (Baden: Lars Müller and Harvard University Graduate School of Design, 2010). 14.

²³⁸ Julia Czerniak and George Hargreaves, *Large Parks*, (New York: Princeton Architectural Press, 2007)

they attempted to extend of the discussions of landscape ecology to the city in relation to the problem of scale. Czerniak and Hargreaves claimed that large parks enabled continuity of ecosystems in the city and contributed to biodiversity, complexity and sustainability of the city. Landscape ecology discipline led discussing the limits and boundaries of landscapes in a broader ecological scale. Considering the scale in terms of continuity of ecological systems – a scale of continuity – expands the site's official boundaries.

Figure 26 shows the background philosophy and outcomes of 'landscape as ecology' approach that was the initiated the expansion of the notion of landscape beyond nature and garden. Figure 27 summarizes the disciplinary exchange, people and literature in 'landscape as ecology' approach that extended the discussion. Recently, as a result of ecological perspective to landscape, landscape architects such as Elizabeth Meyer, James Corner, Charles Waldheim, Chris Reed defined landscape within scale of ecology, in continuous and broader networks of scales.

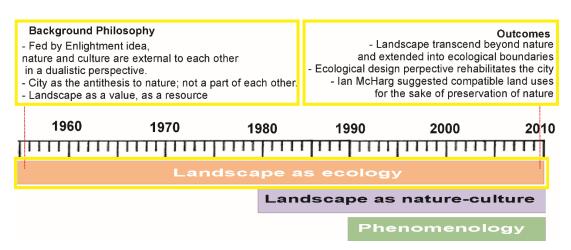


Figure 26. The background philosophy and outcomes of 'landscape as ecology' approach in landscape architecture theory.

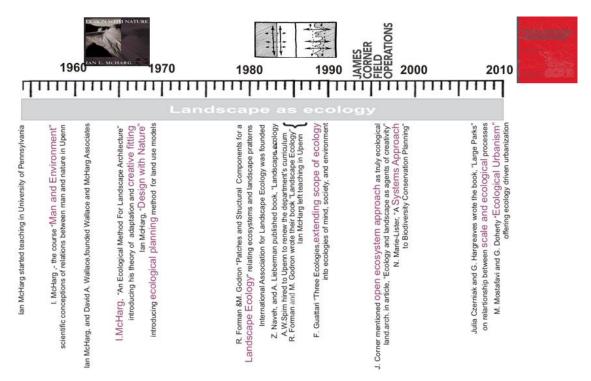


Figure 27. The disciplinary exchange, people and literature in 'landscape as ecology' approach.

3.1.3. Culturally Constructed Landscape

Arguably, as a result of post-structuralism and the loss of faith in scientific determinism, the end of 1980s witnessed an important change in landscape architecture which led to an overall revision within the discipline. Landscape was now understood not as a natural, but rather a constructed phenomenon. When all nature was understood as a human construct, the relationship between city and nature, city vs. landscape, culture vs. landscape, and landscape vs. architecture dissolved and landscape was understood as one system working among others within urbanized environments. With the dissolution of clear boundaries between nature and culture, landscape and city, the pure meaning of landscape as nature is transformed into multiple readings of landscape.

After then, since the end of the 1980s, landscape architecture started to relate not only from nature and ecology but also from social sciences. In 1984, John B. Jackson (1909-1996) adapted geographer Carl Sauer's notion of *cultural landscape* to

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²³⁹ Geographer Carl Sauer defined cultural landscape that human impact on nature as cultural. He focused on culture works on nature. See Carl O. Sauer, *The Morphology of Landscape*, (University of California Publications in Geography, 1925).

landscape architecture discipline. In his article "Concluding with Landscapes" 240, Jackson reinterpreted history of landscapes and classified urban, rural, vernacular, aristocratic landscapes due to how they have been shaped by culture and ideology. Jackson categorized rural vernacular and legally-established landscapes landscape as landscape one; scenic and aesthetically produced landscapes as landscape two, and informal, fragmented, and ephemeral landscapes as landscape three.

In 1983, another inspiring approach from social sciences was historian Andre Corboz's understanding of landscape as *palimpsest*. Corboz wrote "The Territory as a Palimpsest"241 in which he saw the landscape as a palimpsest that gathers all the activities of human beings in historical layers. Sauer's and Corboz's formulations were based on the understanding of landscape as a historically and culturally constructed phenomenon. Corboz formulated today's landscapes gathering and unveiling all these layers. This idea was inspiring for landscape theorists Anne Whiston Spirn, Elizabeth Meyer, John Dixon Hunt and James Corner who theorized landscapes not antitheses to the human systems but as parts of the same ecological system.

In the mid of 1980s, in addition to above mentioned figures outside landscape architecture discipline, some figures inside the discipline started to wrote about culturally constructed landscapes. In her article, "The Authority of Nature: Conflict and Confusion in Landscape Architecture"²⁴², Anne Whiston Spirn argued how nature was constructed literally and figuratively by landscape architects and in the 21st century landscape architects should work for harmony between the human design and the urban nature of cities. In, "Granite Garden: Urban Nature and Human Design", she further argued that the interaction between natural processes and human purpose shaped the urban form. She proposed that the knowledge of natural processes and human intervention could provide an ecosystem different from nature to ecologically rework cities and enhance human health and well-being. In 1999, in his book "Recovering Landscape: Essays in Contemporary Landscape Architecture", James Corner

²⁴⁰ John Brinckerhoff Jackson, "Concluding with Landscapes", in Discovering the Vernacular Landscape, ed. J.B. Jackson, (New Heaven: Yale University Press, 1984), 145-158.

Andre Corboz, "The Land as Palimpsest", *Diogenes* 31, 121 (1983).

Anne Whiston Spirn, "The Authority of Nature: Conflict and Confusion in Landscape Architecture", in Nature and Ideology: Natural Garden Design in the Twentieth Century, ed Joachim Wolschke Bulmahn, 249-262 (Washington D.C: Dumbarton Oaks Research Library and Collection, 1997), 260.

²⁴³ Anne Whiston Spirn, Granite Garden: Urban Nature and Human Design, (New York: Basic Books, 1984).

²⁴⁴ James Corner, Recovering Landscape: Essays in Contemporary Landscape Architecture, (Princeton Architectural Press: New York, 1999).

evaluated the nature as a "socially constructed idea, a landscape, even though it appears wholly 'natural'"²⁴⁵. The book includes sixteen articles discussing constructed landscapes and its shifting role. He stated that "landscape was construed in an eidetic and subjective way that cannot be equated with nature or environment"²⁴⁶. For Corner, landscape was "reconstructed in a synthetic way whose meaning was culturally situated"²⁴⁷. James Corner's book offered recovering the cultural, social, ecological meaning of landscape which were not dependent merely on natural systems anymore.

3.1.4. Landscape as Process

In 1990s, James Corner and his collaborators, Charles Waldheim²⁴⁸, Anu Mathur²⁴⁹, Alan Berger²⁵⁰, Chris Reed²⁵¹ Mohsen Mostafavi declared that landscape as an agent has power to generate urban formations by its capacity to deal with the dynamicism, flow and change of the 21st century cities under the umbrella of *landscape urbanism*. In the mid-1990s, Charles Waldheim and James Corner developed the phrase *landscape as urbanism* in a series of conferences and they popularize the term with the 'Exhibition of Landscape Urbanism' held in Detroit in 1997. Landscape urbanism largely contributed to the understanding of landscape as dynamic, ever-evolving, adaptive, process.

The protagonist of the movement, James Corner, described 21st century urbanism as "organic and fluid urbanism"²⁵² characterised by network of relationships, flows and rapid change, in his manifesto-like article "Terra Fluxus"²⁵³. He offered reviving the processes of ecology as a self-organizing, open and dynamic mean to

²⁴⁵ Ibid, 7.

²⁴⁶ Ibid, 6.

²⁴⁷ In his article *TerraFluxus*, Corner draws a schematic outline for practice of uniting landscape and urban: Processes over time, Staging of surfaces, Operational or working method, The imaginary. See James Corner, "Terra Fluxus" in *The Landscape Urbanism Reader*, ed. Charles Waldheim, (New York: Princeton Architectural Press, 2006), 21-33.

²⁴⁸ Charles Waldheim is the figure who introduced the term landscape urbanism and the editor of the book Landscape Urbanism Reader.

Anurandha Marthur is a professor in Upenn landscape arhitecture, focusing on fluidty of water which offers new visualizations of terrain, design imagination, and design practice.

²⁵⁰ Alan Berger is a professor in MIT, introduced the concept of drosscape, and searches on the re-use of waste landscapes.

²⁵¹ Chrid Reed is the founder of landscape architecture office StossLU (stoss landscape Urbanims), wrote an essay in Landscape Urbanism Reader and studio coordinator in Harvard GSD Landscape Architecture.

²⁵² James Corner, "Terra Fluxus" in *The Landscape Urbanism Reader*, ed. Charles Waldheim, 21-33 (New York: Princeton Architectural Press, 2006), 29.

²⁵³ James Corner, "Terra Fluxus" in *The Landscape Urbanism Reader*, ed. Charles Waldheim, 21-33 (New York: Princeton Architectural Press, 2006).

understand and conceptualize 21st century cities. By transferring ecology's open ecosystem approach²⁵⁴ into design, Corner focused on landscape processes, change and temporality, and reading how change and self-organizing processes occur and organize the change. What is different in Corner's ecological design was incorporating self-organizing change processes as metaphors generating the design. Landscape ecologist Nina Marie Lister stated that this new ecological design perspective took invasion and succession, adaptation, insurgency processes of ecology "as an analogy for design... rather than modelling nature",²⁵⁵. In the same direction, landscape architects Stan Allen, Adrian Geuze, and Chris Reed has recently proposed adaptive ecological design practices in which change and landscape processes generate the design.

Figure 28 shows the background philosophy and outcomes of 'landscape as nature-culture synthesis' approach emerged within poststructuralist discussions since the 1980s. Figure 29 summarizes the disciplinary exchange, people and literature in 'landscape as nature-culture synthesis' approach that extended the notion of landscape into working alongside with urbanism.

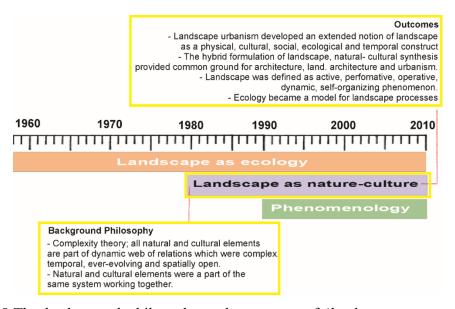


Figure 28.The background philosophy and outcomes of 'landscape as nature-culture synthesis' in landscape architecture theory.

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Open ecosystem approach formulated ecosystems as open, holistic, cyclic, self-organizing, and dynamic systems, marked by often sudden, unpredictable change. Open ecosystem approach derives from C.S. Holling's theory of *dynamic cycle of ecosystem development*. See C. S. Holling, "Resilience of ecosystems; local surprise and global change", in *Sustainable Development of the Biosphere*, W. C. Clark and R. E. Munn, (eds) 292-317 (Cambridge University Press, Cambridge, 1986).

²⁵⁵ Nina-Marie Lister, "Sustainable Large Parks: Ecological Design or Designer Ecology?," in *Large Parks*, ed. Julia Czerniak and George Hargreaves, 35-57 (New York: Princeton Architectural Press, 2007), 40.

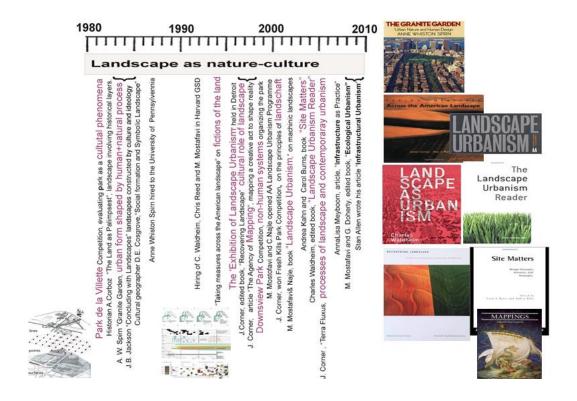


Figure 29.The disciplinary exchange, people and literature in 'landscape as nature-culture synthesis' approach.

3.1.5. From Landscape to Phenomenological Site

By the 1970s, art practices started to investigate how to relate the art object with its site emerged as as a reaction to placeless modernist art without expressing any indifference to site. Particularly, site specific art (land-art) focused on one or few specific aspects of site such as "scale, topography, the earth's position, or the ephemerality of color and light", and explored how to relate the art object with these aspects of site. Those investigations provide a ground for landscape architecture to discuss a triangle of relationship between object, site and bodily experience. At the end of the 1980s, landscape architecture was increasingly recognized in phenomenological discourse as a response to Ian McHarg's analytical and rational method which was dominant in landscape architecture theory and education. Phenomenology influenced landscape architecture was a critic against disregarding for human dimension sensuous qualities and experience. Similar to architecture, phenomenology influenced landscape architecture also took German philosopher Martin Heidegger as a guiding figure to

²⁵⁶ Anita Berrizbeitia, "Re-placing Process," in *Large Parks*, ed. Julia Czerniak and George Hargreaves, (New York: Princeton Architectural Press, 2007): 175-197.

develop phenomenological studies in landscape architecture. In addition to Heidegger's writings on act of building, philosopher Merleau-Ponty's writings were model for adding outer boundary to Heidegger's notion of interior. Merleau-Ponty²⁵⁷ combined "exterior horizon" as the visible situation of an object with "interior horizon" as the visible and invisible qualities that forms the meaning. Grounding on Heidegger and Merleau-Ponty's theory, by the 1980s, landscape architecture started to discuss how meaning was constructed in understanding landscape, how the assessments of the landscape changed through personal lenses and how landscapes were experienced. Architecture historian Marc Treib²⁵⁸ focused on meaning of landscape and introduced landscape as a tool to assume deeper roles of contextualization, heightening experiences, and embedding time and nature in the built world. Robert Rilev²⁵⁹ and Mark Francis²⁶⁰ especially explored meaning of landscape. D. W. Meinig, in his article "The Beholding Eye: Ten Versions of the Same Scene" 261, showed how the same landscapes can be conceived differently through ten different visions. Kaplan and Kaplan²⁶² and Tuan²⁶³ explored the experience of landscapes. A more recent contribution was Matthew Potteiger and Jamie Purinton's book 'Landscape Narratives' that introduced narrative as a fundamental way people shape and make sense of experience and landscapes and they are useful tools in understanding the processes and events in place making.

During the 1990s, with the influences of poststructuralist discussions, James Corner wrote two influential essays in Landscape Journal: "Discourse on Theory 1: Sounding the Depths - Origins, Theory and Representation, and "Discourse on

²⁵⁷ M. Merleau-Ponty, *Phenomenology of Perception* (London: Routledge & Kegan Paul, 1962).

²⁵⁸ See M. Treib, 'Must Landscapes Mean?: Approaches to Significance in Recent Landscape Architecture', Landscape Journal14, No. 1, , (1995) 47-62; M. Treib,. and Gillette JB, Meaning in

Landscape Architecture & Gardens: Four Essays, Four Commentaries, (London: Routledge, 2011). ²⁵⁹ R.B. Riley, "From Sacred Grove to Disney World: The Search for Garden Meaning", Landscape Journal 7, no. 2, (1998): 136-147 ²⁶⁰ See M. Francis, and R.T. Hester, *The Meaning of gardens: idea, place, and action,* (London: MIT

Press, 1990)

²⁶¹ D. W. Meinig, in his article "The Beholding Eye: Ten Versions of the Same Scene" showed how the same landscapes can be conceived differently through ten different visions. See D. W. Meinig, "The Beholding Eye: Ten Versions of the Same Scene", in The Interpretation of Ordinary Landscapes: Geographical Essays, ed. D. W. Meinig and John Brinckerhoff Jackson (New York: Oxford University Press, 1979).

²⁶² Kaplan and Kaplan's wrote on experience of landscape. See R. Kaplan and S. Kaplan, *The Experience* of Nature: A Psychological Perspective, (Cambridge: Cambridge University Press, 1989).

Y. Tuan, Space and Place: the perspective of experience (Minneapolis: Minnesota Press, 1997)

Matthew Potteiger and Jamie Purinton, Landscape Narratives: Design Practices for Telling Storie, (John Wiley &Sons Inc, New York, 1998).

²⁶⁵ James Corner, "A Discourse on Theory I: Sounding the Depths Origins, Theory and Representation", Landscape Journal 9, 2 (Fall 1990): 61-78.

Theory II: Three Tyrannies of Contemporary Theory and the Alternative of Hermeneutics" 266 from a hermeneutical perspective. Corner aimed to reconsider the relationship between signifier and signified and to restore the meaning of landscape in the fragmented world of meanings. He configured the landscape as a construct due to what meaning assigned to it by the designer, by the user, by everyone who interacts with it. James Corner also influenced from Kenneth Frampton's phenomenological discussions on grounded in critical regionalism. Within critical regionalism, Frampton offered exploring geographical and historical origins of a territory that is distinct from global culture to identify poetics of place. In his recent writings, "Towards an Urban Landscape"²⁶⁷ and "Seven Points for the Millennium: An Untimely Manifesto"²⁶⁸, Frampton improved his emphasis on landscape and stated that as a spatial and a conceptual phenomenon, landscape form could be "a redemptive strategy" against global culture of capitalism. Kenneth Frampton suggested providing cultural continuity by bringing site history to the surface against global culture. Frampton offered landscape as place of resistance against global culture. Architect Peter Rowe²⁷⁰ followed his lineage and offered site specific character of landscape as a remedy to placeless urbanism. With the influence of K. Frampton, landscape architects James Corner, Charles Waldheim, and Elizabeth Meyer also attempted to define "ecological, climatological, and symbolic aspects"²⁷¹ of landscape as a medium of resistance against the homogenizing impact of globalization and concurrent urbanization.

In landscape architecture practice, Shlomo Aronson²⁷² and James Corner inserted phenomenology into their practice. They focused on experience in capturing the character of place or region, tectonics, materiality. As Jorge Oter-Pailos identified architectural phenomenologists "not as a self-identified group,... rather a series of

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²⁶⁶ James Corner, "Discourse on Theory II: Three Tyrannies of Contemporary Theory and the Alternative of Hermeneutics", *Landscape Journal* 10 (Fall 1991): 115-33.

²⁶⁷ Kenneth Frampton, "Towards an Urban Landscape" *Columbia Documents of Architecture Theory*, 4,(1995): 83-94.

²⁶⁸ Kenneth Frampton, "Seven Points for the Millennium: An Untimely Manifesto", *Architectural Review*, (November 1999): 76-80.

²⁶⁹ Kenneth Frampton, "Seven Points for the Millennium: An Untimely Manifesto", *Architectural Review*, (November 1999): 78.

²⁷⁰ Peter Rowe, *Making Middle Landscape*, (MIT Press: Cambridge, Massachusets, 1991).

²⁷¹ Kenneth Frampton, "Ten Points on an Architecture of Regionalism: A Provisional Polemic. In Canizaro, Vincent B. *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, And Tradition* (Princeton Architectural Press, 2007), 375-386.

²⁷² Shlomo Aronson figured as a driver of a critical regionalist response by means of landscape materiality in use of stone and water.

independent architects"²⁷³, in landscape architecture, the intellectual idea was distributed into all the field. Nearly, all of the landscape architects integrate experience and sense of landscape into their works. In practice, especially the bodily experience of landscape is foci of phenomenology influenced landscape architecture.

Phenomenology influenced landscape architecture contributed understanding of site appreciating its specific characteristics, sense of place, and movement and changing experience in landscape. Recently, phenomenology influenced landscape architecture focuses on hermeneutical site and relational reading of site "the meaning of which is relatively and partially structured"²⁷⁴. In her essay "On Site" ²⁷⁵, Carol Burns defined landscape not only meaning 'a portion that the eye comprehend in a single view' anymore. Rather it meant "survey; to look over; to delineate extent and position". For her, both landscape and survey "informs ways of seeing". 277 and positioning the self according to measurement; because, they are "forms of knowledge", ²⁷⁸. They frame the information or content. In her article "Site Citations" ²⁷⁹, landscape theorist Elizabeth Meyer identified how site was set through ideas and relationships in the mind as precondition. In her article, "Site Citations" ²⁸⁰, Meyer identified site reading and editing as subjective constructions that were central to establishing landscape architecture as a discipline separate from architecture, engineering and horticulture²⁸¹. This is what Carol Burns and Andrea Kahn named as site as a relational construct "that was construed and constructed"282 through meaning and value assigned to them, after "situational interaction and exchange" 283. Site is also constructed by virtue of what meanings and values assigned to it. Rather it is generated by the intention of the designer and how she reads the site. Thus, recent influences of phenomenology and

²⁷³ Jorge Oter-Pailos, Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern, (Minneapolis: University of Minnesota Press, 2010),

Richard Weller, "Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", Landscape Review 7, no 1, (2001): 5.

²⁷⁵ Carol Burns, "On Site:Architectural Preoccupations", in. *Drawing Building Text*, ed Andrea Kahn, (New York: Princeton Architectural Press, 1991), 146-167.

²⁷⁶ Carol Burns, "On Site: Architectural Preoccupations in Andrea Kahn, ed., *Drawing Building Text* (New York: Princeton Architectural Press, 1991), 160

²⁷⁷ Ibid, 161.
²⁷⁸ Ibid.

²⁷⁹ Elizabeth K. Meyer, "Site Citations", in Site Matters: Design Concepts, Histories and Strategies, ed. Carol Burns and Andrea Kahn 93-130 (New York: Routledge Publications, 2005).

²⁸⁰ Ibid. ²⁸¹ Ibid, 94.

²⁸² Carol Burns and Andrea Kahn, Site Matters: Design Concepts, Histories and Strategies (New York: Routledge Publications, 2005), xv. ²⁸³ Ibid.

hermeneutics in landscape architecture is revolving around how site is constructed through disciplinary norms, personal convictions, societal ideals; how meaning of site is constructed and how site is edited or designed by virtue of these constructions.

To sum up, since the end of the 1980s, landscape architecture theory has not only driven inspiration from the natural sciences and ecology, but also from various disciplines within the humanities and environmental design. Landscape theorist Linda Pollak explains this development, that is, the hybridization of notion of landscape in her article "City, Architecture, Landscape": "urban landscape is a hybrid undertaking, ...that harbours ineluctable contradictions, refusing a singular classification"²⁸⁴. Landscape theory syncretized a position by combining ecology, humanities, phenomenology and geography under the umbrella of landscape urbanism. Landscape urbanism contributed an extended notion of landscape and understanding of landscape not only as a physical, cultural, social, ecological and economic construct but also a temporal phenomenon based on landscape processes. It leads to concerning landscape processes in a broader and multiple scales. Furthermore, phenomenology influenced landscape architecture contributed to the emphasis on the term site and understanding of site as an experiential space with specific characteristics and sensuous qualities that is subjectively perceived. Recently, it introduces a hermeneutical perspective to landscape and enables to see the relational readings of site. As a result of these perspectives, site meant a reading, dialogue and critique of existing conditions and as a relational construct.

Recent formulation of site in architecture matches with what landscape architecture defined landscape as a hybrid and constructed phenomenon developed since the end of 1980s. The highly hybrid formulation of landscape between nature and culture provided common ground for architecture, landscape architecture and urbanism. As mentioned above, figures from landscape architecture and architecture disciplines such as Carol Burns, Andrea Kahn, Sanford Kwinter, Stan Allen, Alex Wall, Rem Koolhaas, Anne Whiston Spirn, James Corner, Charles Waldheim, Mohsen Mostafavi recently produce theoretical, practical and pedagogical suggestions under the term 'site' as a common but underappreciated phenomenon. On the one hand, landscape architecture still prefers to use the term landscape rather than site. This tendency might

²⁸⁴ Linda Pollak, "City, Architecture, Landscape: Strategies for Building City Landscape Petrosino Park, Manhattan", *Daidalos*, 73: Built Landscapes (Spring 2000): 48-59.

be related to keep landscape inside the territory and theoretical domain of the discipline of landscape architecture.

Figure 30 shows the background philosophy and outcomes of phenomenology influenced landscape architecture that started the discussion revolving around site. Figure 31 summarizes the disciplinary exchange, people and literature in phenomenology influenced landscape architecture that extended the discussion.

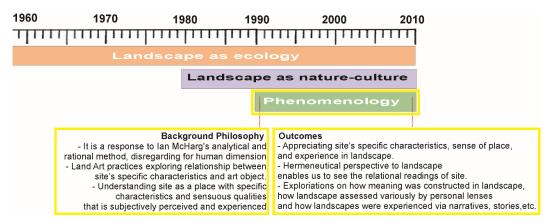


Figure 30.The background philosophy and outcomes of phenomenology influenced landscape architecture.

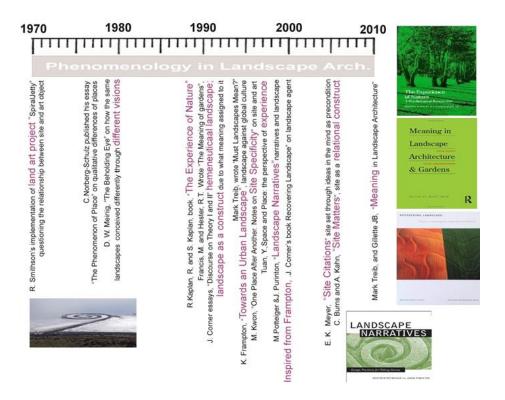


Figure 31.The disciplinary exchange, people and literature in phenomenology influenced landscape architecture.

3.2. Three Mainstream Figures in Landscape Architecture Schools related to Notion of Landscape

The following part clarifies how the conceptual discussions revolving around site developed in landscape architecture education since 1980s as an extended version of landscape. The aim of this part is to map out how landscape architecture theory and education contributed to broader understandings of site by inserting ecological underpinnings in addition to what debate on context formulated related with urbanism. This part focuses on the three mainstream figures and schools in landscape architecture education that have the common lineage for development of contemporary landscape architecture theory in Western world: Ian McHarg in University of Pennsylvania, James Corner in Harvard School of Design, and Mohsen Mostafavi in Architectural Association Landscape Urbanism Program. These figures led the curriculum of the schools and they developed new methods and techniques in formulating landscape and site. This part elaborates on grounding theories, methods and design instruments that these leading figures introduced by exemplifying one of the representative design studios to clarify their position on the construction of recent formulation of site.

3.2.1. Ian McHarg and the Ecological Understanding of Design: Landscape Architecture in the University of Pennsylvania (1954-1984)

While Cornell University had a leading role on the development of contextualism, University of Pennsylvania had the role for the development of contemporary landscape architecture education. University of Pennsylvania changed the understanding of landscape as visual picturesque into landscape that is linked to political, economic, social and ecological contexts. Ian McHarg is the leading figure for the development of the landscape architecture curriculum for thirty years in UPenn. He was both academic and profesional, blurring the distinctions between teaching, research, and practice. He introduced *a frame of ecology* that provided tools to explore, understand, and plan complex landscapes. This section explores in detail McHarg's theory of ecological planning, his highly influential book "Design with Nature" on how to plan land in an ecological way, his philosophy of nature versus city and his

²⁸⁵ Ian McHarg, *Design with Nature* (New York: Natural History Press, 1969).

mapping technique to understand how his theory establishes the basis of contemporary landscape architecture theory and education.

3.2.1.1. McHarg's Ecological Planning Method

In 1954 the new Dean, Holmes Perkins recruited Ian McHarg to rebuild the program in landscape architecture. When McHarg was assigned as an assistant professor at the University of Pennsylvania, he focused on developing a new landscape architecture curriculum to unite a large body of scientific data, including meteorology, geology, geomorphology, groundwater and surface hydrology, soils, vegetation, wildlife, limnology, and, where appropriate, physical oceanography and marine biology with a multidisciplinary team.

McHarg established ecological planning method in UPenn by redefining the discipline driven by the meta-narrative of ecology. McHarg's theory grounds on systems theory which suggests that "a system is composed of interdependent parts which are connected to the whole system with a web of relations" In order to point out all environments are related within a network, McHarg defines ecology as "study of interactions of physical and biological processes, as dynamic and interacting processes" Ecology helps him understand the specific characteristics of landscape, the complexity of the environment, its parts and their relationships.

Anne Whiston Spirn, Ian McHarg's student, identified three types of ecological understanding in McHarg's methodology: "ecology as a science (a way of describing the world), ecology as a cause (a mandate for moral action), and ecology as an aesthetic (a norm for beauty)" In relation to his understanding of ecology as a science, McHarg fully trusted on science as a tool. For him, science revealed "the verifiable facts of nature" ²⁸⁹ and provided a re-connection between humans and nature. McHarg interpreted the landscape as a resource²⁹⁰ and explored elements of landscape with an

²⁸⁶ Ludwig. von Bertalanffy, "General Systems Theory", *Main Currents in Modern Thought*. 11, (1955): 75–83.

²⁸⁷ Ian McHarg, "An Ecological Method For Landscape Architecture", *Landscape Architecture* 57(2), (1967): 105.

²⁸⁸ Anne Whiston Spirn, "Ian McHarg, Landscape Architecture, and Environmentalism: Ideas and Methods in Context", in *Environmentalism in Landscape Architecture*, ed. Michel Conan, (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 2000), 112.

²⁸⁹ Susan Herrington, "The Nature of Ian McHarg's Science", *Landscape Journal* 29, (2010): 1-10.

²⁹⁰ The understanding of nature as resource emerged in 1960s with growing awareness in environmental issues which is also argued in theories of Manual Castells' collective consumption theory, Michael E

ecological inventory. For him, resources existed in a place for specific reasons. McHarg's scientific ecological inventory was based on understanding the 'because' of the natural and cultural processes to get information on why the resources exist in a particular place. He tried to discover the processes on site by gathering ecological data of "physical, biological and cultural history; unique or scarce phenomena; unique scenic, geological, ecological, or historical importance" For instance, he offered looking at the presence of plants, succession stages and ages of plant communities to get information on environmental conditions of the land. Similarly, he examined successive stages of urbanization as adaptations to the environment. These stages were expected to contribute to the "inventory of resources and to the *genius loci*" ²⁹².

Due to *ecology as a cause and action*, McHarg's ecology not only yielded an understanding of the landscape, but also served prescriptive principles about how to design the world. After his scientific ecological inventories, he transferred the characteristics of nature as a guide to planning and design. By applying the rules of ecology, he suggested constructing a balanced environment; in his words, "creating an ecologically benign global civilization". Thus, for McHarg, "ecology was not just an explanation, but a command". Due to *ecology as an aesthetic*, McHarg believed in science as the principal source of authority for landscape design, thus landscape architecture is based on science, and is not an art form.

3.2.1.2. Creative Fitting

McHarg was influenced by Charles Darwin's *The Origin of Species* (1859) and the lesser-known scientist *Lawrence Henderson's The Fitness of the Environment* (1913). Inspired by Darwin's theory of the survival of the fittest, McHarg claimed that all environments had a directional process towards higher levels of organization to enable the best fit to the environment. For him, to reach the higher level of order, all

²⁹¹ Ian McHarg, "An Ecological Method" (1967), in *Theory of Landscape Architecture*, ed. Simon Swaffield (Philadelphia: University of Pennsylvania Press, 2002).

Soule's Conservative biology approaches. See Michael E Soule Michael E Soule,. *Conservation Biology: The Science of Scarcity and Diversity* (Sinauer Associates, 1986).

McHarg stated that he was searching for the *genius loci* of the land which refer to the natural, untouched origin of nature. See Ian McHarg, An Ecological Method For Landscape Architecture, *Landscape Architecture* 57, no.2 (1967):107.

²⁹³ Richard Weller, "Stewardship Now? Reflections on Landscape Architecture's Raison d'être in the 21st Century", *Landscape Journal* 33 no. 2 (February 2014), 86.

²⁹⁴ Ian McHarg, "Ecology and Design", in *The Essential Ian McHarg: Writings on Design and Nature*, ed. Frederick R. Steiner, (Washington, DC 2006), 122.

organisms developed "a kind of creativity, a reciprocal fitting of itself to the environment^{,,295}. Lawrence Henderson (1878-1942) developed a symbiotic model of evolution in which "the actual environment, the actual world, constitutes the fittest possible abode for life".296. For him, the actual world involved various kinds of environments, all exhibiting fitness for appropriate organisms²⁹⁷. McHarg synthesized these two theories by adding consciousness of Lawrence Henderson's theory to Darwin's evolution theory. McHarg developed a theory of *creative fitting* in which all systems show maximum success to become fit through self-organizing evolutionary progress.

McHarg's creative fitting presented a dynamic understanding of natural landscape. According to Darwin, evolution was based on the rule of adaptation of the organism or system to the environment. In a similar manner, McHarg evaluated landscapes as changing entities to fit the environment. McHarg defined nature as a process that was subject to the forces that "produce and control the phenomena of the biophysical world"²⁹⁸. He used ecology to read these "process of becoming"²⁹⁹ in the landscape. In ecology, fitness meant "finding fit environments, adapting these and the self³⁰⁰ that configured the changes on site as self-organizing processes. For McHarg, it was the creativity of the system organizing itself to fit, change and adapt. By transferring this system into design, McHarg defined "adaptive fitting as the ultimate goal for planners"³⁰¹. For McHarg, when the organisms reach an optimal point of success in maximum fit solutions, they will reach a stable position³⁰². McHarg evaluated this stability as characteristic of a complex and healthy environment as a harmony in nature. Highly innovative for 1960s' landscape architecture, McHarg's formulation of landscapes as dynamic and adaptive make him a highly influential figure for landscape architecture.

²⁹⁵ Ian McHarg, *Design With Nature*, 25th Anniversary ed. (New York: John Wiley and Sons, 1992), 53

²⁹⁶ Richard Weller, "Stewardship Now? Reflections on Landscape Architecture's Raison d'être in the 21st Century", Landscape Journal 33 no. 2 (February 2014), 88.

²⁹⁷Arthur Johnson, "Human Ecological Planning at Pennsylvania (1981)" in *The Essential Ian McHarg:* Writings on Design and Nature, eds. Ian McHarg, L. Steiner, R.Frederick, (Washington, D.C.: Island Press, 2006), 93.

²⁹⁸ Susan Herrington, "The Nature of Ian McHarg's Science", Landscape Journal, 29, (2010): 6.

²⁹⁹ Ian McHarg, "An Ecological Method For Landscape Architecture", *Landscape Architecture*, 57, no 2,

³⁰⁰ Arthur Johnson, "Human Ecological Planning at Pennsylvania (1981)" in *The Essential Ian McHarg:* Writings on Design and Nature, eds. Ian McHarg, L. Steiner, R.Frederick (Washington, D.C.: Island

³⁰¹ Richard Weller, "Stewardship Now? Reflections on Landscape Architecture's Raison d'être in the 21st Century", Landscape Journal 33 no. 2 (February 2014), 88.

³⁰² Susan Herrington, The Nature of Ian McHarg's Science, *Landscape Journal* 29, (2010): 1-10.

3.2.1.3. City versus Nature

McHarg criticized economic determinism based urban planning, which disregarded natural processes. For him, "efficiency and economy had little to do with survival or success of plants, animals and men" ³⁰³ in developing healthy environments. Rather, he suggested the survival of the whole system; the city and the nature. In his article "Ecological Determinism" McHarg assumed "reinstating ecology in the city for an affirmative action program" Thus, McHarg's ecological planning method was not merely about the preservation of nature in the city, but also about the positive creation of cities. In a 1957 lecture, McHarg offered a *'humane city'* which includes both the civic vision of people and physical attributes of the environment. McHarg's argument defined the humane attributes of the city in terms of civic idealism, transcendent form, process and change, health and hygiene, morality, and evolutionary self-perfection ³⁰⁶.

McHarg evaluated cities in terms of through its physical evolution. He theorized the present cities as the *made form* which was the accumulation of adaptations to the natural form. He aimed to identify the natural elements (*given form*) and evolved elements (*made form*) in the system. McHarg's initiated his ecological inventory by detecting the physical evolution of a place which shows the changes on land. This inventory was to plan the cities in a natural way. He believed that cities are not natural, but "could be better aligned with nature".

By favoring nature over the city, McHarg supported the preservation of pastoral nature to counter urbanization effectively. His ideal imagination of nature in his mind was antithetical to the city as an extension of Olmsted's opinion. Ian McHarg saw nature as a perfect model to show the way to design; as a model to guide landscape design. Different from Olmsted, McHarg offered ecological planning method, not only

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³⁰³ Ian McHarg, "Ecology and Design", in *The Essential Ian McHarg: Writings on Design and Nature*, ed. Frederick R. Steiner, (Washington, DC, 2006), 86.

³⁰⁴ Ian McHarg, "Ecological Determinism", in *The Essential Ian McHarg: Writings on Design and Nature*, ed., Frederick R. Steiner, 30–46 (Washington, DC: Island, 2006).

³⁰⁵ Ruth Beilin, Book Review: The Essential Ian McHarg: Writings on Design and Nature, Frederick R. Steiner (ed), 2006, *Journal of Agricultural Environmental Ethics* 26 (2013): 715.

³⁰⁶ Kathleen L. John-Alder, "Toward a New Landscape: Modern Courtyard Housing and Ian McHarg's Urbanism", *Journal of Planning History* 13, no 3 (2014):. 197.

³⁰⁷ Ruth Beilin, Book Review: The Essential Ian McHarg: Writings on Design and Nature, Frederick R. Steiner (ed), 2006, *Journal of Agricultural Environmental Ethics* 26 (2013): 719.

for park systems but also for the organization of cities. McHarg offered planning of cities ecologically, by *designing with nature*.

3.2.1.4. Environmental Stewardship

McHarg published his ideas on ecologies of nature and city in his influential book, *Design with Nature*³⁰⁸, in 1969. The book is the masterpiece of McHarg's writings which became a finalist for the National Book Award explaining how to reach a healthy region with step-by-step instructions. The book introduced a holistic approach to ecological planning tested empirically at many scales. In the book, McHarg examined human settlements assumed that ecological design was a remedy to the illnesses of urbanization, pollution and destruction of nature in order to constitute a balanced and self-renewing environment for man's health. He examined the city to identify the reasons for natural and cultural evolution – "the reason for the location of the city, comprehend its natural form, discern these elements of identity"³⁰⁹.

The book led to fundamental changes in theory and practice of landscape architecture. The book promoted preservation but especially, the planned development of cities due to the opportunities and of constraints of all prospective land-uses. It also established the roots of the linkage between landscape architecture and environmentalist preservation. Landscape theorist Anne Whiston Spirn argued that McHarg introduced environmentalism in landscape architecture and promoted "landscape architecture as the instrument of environmentalism" as the steward of the natural system and its continuity. McHarg saw nature as a "single superorganism which we were dependent upon" and, at the same time, had a responsibility for preservation, management, and planning. McHarg made a call to the professions, particularly to landscape architects, who should be conservationists by nature, "not only to preserve but to create and manage".

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³⁰⁸ Ian McHarg, *Design with Nature* (New York: Natural History Press, 1969).

³⁰⁹ Ian McHarg, An Ecological Method For Landscape Architecture, *Landscape Architecture*, 57(2), (1967):107.

Anne Whiston Spirn, "Ian McHarg, Landscape Architecture, and Environmentalism: Ideas and Methods in Context", in *Environmentalism in Landscape Architecture*, ed. Michel Conan, Dumbarton, 97-114(Washington, D.C.: Oaks Research Library and Collection, 2000).

³¹¹ Ian. McHarg, *Design With Nature*, 25th Anniversary ed. (New York: John Wiley and Sons,1992), 124. ³¹² Quoted in Anne Whiston Spirn, "Ian McHarg, Landscape Architecture, and Environmentalism: Ideas and Methods in Context" in *Environmentalism in Landscape Architecture*, ed. Michel Conan (Washington, D.C: Dumbarton Oaks Research Library and Collection, 2000), 110.

McHarg played an important role not only in popularizing environmentalism, but also affecting national and local policies. Since 1960s, McHarg played an increasingly important role in shaping American national environmental policy. In 1962, in partnership with David Wallace, McHarg founded a professional office, "Wallace McHarg Roberts and Todd (WMRT)" and he integrated the office projects with studio projects in UPenn. In his article with David Wallace "Plan for the Valleys vs. Spectre of Uncontrolled Growth" hey examined geological, topographical, economic, and a multitude of other factors layer by layer and showed how planned growth can save millions of dollars in contrast to the uncontrolled growth of the early 1970s, since his planned developments saved money for the private sector, McHarg's clients were mainly private developers of new communities and resorts. Throughout the 1960s and 1970s, McHarg planned abundant of new towns in America. While he advocated designing for nature, his plans also served for to the developers of land for new settlements and resorts.

3.2.1.5. Map Overlay Method

Ian McHarg's theory is not only innovative for his theoretical perspective on ecology, change, and adaptation but also for the instruments and representation techniques he introduced to landscape architecture. The main goal of McHarg's planning was providing an "objective and systematic way of identifying and preserving land most suitable for open space" Accordingly, he developed map overlay method which was based on detecting scarce and unique landscape elements and the most suitable lands to settle by preserving landscape values. Map overlay method started by analyzing and interpreting characteristic of natural elements on site, exploring unique or scarce phenomena on site to identify suitability of land for specific land uses by protecting landscape. The natural elements were analytically represented layer by layer in various maps to individually show the unique, specific data about a site. All the maps were then superimposed to create a composite map. The composite map showed suitability for a specific use having some values that are represented from light to dark

³¹³ Ian L. McHarg and David A. Wallace, "Plan for the Valleys vs. Spectre of Uncontrolled Growth," Landscape Architecture (April 1965)

³¹⁴ Susan Herrington, "The Nature of Ian McHarg's Science", *Landscape Journal* 29, (2010): 6.

³¹⁵ Frederick R. Steiner, *The Essential Ian McHarg: Writings on Design and Nature* (Washington, DC, 2006), 62.

gradations of colors. Figure 32 shows an agricultural suitability map that lighter colors refers to more suitable land for various agriculture types and darker colors refers to the land that are not suitable for any type of agriculture. These maps of intrinsic suitability indicated best uses for the entire study area by providing a *causality* in understanding place. The main goal of the composite maps was to diagnose creative fitting, to find locations where human development will fit in the land. All coexistent, compatible uses were showed in a matrix for each coordinate. The maps showed the location of economic minerals, the location of water resources, slope and exposure, a map of agricultural suitability, map forestry suitability, map of recreation suitability and urbanization suitability. All the maps were compared and examined again to determine the degree of compability or incompability. Rather than single function land use and concept of zoning, McHarg prepared prospective land use map showing present and prospective land uses, in communities of "compatibilities, with dominants, codominants and subordinates, exhibiting opportunities and constraints to human use"³¹⁶. McHarg called this type of mapping as "maps of intrinsic suitability" McHarg believed that all these procedure of mapping, matrices, compability provided an objective procedure; a bias-free compilation of facts to transcend individual artistic subjectivity.

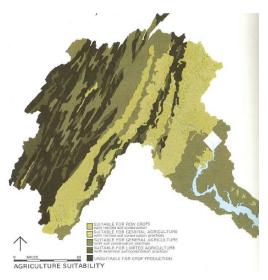


Figure 32. Agriculture suitability map. (Source: Ian McHarg, "The River Basin", Design With Nature, 25th Anniversary ed. New York: John Wiley and Sons,1992).

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³¹⁶ Ian McHarg, An Ecological Method (1967), in *Theory of Landscape Architecture*, ed Simon Swaffield, (Philadelphia: University of Pennsylvania Press, 2002), 40.
³¹⁷ Ibid..

3.2.1.6. Pedagogy of Ian McHarg: Potomac River Basin

Ian McHarg was both an academic and a profesional, experimenting his ecological planning method in design studios in University of Pennsylvania. He taught design studios and gave lectures on the relationship between man and nature and ecological planning and directed the landscape architecture curriculum for thirty years in UPenn. As a critic against his Harvard education on City Planning in Landscape Architecture, he revised the curriculum of the UPenn Landscape Architecture by creating a multi-disciplinary atmosphere with courses ranging from ecology to sociology and to design. In 1959, McHarg started the course Man and Environment, based on the scientific conceptions on the relations between man and nature. The course consisted of thirty-six lectures: McHarg gave six, and he invited guest lecturers from scientists to theologians for the remaining. In 1960, McHarg hired Nicholas Muhlenberg, a scientist with a background in forestry and ecology in UPenn as a sign of the ecological priority in the new curriculum and in the early 1970s, he added several anthropologists to the faculty to integrate social sciences into the curriculum. After ten years of his arrival to UPenn, his ecological design perspective became an integral part of the landscape architecture curriculum.

As a member of American Institute of Architects Taskforce on the Potomac River, McHarg's was hired in the planning of the Potomac River basin (1965-66). He integrated the duty to the design studio in UPenn landscape architecture and regional planning program together with the graduate students. The project took one year to be complemented by eighteen students in fall and twelve students in spring semester. The studio was based on the ecological planning method and employed McHarg's map overlay method, producing five hundred maps and several reports, analysis of overlays of factors to reveal spatial patterns of *intrinsic suitabilities* for diverse land uses, *suitability maps*, *compatibility matrix* among diverse land uses and various natural determinants and the planners' assessment of potential conflicts and their consequences.

The project conceived the river basin *as an interactive process* that representing a relative value system and "working as storehouse with implications for land use and management" ³¹⁸ with all their constraints and prohibitions. In that, McHarg claimed that the project was not a plan; rather it was a value system that was seeking to achieve

³¹⁸ Ian McHarg, "The River Basin", *Design With Nature*, 25th Anniversary ed. (New York: John Wiley and Sons,1992), 137.

certain goals to find "how the prime farmlands be retained, where the best locations for new development were, how to manage growth, how environmentally sensitive lands could be protected, how health and safety of the area be ensured for current and future residents" "319".

In the design process of Potomac River Basin, McHarg embraced six steps for planning outlined in his lecture titled *Ecological Determinism*. These are:1. Ecosystem inventory, 2.Description of natural processes, 3.Identification of limiting factors, 4.attribution of value, 5.Determination of prohibitions and permissiveness to change, 6. Identification of stability or instability. Few years later he expanded this last step to affirm design outcomes as positive or negative³²⁰.

The research process in Potomac River Basin Project began with preliminary ecological inventory about historical geology (morphology with climate and lithology, that influence distribution of ground water, pattern of rivers, relative qualities and quantities), climate, topography, water regimen, soils, plants, animals. Ecological data for geology, physiography, hydrology, groundwater, soils, were gathered layer by layer (Figure 33).

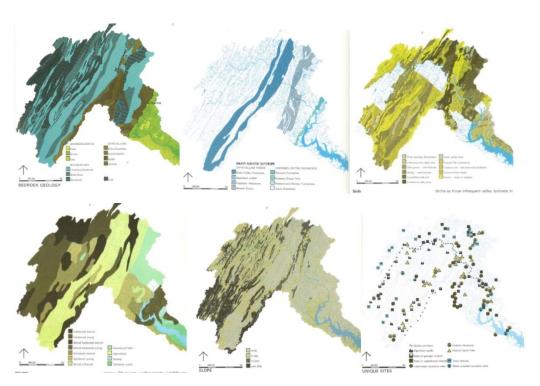


Figure 33. Ecological inventory of landscape elements and unique sites. (Source: Ian McHarg, "The River Basin", Design With Nature, 25th Anniversary ed. New York: John Wiley and Sons,1992).

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³¹⁹ Ibid, 265-266.

³²⁰ Susan Herrington, "The Nature of Ian McHarg's Science", *Landscape Journal* 29, (2010): 13

The preliminary investigation in maps was to seek the answers to the questions of: "Where is the major recreational opportunity in the basin?, 'Where is the agricultural heartland, 'Where are the best forest locations', Where are the best sites for urbanization?" ³²¹. Then, the data was interpreted with respect to a value system concerning uniqueness, or rare resources of natural phenomena and cultural phenomena. This value system helped to identify single and multiple suitable land uses and revealed as the intrinsic suitability maps for agriculture, forestry, recreation, urbanization (Figure 34). For the Potomac River basin, the rare and unique resources and significant values such as mineral resources, water resources, garnet beaches, limestone caves, trout streams and historic places were identified in maps. The reason behind this process was to direct the planning due to the goal of environmental preservation and finding the most appropriate use for protection of resources and values. The preservationist approach of the studio lied in this process.

Afterwards, the students detected compatible land uses for each region with respect to i.e. where limestone only exists, or where agricultural soils concentrated. The goal was to identify land uses that can coexist with others with the highest and best uses of all lands. To decide which land use was the most suitable for each coordinate, the students prepared a *compatibility matrix*. The matrix directed the students to test each land use for intercompatibility of land uses which presented good, bad, poor compability for the sake of natural determinants (Figure 35). This process indicates that McHarg did not prefer to take any decision based on subjectivity; he wanted all the decisions took as a result of objective procedures. In the end, the output of the planning process revealed the potential conjunction of existing and compatible land uses and alternative suitabilities. That is why, more than a landscape plan, McHarg's studio produced land use maps, compability matrices and natural value maps.

³²¹ Ian McHarg, *Design With Nature*, 25th Anniversary ed. (New York: John Wiley and Sons,1992), 265-266.

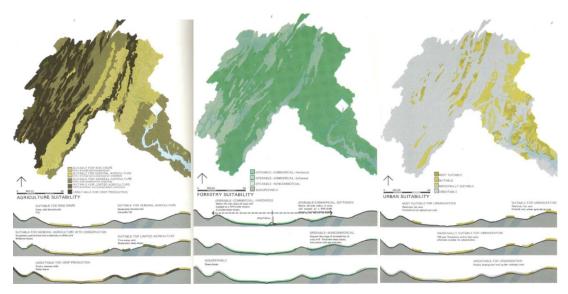


Figure 34. Intrinsic suitability maps for agriculture, forestry, urban and recreational activities.

(Source: Ian McHarg, "The River Basin", Design With Nature, 25th Anniversary ed. New York: John Wiley and Sons,1992).

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Figure 35. Matrix of degree of intercompatibility of land uses. (Source: Ian McHarg, "The River Basin", Design With Nature, 25th Anniversary ed. New York: John Wiley and Sons,1992).

The Potomac River Basin Project provided innovative perspectives in landscape design education. First, the Potomac River basin, as a landscape element, becomes the primary organizing context for ecological planning and design. McHarg called the boundaries of plans determined by the territory of the operation of natural processes such as *physiography* (Figure 36). The project produced proposals that were based on analysis of the region's natural resources and hazards, organized by, what McHarg called, "physiographic determinism." The river basin became a framework not only for the current situation, but also for linking the past, present, and anticipated future actions. Second, the project had a multi-scalar approach that ranges from neighbourhood scale to regional scale. The physiographic regions are conducted at a scale of 1:250,000. Then to establish causality, studies were detailed at 1:24,000 scale. As a result, the scope of landscape architecture was expanded into regions according to what McHarg called the "expansion of landscape architecture's professional responsibility" 323.

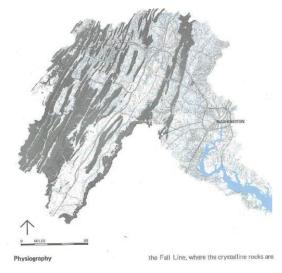


Figure 36. The physiographic regions in Potomac River basin. (Source: Ian McHarg, "The River Basin", Design With Nature, 25th Anniversary ed. New York: John Wiley and Sons,1992).

³²² Quoted in Anne Whiston Spirn, "Ian McHarg, Landscape Architecture, and Environmentalism: Ideas and Methods in Context", in *Environmentalism in Landscape Architecture*, ed. Michel Conan, 97-114, (Washington, D.C: Dumbarton Oaks Research Library and Collection, 2000).

³²³ Susan Herrington, "The Nature of Ian McHarg's Science", *Landscape Journal*, 29, (2010): 1-10. Ian McHarg, *A Quest for Life: An Autobiography*. (New York: Wiley. 1996), 195.

As Anne Whiston Spirn has remarked: "It is difficult to imagine what landscape architecture would be like today without the presence of Ian McHarg's publications, teaching, and professional projects." 324. Before McHarg, landscape architects were primarily interested in garden and park designs in a narrower scale. McHarg contributed to the discipline of landscape architecture by extending its notion and scale in two main ways. The first ground breaking contribution of McHarg to landscape architecture theory and education is his dynamic understanding of landscape. McHarg's interpretation of landscape as a sum of interacting, changing, adapting, and fitting systems is highly innovative for 1960s landscape theory. By identifying form as a state of becoming via an evolutionary process, McHarg downplayed the importance of visual and aesthetic aspects of landscape. He identified form, merely as an "explicit point in the evolutionary process" ³²⁵. Twenty years later, his process-based understanding of landscape found reflections in landscape urbanism led by his students from UPenn³²⁶. Second, McHarg's ecological planning method advocated the notion of stewardship to landscape architecture, which was and is still highly adopted by landscape architects. He developed a descriptive and prescriptive ecological method to understand and protect nature in order to "fit humans in". McHarg's philosophical agenda revolved around a strict division between nature and city. His map overlay method is a tool offering opportunities and constraints for human uses of land for the sake of nature. Third, McHarg's mapping has been a powerful tool in planning for simplifying the complexity of natural processes and to measure the suitability of land uses via suitability matrices, diagrammatic sections, decision trees, and other techniques. This method introduced a holistic and large scale mapping technique into landscape planning and integrated landscape architecture with planning where the disparate scales of design and planning were connected.

McHarg's map overlay method also laid a precedent for computerized Geographic Information Systems (GIS). By the mid-1980s, UPenn and many other planning schools were applying McHarg's large-scale land use maps. The development of computational techniques throughout 1980s made it possible to accumulate, analyze and synthesize large amounts of ecological data. Since then, McHarg focused on

³²⁴ Anne Whiston Spirn, "Ian McHarg, Landscape Architecture, and Environmentalism: Ideas and Methods in Context", in *Environmentalism in Landscape Architecture*, ed. Michel Conan, (Washington, D.C: Dumbarton Oaks Research Library and Collection, 2000), 114.

³²⁵ Ian McHarg, "An Ecological Method For Landscape Architecture", *Landscape Architecture* 57(2), (1967):107.

³²⁶ The landscape urbanism movement led by James Corner, Charles Waldheim, Anne Whiston Spirn.

computer-based mapping techniques via geographic information systems to evaluate more data. He claimed that "the "computer will solve the command, and show me the locations where all most propitious factors were located and most detrimental factors were absent" Developing technologies helped on getting vast amounts of information for systems thinking; separating the elements of landscape into layers, reuniting the elements to interpret and representing them at different scales. However, his powerful theory on understanding landscape as processes did not find its counterpart in his static mapping technique. While McHarg's formulation of nature is process-based, the map overlay method could not show change patterns and landscape processes held on site³²⁸. Thus, the map overlay method could not reflect McHarg's theory of adaptation and change.

Since the mid-1980s, the McHarg's tradition in landscape architecture started to dissolve. In 1986, McHarg's successor, Anne Whiston Spirn hired to the University to extend and renew the department's curriculum on 1 landscape design and theory. In 1988, another student of McHarg's James Corner joined the faculty and incorporated art and aesthetics into cartography technique. He reformulated use of mapping in landscape architecture as a hermeneutical tool by removing its linkages from science and returning it to art. In 1994, John Dixon Hunt was appointed as chair and made great revisions to the curriculum with Corner, Anuradha Mathur³²⁹, and Dilip da Cunha, who explored and tested the disciplinary boundaries of urban planning, landscape architecture and architecture in UPenn inspired by post-structuralism, the impact of which was felt in schools of environmental design.

The new faculty argued for a marriage of the city and nature removing the binary oppositions between nature and the city. In his book "The Granite Garden: Urban Nature and Human Design" Anne Whiston Spirn reformulated nature and urban environment functioning together and Michael Hough, in his book "City Form and Natural Process" , clarified how city form and nature dialectically influence each other. They reformulated hybridized ecologies of nature and culture to include social,

³²⁷ Arthur Johnson, "Human Ecological Planning at Pennsylvania (1981)" in *The Essential Ian McHarg: Writings on Design and Nature*, eds. Ian McHarg, L. Steiner, R.Frederick, (Washington, D.C.: Island Press, 2006), 118.

Landscape theorist Susan Herrington interpreted McHarg's maps as static maps. See Susan Herrington, "The Nature of Ian McHarg's Science", *Landscape Journal* 29, (2010) 1-10.

³³⁰ Anne Whiston Spirn, The Granite Garden: Urban Nature and Human Design, (New York: Basic Books,1984).

³³¹ Michael Hough, City Form and Natural Process, (London: Croom Helm, 1984).

cultural, and environmental dynamics all together. University of Pennsylvania played an important role for developing the ideas about notion of landscape in the 21st century. Ian McHarg's ecological planning was initial endeavours for scrutinizing the notion of landscape and boundaries and the disciplines. Later, James Corner and Charles Waldheim started to speculate on how landscape could operate as a model for urbanism in UPenn under landscape urbanism movement. James Corner, Charles Waldheim, Chris Reed and Mohsen Mostafavi expand McHarg's discussions and spread the discussion to different schools by incorporating their own agendas and techniques.

3.2.2. Landscape Architecture in Harvard University from Olmsted and Eckbo to James Corner: Marriage of Planning and Design

Harvard University's Landscape Architecture program is the first landscape architecture program in the world, opened in 1900 by F.L.Olmsted Jr. This section identifies how Harvard GSD Landscape Architecture construct, extend and transform the meaning of landscape by means of re-constructing its relationship with city. The program had a formative role on developing the discipline by the impact important figures such as Frederick Law Olmsted, Jr. (1870-1957), Garret Eckbo (1910-2000), Dan Kiley (1912-2004), James Corner (1961-), Charles Waldheim (1940-), Chris Reed, mentioned in a historical order. These figures linked the landscape with the city by establishing a social role for landscape architecture. This section explains how the role of landscape changed in traditional, modern and postmodern understandings of the city throughout the program's history via its leading figures. It especially focuses on James Corner as the leading figure in expanding the notion of landscape in the contemporary city and for landscape urbanism. As a representative of Corner's teaching, Chris Reed's, 'Flux City' Studio will be elaborated upon to further clarify Corner's and the movement's agenda.

3.2.2.1. From Olmsted to Eckbo, Eckbo to Corner:

Establishment of landscape architecture as a department in Harvard was closely related to the growing the interest in planning stimulated by the 1893's World Columbian Exposition held in Chicago. The City Beautiful Movement, argued for the aesthetic improvement of cities and the application of Beaux Arts methods on an urban

scale ³³². This movement was also a drive for the change in scope of landscape architecture, from simply designing gardens into larger scale parks, roadways and infrastructures³³³. Alofsin argues that this is when the "modernization of landscape architecture profession begins" ³³⁴ as it gets into closer contact with design of cities, and was institutionalized as a profession. The School of Landscape Architecture in Harvard University was established by Frederick Law Olmsted Jr. and Arthur A. Shurcliff in 19 as the first landscape architecture program in the world. Olmsted Jr. who influenced the creation of the National Parks in the U.S.A. and developed a program in Harvard between 1900-1914 with an emphasis on development of the parks as commons for citizens. Working with his father's colleagues Olmsted Jr. crystallized the national park idea for thirty years in National Park Service for comprehensive plan of urban parks.

In 1923, Harvard University City Planning program started as a graduate level program under the landscape architecture department. Both city planning and landscape architecture programs had common courses and changing options of programs and lecturers from both disciplines. In 1923, the school defined the landscape architect as a professional who "designs and directs the development of or advises regarding work that ranged from private gardens and country estates to government buildings to public park systems to land-subdivisions and residential and industrial suburbs; villages, towns, cities and larger areas involved in regional planning, and even state and national planning", With this definition, landscape architecture transcended garden boundaries and targeted cities.

As a result, the landscape architecture program in Harvard focused on civic aspects of the profession and its social consciousness with the aim of improving public health against the ugliness, unhealthiness and stress of cities. The idea of landscape serving for public health was improved by instructors such as Frederick Law Olmsted Jr., James Pray and Charles Eliot II who were also working for the America's national park commissions. As a result of these developments, till 1930s, landscape architecture training at Harvard revolved around two styles: continuing the Olmstedian picturesque

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³³² Anthony Alofsin, *The Struggle for Modernism: Architecture, Landscape Architecture and City Planning at Harvard*, (New York: W.W.Norton& Company Ltd, 2002), 42.

³³⁴ Anthony Alofsin pointed out the modern necessity of landscape architecture as design of cities. Ibid. 335 Ibid. 65.

tradition that is also responding to modern conditions in the planning of cities and regions and continental models of Italian, French, Spanish and even Dutch designs³³⁶.

The economic crisis in the stock market in 1929, led rethinking of the social and economic values and policies of states. Anthony Alofsin argues that in this period, the Schools of Architecture, Landscape Architecture and City Planning at Harvard moved from a conservative to a radical modernism as a critical reaction to the attachment to tradition³³⁷. The education turned its face to public's perception of landscape architecture by focusing on the communal needs of the day rather than the past, replaced the elite client with that of the community.

In the 1930s, Dan Kiley, Garrett Eckbo and James Rose were the visionaries of their time, advocating a return to the natural world, and the use of simple materials, including the study of ordinary landscapes shaped by farmers, engineers, and folk artists³³⁸. In the late 1930s, Garrett Eckbo, Dan Kiley, and James Rose who were students, rebelled against the Harvard curriculum of landscape architecture, against Bremen Whidden Pond's 339 old fashioned landscape approach in Harvard. Inspired by modernist pioneer Gropius who became director of the school, they advocated a modernist approach to landscape design. While Eckbo focused more on the social dimension of landscape design, Rose focused on spatial design by adapting principles of modern art and architecture into garden designs³⁴⁰.

The modernist movement in landscape design initiated by Eckbo argued for social recovery and a democratic spirit in landscape design. He aimed to provide shelter and a delightful environment for working people in challenging economic situations. As a result, the understanding of landscape design as public work was improved. Calling for clearly outlined systems of parks, play lots, greenbelts, and recreation areas to be incorporated into the plans of all modern cities, Eckbo and others argued for contemporary landscape design to find its new standards according to the new needs of

³³⁶ Ibid, 67.

³³⁷ Ibid, 79.

[&]quot;100 years of Landscape Architecture at Harvard", Perspectives in Landscape Design. 17, Issue 3, (Summer2000), 8-9.

Bremer Whidden Pond (1884-1959) was an American landscape architect and professor at Harvard University. Pond is the figure who led the department from 1914 to 1950, following his teacher Olmsted's principles of social aspects of landscape planning.

340 James Rose, "Freedom in the Garden", *Pencil Points* 19, (October 1938): 640-644.

the society³⁴¹. They demanded participation of landscape architects not only in urban planning, but also in the expansion of America's undeveloped hinterlands.

During the 1960s, the ideology of pluralism dominated not only politics but also academia. Modern architecture and urbanism was criticized for "being elitist, overly aesthetic and disconnected to lives of ordinary people" and connecting political and social issues to urban form. As a part of the critic, Harvard GSD changed its emphasis from aesthetics to social meaning and values. In the Chair of Landscape Architecture, these developments influenced a densification of environmental studies. Environmental studies were promoted and landscape architects were seen as defenders of the environment. In 1966, Advanced Environmental Studies was founded under the department's Landscape Research Office. With developing technology and growing awareness on the environment, opportunities to involve science within design became possible. In 1965, Laboratory for Computer Graphic and Spatial Analysis was established for research on space. As Ian McHarg's mapping method influenced landscape architecture departments all over the world. Landscape architecture departments particularly engaged with McHargian scientific investigation, explorations on large scale domains, and analytical large scale analysis.

During 1960s, the focus of the faculty was a holistic consideration of the environment when Hideo Sasaki was the chairman between 1958-1968. In the late 1950s, Garret Eckbo and Sasaki (landscape architects) focused on a broader and more basic vocabulary of landscape that would include not only buildings but also open spaces, ground forms, trees, water forms, signage and people. In 1958, when Sasaki became the head of department, the teaching focused on a more specifically profession-based education and landscape architecture became less affiliated with other departments at the GSD. Concern for territory became the specialty of city and regional planning departments. At that point, although the landscape architecture program focused on practice producing comprehensive landscape plans were still seen as integral part of the profession. In these years, the department was divided into two main interests: environmental studies based more on analytical research and landscape design that was highly visual. This was also when the scope of landscape architecture was expanded to include computer graphics, geography, regional science and system

³⁴¹ Garrett Eckbo, Danilel U. Kiley, James C.Rose, "Landscape Design in the Urban Environments" *Architectural Review*, (may 1939): 78-82.

³⁴² Anthony Alofsin, *The Struggle for Modernism: Architecture, Landscape Architecture and City Planning at Harvard*, (New York: W.W.Norton& Company Ltd, 2002), 260.

analysis. According to Alofsin, the expansion that incorporated other disciplinary areas mirrored the confusion in the profession itself and plunged the program into identity crisis³⁴³. Even, in the 75th anniversary of Harvard GSD Landscape Architecture, ASLA (American Schools of Landscape Architecture) criticized the program in GSD for favoring landscape planning and resource analysis methods rather than design studios appreciating the form.

3.2.2.2. Landscape as a Hermeneutical Site

In the beginning of 1980s, Methods in landscape architecture in most schools were still dominated by McHarg's methodological planning, based on the exploration of site conditions and mapping. There was a distinction between planning and design and landscape architecture was oscillating between these two. The 1990s was a time when deconstruction held away, descriptions of reality were understood as culturally situated and "nature [was] indisputably defined as a cultural product" Since the 1990s, landscape theorists Anne Whiston Spirn, Elizabeth Meyer and James Corner have been suggesting to extend the boundaries of the discipline from the natural and cultural world to the hybrid world of nature-culture. In the early 1990s, James Corner emerged as a figure who established a middle ground between the exclusive categories of landscape planning and landscape design. Corner criticized landscape architecture methodologies developed from the natural sciences (and particularly Ian McHarg's method) that were exclusively focusing on comprehensive planning methods. Rather, he offered to consider a broad range of possibilities which he thought was offered by the postmodern conjuncture and poststructuralism.

James Corner's impact on landscape theory began in the early 1990s, when he wrote two influential essays in the *Landscape Journal*: "Discourse on Theory 1: Sounding the Depths - Origins, Theory and Representation" and "Discourse on Theory II: Three Tyrannies of Contemporary Theory and the Alternative of

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³⁴³ Ibid, 264-265.

³⁴⁴ Richard Weller, "Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", *Landscape Review* 7, no.1, (2001): 8.

³⁴⁵ James Corner, "A Discourse on Theory I: Sounding the Depths Origins, Theory and Representation" in *Landscape Journal* 9, 2 (Fall 1990): 61-78.

Hermeneutics"³⁴⁶. These two essays belonged to Corner's early work engaging with the hermeneutics of landscape. Corner aimed to reconsider the relationship between signifier and signified, and to restore the meaning of landscape in the fragmented world of meanings. He evaluated landscape as "a richly hermeneutical site" ³⁴⁷ the meaning of which is "relatively and partially structured" and reconstructed again and again within different contexts. Corner argued that "nature and culture were linguistic constructions with unstable foundations" His idea was to blur the distinctions between culture and nature and saw them as sides of the same coin by means of hermeneutical understanding.

Rather than a passive resource to be protected (as McHarg would have it), Corner emphasized the critical and cultural role of the landscape. For Corner, landscape was not a neutral term, independent from culture. In his famous book "Recovering Landscape: Essays in Contemporary Landscape Architecture" Corner preferred using the term reconstructing/recovering, instead of deconstructing the landscape. James Corner aimed to reconstruct the cultural role of landscape. For him, landscape was an active agent; not only influenced by culture, but also has the potential to influence culture. This cultural role of landscape was an inspiration from Kenneth Frampton's critical regionalism. As Kenneth Frampton declared, "we were in a hybrid world where culture was fertilized between the rooted culture and universal civilization" For Corner, all sites were hybrid productions; a combination of specific, regional characteristics of landscape and global culture. For Corner, we were in postmodern world where everything is "de-natured" and meaning is lost. With the influence of Kenneth Frampton, Corner offered landscape "to "creatively reconcile between placeless global modernity and rootedness, home and belonging" and

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³⁴⁶ James Corner, "Discourse on Theory II: Three Tyrannies of Contemporary Theory and the Alternative of Hermeneutics", *Landscape Journal* 10 (Fall 1991): 115-33.

³⁴⁷ Richard Weller, "Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", *Landscape Review* 7, no.1, (2001): 5.

³⁴⁸ Ibid.

³⁴⁹ Ibid, 11

³⁵⁰ James Corner, *Recovering Landscape: Essays* in Contemporary *Landscape* Architecture (New York: Princeton Architectural Press, 1999).

³⁵¹ Kenneth Frampton, "Prospects for a Critical Regionalism" (1968), in *Theorizing a New Agenda for Architecture*, ed. Kate Nesbitt, 468-482 (Princeton: Princeton Architectural Press, 1996) ³⁵² Ibid.

landscape architects to "bring site history to the surface"³⁵³ and "rebuild a sense of wholeness, continuity and meaning for cultural continuity³⁵⁴ against global city. Thus, Corner emphasized the "critical instead of the regional landscape"³⁵⁵. That is why, James Corner pointed out landscape architecture as a critical act; landscape as the emancipatory agent.

For instance, in Downsview Park Competition Entry, in 1999, James Corner and Stan Allen, integrated two systems into a complementary whole: *Circuits* accommodate all activity programs, event spaces and circulation, and *through flows* support all the hydrological and ecological dynamics specific to the site³⁵⁶. Different modes of recreation and activities were expected to occur with emerging ecologies over time. Corner offered evolving ecologies in the landscape generating the spatial and social transformation of the park. Corner and Allen suggested locally emergent ecologies of landscape such as the native growing of plants, local natural water cyclic systems, site specific habitats were generating the processes on site. The characteristics of local ecologies behaved as a transformative tool on behalf of local ecologies against global culture's homogenization. These ecologies expected to impact not only the spatial organization of park, but also the events, programs and the culture on site. This is what Corner described as the cultural role of landscape.

3.2.2.3. Eidetic Representation

James Corner paid specific attention to representation, which was more than an act of imaging; a critical process by itself. Rather than a visual composition, Corner assumed that "techniques of representation are central to any critical act in design" He aimed to construct a reality and a way of seeing and acting in the world by means of representation. For him, composite imaging operations, ideograms, imagetexts,

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³⁵³ Richard Weller, "Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", *Landscape Review* 7, 10.1, (2001): 12.

James Corner, "A Discourse on Theory II: Three Tyrannies of Contemporary Theory and the Alternative of Hermeneutics", *Landscape Journal*, v 10, (1991): 122.

³⁵⁵ Richard Weller, "Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", *Landscape Review* 7, no.1, (2001): 12.

³⁵⁷ James Corner, "Introduction: Recovering Landscape as a Critical Cultural Practice" in *Recovering Landscape: Essays* in Contemporary *Landscape* Architecture, ed. James Corner, 1-28 (New York: Princeton Architectural Press, 1999), 8.

scorings, pictographs, indexes, samples, game boards, cognitive tracing, and scalings, all provided opportunities to produce productive relationships; "less as parts of a visual composition, more as means or agents" S58. Corner produced eidetic images that worked more as means or agents for speculation. Eidetic images brought parts together by removing them from their contexts. At this point, Corner concerned about providing creative and open-ended relations between parts by "engaging, accelerating networking interactions amongst forces in time", 359. In this sense, Corner called the images operative rather than representational since they were "digging, finding and exposing" ³⁶⁰ and "relating, connecting and structuring" ³⁶¹.

Like his teacher Ian McHarg, Corner was interested in cartography techniques and maps. On the one hand, While McHarg focused on analytical and natural sciencebased maps to reveal the truth of nature, Corner accepted that "maps are essentially subjective, interpretative and fictional constructs of facts" 362. Compared to McHarg's maps, Corner's mapping technique was highly subjective and provocative in contrast to his predecessor McHarg. In his article "The Agency of Mapping" 363, Corner pointed out that even in analytical mapping techniques, the designer uses the maps to construct an argument, and makes a "relational reasoning" by collecting, combining, connecting, masking and unfolding "new realities out of existing constraints",³⁶⁵. These procedures of selection, schematization and synthesis made mapping a creative and critical act.

Corner preferred to use the word mapping rather than map. Because, he evaluated mapping as a creative activity to explore and shape new realities. In that sense, Corner was influenced by philosophers Gilles Deleuze and Felix Guattari's aphorism "Make a map not a tracing!" He was also influenced by cultural geographer Denis Cosgrove who focused on the meaning of landscape in cultural geography and its representations, particularly with the maps. Similar to Deleuze and Guattari, Corner stated that "mapping was already a project in the making". .Rather than seeing

³⁵⁸ James Corner, "Eidetic Operations and New Landscapes", in Recovering Landscape: Essays in Contemporary Landscape Architecture, ed. James Corner, (New York: Princeton Architectural Press,

³⁵⁹ James Corner, "The Agency of Mapping: Speculation, Critique, Invention" in *Mappings*, ed. Denis Cosgrove, 213-252 (Reaktion Books, 1999), 250. ³⁶⁰ Ibid, 225.

³⁶¹ Ibid.

³⁶² Ibid.

³⁶³ Ibid, 213.

³⁶³ Ibid, 216.

³⁶⁴ Ibid, 213

³⁶⁵ Ibid.

mapping as a means of projecting power-knowledge, Corner preferred to conceive mapping as a productive and liberating instrument; "a world-enriching agent", He preferred to focus on new and speculative techniques of mapping for the act of reframing, re-projecting, re-coding, reconstructing.

In his book "Taking Measures Across the American Landscape" in collaboration with aerial photographer Alex MacLean, Corner explored American landscapes by illustrating them through essays and mappings. Corner brought disparate parts into a productive relationship by combining various representation techniques which he called as "fictional and metaphorical dimensions of the land's construction" ³⁶⁸. In the book, he purposefully used Geological Survey maps, by subverting their frame, scale, orientation, color-separation, numerical coordinates, grid measures and indexes and incorporated them into other notation systems. In his mapping, *Pivot Irrigators I*, he cut the geological map as a circle without scale and de-territorialized the map by reframing with circles. In Figure 37, the first image shows Pivot Irrigations in California that James Corner inspired from and the second image is Corner's mapping that he constructed by reframing a conventional topographic map and subverting their frame as the shape of irrigation areas. Typically, he left visible the names of places or geographical coordinates to give information about certain geographical conditions. The images were cropped as pivot irrigations in California and removed from their bigger contexts and brought together. Corner reframed fragments of images such as underground aquifer maps and infra-red satellite photographs which capture the circular forms of different fields³⁶⁹. The colors of the images also gave an idea about temperature, in the sense that recently irrigated fields which are coolest and therefore lightest like in satellite imaging. The creative process lied in establishing the relational connections between parts to provide new "suggestive readings/projections", 370. He poetically defined this networking' process as: "to work one's way into a field of opportunity, mapping the various players and sites whilst remaining an active a player in the field", 371.

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³⁶⁶ James Corner, "The Agency of Mapping: Speculation, Critique, Invention" in *Mappings*, ed. Denis Cosgrove, 213-252 (Reaktion Books, 1999), 216.

³⁶⁷ James Corner and Alex Maclean, Taking *Measures Across the* American *Landscape*, (New Haven: Yale University Press, 1996).

³⁶⁸ Ibid, 17.

James Corner, "The Agency of Mapping: Speculation, Critique, Invention" in *Mappings*, ed. Denis Cosgrove, 213-252 (Reaktion Books, 1999), 248.

³⁷⁰ Ibid, 249. ³⁷¹ Ibid, 250.



Figure 37. James Corner's mapping of "Pivot Irrigators I". (Source: James Corner and Alex Maclean, Taking Measures Across the American Landscape, Yale University Press: New Haven, 1996).

In his maps, the scale of landscape oscillates between local to global. Landscape becomes both a global, planatery, ecological phenomenon with satellite images and at the same time, a specific phenomenon with the site's unique images. These eidetic maps become tools to understand more intimate characteristics of sites as well. They reveal not only the visible but also invisible and unrevealed relations of landscapes. Sometimes it was so intimate that, the intension behind the mapping and the speculative message was so unobvious and unclear. He constructed his own understanding of the network of relationships and associations on the site as an artistic creativity. Thus, in his article about James Corner, Richard Weller argued that "Corner is returning early twenty-first century landscape architecture from the sciences to the arts" In the meanwhile, Corner called these mapping techniques as "a way of recovery of landscape in contemporary culture" 373. Corner used maps as a tool for understanding, reconceptualizing and recontextualizing the contemporary site.

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³⁷² Richard Weller, "Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", *Landscape Review* 7, no 1 (2001):

³⁷³ James Corner, "Eidetic Operations and New Landscapes", in *Recovering Landscape: Essays in Contemporary Landscape Architecture*, ed. James Corner (New York: Princeton Architectural Press, 1999), 153-154.

3.2.2.4. From Landskip to Landschaft

Corner's recent work shifted its emphasis from hermeneutical site and mapping to exploring the very notion of landscape. In his 1999 essay "Eidetic Operations and New Landscapes", Corner introduced the landscape as working space. Corner rejected the formulation of landscape as a constructed scene (*landskip*), and favoured the term *landschaft*, that was about "how landcapes work, what they do, how they interact, and what agency or effects they might exercise over time", It focused on how landscape performed –a performative landscape.

In fact, one might argue that the term *landschaft*, was reformulation of Ian McHarg's creative fitting. McHarg's formulation of evolving landscapes in order to attain fitness (creative fitting) was an inspiration for Corner's modelling of dynamic landscapes. While McHarg's designs aimed reaching a balanced and static state of the ecosystem, Corner aimed to respond to the dynamic processes of the landscape as the open and ever-evolving ecosystems. Different from McHarg, Corner formulated landscapes as open, ever-evolving, and self-organizing systems which are indeterminate since he was influenced from open ecosystems approach. As a result of this difference, Corner saw his practice as "truly ecological landscape architecture" 376. Corner's open ecosystem approach reflected in landscape design in his *landschaft*.

James Corner transferred *landschaft*, into his design works in his office 'Field Operations' in partnership with Stan Allen since 1998, one could examine Corner's landscape design works. In one of the well-known project, Fresh Kills Park, in 2001, he developed the design process based on the premises of *landschaft*. Fresh Kills Park is an 890-hectare landfill area in Staten Island, New York. Corner and Allen designed the transformation of the landfill into a park not as a static, but as an evolving landscape. The motto of Corner and Allen's design was "Lifescape is both a place and a

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³⁷⁴ James Corner, "Eidetic Operations and New Landscapes" in *Recovering Landscape: Essays in Contemporary Landscape Architecture*, ed. James Corner, (New York: Princeton Architectural Press,1999).

James Corner, "Introduction: Recovering Landscape as a Critical Cultural Practice" in *Recovering Landscape: Essays* in Contemporary *Landscape Architecture*, ed. James Corner, 1-28 (New York: Princeton Architectural Press, 1999).

³⁷⁶ James Corner, "Ecology and landscape as agents of creativity", in *Ecological design and planning*, eds. George F. Thompson and Frederick R. Steiner (John Wiley & Sons Inc, 1997), 102.

The name of the office combined 'field', referring to a new kind of horizontally-distributed urbanism in the late twentieth century and 'operation' referring to the temporal dimension of urbanism.

process"³⁷⁸ and "to create a framework for development at Fresh Kills over the next thirty years".

Corner's *landschaft* was an exploration of how specific landscape processes work on site in time to incorporate landscape processes into design. Corner and Allen started analysing specific attitudes and characteristics of landscape; rhythms such as periodic events, floods, saturation etc.; periodic cycles in landscape such as seasons, day-night cycle etc. Thus, Corner's site analysis was based on an understanding of how cultural and natural processes were interrelated in the past and how the site came into its present state, what changed and what remained the same. For the Fresh Kills Park, Corner and Allen explored the water levels of the Staten Island, flood cycles, growing trash levels on landfill etc. This exploration of site history helped anticipating the future transformation of park area. After understanding how and why a site performs as it does within time, Corner treated landscape' as an active agent to create change and start processes. In his theory and praxis, Corner let the generic ecological processes such as seeding, succession, invasion and adaptation to work with specific attitudes, rhythms, and characteristics of the site. Similarly, for Fresh Kills Park, he defined four phases for spatial development: seeding, infrastructure, programming and adaptation. Seeding was the metaphor to initiate a process for design that triggered further change and the emergence of natural and cultural ecologies on the site. Corner described the seeding strategy as: "once seeded, set up, or staged, ecological succession presents one site state that establishes the conditions for the next which is not necessarily in foreseeable or prescribable ways." Thus, James Corner reintroduced ecology into landscape architecture as a model for landscape processes rather than an instrument for ecological inventory.

For Corner, *landschaft* was not only about non-human processes. Corner aimed to integrate the self-organizing and productive capacity of landscape and the phenomenon of everyday life. That is why he foregrounded "program, event space, utility, economy, logistics, production constraints and desires" working in harmony with ecological processes. In Fresh Kills, Corner and Allen envisioned infrastructure

³⁷⁸ Field Operations, "Fresh Kills Park: Lifescape", Draft Master Plan, March 2006.

³⁷⁹ James Corner, "Not Unlike Life Itself. Landscape Strategy Now", *Harvard Design Magazine* 21,(Fall 2004): 32.

³⁸⁰ James Corner, "Eidetic Operations and New Landscapes" in *Recovering Landscape: Essays in Contemporary Landscape Architecture*, ed. James Corner, (New York: Princeton Architectural Press,1999), 159.

and programming that were working in harmony with the evolving vegetation systems and emerging ecologies.

Corner's works were less about the construction of finished works or blueprint plans. It was more about the designing the "processes, strategies, agencies, and scaffoldings"381. Corner used landscape's performative potential to arrange cultural and natural processes and contingencies over time via a strategic framework. In his designs, Corner preferred strategically phasing the design by configuring the stages of the necessary conditions in time", 382 to be generated by self-organizing capacities of the landscape. The self-organizing capacities of the landscape helped actualization of the design by organizing site through ecological processes. Thus, Corner's designs were based on strategically designing the long-term staging of design. His strategic design was akin to Rem Koolhaas' strategic instrumentality in which series of spaces were produced in time. Since Corner concentrated on orchestrating landscape processes; similar to Koolhaas, Corner preferred to use a diagrammatic graphic language to explain his strategies. Moreover, to display the change of site over time, he reinterpreted maps and used them to illustrate sequential maps of developing site plan. As shown in Figure 38, in Fresh Kills Park Competition, Corner preferred to display the growing Fresh Kills Parkland from 2001 to 2026 via sequential site plans rather than a single plan schema.

James Corner, "Ecology and landscape as agents of creativity", in *Ecological design and planning*, eds. George F. Thompson and Frederick R. Steiner (John Wiley & Sons Inc, 1997), 102.

James Corner, "Eidetic Operations and New Landscapes" in *Recovering Landscape: Essays in Contemporary Landscape Architecture*, ed. James Corner (New York: Princeton Architectural Press, 1999), 160.



"Growing a new parkland over time"

Figure 38. Phasing of programming and adaptation of Lifescape. (Source: Field Operations, "Fresh Kills Park: Lifescape", Draft Master Plan, March 2006)

3.2.2.5. Landscape and Urbanism

In the late 1980s, in UPenn, James Corner and Charles Waldheim³⁸³ started to explore the boundaries of disciplines and criticized traditional urban design strategies and New Urbanism that were incapable of responding to the rapid pace and horizontal character of contemporary American urbanism. They organized a symposium entitled "Constructing Landscape" at the University of Pennsylvania in 1993 and the following "The Recovery of Landscape" at the Architectural Association in 1994. These conferences focused on redefining what landscape was for 21st century and led to the development of the phrase "landscape as urbanism". The 'Exhibition of Landscape Urbanism' held in Detroit in 1997, helped further popularize the term. The speakers in the conference were Ian McHarg, James Corner, Mohsen Mostafavi, Linda Pollak, Brigitte Shim, Adrian Geuze, Alex Wall, Joan Roig, Grant Jones, and Kathy Poole who were the early theorists of landscape urbanism. Conference proceedings mainly consisted of discussing the role of landscape as an agent, more than a scenic beauty in the contemporary urban situation that could generate complex, layered, fragmented and dynamic urbanism.

In 1999, undertaking the editorship of the book "Recovering Landscape: Essays in Contemporary Landscape Architecture" James Corner discussed the changing physical and conceptual understanding of urbanism in the 21st century and the expanding efficacy and scope of landscape in the past ten years. He focused on post-industrial sites such as mine sites, active rail corridors, marine ports, landfills, interstate overpasses, river spillways, and old factory sites where the boundaries between public and private, open and closed, and infrastructure and –landscape were blurred. Corner's book was an invitation to recover the meaning of landscape and rethink what landscape actually is in this new situation. The main goal for this recovery was to acknowledge landscape's cultural value and to discover its creative hidden potential. Corner identified three areas for recovering landscapes: 1. The meaning of landscape shifted from landscape as a product of culture, to landscape as an agent that has formative effects on culture. Here, "landscape is a verb rather than ... noun (as object or

³⁸³ Charles Waldheim, who was an architecture student in 1980s at the University of Pennsylvania and student of James Corner, coined the term landscape urbanism as a critique of urban design in redescribing the environmental, economic and social conditions of contemporary city.

³⁸⁴ James Corner, *Recovering Landscape: Essays* in Contemporary *Landscape* Architecture (New York: Princeton Architectural Press, 1999).

scene)"³⁸⁵ and landscape architecture could be "an active instrument"³⁸⁶ in the shaping of culture. 2. Social program and utility of landscape was enlarged. Landscape included multiplicity and pluralism involving all competing forces (social constituencies, political desires, ecological processes, program demands etc.) because of its "bigness in scope and scale"³⁸⁷. 3. Ecological linkages of landscape were extended from natural ecology to both human and natural systems. With the book, Corner introduced an expanded role for landscape. Corner argued that landscape as a cultural agent had the capacity to reshape the world.

In 2006, in his provoking article "Terrafluxus" Corner denoted terrafluxus as a new landscape for the 21st century which refers to fluids, process-driven systems, dynamics and forces of change. He defined conditions of contemporary new urbanism emerged as a response to: growing interest on local attributes and collective sense of place; failure of uncritical ecology to provide a concrete environment; defunctioning of huge and complex postindustrial sites; the rise in recreation and tourism and searching for intrinsic values; the emergence of land art and growing attention to landscape's ephemerality³⁸⁹. Corner offered that the landscape had the capacity to drive development of this dynamic urban environment. Landscape as an open, flexible and uncertain phenomenon, provides "a field of action to alternative permutations over time for ever-evolving indeterminate processes of 21st century cities", While McHarg's ecological planning was related to issues of preservation and resource management against urban development, Corner argued for a reconciliation of landscape with urbanism by searching for how landscape might operate as a model for urbanism. Accordingly, landscape became a highly strong element in Corner's design schemes. However, in his design works, landscape had the ability to transform urban public green spaces, not deriving a transformation for the entire city. Landscape urbanism remained quite a conceptual approach towards city.

³⁸⁵ James Corner, "Introduction: Recovering Landscape as a Critical Cultural Practice" in *Recovering Landscape: Essays* in Contemporary *Landscape* Architecture, ed. James Corner, 1-28 (New York: Princeton Architectural Press, 1999), 6.

³⁸⁶ Ibid, 1.

³⁸⁷ Ibid, 2.

³⁸⁸ James Corner. "Terra Fluxus" in *Landscape Urbanism Reader*, ed. Charles Waldheim (New York: Princeton Architectural Press, 2006), 21-34.

³⁸⁹ Ibid.

³⁹⁰ Ibid, 31.

3.2.2.6. Pedagogy in Harvard: Flux City Studio

After the hiring of Charles Waldheim, Chris Reed and Mohsen Mostafavi to Harvard GSD Landscape Architecture program, the program focused on landscape processes generating flexible, dynamic, and adaptive urbanism since the 2000s. Charles Waldheim, head of the department and protagonist of landscape urbanism, coined the term landscape urbanism as a critique against visual priority of landscapes. Chris Reed, the founder of landscape architecture office Stoss LU, participated in Corner's discussion on the role of landscape in urban development. To go further on the pedagogical design approach of landscape architecture in Harvard GSD, Chris Reed's Studio- 'Flux City' was explored in detail with its methods and instruments.

In his studios 'Flux City' and 'Infrastructural Ecologies', Chris Reed focused on infrastructure systems for designing flexible, dynamic, and adaptive landscapes Flux City' aimed to provide flexible, dynamic, and adaptive strategies and concrete solutions to general problems of climate change, congestion and environmental problems ³⁹¹. Flux City studio conceived site as a "performative field, shaped by systems in a constant state of flux" ³⁹² and tried to invent adaptive ecologies responsive to these dynamic conditions. To achieve these objectives, Reed preferred to work on Jamaica Bay in New York since 2010, a highly urbanized area with significant infrastructure, (such as JFK airport, bridges, power lines and roads) and subject to constant change (by storm surge inundation, high watertables, tidal fluctuations and in the longer term sea level rise) ³⁹³.

The studio was structured in two phases and additionally, three digital workshops on parametrics and performance (Rhino and Grasshopper) throughout the 14 week semester. Since the studio aimed to provide adaptive, flexible systems, it worked with performative strategies of landscape via computational design. The first phase of the studio, called *Flux Fields* was motivated by Stan Allen's field theory and his idea of mat urbanism. At this point, Reed offered using the potential of mat or field strategies which Stan Allen explained in his article "*Mat Urbanism: The Thick 2-D*" that "the formal composition was governed by the internal connection of parts, rather than an

³⁹¹Syllabus of 'Flux City', GSD1212 Landscape Architecture Design IV, http://isites.harvard.edu/fs/docs/icb.topic844178.files/gsd1212assignment3_2011_final.pdf

Jillian Walliss, Heike Rahmann, Landscape Architecture and Digital Technologies: Re-Conceptualising Design and Making, (London: Routledge Publications, 2016), 77.

393 Ibid

³⁹⁴ Stan Allen, "Mat Urbanism: The Thick 2D", in *CASE: Le Corbusiers Venice Hospital and the Mat Building Revival*, ed.Hashim Sarkis (Munich: Prestel/Harvard Design School, 2001), 118-126.

overall geometric figure. The open fields/mats served as dynamic systems that provide adaptability, resilience, and flexibility for ecological systems. At the end of this phase, students were expected to create an open field/mat that could provide productive ecologies for a portion of the site. The mats were performative since they were The studio aimed that students identify the how physical responding to change. conditions change when the parameters change. This phase was supported by two workshops to explore relationships between physical and operational parameters (size, shape, adjacency, connection, etc.) and external forces (such as when it touches the ground or when it is disturbed by programmatic desires) via parametric programs. . In the first workshop, the students parametrically explored between a phenomena and form. Figure 39 shows that how one student documented the behaviors of fog and its relationship with the ground. He documented how advection, precipation (frontal fog) changes, and radiation fog changes, when the ground changed into cool moist ground surface, dry cool air ground, cool ground surface through the modification of parameters on computer programs of Rhino and Grasshopper. The parameters were ground's condition, levels of humidity, temperature and ground water.

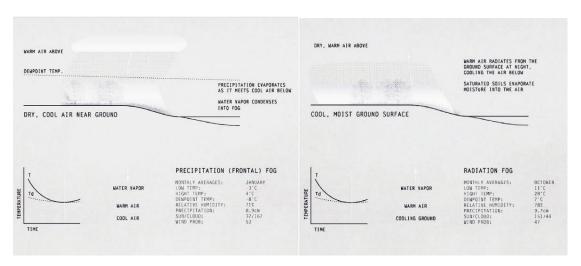


Figure 39. Documenting the behaviors of fog and its relationship the ground via Rhino and Grasshopper in Flux City studio.

(Source: Jillian Walliss, Heike Rahmann, *Landscape Architecture and Digital Technologies: Re-Conceptualising Design and Making*, Routledge Publications: London, UK, 2016).

Second workshop was on landform, introducing techniques such as physical and 3d digital modelling, plans, and sections for translating ecological infrastructures onto the site. The same student formed a landform matrix, which pointed out the relationship

between advection fog and landform, how it is accumulated, how the amounts changed etc. Figure 40 shows that how these landforms provided a performative mat/field that transformed with respect to changing of external conditions. It shows a performative mat/field figuring out the relationship between advection fog and landform via a Landform matrix.

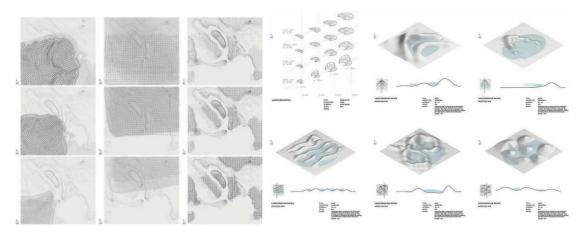


Figure 40. A performative mat/field figuring out the relationship between advection fog and landform.

(Source: Jillian Walliss, Heike Rahmann, Landscape Architecture and Digital Technologies: Re-Conceptualising Design and Making, Routledge Publications: London, UK, 2016).

The second phase of the studio was called *Neighborhoods*, and aimed to provide relational urbanism via building blocks that adapt well to the flux field. In this phase, students generated catalogues of building blocks and explored variations of assemblies of the proposed building blocks. Figures 41-42 show what students Patchara Wwongboonsin and Kate Michael offered as building typologies in the studio. Figure 41 displays building typologies they offered to respond to changing sunlight and wind blow to areas between buildings. The 3d model in Figure 42 shows how the building blocks respond to changing sun angles in different seasons. They also investigated how these new parameters affected the logic of the mats themselves within multiple scenarios. In Wwongboonsin and Michael's design, these parameters were considered sun level, open space level, winter and summer seasons' sun angle, and wind. In this phase, a third workshop was held produce relational urbanism models. It used parametric design interfaces for producing infrastructural and environmental variables in order to generate three dimensional massing proposals of urban environments.

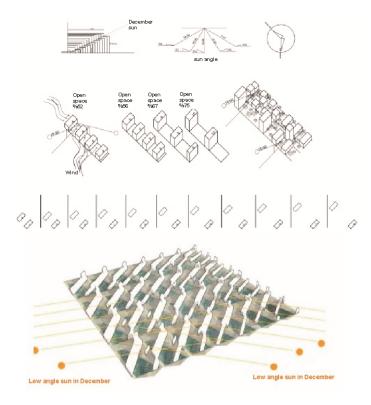


Figure 41. Building typologies responding to changing sunlight and wind blow. (Source: http://relationalurbanism.blogspot.com.tr/p/term-1-natures-and-types.html)

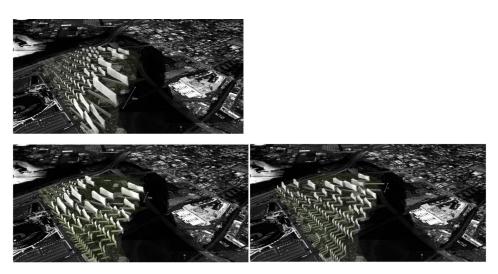


Figure 42. The building blocks respond to changing sun angles in different seasons. (Source: http://relationalurbanism.blogspot.com.tr/p/term-1-natures-and-types.html)

The outputs of the studio were responsive fields for change and scenarios elaborating time and flux conditions on different possible futures, rather than master plans. As the end result, students developed field, mat, performative ecologies, relational urbanism that were in flux and that were working with physical infrastructure systems such as roads, corridors, rail, water, or energy generation transmissions.

3.2.3. Mohsen Mostafavi and the Idea of 'Operative Landscape' in Architectural Association, Landscape Urbanism Program (2000-2004)

This section elaborates on the theory and pedagogy in the Landscape Urbanism Studio at the Architectural Association which was led by Mohsen Mostafavi with Ciro Najle from 2000 to 2004. It aims to convey how landscape urbanism movement is interpreted in studio as a result of the focus on the machinic aspects of landscapes and computerized form finding tools. The Landscape Urbanism Studio at the Architectural Association was established under the direction of Ciro Najle and Mohsen Mostafavi, chairman at the time, in 2000. It is the first graduation program that moved the landscape urbanism movement with the same title into the curriculum of an educational programme. Different from other schools, AA Landscape Urbanism program is a cross disciplinary program, not led by landscape architects. Although the AA Landscape Urbanism Programme opened in 2000, its roots are grounded in the late 1980s, at the University of Pennsylvania, where James Corner, Charles Waldheim, and Mohsen Mostafavi started to explore role of landscape in the 21st century cities. As mentioned earlier In 1997, Mohsen Mostafavi, participated in the 'Exhibition of Landscape Urbanism' where it emerged as a movement the landscape urbanism movement emerged with the in Detroit together with speakers James Corner, Charles Waldheim, Alex Wall, and Adriaan Geuze.

Mostafavi was the Chairman of the Architectural Association School of Architecture in London before the Landscape Urbanism program was founded. He received his architecture diploma from the same school in 1976, and undertook research on counter-reformation urban history at the Universities of Essex and Cambridge. As the prominent figure of landscape urbanism, Mohsen Mostafavi, transposed all the discussions on landscape urbanism into AA Landscape Urbanism program in 2000. He was also the writer of the book "Landscape Urbanism Reader: A Manual for the *Machinic* Landscape." The book mainly included texts based on projects developed in the Landscape Urbanism programme at the AA. In the book, Mostafavi and Najle claimed that modern planning was not sufficient enough to understand today's urbanism and they offered landscape whose temporal characteristic as an antidote to modern planning.

Mohsen Mostafavi, and Ciro Najle, *Landscape Urbanism: A Manual for the Machinic Landscape*, (London: Architectural Association Publications, 2003).

They pointed out newly emerging landscapes, as new potential sites in contemporary urbanism.

3.2.3.1. Territory as Disciplinary Common Ground

The program in AA aimed to transcend the boundaries of disciplines in order to encounter with new and globally diverse forms of urbanism. In this direction, the program was open to a broad range of professions such as architects, landscape architects, urban planners, engineers, and geographers. In AALU, "territory" is defined as the common ground for all these disciplines, for the program to call all the designers to involve in complex social, political, economic processes - "to be the engines (historically, geographically, conceptually) behind these contemporary conditions" ³⁹⁶.

The Landscape Urbanism program re-assessed the role of architecture in the neglected element of landscape with an emphasis on poststructuralist philosophy on man, nature and urban. For the program, "city and country mutually presuppose and reproduce one another" ³⁹⁷. Ciro Najle promotes the "understanding of landscape allowing integration of natural processes and urban development into the folding of an artificial ecology" ³⁹⁸. The studio develops its method by synthesizing knowledge from environmental engineering to landscape studies, from urban strategy to development industry with a wide range of scales into an operative framework.

In the Landscape Urbanism program, Najle and Mostafavi evaluated contemporary landscapes as "systems organized around the exchange, processing and distribution of life" ³⁹⁹ and that form "larger environmental, social, subjective and historically contingent ecologies" ⁴⁰⁰. " Along these lines, Najle and Mostafavi expanded the traditional planning's strategies by adding newly and globally emergent territorial conditions of urbanism such as rapid urbanization, informal settlement, social and informal precarity. Accordingly, their studios were focused on public and private hybrid landscapes in the context of global city; surfaces and voids in addition to buildings; the new hybrids such as landscapes as buildings, buildings as landscapes

³⁹⁶ http://landscapeurbanism.aaschool.ac.uk/what-is-aalu/accessed in 23.03.2016

³⁹⁷ Douglas Spencer, "Landscape Urbanism at the Architectural Association", *Topos* 71 (June 2010).

³⁹⁸ Najle Ciro, "Framework", in *Landscape Urbanism: A Manual for the Machinic Landscape*, ed. Mostafavi Mohsen and Najle Ciro, (New York: AA Publications: 2003), 9.

³⁹⁹ Douglas Spencer, "Landscape Urbanism at the Architectural Association", *Topos* 71 (June 2010). ⁴⁰⁰ Ibid.

where the distinction between architecture and landscape dissolved; and leftover spaces of abandoned postindustrial areas, rather than merely public spaces of city. Mostafavi glorified landscapes for providing new and unexpected insights in response to the contemporary urban situation. For them, temporary uses of landscape provided potential diversity for future activities and enables dynamism of city. Landscape urbanism studio put the temporal characteristics of landscape as the focus of its exploration and worked around to understand the temporal dynamics; how landscapes work in time, what material processes and organizations exist on site. Landscape architecture's consideration on changing of land through time could lead to a more productive relationship between landscape and urbanism in which urbanism could register "a conception of time that is not implicit and linear as it generally does",401.

3.2.3.2. *Machinic* landscape

In AALU, Mostafavi undertook the performative aspect of landscape under the title of machinic *territories and* directed The Machinic Landscape courses and Landscape Urbanism studio. Machinic landscape referred to the understanding "landscape as a source" where data was gathered from. The data gathered from landscape are transferred into a form-generating computer program.

To understand the forces working on site Mostafavi identified two types of investigation in order to learn from landscape: 1. understanding operative method of landscape and 2. consideration of long and short term dimensions of landscape in urbanism. Mostafavi constructed his theory and pedagogy in AALU based on these two premises. First, the operativeness of landscape meant that landscape operates across local and global scales. For Mostafavi and Najle, the operative perspective to the landscape referred to multiscalar relationships between landscape elements and interrelated forces across scales and their relationship with specific conditions. To identify how landscape operated across scales, Najle and Mostafavi sought reading, mapping and indexing urban conditions for the region as a complex mesh of interrelated forces. Douglas Spencer in his article "Landscape Urbanism at the Architectural

⁴⁰¹ Mohsen Mostafavi, "Landscapes of Urbanism", in *Landscape Urbanism: A Manual for the Machinic Landscape*, ed. Mostafavi Mohsen and Najle Ciro, (New York: AA Publications, 2003) 4-8.

⁴⁰² Hanna Assargard, "Landscape Urbanism: From a methodological perspective and a conceptual framework", Unpublished Master in Landscape Planning, (Swedish University of Agricultural Sciences Department of Urban and Rural Development, 2011): 7.

Association" ⁴⁰³, exemplified Mostafavi and Najle's operative understanding of landscape between globally emergent political economy and local territorial conditions in the case of United Arab Emirates. For instance, the growing dependency on oil consumption and population growth affected a significant trend toward unemployment in United Arab Emirates. Thus, the government invested on non-oil growth such as infrastructure, tourism, leisure and cultural projects together and consolidated foreign investment in the main cities that resulted in overcrowding in heavily populated centres and development of peripheral regions in the Emirates. These interrelated conditions convey how global economy, national politics related with urban development and spatial evolution of urban landscape. As in this case, landscape was viewed as "a lens through which contemporary city is represented",404. It required understanding multiscalar relationships. For Mostafavi, the operativeness of landscape made it more global⁴⁰⁵. Second, due to long and short term dimensions of landscape, Mostafavi and Najle focused on adapting a dynamic system in the form-finding process. Rather than focusing on a pure physical form as the product of the design, the design process was directed towards analyzing, interpreting and designing of a dynamic system.

James Corner's *landschaft* and Mostafavi's *machinic* landscape have different approaches towards dynamicism and their methods differ accordingly. Different from James Corner's *landschaft* which had less emphasis on form, in the *machinic* landscape, landscape became part of a "form-generating process", and "dependent on computer modelling". Thus, the representation types in *machinic* mode were mostly diagrams about how form was derived. The process was called *organization* within the *Machinic* mode to landscape and in field operations, design was generated by site information. *Landschaft* focused on how to transfer characteristics of landscape into design and how to accommodate change in landscape into design whereas, the *machinic* landscape focused on how the dynamic forces of landscape can be modelled in order to

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⁴⁰³ Douglas Spencer, "Landscape Urbanism at the Architectural Association", *Topos* 71, (June 2010): 3.

⁴⁰⁴ Mostafavi Mohsen & Najle Ciro. Urbanism as Landscape? İn "AA Files" No 42, (2000). (London: The Architecture Association School of Architecture,): 44-47.

⁴⁰⁵ Mohsen Mostafavi, "Landscapes of Urbanism" in *Landscape Urbanism: A Manual for the Machinic Landscape*, ed. Mostafavi Mohsen and Najle Ciro, (AA Publications: New York, 2003), 4-8.

⁴⁰⁶ Christopher. D. Gray, "From Emergence to Divergence: Modes of Landscape Urbanism", Dissertation (MA-LA), (Edinburgh College of Art School of Architecture, Scottland 2005-2006), 63.

⁴⁰⁷ L. Muir, "Mapping Landscape Urbanism", Dissertation (MA-LA), (University of Manitoba Department of Landscape Architecture Faculty of Architecture, Canada Palka, 2010).

⁴⁰⁸ Hanna Assargard, "Landscape Urbanism: From a methodological perspective and a conceptual framework", Unpublished Master in Landscape Planning, (Swedish University of Agricultural Sciences Department of Urban and Rural Development, 2011): 61.

create form. In *landschaft*, process overwhelms form and form is only a by-product of process. Corner's *landschaft* focused on performance of landscape about understanding how landscapes work in time, to be able to make future predictions of the site and develop strategies for future situations. To understand functioning of landscapes, *landschaft* explored past and current rhythms, cycles and patterns on site. Corner's *landschaft* produces strategies but, Mostafavi's *machinic* landscape produces forms. On the one hand, the *machinic* landscape's emphasis was on operative role of landscape about how landscape operates across scales. It had a multiscalar understanding to understand interrelated landscape elements and landscape forces. Mostafavi's *machinic* landscape considered the dynamic forces on site but without making any predictions or foreseeing. Rather, *machinic* mode produced designs for the time period when the dynamic forces were identified on site. The end product for *machinic* landscape is organizations, materiality suggestions, and scaled detailing.

3.2.3.3. Pedagogy in Landscape Urbanism Studio

In AA Landscape Urbanism Program, there were three main phases to construct the design. In the first phase, students performed specific surveys on reading, mapping and indexing site conditions to identify interrelated forces and organizations in order to define the emergent machinic landscape. Understanding the performative aspect of landscape was the main emphasis of the studio what Mostafavi defined landscape "as a material device" working between local and global networks and as a mean to organize these relationships. After putting the operative system as a system of rules that regulates the behaviour of a series of global and local systems, in the second phase, all these surveys were poured into a computer algorithm to provide an urban prototype of urbanism applied in a larger scale. In this phase, the projects were both specific and generic (in multi-scales) and had diverse temporalities (within development, construction or use of prototypical organizations). Then, in the third phase, as the final product of design, multiple prototypes were produced for different temporalities, rather than a static architectural form. In this interpretation phase, prototypes were used as the tools to identify the contingencies of global and local systems that operate on the site. Parametric, simulation-based programs and prototyping computer programs were highly

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⁴⁰⁹ Mohsen Mostafavi , "Landscapes of Urbanism", in Landscape Urbanism: A Manual for the Machinic Landscape, ed. Mostafavi Mohsen and Najle Ciro, (New York: AA Publications, 2003) 4-8.

utilized to understand and adapt such dynamic systems. In the final phase, the site presented its generative potentials in various scales (from generic to specific), realized through temporal and organizational urban models.

In order to further clarify the design process, I will explain the 'River Thames Access Project' as an example. The project site was on the River Thames corridor where industrial production pressured for the site and with discontinuous and uncontrolled development emerged as a result of fast occupation. The projects attempted to constitute robust urban prototypes, capable of integrating infrastructural networks, geology, hydrology, ecology and various economies under the framework of performative landscapes. As mentioned above, working in the new *hybrid territories* was one of the core intentions of the studio.

The River Thames Access Project started with analysis, surveys, samples, statistics, observations, fields of opportunity to identify the dynamic plane of performance of the landscape through rhythms, cycles tendencies and macro scale processes. In this phase, students also explored the temporalities in relation to capacities on the corridors that are changing due to the Thames River's regime. Figure 43 shows Roxanne Scorcelli's Project "Urban Excess, River Excess" with the diagrams showing of the temporalities in relation to capacities on the corridors that are changing due to the Thames River's regime. The circulation and temporalities were evaluated as a performative plane and represented through diagrams.

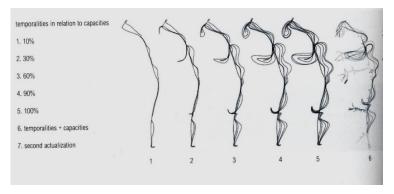


Figure 43. Roxanne Scorcelli's "Urban Excess, River Excess" Project in AALU. (Source: Mohsen Mostafavi and Ciro Najle, "Urbanism as Landscape?" *AA Files*, 42, 2000)

As the next step, the students developed an urban prototype to as a model, capable of continuous transformation. The prototypes were used to mimic an operative system that regulates a set of conditions of global and local systems on sites. In their

projects, student Yacira Blanca produced a prototype of urbanism investigating transformation that engaged with the topography, housing units, parking conditions and Thames River channels. They explored how different housing units (3,5 m-7 m) work with topography, how the vertical connection will be supported with different topographical conditions and parking conditions, how the channel's continuity will be enabled working with housing units. Figure 44 shows Yacira Blanca's Project, "Expansive Interfaces: Filling Urban Gaps", providing a prototype urbanisms investigating transformations with the topography, housing units, parking conditions and Thames River channels.

In the final phase, a design thesis was constructed with their "capacity to produce new territories openly engaged with environmental, social and subjective conditions" For instance, Roxanne Scorcelli's Project "Urban Excess, River Excess" proposed new corridor territories emerged as the synthesis of open and closed boat traffic working with tidal action of Thames and circulation of public at different speeds (walking, running, cycling). In Figure 45, Roxanne Scorcelli's Project "Urban Excess, River Excess" proposed newly emerging corridor territories for walking, running, cycling that emerged as the synthesis of open and closed boat traffic working with tidal action of Thames, River Thames Access Project, 2000, AALU. Top images show opportunities for open and closed boat traffic and bottom images show new corridors for walking, running, cycling.

⁴¹⁰ Mohsen Mostafavi and Ciro Najle, "Urbanism as Landscape?" AA Files, 42. (2000): 47.

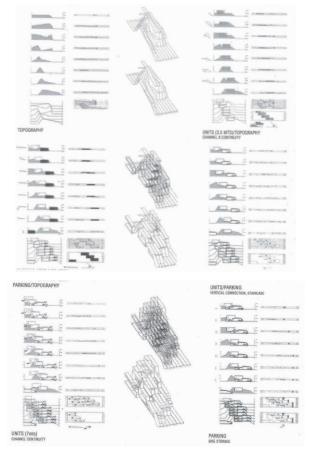


Figure 44. Yacira Blanca's Project, "Expansive Interfaces: Filling Urban Gaps" in AALU.

(Source: Mohsen Mostafavi and Ciro Najle, "Urbanism as Landscape?" AA Files, 42, 2000)

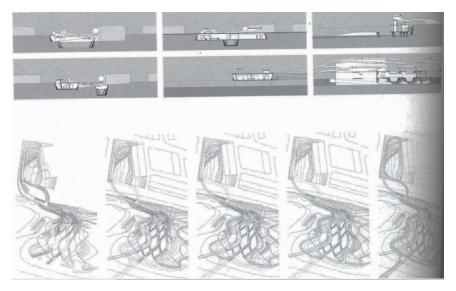


Figure 45. Roxanne Scorcelli's Project "Urban Excess, River Excess" in AALU. (Source: Mohsen Mostafavi and Ciro Najle, "Urbanism as Landscape?" AA Files, 42, 2000)

It seems like Mostafavi gathered theoretical principles of landscape urbanism under one program. First, Ciro Najle and Mohsen Mostafavi focused on landscape as an artificial ecology in which city and country mutually reproducing one another. Second, it was an interdisciplinary program gathering the design disciplines under the common ground of territory to design complex processes in contemporary conditions. Mohsen Mostafavi founded Landscape Urbanism Program in AA based on the principle of producing for the newly emerging territories. That is why the studio worked not only for the public spaces, or not only for private spaces, but especially for a hybrid places between the two. Third, they especially preferred to work on Fourth, Najle and Mostafavi's landscape urbanism studio put the dynamic landscape as a model for dynamic architectural form. The differentiating approach of the studio was the emphasis on machinic landscape operating across scales. This approach brought a multiscalar perspective to focus on organization working beyond official boundaries of site. However, when the practical outcomes in the Mostofavi's studio are considered, one can claim that Mostafavi's machinic landscape was a form-generating process through specific programs on dynamic modeling. The concept of machinic landscape refers to the understanding "landscape as a source" where data is gathered from and to be transferred into a form. It was only the dynamic form which is transferred into architecture. Besides all, the studio contributed to the development of an advanced knowledge on computer technologies on exploring dynamic form and transferring site data into form.

In 2004 Mostafavi left AA and moved to Cornell University College of Architecture, Art and Planning, and to Harvard Graduate School of Design one year later. But, AALU Program continued operating in the domain of performative – *machinic* landscapes from local to global scale. During his Harvard teaching, Mostafavi introduced the term '*ecological urbanism*' as a critique against landscape urbanism. The phrase ecological urbanism was used by Mostavavi in 2007 in the book *Intervention Architecture*⁴¹² and *was* started as a project at Harvard GSD followed with a conference of the same name, and an exhibition, which was later published as a book. Ecological

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⁴¹¹ Hanna Assargard, "Landscape Urbanism: From a methodological perspective and a conceptual framework", Unpublished Master Thesis in Landscape Planning, (Swedish University of Agricultural Sciences Department of Urban and Rural Development, 2011), 7.

⁴¹² Pamela Johnston, *Intervention Architecture: Building for Change, Aga Khan Award for Architecture*, 10th Cycle, (London: I.B.Tauris & Co Ltd., 2007)

urbanism aimed ecology driven urbanisation supported by enlarged notion of ecology⁴¹³ as a political, social, cultural and critical phenomenon. In the conference "Alternative and Sustainable Cities of the Future", Mostafavi described the aspirations of ecological urbanism as "accommodating the inherent conflictual conditions between ecology and urbanism by conjoining individual and professional human intervention into ecology"⁴¹⁴. Mostafavi especially emphasized that the worldwide environmental crisis could not be solved because of the division of disciplines that he called "spaces of disagreement" ⁴¹⁵. Mostafavi suggested taking action of all disciplines with a holistic approach to ecological issues. What is different in ecological urbanism was, rather than excluding traditional methods, utilizing a multiplicity of old and new methods, tools and techniques, combining visual representations and scientific data in a cross disciplinary and collaborative approach.

⁴¹³ Enlarged notion of ecology was developed by Felix Guattari, in his essay "Three Ecologies" to refer to ecology in the environment, in the social relations and in the human subjectivity (mind). See Felix Guattari, "The Three Ecologies", trans. Chris Turner, *New Formations* 8, (1989): 131-147.

⁴¹⁴ Mohsen Mostafavi, "Why Ecological Urbanism? Why Now?", in *Ecological Urbanism*, eds. Mohsen Mostafavi and Gareth Doherty, (Baden: Lars Müller and Harvard University Graduate School of Design, 2010), 14.

⁴¹⁵ Charles Waldheim, "On Landscape, Ecology and Other Modifiers to Urbanism", *TOPOS*, vol. 71, (2010): 24.

CHAPTER 4

EMERGENT THEMES IN FORMULATION OF SITE

This section elaborates on emerging themes in formulation of site that architecture and landscape architecture contribute since the WWII. The aim of this chapter is putting theories and concepts on site that landscape architecture and architecture disciplines provided in the same historical line and conveying how the disciplinary differences foster broader meanings of site. For a clear analysis, I categorize emerging formulations of site from architecture and landscape architecture into thematical order by putting how these two disciplines contributed to diverse meanings of site in relation to the notion of their discipline. It clarifies how and why relational, temporal and multiscalar formulations of site substantially introduced by landscape architecture and how and why dynamic, programmatic and operational understanding of site was conveyed by architecture. This thematic categorization does not mean that the formulations are separated from each other. Furthermore, the ideologies and positions behind these themes are related to, sometimes dissolved into each other.

This chapter classifies the emerging formulations of site under the themes of: Site as a Relational Construct, Site as a Multiscalar Phenomenon, Site as a Temporal Phenomenon, Site as Form vs. Strategy. These themes emerged in twenty-first century cities' as a response to rising questions such as: what are the boundaries of a site that responds to flows?; how does a site oscillate between generic processes of ecology and the site's specific characteristics?; if site is more than a physical entity that is perceived, conceived and experienced, how can it theoretically be formulated?, What is change, temporality and process on site? and how can they be incorporated into design?

4.1. Site as a Relational Construct

Before 1940s, site specific aspects were mostly understood in relation to environmental conditions such as climate, sun, wind direction etc.to be rationally integrated into design. Fifty years ago Colin Rowe and Ian McHarg proposed distinct methods to analyse given sites regarding certain urban or rural qualities to be able to

simplify their complexity. Rowe analysed urban textures via identifying urban elements in the form of solids and voids and creating figure/ground maps, while Ian McHarg attempted gathering all the environmental data by separating the site into physical layers such as soil, topography, hydrology, settlements etc. represented via map overlays. Ian McHarg believed that all data about site can be grasped and analyzed by means of instruments of science. Both Rowe and McHarg grounded their methodology on a rational framework believing that site data should be gathered by bias-free objective procedures and in order to overcome a subjective compilation of facts.

At the end of the 1960s, as one outcome of the critical re-evaluation of modernism, environmental psychology and phenomenology studies influenced architecture integrating subjective criteria, like the sense of place and the bodily experience of environment. According to architectural historian Jorge Oter-Pailos⁴¹⁶, architectural phenomenologists were against detached mental images from history of architecture as Robert Venturi suggested for architecture. Against closed social order and hierarchy in architecture and against primacy of theory in architecture, they brought experience to the forth and sought for how architecture was perceived and experienced. Different from their premises, Christian Norberg Schulz, Dalibor Vesely, Peter Carl, Steven Holl, David Leatherborrow and Juhanni Pallasmaa and in practice, Tadao Ando, Steven Holl, Peter Zumthor, Daniel Libeskind initially engaged with experience, sense of place and site specific character of place. They especially inclined to site issues, its particularity, material properties and tectonics as the tool for manifesting the character of place. Sometimes it is the nature, sometimes it is the local material, sometimes topography etc. all of which are considered in terms of their sensuous qualities of site, poetics of site, or bodily experience of site. They contributed to development of discussions on particularity of place, site specificity, character of place, poetics of place, sensuous quality of place, experience of place, and development of representation techniques such as sketches, perspective drawings, rendered pencil drawings, collages, etc to display expression of individual perception and experience of place.

On the one hand, in landscape architecture, phenomenology was inserted into theory as a response to Ian MacHarg's analytical, scientific and rational explorations on site which was dominant in landscape architecture theory and education until the end of

⁴¹⁶ Jorge Oter-Pailos, *Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern*, (Minneapolis: University of Minnesota Press, 2010).

1980s. By the 1990s, landscape architecture paid attention to phenomenological discussions of Martin Heidegger, M. Merleau-Ponty, J. Pallasmaa and Christian Norberg Schulz. After then, landscape architecture developed its own phenomenology influenced theory and methods. D. W. Meinig's article "Beholding Eye", Kaplan and Kaplan's "The Experience of Nature" ⁴¹⁸ and Tuan's ⁴¹⁹ experience of landscape; Marc Treib's ⁴²⁰, Robert Riley's ⁴²¹ and Mark Francis' ⁴²² explorations on meaning of landscape contributed development of theoretical grounds in phenomenology influenced landscape architecture.

What was differentiating in landscape architecture was shifting the explorations on hermeneutics and site. By the 1990s, with a poststructuralist perspective, in his book, "Landscape Imagination", landscape architect James Corner collected essays which define landscape imagination as a critical agent rebuilding society's relationship to the natural and built landscapes. He configured the site as what the meaning is assigned to it by the designer, by the user, by everyone who interacts with it. A more recent contribution was Matthew Potteiger and Jamie Purinton's book 'Landscape Narratives' that introduced narrative as a fundamental way people shape and make sense of experience and landscapes and they are useful tools in understanding the processes and events in place and making places. By the end of 1990s, Elizabeth Meyer landscape architect and theorist explained the discipline's theory as "specific... based on observation which is known through experience" 425 After then, almost every landscape architecture school frequently using methods and techniques of

⁴¹⁷ D..W Meinig, "The Beholding Eye: Ten Versions of the Same Scene", in *The Interpretation of* Ordinary Landscapes: Geographical Essays, eds. D. W. Meinig, and J. B.Jackson (New York: Oxford University Press,1979).

418 R, Kaplan, and S. Kaplan, *The Experience of Nature: A Psychological Perspective*, (Cambridge:

Cambridge University Press, 1989).

Y. Tuan, Space and Place: the perspective of experience (Minneapolis: Minnesota Press, 1997)

⁴²⁰ See Marc Treib, 'Must Landscapes Mean?: Approaches to Significance in Recent Landscape Architecture', Landscape Journal, 14 (1), (1995) 47-62. M. Treib, and JB Gillette, Meaning in Landscape Architecture & Gardens: Four Essays, Four Commentaries, (Routledge: London, 2011).

⁴²¹ R.B. Riley, 'From Sacred Grove to Disney World: The Search for Garden Meaning', Landscape Journal 7 (2), (1998), 136-147.

⁴²² See M. Francis, and R.T. Hester, *The Meaning of gardens : idea, place, and action* (London : MIT Press, 1990)

⁴²³ James Corner and Alison Hirsch, Landscape Imagination: The Collected Essays of James Corner 1990—2010, (Princeton Architectural Press, 2014).

⁴²⁴ Matthew Potteiger and Jamie Purinton, Landscape Narratives: Design Practices for Telling Stories (New York: John Wiley &Sons Inc, 1998).

⁴²⁵ Elizabeth K. Meyer, "The Expanded Field of Landscape Architecture", in *Ecological Design and* Planning, ed. George Thompson and Frederick Steiner, (John Wiley Press, 1997).

phenomenological approach to illustrate the experiences on site, sensory experience, feeling of the atmosphere.

James Corner developed these discussions further and explored how to insert subjectivity, interpretation of relationships and individual experience into maps. In his innovative book "Taking Measure across American Landscape" 426, with photographer Alex Maclean, James Corner reconstructed American landscapes in creative ways of mapping. Corners' mapping subjectively re-creates a site by collaging elements on site in with satellite images, drawings, pictures, topographic maps etc. which is a creating process by itself. He offered act of creation of map as a kind of "drawing of site",427. Map constructs the reality rather than representing a reality. When compared with Ian McHarg's maps, it is less data driven, more subjective interpretation of relationships on site. For the book, theorist Nadia Amoroso states that "Corner tells the story of site", 428 in mappings. The mappings were more an art form rather than evidences of art forms. They tell the subjective and experiential stories of site. The goal is to describe uniqueness of every site which is subjectively experienced. Maps are too abstract to understand the intention without explanation. The main intention behind Corner's mapping was showing multiple readings of site that can be re-produced by the designer. Together with James Corner, phenomenological approach in landscape architecture changed its emphasis to hermeneutics with a poststructuralist perspective, by the 1990s. James Corner evaluated landscape as "a richly hermeneutical site", 429 the meaning of which was "relatively and partially structured",430 and reconstructed again and again within different contexts. Thus, site is what the meaning is assigned to it by the designer, by the user, by everyone who interacts with it. Landscape theorist Elizabeth Meyer⁴³¹ categorized such kind of a relationship with site as 'site as armature or framework' in which site was set through ideas and relationships in the mind. She exemplified the exaggerated version of this relationship when idealized landscape types

⁴²⁶ James Corner and Alex Maclean, Taking *Measures Across the* American *Landscape*, (New Haven: Yale University Press, 1996)

⁴²⁷ Nadia Amoroso, *The Exposed City: Mapping the Urban Invisibles* (Routledge, London and New York, 2010), 94.

⁴²⁸ Ibid, 108.

⁴²⁹ Richard Weller, "Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", *Landscape Review* 7, 1 (2001): 5.

 ⁴³⁰ Ibid.
 431 Elizabeth K. Meyer, "Site Citations", in *Site Matters: Design Concepts, Histories and Strategies*, ed. Carol Burns and Andrea Kahn 93-130 (New York: Routledge Publications, 2005).

are transposed onto a particular landform as armature⁴³². Here, site is set through ideas and relationships in the mind. Here, site is not defined as a precondition. Rather it is generated by the intention of the designer and how she reads the site. This is what Carol Burns and Andrea Kahn named as site as a *relational construct* "that is construed and constructed"⁴³³ through meaning and value assigned to them, after "situational interaction and exchange"⁴³⁴. Thus, site is not only the real that is observed but also what is defined with disciplinary norms, personal convictions, societal ideals. Site is also constructed by virtue of what meanings and values assigned to it.

To sum up, It can be inferred that by means of landscape architects E.Meyer, J. Corner, M. Potteiger and J.Purinton and C.Burns and A.Kahn site is now understood as layering of realities rather than layering of site elements. Site provides a framework for layering the realities. Site can be redefined again and again with respect to ideological, conceptual, contextual, scalar, temporal relations that you construct with it. Even the recent mapping techniques in landscape architecture, particularly James Corner's eidetic mappings, improved subjective production of maps as art objects.

4.2. Site as a Multiscalar Phenemenon: Sites as Nodes in Network of Flows

Architect Linda Pollak, in her article "Constructed Grounds: Questions of Scale" formulated the concept of scale as a representation of spatial difference and she differentiated between architectural scales and landscape scales. She defines architectural scales as: "a field from the interior to the exterior of building, from its smallest detail to its overall presence, rarely exceeding the distance from which a project is actually visible" and landscape scales as "areas much larger than any specific site, encompassing multiple ecological systems as "areas much larger than any specific site, encompassing multiple ecological systems. Architecture as a discipline tends to see the site as "the place or position occupied by some specified thing" mainly

Elizabet

⁴³² Elizabeth Meyer, "Site Citations", in *Site Matters: Design Concepts, Histories and Strategies*, ed. Carol Burns and Andrea Kahn 93-130 (New York: Routledge Publications, 2005), 103.

⁴³³ Carol Burns and Andrea Kahn, *Site Matters: Design Concepts, Histories and Strategies*, (New York: Routledge Publications, 2005), xv.

⁴³⁴ Ibid..

⁴³⁵ Linda Pollak, "Constructed Grounds: Questions of Scale", in *Landscape Urbanism Reader*, ed. Charles Waldheim 125-140 (Princeton Architectural Press, New York: 2006).

⁴³⁶ Ibid, 129.

⁴³⁷ Oxford English Dictionary, accessed at

dependent on the building lot or property lines. Through landscape architecture, the understanding of site expanded beyond the visible boundaries of a given piece of land.

Ian McHarg, landscape architect, urban planner, theorist and academic, to conceive landscape beyond its visible boundaries in the 1960s for the first time by introducing the term 'physiographic regions' to refer to fields of specific ecological character. In his Green Valley and the Worthington Valley Plans, the valleys were the backbone of the design. Valleys provided a framework for organizing the plans, limiting the uncontrolled development and despoliation. The scale of design, the boundaries of the sites were determined according to the ecological region defined by the valleys. Figure 46 shows that McHarg's plans have no exact boundaries of site; it was enclosed and described by the valleys. McHarg defined the boundary of site where valley's homogeneous ecosystem was dominant.



Figure 46. Bird's eye view of the Green Valley and the Worthington Valley. (Source: http://www.wrtdesign.com/projects/detail/plan-for-the-valleys/316)

From a different perspective, in 1960s, architect Vittorio Gregotti also elevated the boundary of site from its property lines to a broader scale of 'territory'. In 1966, in his article "Il territorio dell' architettura/ Territory of Architecture" 438, he introduced territory as the new scale that architecture has to address, referring to not only physical but also historical, anthropological and geographical concerns. Etymologically the term territory has common roots with the words terror, terrify or terra (earth) as a land ruled by a group with or without violence. By choosing this term, Gregotti refers to an area

⁴³⁸ Vittorio Gregotti, "Territory and Architecture" (1966), Architectural Design Profile 59, no. 5-6 (1985): 342.

that is modified by human intervention⁴³⁹. For his design of University of Cosenza, Cosenza, Italy (1973-1980), Gregotti designed campus that took into account the morphological characteristics of the whole campus as a territory. He saw the campus as defined by the 32000 meter- long Crati Valley and its limits defined by two main railway lines on the east and the west adding the limits created by human intervention into his definition of the territory. Figure 47 shows the large-scale territory that Gregotti defined the boundaries of site by territory of natural and built environment. Therefore the main difference between Gregotti and McHarg's formulation of site is that Gregotti adds the manmade thresholds to the natural thresholds.

In Gregotti's formulation, scale of territory is limited by physical elements (natural and built)— the territory restricted by topography of valley and railways — that are visible and can be depicted with maps and visual analysis. For McHarg the boundaries of a site are more abstract, and are determined by the ecological region which requires exploration of homogenous ecological characters. For McHarg a physiographic region, by definition, displays homogenous attributes inside the given boundaries of a region. The ecological zones become the limits to the site.

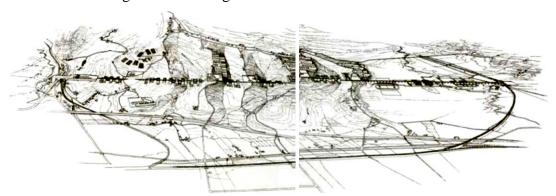


Figure 47. V. Gregotti's design of University of Cosenza (1973-1980). (Source: Kenneth Frampton, Megaform as Landscape, Ann Arbor, Michigan: University of Michigan, 1999).

Since the 1990s, landscape architecture expanded its emphasis to include infrastructures and larger geographies within the scale it is dealing with. Infrastructures are seen as larger continuous systems linking cities and regions. In the articles of Pierre

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⁴³⁹ For Gregotti, architecture is modification of nature. He defined architecture's task is "an architecture of context by revealing nature through modification, measurement and utilization of the landscape". see Vittorio Gregotti, "Territory and Architecture", *Architectural Design Profile* 59, no. 5-6 (1985): 342.

Belanger's "Landscape Infrastructure: Urbanism Beyond Engineering" 440 "Redefining Infrastructure", Stan Allen's "Infrastructural Urbanism", Georges Farhat's "The urban as infrastructural landscape",443, Annalisa Meyboom's "Infrastructure as Practice" 444, point to the potentials of infrastructure systems for generating urban form and exploring landscape architecture's role in promoting cultural and social public life.

A more radical contribution of landscape architecture on formulation of scale and limits of site is provided by landscape urbanism. With the excessive contribution of landscape urbanism in the works of Corner⁴⁴⁵, Waldheim⁴⁴⁶, Mostafavi and Najle⁴⁴⁷, and Koolhaas's recent interest in landscape 448 the perception of landscape has shifted from a passive entity that should be preserved to an active one which has the potential to organize processes in the city. While traditional environmentalism conceives landscape as an urban-natural resource, fixed in an area, landscape urbanism integrated not only the physical features or elements visible on site, but also invisible processes and movements working across scales. At the end of 1990s, Mohsen Mostafavi evaluated landscape as operative landscapes (or machinic landscapes) that were operating across specific and global scales. Dealing with a site demands an understanding of interactions with variable forces (physical, ecological, social, political, economic etc.) that are embedded in site.

In landscape architecture discipline, recent question about site is: if site is where flows (processes and movements) take place as results of larger infrastructures, then, 'What is the boundary of site? According Linda Pollak landscape forces are "acting at

⁴⁴⁰ Pierre Belanger, "Landscape Infrastructure: Urbanism beyond Engineering", in *Infrastructure* Sustainability & Design ed. Spiro N. Pollalis, Daniel Schodek, Andreas Georgoulias and Stephen J. Ramos (London: Routledge, 2012): 276-315.

⁴⁴¹ Pierre Belanger, "Redefining Infrastructure", in *Ecological Urbanism* ed.Mohsen Mostafavi and Gareth Doherty (Baden, Switzerland: Lars Müller Publishers, 2010): 332-349.

Stan Allen, "Infrastructural Urbanism", Points + Lines: Diagrams and Projects for the City, (New York: Princeton Architectural Press, 1999): 48–57.

⁴⁴³ Georges Farhat, "Open space and infrastructure networks in the Val de Bièvre metropolitan area

⁽Paris)", Journal of Landscape Architecture 3, (2008): 56-67.

AnnaLisa Meyboom, "Infrastructure as Practice", Journal of Architectural Education, Alternative Architectures: Alternative Practice 62:4, (May 2009): 72-81

James Corner, 'Terra Fluxus', in *The Landscape Urbanism Reader*, ed. Charles Waldheim, (New York: Princeton Architectural Press, 2006), 21-33.

⁴⁴⁶ Charles Waldheim, "Landscape Urbanism: A Genealogy", Praxis 4, New Orleans, Garrity Printing, (2003): 10-17.

Mohsen Mostafavi and Ciro Najle, Landscape Urbanism: A Manual for the Machinic Landscape, (London: Architectural Association Publications, 2003).

⁴⁴⁸ Rem Koolhaas, 'IIT Student Center Competition Adress', Illinois Institute of Technology, College of Architecture Chicago, (March 5,1998).

multiple scales, often invisible at the physical location" Landscape architect Andrea Kahn supported Pollak's position and claimed that site is in relation with "multiple scalar networks",450 by referring to forces and processes from global to local, economical to ecological, production to consumption. As a response to site's multiscalar dimension, landscape architect Andrea Kahn concluded to focus on operational limits rather than official boundaries. In her article "Defining urban Sites" ⁴⁵¹, she formulates the term "unbound site" That is why, rather than defining clear and descriptive boundaries, recent landscape architecture redefines boundaries of site through the operational limits of site's processes (to what extend it operates); the scope of its functioning. For Carol Burns and Andrea Kahn, the operational limits for a site can be explained under three headings: area of control, area of influence and area of effect" ⁴⁵³. Area of control refers to distinctive boundaries such as property lines. Area of influence relates to encompassing systems and forces even if they do not take place within the official boundaries such as climatic zones, ecological regions etc. Area of effect is area of impact of the following design action that can be in district or metropolitan scale. These boundaries of site include both the physical and non-physical boundaries of relationships operating beyond site. In Charles Waldeim's studio Project, "Milwaukee's Tower Automotive Site", site can be understood within operational scales. In the studio, within Waldheim's perspective, site was framed within an expanded urban network, from truck commerce to energy recycling and discreet systems of transportation, energy production, watershed, and urban services. The studio aims to remedy the loss self-sufficient economic value, environmental contamination of toxic brownfield, decreasing population and no program on site and constituencies of shrinking industrial landscape of the American Midwest⁴⁵⁴. Student Jason Sowell's project, "Digital Pulp" suggested cultivating paper products on the site and restoring them to amend the soil of the site. Figure 48 shows his diagrams on paper manufactures

⁴⁴⁹ Linda Pollak, "Constructed Grounds: Questions of Scale", in *Landscape Urbanism Reader*, ed. Charles Waldheim (New York: Princeton Architectural Press, 2006), 129.

Andrea Kahn, "Defining urban Sites", in Site Matters: Design Concepts, Histories and Strategies, ed.
 Carol Burns and Andrea Kahn 281-296 (New York: Routledge Publications, 2005), 291

⁴⁵² Ibid, 290.

⁴⁵³ Carol Burns and Andrea Kahn, "Why Site Matters?", In *Site Matters: Design Concepts, Histories and Strategies*, ed. Carol Burns and Andrea Kahn (New York: Routledge Publications, 2005), xii.

⁴⁵⁴ Charles Waldheim, *Post-Fordist Public Works: Landscape Urbanism Strategies for Milwaukee's Tower Automotive Site*, (Harvard University Press, 2006), 15-35.

that have influence on each other. Sowell considered boundary of site as the influence area of other paper manufactures that have influence on other.

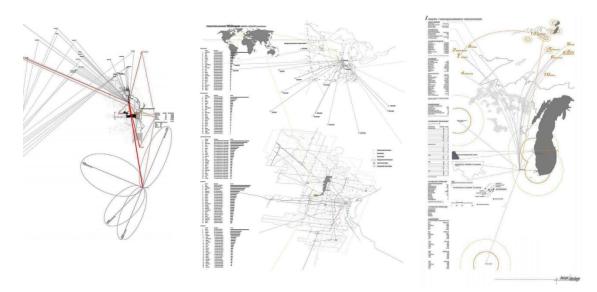


Figure 48. Jason Sowell's "Digital Pulp" Project, mapping paper manufactures that have influence on each other.

(Source: Charles Waldheim, Post-Fordist Public Works: Landscape Urbanism Strategies for Milwaukee's Tower Automotive Site, Harvard University Press, 2006).

Jason Sowell's project, "Digital Pulp", also considered sites of Milwaukee's cluster of "locally available resources including mill sludge and other waste streams, mining the growing stream of unavoidable paper products which continue to accrue around digital information". This exploration added a lower scale investigations. Figure 49 and 50 shows his maps about locally available resources including mill sludge and other waste streams, mining the growing stream of unavoidable paper products. To enable an efficient forestry program, his project considered the site of raw materials and coal burning power plants operating around Milwaukee. But he also paid attention to ecological inputs such as toxic portions of the automobile site, snow dump facilities and its discharging salty snow-melt and its relationship with river which puts the site into ecological scale.

To sum up, recently, site's scale shifted from territory and ecology to operative landscapes working in multiple scales. A site exists at an "unlimited number of scales" which depends on multiple elements, relations, and interdependencies.

⁴⁵⁵ Ibid, 64.

⁴⁵⁶ Linda Pollak, "Constructed Grounds: Questions of Scale", in *Landscape Urbanism Reader*, ed. Charles Waldheim 125-140 (New York: Princeton Architectural Press, 2006), 130.

Recent landscape architecture reconsidered site within multi-scale networks and relationships. It sees landscape as the organizing element of design which "coherently brings together an extended spectrum of scales" ⁴⁵⁷. Each scale brings a distinct meaning of territory and a distinct set of complexity and contexts. Recent landscape architecture proposes moving freely between the scales and between multiple readings of territory without any order and hierarchy. Boundaries of site are dependent on how the designer constructs its relationship between the design methodology, design questions and design proposals.

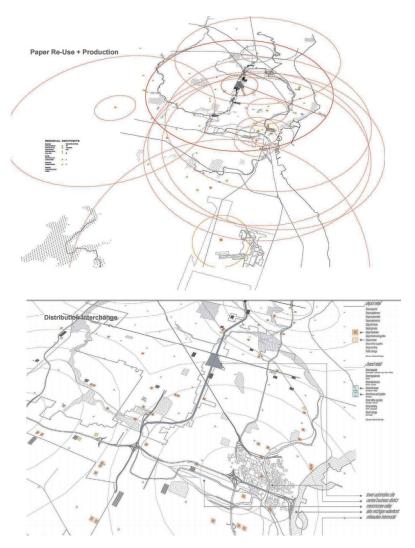


Figure 49-50. Jason Sowell's "Digital Pulp" Project, mapping locally available resources.

(Source: Charles Waldheim, Post-Fordist Public Works: Landscape Urbanism Strategies for Milwaukee's Tower Automotive Site, Harvard University Press, 2006).

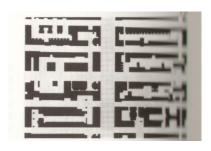
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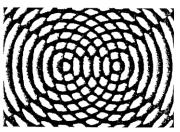
⁴⁵⁷ Carol Burns and Andrea Kahn, *Site Matters: Design Concepts, Histories and Strategies* (New York: Routledge Publications, 2005), 25.

4.3. Site as a Temporal Phenomenon: Change and Process on Site

In architecture, change and temporality is mostly addressed with reference to morphological considerations. Colin Rowe's contextualism was highly innovative in 1960s since he inserted idea of change in his designs rather than fitting into existing conditions. Rowe's formulation of *differentiated building* was based on morphological change in the ideal object (type) when intersecting with the existing environment (context) – its figure-ground patterns, gridal systems or texture. The change was mainly physical and the morphological change was mainly compositional. In 1980s, Kenneth Frampton offered historically reflective context in which regional typologies change into site-specific 'topographies'. Both Rowe's and Frampton's formulation of change were morphological.

Thirty years later, the morphological approach was enriched by idea of dynamic form by especially Stan Allen, Sanford Kwinter and Mohsen Mostafavi. Stan Allen conceived the city mainly as an urban surface and effects on urban surface that gave form to cities. The forces can be dynamics of use, behaviour of crowds or masses in motion, or changing patterns of landscape elements that has a regular and repetitive pattern. The interplay of multiple forces makes the field conditions dynamic. For instance, moire patterns, as one of Allen's description of field conditions, was the outcome of the intersection of two regular fields affected each other and produced a field. In a similar manner to Allen, Sanford Kwinter focused on dynamic formal strategies of landscape as a new practice of architectural practice. He took morphogenesis, and topology theory as a model for design. By evaluating forms as evolutionary segments of a dynamical system, he investigated what the system was actually doing at a given moment or place. Mohsen Mostafavi's machinic landscape was more about analysing the dynamic site. The organization of the project was derived from data gathered from site that were synthesized into computer programs. The machinic landscape modelled the forces on site at an instant time and transferred into a form via specific computer programs. As new computer technologies and parametric design programs developed, Mostafavi's machinic landscape got chance to investigate time-bound change. Figure 51 shows the formal strategies for change on site represented by Rowe's figure ground patterns, Stan Allen's moire patterns and Sanford Kwinter's morphogenesis.





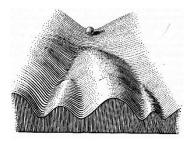


Figure 51. Colin Rowe's, Stan Allen's and Sanford Kwinter's illustrations of site

In landscape architecture, the idea of change is quite different. Change is not external; the landscape is a changing phenomenon by itself. In 1960s, Ian McHarg described landscape as "change is the characteristics of landscape". McHarg's innovative theory of creative fitting 459 was based on the adaptation processes in which an organism or landscape reached a stable position when it achieves the best fit to the environment. He identified landscape form as a state of becoming via an evolutionary process of fitting to its environment. McHarg defined landscape as a sum of interacting, changing, adapting, and fitting systems.

Few decades later, James Corner revised McHarg's creative fitting with open ecosystem approach 460, in which landscape is started to be discussed as ever-evolving, adaptive, self-organizing and operative systems as a response to changing environmental conditions 461. Contemporary landscape design promoted "motion and change that encompasses dynamic processes and multiple visions" In attempting to put a dynamic understanding of landscape into practice, James Corner, Charles Waldheim, Anita Berrizbeita (process-driven approach), Chris Reed, Stan Allen, Adrian Geuze incorporate landscape's self-organizing processes of invasion, succession, adaptation and seeding as models to develop the landscape.

⁴⁵⁹ Ian McHarg claims that, all organisms develop "a kind of creativity, a reciprocal fitting of itself to the environment" to reach the higher level of order and stabilize. See Ian McHarg, *Design With Nature*, 25th Anniversary (New York: John Wiley and Sons, 1992).

⁴⁶⁰ Since past few decades, closed, hierarchical, and stable and fitting ecosystem approach was altered into open complex, self-organizing, cyclic and dynamic ecosystems approach that is in constant flux. See Nina-Marie Lister, "Sustainable Large Parks: Ecological Design or Designer Ecology?", in *Large Parks*,

eds J. Czerniak, and G. Hargreaves (New York: Princeton Architectural Press, 2007), 35-57.

⁴⁶² Anne Whiston Spirn, "The Poetics of Nature: towards a new aesthetic for urban design", *Landscape Journal 7*, no.2 (1988): 108.

⁴⁵⁸ Ian McHarg, *Design with Nature* (New York: Natural History Press, 1969), 1-3.

⁴⁶¹ See Bart Johnson and Kristina Hill, *Ecology and Design: Frameworks for Learning*, (Washington: Island Press, 2002); Nina-Marie Lister, "Sustainable Large Parks: Ecological Design or Designer Ecology?", in *Large Parks*, eds J. Czerniak, and G. Hargreaves (New York: Princeton Architectural Press, 2007); Julia Czerniak and George Hargreaves, *Large Parks* (New York: Princeton Architectural Press, 2007); Anita Berrizbeitia, "Re-placing Process," in *Large Parks*, eds. Julia Czerniak and George Hargreaves, 175-197 (New York: Princeton Architectural Press, 2007).

J. Corner incorporated non-human ecologies into formulation of site's dynamicism. He explored the dynamic processes on site, understanding how they work on site over time what James Corner called *landschaft* and designing with these processes as the agents generating the development of phasing of the project on site. Thus, he focused on regularities, rhythms, cycles and sequences in landscape changing with seasonal or daily temporalities on site, called as *processes*. What was innovative in Corner's method is his trust in nature's productive capacity to develop the project. He organized his projects by means of non-human ecologies that self-organize growth, evolution and adaptation of new programs and events. Here, the design process functions as "potent agents of change" Locally emergent ecologies are generating ever-evolving and indeterminate processes in the urban landscape. Corner's designs end with a phasing of design that puts strategies, steps and scenarios to reach the final situation of design. To work with changing site over time, James Corner preferred to provide plural site maps showing evolution of site over time in time sequences (Figure 52).



Figure 52. Phasing in Fresh Kills Park, generated by ecological systems. (Source: Field Operations, "Fresh Kills Park: Lifescape", Draft Master Plan, March 2006)

Landscape architect Anaradha Mathur and architect Dilip da Cunha developed Corner's evolutionary maps further and attempted to represent temporality via transverse maps. They produced new cartography techniques through sections and photos other than its common images of site. In their book "SOAK: Mumbai in an

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⁴⁶³ Nina-Marie Lister, "Sustainable Large Parks: Ecological Design or Designer Ecology?", in *Large Parks*, eds J. Czerniak, and G. Hargreaves (New York: Princeton Architectural Press, 2007), 51.

Estuary "464, they questioned the categorizations of land and sea and to show there is no clear lines, they draw series of transverse sections of Mumbai River. Mumbai's transverse sections shifted the Mumbai's popular image of island. These sections were producing sequential sections on site. These maps produced images by sections which constituted another kind of continuity (Figure 53). These maps were like taking pictures when walking on site as site over time pictures. At this point, they have similarities with Cullen's sketches presenting serial vision for images of walking. However, the produced images engaging more with time rather than the vision as Cullen did. The way that the sections located on maps provided the atmosphere of layering of site in time, temporality and sequentiality.

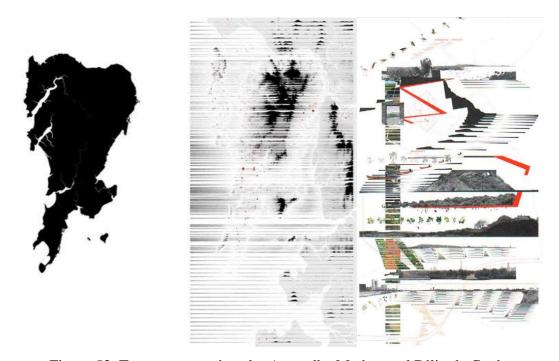


Figure 53. Transverse sections by Anuradha Mathur and Dilip da Cunha. (Source: Anuradha Mathur and Dilip da Cunha, SOAK: Mumbai in an Estuary, New Delhi: Rupa & Co., 2009).

To illustrate further, how landscape architecture and architecture incorporate change and dynamicism, one can compare James Corner's idea of "landschaft" and Mostafavi's concept of machinic landscape. With "landschaft" Corner aimed to accommodate change in landscape into design. Thus, Corner explored past and current rhythms, cycles and patterns on site to be able to make future predictions for the site organized with emerging program elements on site over time. Thus, the process

⁴⁶⁴ Anuradha Mathur and Dilip da Cunha, SOAK: Mumbai in an Estuary, (New Delhi: Rupa & Co., 2009).

overwhelms form and form becomes only a byproduct of process. On the one hand, *machinic* landscape focused on how the dynamic forces of landscape transferred to a model in order to create form. *Machinic* landscape was a form finding activity, that was modeled merely for the time period when the dynamic forces are identified on site. The form was a dynamic but not responding the prospective futures of the site.

To sum up, the understanding of change in architecture was mostly morphological. On the one hand, landscape architecture is quite different since the object of the discipline is a living material. James Corner's landschaft is highly innovative to re-evaluate the temporality, process and change of site. Contemporary landscape architecture provides incorporating self-organizing processes on site that were generating the design per se. Here, landscape is not a passive entity which design acts upon, it processes similar to ecosystems like growth, change, adaptation, and transformation that are seen as integral to design. This approach of temporality, change and process is highly innovative and unique for understanding an organic and dynamic understanding of site. Landscape urbanism transferred this dynamic landscape into the urban scale and offers the complex, dynamic, fragmented and adaptive landscape as a model to work with the dynamicism of 21st century cities.

4.4. Site Between Form vs. Strategy

At the end of 1980s, Rem Koolhaas declared that in 20st century, the contemporary city was the result of a clash of unpredictable events rather than the designed end-product of planned development. Koolhass declaration was also indicating the shift from utilitarian perspective's emphasis on function and land use towards indeterminacy, program and experience. As a result of this indeterminacy in cities, Koolhaas proposed *programming of urban sites* rather than blueprint planning. Accordingly, he suggested architecture to produce on strategies and programmatic assumptions that would exploit the indeterminacy of urban life.

The Park de La Villette Competition was a groundbreaking milestone for architecture and landscape architecture for exploring the possibilities of program and experience that generate open ended, indeterminate processes in urban landscape. In his winning entry for Park de La Vilette Competititon, 1982, he proposed to distribute the programmatic requirements over the total site of 50 hectares in a regular arrangement of points of intensity, designated as *Folies*. Along the park, the *Folies* are repeated as a

series of related neutral objects without an exact function and without any dependent programmatic concern. The infrastructure elements of *folies*, strategically organized to support an indeterminate and unknowable range of future uses over time. The program elements and function of folies will be determined by the life in the park. As Jacques Derrida stated the structure of the folies that left "opportunities for chance, formal invention, combinatory transformation, wandering" Moreover, there are some so called left-over surfaces that are composed of compacted earth and gravel surfaces allow for complete programmatic freedom. Against utilitarian perspective in architecture, in his article, "The Architectural Paradox", Bernard Tschumi claimed that "future of architecture lies in the construction of events", hot the planned land uses. Accordingly, Tschumi suggested an architecture that provides conditions to occur events, rather than producing blueprint plans.

With the second awarded entry for Park de la Villette Competition, Rem Koolhaas also focused on indeterminacy in design but with a focus on program rather than event. Tschumi explained the difference between program and event: "program is more predictable while it relies on repetition and habit; but an event is unpredictable, indeterminate that occur randomly and cannot be designed". However, Koolhaas interpreted program in the urban context is also indeterminate since changes in the architectural object were naturally ambiguous and unpredictable. For the park, Koolhaas offered a strategy for the indeterminacy -'Limited Self-Organization', where the limits set by the designer, the program will undergo constant change and adjustment. The design of the park was a strategic design that made a selective juxtaposition of planned and unplanned elements. For Koolhaas, program gained a strong force by which the architect looking for strategies to pursue his own interest⁴⁶⁸. The main idea of design was providing visitors variety of program experiences compressed in site. Koolhaas designed a strip layer as vertical juxtaposition of various programs (as in Manhattan adjacent skyscrapers) which was responding to changes according to new demands on site. By means of the strip layer, Koolhaas preferred to construct multiple links between activities, communicating the periphery of site with unprecedented events. Koolhaas

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⁴⁶⁵ Jacques Derrida (1986), "Point de folie", in *Architecture Theory since 1968*, ed. K. Hays, (London: MIT Press, 1998).

⁴⁶⁶ Bernard. Tschumi, (1975) "The Architectural Paradox" in *Architecture Theory since 1968*, ed. K. Hays, 214-229 (Cambridge, MA: MIT Press, 1998), 214.

⁴⁶⁷ Ana Miljacki, Amanda Reeser Lawrence, and Ashley Schafer, "2 Architects 10 Questions on Program: Rem Koolhaas+Bernard Tschumi", *Praxis* 8, (2006).

⁴⁶⁸ Ibid.

declared that "the more the park works, the more it will be in a perpetual state of revision",469.

These architects contributed to explorations on dynamic architectural form, programming of sites, indeterminacy and potentials of landscape as a stronger and conceptual alternative to context. They provided ground breaking perspectives for architecture about deconstructing the program over site and for landscape architecture about deconstructing the meaning of park as a natural phenomenon.

By the end of 1990s, landscape architect James Corner transferred Koolhaas' approach towards indeterminacy and program into landscape architecture and developed self-organizing systems of landscape into design. By it further by incorporating transferring ecology's open ecosystems approach, Corner formulated landscapes as open, ever-evolving, and self-organizing systems. In his article "Not Unlike Life Itself^{3,470}, Corner explained landscape design propagating more diverse lifeworlds for both natural/biological and urban/programmatic. Corner especially emphasized on highly organized strategies of survival in the landscape what gave a "design intelligence" and enable the site organizing itself, giving shape and form to the grounds. He explained this design intelligence of landscape as: "once seeded, set up, or staged, ecological succession presents one site state that establishes the conditions for the next",471. Thus, he offered "open-ended, adaptive and flexible and ecologically strategic designing"472. In that sense, Corner's strategic design was quite different from what Tschumi and Koolhaas offered as program. Corner grounded his strategical design perspective, based on the functioning of the ecological processes on site. Figure 54 shows James Corner's Fresh Kills Park Project producing strategies for changing program elements in which the development of natural areas generating the site. James Corner's Fresh Kills Park produced strategies for changing program elements in which the development of natural areas generating the site. What is different in James Corner's field operations is understanding form as a byproduct of process rather than an end product. In Corner's works, process overwhelmed form and form was only a byproduct of process. As Corner stated "Whether a particular project is naturalistic, rectilinear,

⁴⁶⁹ Rem Koolhaas and Bruce Mau, "The Netherlands: Landscape Architecture – a process", in S, M,L, Xl,. (Rotterdam: Ruijter M. Publishers, 1995), 27.

⁴⁷⁰ James Corner, "Not Unlike Life Itself. Landscape Strategy Now", Harvard Design Magazine 21, (Fall 2004): 31-34.

⁴⁷¹ Ibid, 32. ⁴⁷² Ibid, 34.

curvilinear, formal, or informal is irrelevant; ... recovering landscape is less a matter of appearances and aesthetic categories than an issue of strategic instrumentality, 473.

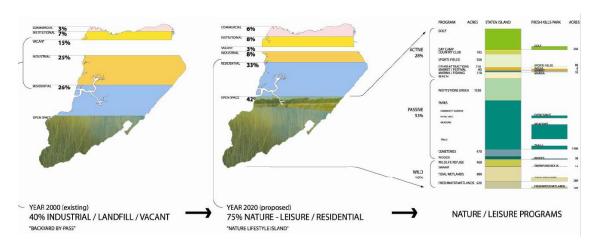


Figure 54.J. Corner's strategies for programming in Fresh Kills Park Competition. (Source: Field Operations, "Fresh Kills Park: Lifescape", Draft Master Plan, March 2006)

20 years later than Park de la Villette project, Bernard Tschumi and Rem Koolhaas attended a new park competition: Downsview Park Competition Project, in 2000. It is remarkable to observe how they renovated their attitudes towards program in their design schemes for Downsview Park by incorporating self-organizing ecological processes into program development. For that 259 hectares redevelopment area of former military airbase site, Bernard Tschumi and landscape architect Derek Revington's design "The Digital and the Coyote", offered juxtaposition of digital mass culture with the emerging ecology of the wild to regenerate unpredictable wildness at its core. The project based on modification of the current cultural and damaged vegetational situation. The project includes richly detailed diagram of strategic phasing of succession planting and seeding of ambient urbanity in fifteen years. Figure 55 shows Tschumi and Revington's scheme for development of the park due to strategically phasing of invasion and succession processes of plants groups in fifteen years. The development of the park was planned due to invasion and succession of natural fingers inside the western interior of the park (first five year) and connecting with basin activities and leading towards center to link to coyote territory (second five years) and flowing of the basin activities to territory (third five years). Natural fingers sustained

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⁴⁷³ James Corner, *Recovering Landscape: Essays in Contemporary Landscape Architecture* (New York: Princeton Architectural Press, 1999), 4.

the wild gardens, nascent and more fragile ecologies of the wetlands and they enabled the succession landscapes. In a similar manner, Rem Koolhaas and Bruce Mau's winning entry "Tree City" for Downsview Park, suggested trees rather than buildings, served to catalyze the change of low-density metropolitan life. Moreover, economic value attributed to the landscape that will lead the development of the park and the city. The development of the park was appreciated by land value to be spent managing the park.

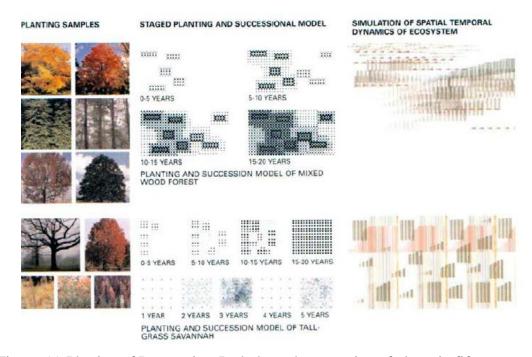


Figure 55. Phasing of Downsview Park through succession of plants in fifteen years, in Bernard Tschumi and Derek Revington's scheme.

(Source: *Harvard University GSD 2241: Landscape Representation III*, Fall 2011, "Representing Biotic Ephemera: Floral and Faunal Networks")

In landscape architecture, strategic design was based on concerning ecological systems to organize the site especially focusing on modifications in the dynamics of nature such as vegetational change or change in the water systems. In that sense, what landscape architecture offered as strategic design was quite different from what architecture did. Recently, landscape architecture contributed extending the program in architecture not only driven by the human and cultural forces, but also by natural processes. On the one hand, landscape architecture practices focuses on "adapting to changing conditions rather than forms that conform an aesthetic whole",474. There are

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⁴⁷⁴ Anita Berrizbeitia, "Re-placing Process", in *Large Parks*, eds. J. Czerniak and G. Hargreaves ((New York: Princeton Architectural Press, 2007), 178.

various names for such kind of landscape design such as evolutionary design⁴⁷⁵, adaptive design⁴⁷⁶, ecological design,⁴⁷⁷ process-based design etc. Whatever the name is, landscape architecture's strategic design perspective, to some extent, is undermining the architectonic form by putting strategy over form. In that sense, the outcome of the design became strategies and tactics rather than form and composition. Form loses its previous dominance in design.

⁴⁷⁵ Martin Prominski, "Designing Landscapes as Evolutionary Systems", *The Design Journal* 8, Iss. 3.(2005).

⁴⁷⁶ Nina-Marie Lister, "Insurgent Ecologies: (Re)Claiming Ground in Landscape Urbanism", in *Ecological Urbanism*, ed. M. Mostafavi and G. Doherty, 524-535 (Lars Müller Publishers, 2010).
477 Nina-Marie Lister, "Sustainable Large Parks: Ecological Design or Designer Ecology?", in *Large*

Parks, eds J. Czerniak, and G. Hargreaves (New York: Princeton Architectural Press, 2007),

CHAPTER 5

CONCLUSION:

AFFIRMATIONS AND LIMITATIONS

In concluding this study, my research has evidenced that the "conceptual companionship" between architecture and landscape architecture on site is largely an outcome of the historical change in the theoretical formulations of context, site and landscape. I argue that the significant increase in theoretical speculation on site after the 1980s did not randomly emerge; but was directly related to the historical development of the debate on context in architecture and extension of the notion of landscape in landscape architecture.

This thesis situates the conceptual discussions on site in architecture theory that is embedded in the debate on context in relation to urbanism. The initial dissolution in the debate on context was accelerated by phenomenology influenced architecture that widened the scope of debate on context beyond the matrix of the historical city. Phenomenological studies in architecture contributed to emphasis on site, site-specificity and sense of place and experience of place.

Architecture and landscape architecture influenced each other especially after 1980s and they came together at the intersection of a new "site" that provide innovative potentials for architecture, landscape and urban design. Initially, landscape architecture influenced from Walter Gropius' ideas on modern architecture and Garrett Eckbo, James Rose and Dan Kiley demanded development of modern landscape architecture. Since the 1980s, these two disciplines started to affect each other in an unprecedent way as an outcome of post structuralist discussions on dissolution of boundaries. The winning entries of Park de la Villette Competition, 1982 by the architects Bernard Tschumi and Rem Koolhaas, evaluating park as a cultural phenomena, were highly influential for landscape architecture. It was the end of 1980s when architect Rem Koolhaas and landscape architects Anne Whiston Spirn, James Corner and James Corner declared that landscape is the primary element for urban order. With the impact of landscape urbanism and extension of notion of landscape as natural-cultural synthesis, since the 1980s, landscape architecture enriched broad range of formulations

of site common to architecture and landscape architecture disciplines. Throughout 1980s and 1990s, architects Rem Koolhaas, Sanford Kwinter, Mohsen Mostafavi, Stan Allen, Alex Wall, and Kenneth Frampton focused on the potentials of landscape for architectural design as form, as program or as critic. They led to emergence of a new area of investigation particularly revolving around form of a dynamic site. Architects also influenced from open ecosystem approach that landscape urbanism invoked and in Downsview Park competition in 2000, Rem Koolhaas and Beernard Tschumi revised traditional architectural program by harmonizing it with non-human ecological systems. Since the 1980s, J. Corner's writings on recovering landscape, John B. Jackson's and Elizabeth Meyer's exploration of notion of landscape; Annalisa Meyboom's, M.Potteiger's and S. Allen's writings on infrastructural urbanism and landscape infrastructure; Ian McHarg's, V.Gregotti's, Richard Forman and Michel Godron's, Nina Marie Lister's and C. Waldheim's investigations on scale of landcape; J. Corner's, hermeneutical landscape, E. Meyer's and, Carol Burns' re-interpretation of site as a relational construct; Mohsen Mostavi's operative landscapes, J.Corner's performative landscapes on dynamic landscape were all contributed to development of a more hybrid and multiple understanding of site. The extended notion of landscape as natural-cultural synthesis, produced broad range of formulations under the theoretical and operative discussions on temporal, multiscalar, performative, adaptive, and relational understandings of site. Recently, it can be claimed that architecture and landscape architecture created a new notion of site that is quite different from its traditional descriptions.

To sum up, the thesis shows it is obvious that the nostalgic notions of a site being essentially bound to the physical notions have left behind. This situation is closely related with the shifting relationships between architecture, landscape and city in architecture and landscape architecture disciplines. As a result of parallel developments in architecture and landscape architecture, the two disciplines seem to have created a recent convergence towards urbanism and a relationship that has not previously existed. "Site" became a new theoretical and operative field that the two disciplines drain their own theoretical and practical information, experience, practice and instruments.

As the two of the disciplines start to converge on the common ground generated around "site", the two might mutually benefit from in theory, practice and education. They develop a symbiotic relationship that has never been so close with the maximum benefit until now on. While both disciplines affirm the value of an open understanding

of "sites", one should also be aware of the limitations of the term. The following section speculates on why the recent formulations of site (subjective readings of sites, the performative aspects of sites, the dynamic aspects of sites, the neutrality of site, notations and pedagogies of sites) carry a promising potential for theoretical exploration for architecture and landscape architecture and the limitations of this new formulations of site.

Site has No Domain

In the first half of the 20th century, the environment was understood via binaries like urban vs. rural (anti-urban), or city versus landscape (man-made vs. natural). Figures like Ian McHarg and Patrick Geddes heavily focused on the rural or landscape as distinct environmental categories and developed their theoretical work in relation to natural systems. As Patrick Geddes' separation of rural vs. urban regional systems and Ian McHarg's ecological method of layering the landscape conceptualized the city as the antithesis to the landscape so did Hubert de Cronin Hastings and Gordon Cullen with townscape, Colin Rowe with the contextualist collage city, Ernesto Rogers' city of historical continuity and Aldo Rossi's analogous city.

However, after the post-structural turn, the city was started to be seen as an entity structured by a system of complex relations between different, interdependent, but possibly contradictory forces where nature and city are intermingled. With landscape urbanism as an established theoretical position developed within landscape architecture, architecture and urbanism, the established dichotomy between the city and the landscape was rejected. Elizabeth Meyer's conceptualization of landscape as "what is not architecture", Spirn's rejection of landscape as something to be planned separately from urban environments and, Corner's rejection of the pastoral view of landscape are based on the acceptance of a hybrid which sees both nature and culture as human constructs. In James Corner's words "nature and culture are linguistic constructions with unstable foundations" and they are the two sides of the same coin.

In contrast to the term context which was almost always used with urban connotations, site spans over an indistinct territory that can cover the urban as well as

⁴⁷⁸ Richard Weller, Between hermeneutics and datascapes: a critical appreciation of emergent landscape design theory and praxis through the writings of James Corner 1990-2000 (Part One)", Landscape Review 2001:7(1), 11

the rural, city as well as the landscape. In that sense, as Carol Burns declared "there is a neutrality of site", ⁴⁷⁹. Site is a generic term that works between the blurred and dissolving boundaries of the environmental disciplines and provides a common ground on which architecture and landscape architecture can act.

The dissolution of categories of architecture, landscape and urban is not only perceived at the conceptual level, but also at physical level. One recent tendency in architecture that manifests this dissolution is landform building, where the building and the landscape become indistinguishable. ⁴⁸⁰, "Figuring the site", as Elizabeth Meyer calls it, landform building does away with the boundaries between figure (the building) and ground (the site); the roof and the ground are inseparable by means of a continuity of surfaces; where the field or the topography becomes the form generator for architecture. The site or the field condition constitutes the overall order of architectural design⁴⁸². Michael Spens explains this tendency as architecture becoming landscape, building becoming non-site and the "site materializ[ing] as the work per se" ⁴⁸³.



Figure 56.Landform architecture, Yokohama Ferry Terminal. (Source: http://www.arcspace.com/architects/foreign_office/yokohama/yokohama_index.html

⁴⁷⁹ Carol Burns and Andrea Kahn, *Site Matters: Design Concepts, Histories and Strategies* (New York: Routledge Publications, 2005), 165.

.480 Stan Allen and Marc McQuade wrote a book on recent samples of geomorphic megastructures in which architecture and the surface of the earth interpenetrated into each other. See Stan Allen and Marc, *Landform Building: Architecture's New Terrain*, (Zurich: Lars Muller, 2011)

⁴⁸¹Elizabeth Meyer, "Site Citations: The Grounds of Modern Landscape Architecture", in Site *Matters: Design Concepts, Histories and Strategies*, ed. Carol Burns and Andrea Kahn (New York: Routledge Publications, 2005), 106.

⁴⁸² Some examples for landform buildings are Yokohama Ferry Terminal, competition, 1995, by FOA, Renzo Piano's Paul Klee Museum, in Berne, 2005, Odile Decq's Liaunig, Vancouver Convention Centre West, 2009, by LMN + DA with MCM, Collection Museum in Neuhaus, Austria, 2008, Peter Eisenman's *City of Culture of Galicia*, Santiago de Compostela, 1999, Spain, or Vicente Guallart's Denia Castle Cultural Park in Spain, 2003.

⁴⁸³Michael Spens, "Introduction: Site/Non-Site, Extending the Parameters in Contemporary Landscape", *Architectural Design*, Profile No 186, Vol. 77 No 2, (2007): 6.

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Contemporary landscape architecture aims to cover both the visible and the invisible forces working on site. According to J.B. Jackson, we are in the era of "Landscape Three" in which we experience informal and fragmented landscapes identified by relationships 484. It is also possible to observe this distinction when one compares Colin Rowe's representations of site via figure ground maps in the 1960s and Stan Allen's representations of site via field forces in the 1990s. Rowe's site includes visible physical elements on site such as solids and the voids of the city. Arguing for a shift "from context to field",485, Stan Allen aims to incorporate complex geometries regarding urban forces, sequence of events, dynamics of use, the behaviour of crowds in motion into the formulation of sites. In the *moire* patterns and the intersection of waves as Allen sees the potential of representing the complexity and the indeterminacy of contemporary urban situations. A site includes the multiplicity and pluralism of both physical elements, and invisible forces such as social constituencies, ideological constructions, political desires, ecological processes, events and possible interactions amongst those forces. In that sense, neither the physical layering of site, nor the stylistic categorization or the formal language of landscape is the main focus of landscape architecture. Site accommodates all.

Site provides a framework for layering

Since the 1980s, influential authors and architects like Kenneth Frampton, Vittorio Gregotti, Christopher Alexander and Christian Norberg-Schulz particularly influenced by phenomenology's emphasis on site specific and sensual experience of site that widened the scope of the debate on context beyond the matrix of the historical city. A parallel development took place in landscape architecture theory where a subjective and relational understanding of site became important. Instead of seeing site merely as superimposed layers of physical elements, James Corner's hermeneutics regarding site; Elizabeth Meyer's readings of landscape history from a feminist perspective; D.W Meinig's proposal of different lenses for landscape and Matthew Potteiger's proposal

⁴⁸⁴ Jackson categorized rural vernacular and legally-established landscapes landscape as landscape one; scenic and aesthetically produced landscapes as landscape two, and informal, fragmented, and ephemeral landscapes as landscape three. John Brinckerhoff Jackson, "Concluding with Landscapes", *in Discovering the Vernacular Landscape*, ed. J.B. Jackson, (New Heaven: Yale University Press, 1984), 185-158.

⁴⁸⁵ Stan Allen, "From Object to Field," in *Architecture After Geometry*, *Architectural Design*, vol 67, no.1/2, (Jan-Feb 1997): 24.

to view landscapes in the form of different narratives made it possible to see landscape as accommodating multiple meanings.

In a world of fast-changing realities and indeterminacies, site is a phenomenon which is hard to pin down regarding the factors that impact upon sites, which makes it impossible to comprehend and control as a whole. As Andrea Kahn and Carol Burns stated in their book "Site Matters" 1486, it is obvious that comprehending site requires many horizons—historical, philosophical, rhetorical, legal; phenomenological, analytic, formal, descriptive, aesthetic; temporal, strategic, tactical; social, economic, political. Currently, site provides flexibility for a designer to construct several possible perspectives. The term site offers new reading of "context"s, while the term context was left aside due to the historical legacy of Contextualism as defined by Colin Rowe. Site allows the designer (the user or anyone who interacts with it) a 'frame' to look at this complex and relational phenomenon rather than attempting the impossible task of grasping it as a whole: collecting all possible information about it. In the "neutrality" attributed to site, lies a new potential.

Site performs like a Living Organism

In the 21st century, cities are characterized by rapid change linked via complex networks of communication, knowledge, resources, finance, and migration. Landscape architecture provides opportunities to work with the contemporary urban dynamism by attuning landscape to this dynamism. By taking its impetus from ecology regarding how ecosystems behave, landscape architecture sees change as an organic process. Since the 1990s, landscape architecture theory argues that temporality should be incorporated into landscape design by considering landscape as a living system which functions like ecology's self-organizing systems changing, adapting and evolving and organizing the site by itself. After the 1990s, as new computer technologies and parametric design programs made possible for the advocates of dynamic landscape, to investigate time-bound change.

The new approach in landscape architecture on temporality, change and process is highly innovative and unique to for understanding an organic and dynamic

⁴⁸⁶ Carol Burns and Andrea Kahn, *Site Matters: Design Concepts, Histories and Strategies*, (New York: Routledge Publications, 2005).

understanding of site. Here, site is like a living organism that changes, organizes itself, grows and decays. This understanding of dynamic site also modifies the role of the landscape architect or architect and her relationship with site. Landscape architect or architect does not develop one blueprint for the end result anymore. Rather, she designs the conditions for the ecosystems to develop and let the system grow, evolve where there is no one final state. To cope with change, she would prefer to incorporate adaptive strategies for developing the design conditions to strategically harbor the site's own productive capacity.

One can, and maybe should, argue that this is an inevitable result of the difference regarding change between landscape and architecture, where in the latter one has to come up with a "building," whereas the former incorporates change in multiple ways. A building is constructed to be durable, as a stable shelter from the elements. A building can accommodate temporality in quite limited ways in comparison to a landscape, like ageing or a limited change in form via flexibility. Even kinetic architecture is limited to a kind of formal repertoire. Nature has a slower pace and the adaptation processes that landscape architecture responds to take a lot of time. Although adaptability of form might be limited, adaptability can be reinterpreted in terms of program and activities distributed on site where the temporary or deployable character of architecture can be utilized, and thus architecture, in the form of built objects, becomes part of an overall landscape strategy and its consequent program. The program could be designed in an adaptive way with respect to seasonal changes, day-night changes, event changes etc. inside and outside of the building.

Second, the process-based landscape architecture is convenient for urban transformation areas and large scale interventions within which self-organizing ecological processes function. In contemporary metropolises, it is highly unlikely for the practical exploration of such processes to take place since it is impossible to find such vast vacant lots. Probably, this is one of the reasons why landscape urbanism practices found application in post-industrial sites or along urban infrastructure systems. It should be kept in mind that Landscape urbanism was formulated in response to condition of 21st century American urbanism where large open areas are horizontally distributed due to urban sprawl where the urban elements and the landscape elements of this environment are practically indistinguishable.

Third, architecture discipline prefers phasing of design for the easement of implementation. It divides the project into physical zones to be implemented

sequentially. However, the dynamic phasing technique needs more effort and time in monitoring, experimenting and developing the end state of design. In the implementation phase, it puts too much burden on the maintenance and implementation of the project due to economical restrictions.

Site Operates Across Scales

With globalization, the notion of site becomes more complex and broad including deconcentration and diffusion of territories, international trade, dispersed sites of industry, emergence of internal peripheries, spaces of exchange and the networked relationships between these spaces of flows. This is why individual sites or nodes are dependent on larger economic networks. Although some of them are geographically away from each other, they are closely related within economical or technological networks. Or some of them may be geographically close but contextually there is no communication. That is why, sites are currently related to each other at multiple scales. One can argue that the previous understanding of site as multi- layered entities the dependence on networks was added and thus now we talk about networked sites.

The theoretical work of Richard Forman and Michel Godron, Felix Guattari and then, James Corner, Nina-Marie Lister, Elizabeth Meyer, Anne Whiston Spirn embraced ecological principles and the need for an understanding of sites in an ecological scale. Thinking on the scale of ecology involves networks of urban-natural relations and it focuses on systems and capacities of landscape rather than geographical boundaries. Mohsen Mostofavi's machinic landscape (operative landscape) the boundaries of a site to a different perspective – through the operational limits of site processes (to what extend it operates); or the scope of its functioning. Initially, understood site as a multivariable phenomenon hosting sets of conditions attached to local, global, economical, ecological, political and socio-cultural networks. It can be claimed that site is a conceptual shift. It replaced the wholistic understanding of context. By referring to site, we gather up all the specificities and networked relationships between individual sites. Thus, site enables us to formulate it in an unlimited number of scales. It brings freely moving between scales and coherently bringing scales into a whole under a goal or a research question or a design problem. The boundaries and scales are determined by the operative areas of the processes and movements.

Site is about Programming Experience

In 21st century cities, contradictory uses can come together in unpredictable ways. Land uses are vertically and horizontally mixed in the contemporary city. Since the 1970s, there is a growing concern for discovering in architecture, planning and urban practices as an outcome of growing. As 1970s' site-specific art practices explored how to relate the art object with site, and the studies in environmental psychology and phenomenology contributed to the experiential level of city. Kevin Lynch's cognitive maps—of urban experience; Christian Norberg-Schulz's promotion of place as an outcome the phenomenological experience of a site and Kenneth Frampton's critical regionalism in response to the culture of a place, Y. Tuan's⁴⁸⁷ and Kaplan and Kaplan's emerging explorations on the experience of landscapes—led us to focus on senses and feelings, and experiences. These studies argue that sites offer specific and unique experiences deriving from their characteristics. Against an all-inclusive, totalizing perspective to context, site-specificity engages unique properties of landscape.

This shift towards experience in addition to the utilitarian perspective's emphasis on function and land use, brings forward a reinvestigation of the relationship between program and site experience. The experience of a site can be employed as a unifying tool to combine contradictory programs, and help develop multi-functionality. Maybe this is why context is no longer the right term or concept to respond to the requirements of the contemporary city as Contextualism privileges a limited sense of site-specifity and its relationship to sensual experience.

By focusing on fragmented, uncontrolled site, architecture theory discusses indeterminacy and experience in terms of architectural program and social uses that generate open ended, indeterminate processes in urban landscape. Architects like Rem Koolhaas and Alex Wall reinterpret architectural programs in the dynamic and fragmented urban environment and offer programming of sites rather than employing design to give them a final form. In Park de la Villette Competition (1982), Rem Koolhaas focused on *programming* as a generative force of human events on the site to supply ever-changing, urban agglomerations. Koolhaas suggested programmatic indeterminacy, strategies and tactics for the juxtaposition of unplanned relationships

⁴⁸⁷ Tuan, Y.(1997) Space and Place: the perspective of experience. Minneapolis: Minnesota Press.

between park programs. Architect Alex Wall⁴⁸⁸ evaluated the site's dynamic surface as a living, adaptive and connective tissue and he suggested programming the urban surface by offering strategies such as multi-layering surface, folding with smooth geology, providing non-programmed uses, impermanence for future demands and improving movement.

On the one hand, contemporary landscape architecture theory ascribes experience to this indeterminacy that could replace program. What is unique for landscape architecture is the arrangement of the distribution of experiences along a site as a whole, by concerning bodily experiences and movement, that is it offers writing the program via experience along the entire site. Thus it offers architecture a way of seeing spatial experience as the direct result of a program of bodily experience and innovative way of writing the architectural program. Thus, the phenomenology influenced perspective to site provides a new look to site design in which architectural program is directly replaced by an experiential scenario. Of course what comes closest to proposing such a scenario is Bernard Tschumi's understanding of event and the creation of event spaces.

Site is a Notation

Philosopher Nelson Goodman⁴⁸⁹, in his discussion of notation, distinguishes two types of art forms. One is autographic and the other one is allographic. *Autographic arts* are dependent on the direct contact of the author. On the other hand, *Allographic arts* are capable of being reproduced at a distance from the author by means of notation. Goodman claims that architecture is a mixture of the two, for being highly abstract and self-referential and, at the same time, aiming instrumental transformation of existing reality. In Goodman's terms, notations are capable of producing new configurations out of given materials. Concluding from Goodman's statements, Stan Allen states that architectural representation is "never neutral, and the means of representation always leave a trace on the construction". Architectural representations are reflections of the

⁴⁸⁸ Alex Wall, "Programming the Urban Surface" in *Recovering Landscape: Essays in Contemporary Landscape Architecture, ed.* James Corner, 233-249 (Princeton Architectural Press: New York, 1999)

⁴⁸⁹ Nelson Goodman, *Languages of Art: An Approach to a Theory of Symbols*, 2nd edition, (Indianapolis: Hackett Publishing Company, 1976)

⁴⁹⁰ Stan Allen, "Mapping the Unmappable: On Notation", in *Practice: Architecture, Technique and Representation*, ed. Stan Allen (London: Routledge, 2009).

shifting field of the contemporary city and they reproduce a new reality by means of notations.

In 1960s, Ian McHarg wanted to overcome subjective biases by means of compilation of facts via objective map overlay procedures. Ian McHarg mapped out site by simplifying the complexity of natural elements via layering mineral resources, slope, accessibility, water resources etc. and attribute the scientific information of site in maps. Today cities are where material and immaterial information, capital and physicality are intermingled in complex relationships and formations. The contemporary urban situation changes into dispersed, dynamic and complex networks of flows and the representations of site start to vary accordingly. In 1990s, James Corner accepted the complexity of the landscape and offered multiple readings from this complexity through his eidetic mappings. Since few decades, the incorporation of the need to represent experience and ways of experiencing a site enhances architectural representation via the proliferation of sketches, perspective drawings, rendered pencil drawings, collages and, diagrams that illustrate individual perceptions. Gordon Cullen's sketch drawings, Christian-Norberg Schulz' drawings and photography, Kenneth Frampton's graphic designs and James Corner's eidetic images and eidetic mapping are different ways of expressing subjective experience and individual perception on site. in 1960s, Gordon Cullen's sketch drawings aimed to display the serial vision that one experience in the traditional towns and Christian-Norberg Schulz' drawings and photography aimed to display the eye level experience of site. In 1980s, Kenneth Frampton's graphic designs aimed to display political and cultural dimensions of experience. At the end of 1980s, Rem Koolhaas used visual tools, maps, diagrams, drawings, and texts as new terminologies to speculate on specific conditions of an area. By producing as many visual images and diagrams as it can, he showed that there are abundant of realities, multiple viewpoints, multiple contexts in the contemporary city.

In 1990s, James Corner reversed landscape architecture's main instrument, the maps, into a subjective representation tool. James Corner also argues that any landscape representation (particularly maps) is subjectively and culturally constructed. As he prefers to focus on the productive potentials of maps to explore and shape new realities, mapping itself becomes a problem of design and design itself. He re-interpreted cartography techniques as essentially subjective, interpretative and fictional tools in order to explore and shape new realities. Mapping as a creative and critical act subjectively bringing the pieces together.

Departing from the discipline's own conventions landscape architecture revisited cartography techniques and created sequential maps and phasing maps to represent temporality as it takes place on site. Instead of creating one site plan, James Corner prefers to provide plural site maps to show the sequential evolution of a site. Landscape architect Anaradha Mathur and architect Dilip da Cunha follow Corner and attempt to represent temporality via transverse maps. Their maps produce sequential sections that have continuity on site. The way that the sections are located on maps provides layering of site with temporality and sequentiality. These techniques illustrate sensuous qualities of place, characteristics and atmosphere of site. It seems like the representations become more and more abstract in time; even the intension behind the representation gets blurred more.

Recently, the revised use of cartography techniques have become the primary techniques for displaying complexity, subjectivity, dynamism and the evolution of a site in time. In addition to cartography techniques, video techniques are widely used in recent landscape architecture schools to insert the sense of time into analysis. Especially ETH Landscape Architecture Program in Switzerland enhanced the video techniques combined with parametric design tools under the supervision of Christophe Girot.

Development of these new notations and representation techniques provides an inspiring new catalogue for architects. However, one should also be critical of the manipulative power of such representations. Landscape theorist Ziva Kolodney argues that garden design's visual techniques such as screening and framing via the urban gaze (the eye looking at the city) constructs ideological and social identities, and harbors "exercises of power". According to Andrea Kahn, representation techniques construct avenues of signification through which "they make site concepts manifest by design," ⁴⁹²in their capability to construct site knowledge. Thus, it should be argued that recent notations and representation techniques on site are tools for constructing as well as deconstructing the reality of sites.

⁴⁹¹ Ziva Kolodney, "Between knowledge of landscape production and representation", The Journal of Architecture 17, No 1, (2012): 99.

⁴⁹² Andrea Kahn, "Defining urban Sites", in Site *Matters: Design Concepts, Histories and Strategies*, ed. Carol Burns and Andrea Kahn 281-296 (New York: Routledge Publications, 2005), 291.

Pedagogies on Site

Architecture theory has always been in touch with domains of discourse in developing new frameworks. Theory transgresses the disciplinary limits of convention and introduces new areas for conceptual exploration for architecture. While the products of such exploration may not take fast hold in practice, academic institutions welcome them as academia remains the hotbed of exploration only to deliver them back to practice. Therefore architectural pedagogy offers an "experimental space between instrumentality and conceptual speculation". When we explore pedagogies revolving around site, we can see that conceptual speculation finds its counterpart in methodology, in instruments and in representation techniques.

Colin Rowe's pedagogy of contextualism in Cornell University from 1963 to 1988, explored how to bringing together the old and the new in response to the problem of urban reconstruction in Europe after WWII. He configurated urban context by means figure ground maps, (in a way, the urban texture) based on Gestalt principles of dualities. What was innovative for that era in Rowe's pedagogy was the morphological approach exploring how the modern type changed when it exposured to a site pressure, in other words, a context. Accordingly, the methodological steps of the studio was: explaining site pressures, proposing the pre-deformed shape (ideal type); constructing a design problem; and making decisions on how to relate with the context.

The same era, in University of Pennsylvania landscape architect and town planner Ian Mcharg developed his ecological planning method in landscape architecture. With respect to Rowe, McHarg explored other side of the coin, the nature or the ecology as showing the way how to design. Like Rowe, McHarg formulated dualities like urban vs nature. Rowe was exploring cities, McHarg was exploring landscapes and their thinking was corollary to see the two as antithetical phenomena. By using nature and ecology interchangeably, McHarg, read landscape through information on natural processes, which he aimed mimicking in his designs. His ecological planning method was based on suggesting opportunities and constraints for various possible land uses after a long scientific and analytical research on landscape elements and values in favor of supporting nature. He developed map overlay mapping to explore unique or scarce landscape phenomena on site by analytically representing

⁴⁹³https://www.architectural-review.com/today/radical-pedagogies-in-architectural-education/8636066.article

natural elements layer by layer. Like Rowe, McHarg tried to simplify the elements by layering or by classifying the dualities and then found the relationships between these elements via compability matrices. It was a configuration of world in terms of dualities.

In the 1970s, another paradigm emerged in reaction to the rationality of modern architecture for excluding the human dimension. Focusing on experience and poetics of place Kenneth Frampton, in Columbia University between 1972-1988, aimed to see the phenomena of experience in correlation with the larger dynamics of politics, capitalism and globalization. Frampton's teachings in Columbia were centred around typological and contextual understanding of architecture. Different from Rowe's types, Frampton proposed combining regional typologies and site-specific 'topographies' with a contextual sensitivity towards a historically reflective understanding of urban context. His pedagogical approach aimed to incorporate site specificity into the generic type. It led an exploration on history, culture and social specificities of particular sites and their spatial relationships. In emphasizing the human dimension he preferred free hand sketches, renderings, eye level perspectives to represent the subjectively interpreted bodily experience of buildings and graphic design techniques such as collage to explore the essence of architectural images, instead of plans or maps. In Frampton's pedagogy, the dualities in the city dissolved into specific, sensuous and experiential qualities.

By the end of the 1980s, recognizing the speed of urban change and growth and the lack of any sense of overall unity in cities, Rem Koolhaas, declared that fragments in the city should not have an overall coherence and every fragment could create its own context. While Colin Rowe's collage city and Kenneth Frampton's critical regionalism were based on combining fragments and polarities of the modern and the traditional or the local and global harmoniously, Koolhaas intentionally decontextualized these fragments. At the end of 1990s, in his studio in Harvard GSD, Koolhaas privileged analysis before design, or research by design or vice versa. The results of the analyses were almost always represented in diagrams accompanied by cynical captions in plain irony without any claim for scientific objectivity. Koolhaas' studio's research proposals were based on strategies and programmatic assumptions that would exploit the indeterminacy, dynamicism, multi-contextual urban life.

By revising Ian McHarg's theory of adaptive landscape, exploring the boundaries of the disciplines in 1980s in University of Pennsylvania, James Corner led the landscape urbanism movement in America. At the beginning of the new millenium, in Harvard School of Design, James Corner explored performative strategies of

landscape (focusing on how landscapes work, what they do, how they interact, and what agency or effects they might exercise over time). The performative landscape was seen an active and dynamic phenomena that works in certain ways, that relates to change and adapts and thus survives. Corner's and Chris Reed's studio in Harvard, attempted to suggest flexible and adaptive strategies by combining parametric design and Stan Allen's field theory⁴⁹⁴ including the idea of mat urbanism⁴⁹⁵ that sees buildings as surfaces that can extend in any direction and can be loaded with program elements. Within this framework the open fields/mats serve as dynamic systems that provide adaptability, resilience, and flexibility for ecological systems. In the studio, the mats were designed according to their internal logics (size, shape, adjacency, connection, etc.) and their response to external forces whenever they interact with them. The architect served as the agent that triggers the self-organizing ecologies on mats. Corner's approach changed the role of the site, the role of the architect and the role of the design all together.

In contrast with Corner, Mohsen Mostafavi led the effort to explore the potentials of landscape urbanism under an interdisciplinary program from 2000 to 2004. He founded the Landscape Urbanism Program at the AA by gathering different design disciplines on the common ground of territory to design complex processes in contemporary conditions. With Ciro Najle, Mostafavi especially preferred to work not only on public, or private property, but especially on hybrid places. The main focus of the landscape urbanism studio at the AA is the operative aspect of landscape to understand how landscape operates across local and global scales. While Corner's *landschaft* produces strategies, Mostafavi's *machinic* landscape produces forms. Therefore the studio's main contribution lies in the development of advanced computer simulations where site data is transferred into form as a result of the dynamic processes generated by computers.

Academic institutions are hosts where intellectual, political, economic and social relationships in the society are embedded in. They provide spaces of confrontation for changing ideological, intellectual, political, and power relations in the society. They were also mechanisms for the reproduction of the required instruments for the concepts of the intellectual environment. Cornell University's role on the development of

See Stan Allen, "From Object to Field," *Architecture After Geometry*, *Architectural Design Profile* 127, (May-June 1997)

⁴⁹⁵ See Stan Allen, "Mat Urbanism: The Thick 2-D", in *CASE: Le Corbusier's Venice Hospital*, ed. Hashim Sarkis, 118-126 (Munich: Prestel, 2001).

contextualism, was leading the discussions on how to insert the new object into the traditional city after WWII. Then, after the post structuralist turn, the University of Pennsylvania had the leading role on the development of contemporary landscape architecture education by formulating landscape as a natural-cultural ecology. In the meanwhile, Harvard School of Design had a role in situating landscape into the city and discussing its social role for the urban life. One of the major reasons behind this approach was emergence of city planning department inside landscape architecture program. Recently, Harvard GSD Landscape Architecture played an important role in developing new methods and techniques in developing techniques for understanding temporal, dynamic and performative sites to work in harmony with the contemporary city and to some extend, generating the processes in the city. Recent contemporary landscape architecture schools main concern is producing adaptive, active, dynamic, strategic design perspectives to understand the complex cities of 21st century and to work with the dynamic, fragmented and networked structure of contemporary cities. The developing computer technologies and programs on parametric design also improve this process and the design process evolve into adaptive dynamic modelling. Accordingly, the form was undermined by the modelling process and the outputs of the design are strategies, processes and future predictions. When we observe the recent landscape architecture education in design studios, they attempt to provide a combination of landscape architecture in dynamic and complex environments and parametric design techniques. Recently, landscape architecture theory and education explores how to work with dynamic complex landscapes. And parametric design tools eases to work with complex systems, structures and geometries. The parametric design offers rules, parameters and the relationships between elements to inform the design process. However, it can be inferred that developing computer technologies and parametric design programs seem to dominate the design process. The instruments, the techniques and even, the design process are generated by the capabilities of the programs. While the explorations on dynamic and complex site provide new openings in education, it also carries the threat of instruments overwhelming the knowledge and information. On the one hand, the new perspective on site as a relational construct could provide new horizons to architecture education which prompts more open, creative and unlimited way of design. It can provide a site design based on constructing the meaning of site individually and manifesting a position towards it.

To sum up, there is a range of developments in our contemporary cities, in our profession and in our theorizing the world particularly outside our vision. The changes in the theory, pedagogy and notations present it as an accomplished fact. We must confrontation with the realities of the current world. Today, we cannot talk about a holistic, comprehensive and single context of the cities anymore. But, we witness the growing concern on subjective, multi contextual, polysemic, dynamic, fragmented site which is a historical outcome of the contemporary cities. The thesis shows that there is an inevitable dialogue between architecture and the city that transforms in time. In the recent dialogue, architecture discipline seeks is how to incorporate these new paradigms - relationships, complex networks, dynamicism, subjectivity, and complexity -in architecture theory and education. And it utilizes contemporary landscape architectures formulations on dynamic and relational site perspective. In the meanwhile, to work in harmony with this indeterminate environment, recent landscape architecture practices transfer architecture's program approach into landscape architecture. As a result, these two disciplines converge in an inevitable way under the common issue of site that has never been so close before.

Recent convergence on site introduces new notions of site such as temporality, dynamicism, invisible processes etc as a response to characteristics of contemporary urbanism. On the one hand, these new notions of excludes the traditional notion of site bound to its physicality. The physical boundaries, property relations, plot, etc are the realities that are ignored.

In the future studies, it seems like site is providing an open area of research. Architecture could enrich the research on site by adding formal inquiries on dynamic landscape, or by adding programmatic inquiries distributing over all site and occupation of the program over time. Landscape architecture could enrich the research on site by adding dynamic processes of ecology and relational understanding of ecology on landscapes. Landscape architecture could deepen the research on the history and archaelogy of site. It could add information on change of site. By going beyond generic processes of ecology, landscape architecture could contribute to overarch the archaelogy of site, explore how the site bahave, what the stories embedded in site and processes on site and how it could change. The parametric tools and new computer technologies as tools could help to explore, understand and generate change and processes on site.

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