# RETHINKING LANDSCAPE URBANISM IN STUDIO: A TUDELFT EPISODE

#### / EBRU BINGÖL, INGE BOBBINK AND ERDEM ERTEN

Izmir Institute of Technology, TU Delft

ebrubingol@iyte.edu.tr; i.bobbink@tudelft.nl; erdemerten@iyte.edu.tr

**KEYWORDS:** Emerging themes in landscape urbanism, Multi-Scale Perspective, Experience of landscape, Temporality of landscape, TUDelft Landscape Architecture

## ABSTRACT

Since its emergence in 1990s, landscape urbanism provides temporality- indeterminacy- and self-organization-based solutions varying from *drosscape* to suburbanization projects.<sup>1</sup> Its theoretical framework syncretizes a position by combining science of ecology with humanity theories; scientific and data based solutions of ecology with subjective understanding that derive from experiencing landscapes; large scale processes of ecology, infrastructure and economy with specific conditions of site; spatial understanding of landscape with temporal and ever-evolving landscape. That is why, the theory of landscape urbanism is eclectic and divergent, the theoretical coherence of which is highly debated.

On the one hand, the eclectic theory of landscape urbanism provides a methodological openness by means of newly emerging themes. This paper aims to discover the methodological openness that emerging themes are providing to contemporary landscape architecture education that has not been comprehensively manifested yet. It investigates influential and innovative methods that have been appropriated in TUDelft Landscape Architecture master track studios.

# EMERGING THEMES IN LANDSCAPE URBANISM

Landscape urbanism expands traditional paradigms of landscape architecture by adding some newly emerging themes. It expands the meaning of landscape in three main areas. First, landscape urbanism inserts subjective conditions of sense of place, site specificity and experience of landscape into formulation of specific conditions of site which were defined mostly by environmental conditions such as climate, sun, wind direction etc. Landscape architecture has always been in relation with reading the specificities of site and designing with them. However, landscape urbanism put the emphasis on sensational, emotional, experiential responses that is perceived. Recently, debate on site flourishes with the discussions of how the *meaning* constructed in understanding landscape (Treib, 1995; Treib and Gillette, 2011; Francis and Hester, 1990; Riley, 1998), how the assessments of the landscape changes through *personal lenses* (Meinig, 1979) and how landscapes are *experienced* (Kaplan and Kaplan. 1979; Tuan, 1997).

Second, the scope of landscape architecture has shifted from passive landscape that should be preserved into landscape as the organizing element of city (Corner, 2006; Waldheim, 2002;

Pollak, 2000; Mostafavi and Najle 2003; Koolhaas, 1998). The traditional environmentalism conceives preservation as a technical requirement with narrower scale interventions and landscape as urban-natural sources fixed in an area. By putting landscape as structuring element for design, landscape urbanism 'coherently bring together an extended spectrum of scales' (Burns and Kahn, 2005, p. 25) to comprehend multi-variable dynamics of landscape. Here, landscape as an active phenomenon, re-organizes its own scale within its various networks of relations, from ecological to economic, to political to organizational networks.

Third, the understanding of temporality of landscape has expanded. Traditional understanding of temporality of landscape is related to seasonal changes, growing plant material in their lifespan and Ian McHarg's theory of creative fitting.<sup>2</sup> Since 1960s, with the changing paradigm in open, ecosystem approach , landscape is started to be discussed as ever-evolving, adaptive self-organizing and operative systems as a response to changing environmental conditions (Hill, 2002; Lister,

SPECIFIC CONDITIONS OF SITE	SCOPE LANDSCAPE	TEMPORALITY OF LANDSCAF
	Preservation Environmental Stewardship	Seasonal change of plants Growing of plants
-Sense of Place -Experience of Landscape	Landscape as organizing Element of design Infrastructures systems Flows	-Adaptability of Landscapes -Operativeness/ Process form -Self-organizing processes

FIGURE 1. Newly emerging themes in landscape urbanism

2007; Czerniak and Hargreaves, 2007; Berrizbeitia, 2007).<sup>3</sup> Since then, by inserting ecological systems as models for design, landscape urbanism produces of adaptive landscapes, dynamic and self-organizing systems and operative landscapes. (Figure 1)

This paper focuses on these three emerging themes: Sensuous qualities and Experience of Landscape, Multi Scalar perspective and Temporality, Change and Process and it explores how pedagogical underpinnings in contemporary landscape architecture education encourage these themes in TUDelft Landscape Architecture.

# CONTEMPORARY LANDSCAPE ARCHITECTURE EDUCATION: TUDELFT EPISODE

This part investigates methodological openness on sense, scope and temporality of landscape that

		Design Studios	Interviewee
1. SEMESTER	Quarter 1: Architecture and Landscape	'Villa Urbana: Design of an Experimental Villa'	*
	Quarter 2: Urban Landscape	Teatro Urbano: Park Design in Urban Transformations'	*
2. SEMESTER	Quarter 3: Dutch Lowlands'	New Dutch Waterscape	*
	Quarter 4: Elective Studios	Heritage Landscapes Landscape Architecture on Site Smart Infrastructure and Mobility	<u> </u>
3., 4. SEMESTER	Graduation Laboratory	Flowscapes	*

FIGURE 2. Organization of the studios in TUDelft and number of interviewee

has been appropriated in TUDelft Landscape Architecture master track design studios, based on eight interviews with tutors of seven design studios, exploration of quarter guides and final submissions of the students to the studios.<sup>4</sup> (Figure 2)

SITE SPECIFICITY AND EXPERIENCE OF LANDSCAPE

TUDelft Landscape Architecture studios provide a rich palette of diversity in developing methods on place-making and phenomenological understanding of landscape in the design studios. In the *Q 1: Villa Urbana*, students start design by choosing their actual boundary site for design which means site selection is already a design. To find an actual location for the villa, students are directed to discovering the site specific qualities of landscape. The design is used as a basis for investigating the hidden qualities of the landscape (Quarter Guide Q1: Architecture and Landscape', 2014-2015) and discovering sensuous qualities of place which is more depended on how observer conceives, perceives and acts in the landscape (Quarter Guide Q1: Architecture and Landscape', 2014-2015).

*Villa Urbana*, puts special emphasis on experience of landscape as one the programmatic element of the studio. In studio guide, Quarter Guide Q1, landscape is defined as the 'experimental field of architecture' (Quarter Guide Q1: Architecture and Landscape', 2014-2015). The students develop their designs by considering experiences of different user groups given as near blind daughter, villager, forester and visitor. The studio also uses the *narrative design* method as a tool to develop the sense of place and site specific experience.<sup>5</sup> It focuses on changing experience through movement. Students develop at least four different paths, narratives, sequences of events, to be experienced on different or overlapping routes and personalities (Quarter Guide Q1: Architecture and Landscape', 2014-2015). (Figure 3)

Studios, *quarter Q3: New Dutch Waterscape and quarter Q4: Heritage Landscapes* put Dutch landscape characteristics of water and the Dutch waterline heritage as the focus of design. In *Q3: New* 

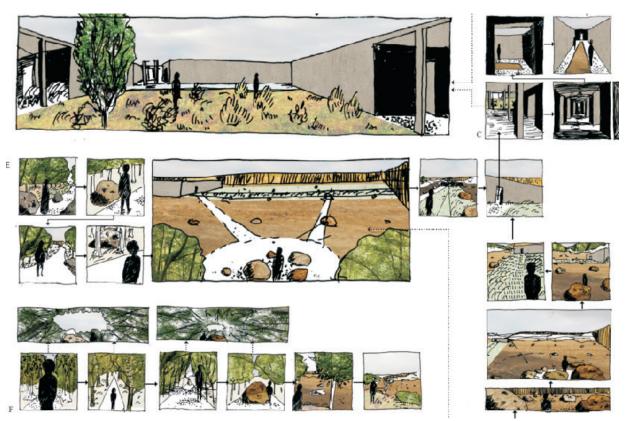


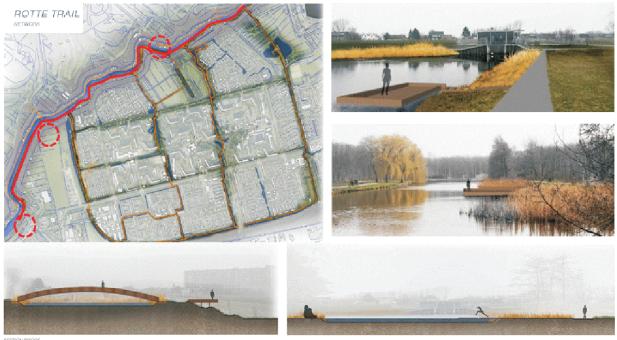
FIGURE 3. Experience of landscape through moving along a route. Student work: Malexan, Quarter 1: *Villa Urbana*, 2014. Studio coordinator: Saskia de Wit

Dutch Waterscape, the atmosphere is the emphasis of the design. The form, materialisation, and sections are tools to carry of the information of the place, the identity, and the atmosphere. Accordingly, in Q3: New Dutch Waterscape, student work focus on the characteristics of landscape distinct from Q1 Villa Urbana's work that focus on experience. In the Q4: Heritage Landscapes introduces stories, concept and value assessment as frameworks of design. Understanding and interpreting the stories of heritage is referential for design. By means of stories, students discover tangibles and intangibles (story of Dutch waterline) input. The studio also integrates value assessment into design. Students interpret city and object scale variables of values defined by Cultural Heritage Agency of Netherlands through their own personal attachment to place.

In Q4: Landscape Architecture on Site, the experience is not limited with design per se. Students construct a preliminary design for an outside-exhibition. The construction of the design is an experience per se of which ease of construction, materials and detail solutions should be considered. The design is improved in terms of enriching the experiences of the visitors from sensuous experiences to functional requirements i.e. putting the bike, entering the site, having some spots along the site etc. (Figure 4)

# MULTI-SCALE PERSPECTIVE IN TUDELFT LANDSCAPE ARCHITECTURE MASTER TRACK

TUDelft Landscape Architecture Track consists of mainly two strategies in moving between scales. The first approach takes its method from planning profession, which defines the scales distinctively and moves from upper scale to lower scale to identify the multiple contexts of urbanism. In *Q2: Teatro Urbano*, the studio identifies three distinctive scales where landscape operates in different ways: regional, district and component scales which are hierarchically and distinctively defined. In the regional scale, students analyse the urban metabolism through natural-cultural processes within elements of: water, biota, traffic, food, rubbish, air, energy, earth. In district scale, landscape patterns related to functional, spatial, visual structure and form of the city. At the component scale, they provide design-technical resolution of individual urban landscape components. Here, shifting scales implies moving between different meanings of the territory, different contexts and variables. Similarly, *Q4: Smart Infrastructure and Mobility Studio*, inserts its methods and instru-



1\_250

SCRION PLIMPING STATIO

FIGURE 4. Q3: New Dutch Waterscape, the atmosphere of landscape is the emphasis of the studio. Student work: Antonia Koukouvelou, 2015. Studio coordinator: Inge Bobbink

ments from urbanism and planning profession. The studio focuses on aspects of metropolitan mobility, water management and urban design in a developing context (reflecting on the concept of 'multiple use of water') (Studio Guide, Elective AR 0027: Smart Infrastructure and Mobility, 2014-2015). The students move into scales from macro, meso to micro scales. In both studios the boundaries of the scales are given. Accordingly, the context is dependent upon the actual scale that is already defined. (Figure 5)

The second approach takes landscape as the organizing element for design in which scale and context is landscape-depended. In *Q3: New Dutch Waterscape*, it is the waterscape, in *Q4: Heritage Landscapes*, it is the heritage, which provides the framework for moving between scales and the link between the scales. The landscape element "water" or the "heritage" is as guiding themes of the studios and , every inquiry, any design problem or design possibility on these themes bring in their own scale and context in a non-hierarchical way. (Figure 6)

The *Graduation Lab: Flowscapes* is a one-year long research based studio in which students develop their own research projects from problem definition, description of research questions, development of a method for the design and providing design experiments for specific areas. The studio has a special emphasis on "flow" which refers to movements and processes (Nijhuis and Jauslin, 2014). Understanding flows requires exploring site beyond its official boundaries. The spatial framework is given by the Rhine-Danube corridor, connecting nine countries; students develop their research on a specific area. Moving between scales is related to the problem definition. Multiple scale research is needed to identify the context of the problem which is sometimes local sometimes global. Thus, there is no defined protocol on beginning from large scale to move into small scale in the studio (Nijhuis, 2015). Also there is an interchange between specific and generic.

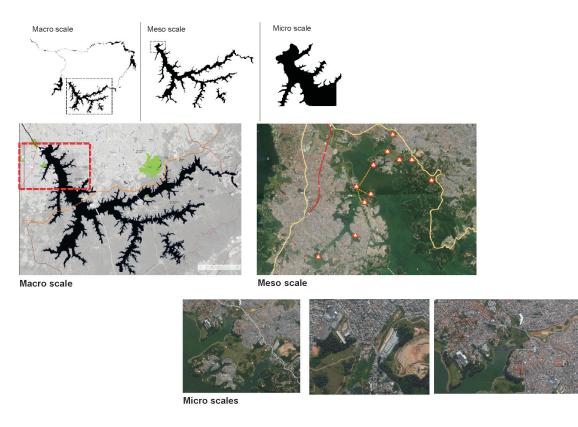


FIGURE 5: Macro, meso, micro scales in Q4: 'Smart Infrastructure and Mobility Studio. Studio Guide, Elective AR 0027: Smart Infrastructure and Mobility, 2014-2015, Department of Urbanism, Faculty of Architecture, TU Delft.

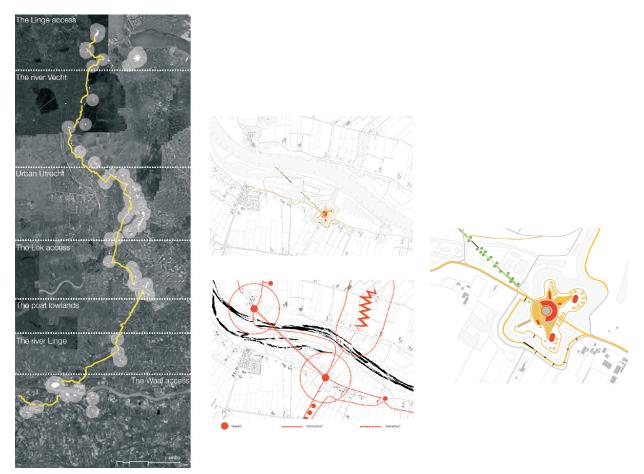


FIGURE 6: Putting heritage as structuring element for moving between scales. Student work: Tatiana Lyubimova, Q4:'Heritage Landscapes' 2015. Studio Coordinator: Gerdy Verschuure

In the lower scale, design experiments to be tested to develop not only site specific solutions to the specific problem but also providing generic strategies for similar places.

# TEMPORALITY, CHANGE AND PROCESS IN TUDELFT LANDSCAPE ARCHITECTURE MASTER TRACK

Landscape architecture's main difference through other design disciplines is its living material. Thus, temporality of landscape has always been one of the essential themes of the discipline. However, since 1990s, by transferring open ecosystem approach to design, landscape urbanism evaluates landscape as an ever-evolving, adaptive and self-organizing and operative phenomenon. It focuses on regularities, rhythms, cycles and sequences in landscape changing with seasonal or daily temporalities on site, called as *processes*. Henceforth, site analysis is based on exploring how cultural and natural processes were interrelated in the past and how the site came into being, furthermore questions like what changed and what remained the same. It is not only discovering seasonal changes, but more about 'how landscapes work, what they do, how they interact, and what agency or effects they might exercise over time' what James Corner (1999) calls *landschaft*. This exploration helps anticipating the future of a given site and how landscape as an agent could generate processes on site. Accordingly, landscape urbanism practices focus on 'adapting to changing conditions rather than forms that conform an aesthetic whole' (Berrizbeitia, 2007, 178). The temporality of landscape is also incorporated in the implementation phase, particularly in phasing of design which includes developing scenarios and steps to reach the final situation of design.

In TUDelft Landscape Architecture master track temporality of landscape is mostly evaluated within seasonal changes, changing water levels, flood ranges etc. This is because the Netherlands

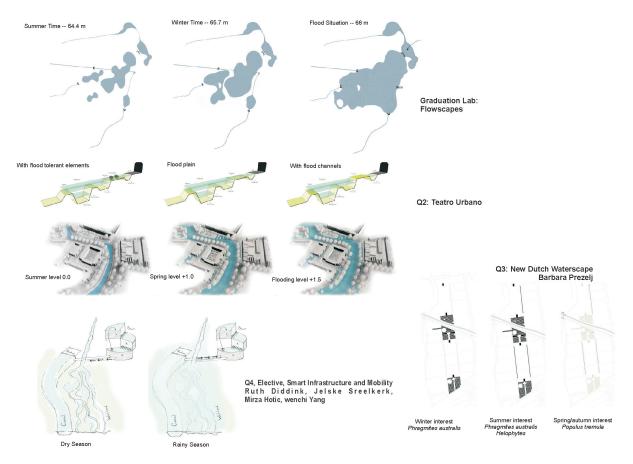


FIGURE 7: Temporality of landscape in TUDelft studios, based on change of seasonal water levels.

has an unique conditions for situating below sea level. However, less number of students prefer to develop design strategies working in harmony with these processes. (Figure 7)

A strategy of temporality that is involved in studios is *phasing of design* in developing steps to reach the final design. *Q1: Villa Urbana* embraces landscape 'in terms of time and space' (Quarter Guide Q1: Architecture and Landscape, 2014-2015). To make the time aspect more explicit, the design assignment includes developing scenario of how design will develop in time intervals of 2018-2028-2058. The students develop their design by incorporating time aspect, investigating 'how to influence the process by design and how to give architectural expression to the natural processes' (Quarter Guide Q1: Architecture and Landscape, 2014-2015). (Figure 8)

*Graduation Lab: Flowscapes* studio focuses on the interaction taking place by flows (movements and processes) and spatial entities (natural and human systems) (Nijhuis and Jauslin, 2014). It introduces process driven approach, defined in the studio guide as: 'landscape gains an "operative force" in territorial transformation processes' (Nijhuis and Jauslin, 2014, 12). Here, landscape is defined as an agent to trigger change on Danube-River corridor. This approach is not obligatory; but left to students' preference. Moreover, the studio provides a strategic design approach, in which students directed towards "not to design everything but to design conditions" (Nijhuis, 2015). As a research based project, students develop a long-term strategy towards planning and design.

# CONCLUSION

Landscape urbanism provides some newly emerging themes such as experience of landscape, multi-scale perspective to landscape and temporality of landscape. These generic themes offer methodological openness and diversity of practical methods and techniques in landscape architecture education.



FIGURE 8: Phasing of design in time intervals by defining how to go there. Quarter Guide Q1: Architecture and Landscape', 2014-2015, 5th Edition, Chair of Landscape Architecture, Department of Urbanism, Faculty of Architecture, TU Delft.

Landscape architecture education in TUDelft provides a large palette of tools for improving place making by discovering sensuous and experiential qualities of landscape. There are different roles attributed to design studios in TUDelft such as: choosing consciously a site; story building; atmosphere; movement and experience; value assessment; constructing, adapting and visiting the design. Undefining the boundaries of a site improves the relational understanding of a site in studio and makes it necessary to individually discover the unique qualities of a specific area. Stories, narratives, values and atmospheres help students to discover the specific character of place and moving into materiality, landscape sections and details. Rather than focusing on programme and social spots, designing experiences along the path improves the open space design from place-making perspective. It allows a landscape program that is flexible and more emancipatory. Constructing and visiting the design each's limitations and possibilities.

In developing multi-scale perspective to design, Q3 New Dutch Waterscape, the Q4 : 'Heritage Landscapes' and Graduation Lab: Flowscapes studios put landscape as the structuring element of design. This understanding brings landscape-depended moving between scales in a non-hierarchical way. The landscape element brings various scales with respect to its own networks and contexts. In addition to using the methods and techniques from the planning discipline such as hierarchical organization of scales and context, categorization of landscapes into layers etc. landscape architecture in TUDelft develops its own methods and techniques by combining large-scale strategies of regional design with site-specific design perspectives.

In TUDelft Landscape architecture studios, temporality of landscape is mostly evaluated within changing water levels with respect to seasonal changes. There is less emphasis on landscape urbanism's strategies of incorporating self-organizing systems into design, performative role of landscape and adaptive processes. Rather, development of design in phases is a method preferred by Q1 and Graduation Lab. This is why landscape architecture is still developing its methods and tools to discover flows and dynamics in addition to established techniques for spatial practices. Landscape architecture requires additional instruments to explore processes and flows in the landscape. As Sanford Kwinter (1992, 64) claims 'we need [...] representing multiple play of forces across all the dimensions of space at a single specific instant in time'. Landscape architecture should further develop its own instruments on understanding dynamics, connections, links and relationships; relational networks of artefacts, organizations and processes and in-between spaces. Because the essence of landscape urbanism lies in relationships and dynamics between parts.

### REFERENCES

- Berrizbeitia, A. (2007). 'Re-placing Process,' in Czerniak, J. and Hargreaves, G. (eds.) *Large Parks* (New York: Princeton Architectural Press), 175-197.
- Burns, C. and Kahn, A. (2005). Site Matters: Design Concepts, Histories and Strategies (New York: Routledge Publications).
- Corner, J. (1999). 'Introduction: Recovering Landscape as a Critical Cultural Practice'. In Corner, J. (ed.) *Recovering Landscape: Essays in Contemporary Landscape Architecture*. (New York: Princeton Architectural Press), 1-28.
- Corner, J. (2006). 'Terra Fluxus'. In Waldheim, C. (ed.), The Landscape Urbanism Reader (New York: Princeton Architectural Press), 21-33.

Czerniak, J. and Hargreaves, G. (2007). Large Parks (New York: Princeton Architectural Press).

- Francis, M. and Hester, R.T. (1990). The Meaning of gardens: idea, place, and action (London : MIT Press).
- Lister, NM. (2007). 'Sustainable Large Parks: Ecological Design or Designer Ecology?'. In Julia Czerniak, J.and Hargreaves, G. (eds.), *Large Parks*. (New York: Princeton Architectural Press), 35-57.
- Hill, K. (2004). 'Shifting Sites'. In Burns, C. and Kahn, A. (eds.) Site Matters: Design Concepts, Histories and Strategies. (London: Routledge), 131-156.
- McHarg, I. (1969). Design with Nature. (New York: Natural History Press).
- McHarg, I. (1992). Design with Nature, 25th Anniversary. (New York: John Wiley and Sons).
- Nijhuis, S. and Jauslin, D.(2014). Flowscapes: Graduation Lab, 2014-2015 Landscape Architecture Semester Guide Msc3&4.
- Nijhuis, S. (2015). Interviewed by Ebru Bingöl, 22 May.
- Riley, R.B. (1998). 'From Sacred Grove to Disney World: The Search for Garden Meaning', *Landscape Journal 7*(2): 136-147.
- Quarter Guide Q1: Architecture and Landscape, 2014-2015, TU Delft Chair of Landscape Architecture, 5th Edition.
- Kaplan, R., and Kaplan, S. (1989). *The Experience of Nature: A Psychological Perspective*. (Cambridge: Cambridge University Press).
- Koolhaas, R. (1998). IIT Student Center Competition Adress, Illinois Institute of Technology, College of Architecture Chicago, March 5.
- Kwinter, S. (1992). 'Landscapes of Change: Boccioni's Stati d'animo as a General Theory of Models', *Assemblage* (19): 52-65.
- Meinig, D.W. (1979). 'The Beholding Eye: Ten Versions of the Same Scene'. In Meinig, D. W. and Jackson, J. B. (eds) The Interpretation of Ordinary Landscapes: Geographical Essays (New York: Oxford University Press).
- Mostafavi, M., and Najle, C. (2003). *Landscape Urbanism : A Manual for the Machinic Landscape* (London: Architectural Association Publications).
- Pollak, L. (2000). 'City, Architecture, Landscape: Strategies for Building City Landscape Petrosino Park, Manhattan', *Daidalos*, 73, Built Landscapes, pp 48-59.
- Studio Guide, Elective AR 0027: Smart Infrastructure and Mobility, 2014-2015, Department of Urbanism, Faculty of Architecture, TU Delft.
- Treib, M. (1995). 'Must Landscapes Mean?: Approaches to Significance in Recent Landscape Architecture'. Landscape Journal 14(1): 47-62.
- Treib, M. and Gillette JB. (2011). *Meaning in Landscape Architecture & Gardens: Four Essays, Four Commentaries* (London: Routledge).
- Tuan, Y.(1997). Space and Place: the perspective of experience (Minneapolis: Minnesota Press).