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Abstract: Landscape has been used as a metaphor or conceptual reference for an increasing amount of excellent architectural projects in the last two decades. The phenomenon seems to be a substantial innovation of architecture with an interesting potential for artistic, social and ecological gains. To be able to better understand and critically review these projects, it is important to better understand the notion of landscape.

How can we better understand the idea of landscape and its design methods for application in architecture? To answer this central question we try to find a working definition of relevant landscape design methods in this paper. Only thereafter may we ask how these landscape methods are applied to the theory and practice of architecture, and what knowledge can be derived from built examples for future practical and theoretical use in the field.

This paper is part of the larger study ‘Architecture with Landscape Methods’ with more case studies. This paper however is mainly based on literature study. Currently the author is analyzing four crucial projects from 1990-present in CAD and GIS based analytical case studies. One or two of these cases will illustrate the subject to the audience in the author’s poster presentation at IFLA2012.

Sub-themes: Urban landscapes in transition, Landscape Urbanism, design methodologies, theory in landscape architecture
LANDSCAPE DESIGN METHODS IN ARCHITECTURE

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1. Introduction

The division between the two disciplines of architecture and landscape has been questioned from many sides. Innovative practitioners of architecture designed parks with bright concepts of anamnesis, process, and cultivation, like Bernard Tschumi’s or OMA’s designs for Parc de La Villette (1987) (Tschumi and Choay 1985; Vidler 1992). At the same time, landscape architects started to create a new breed of constructed landscape, like West 8’s design for the Schouwburg Plein (1991) (Wall 1999) or the Kremlin at Lijdse Rijn Park (1997). With this in mind, it is widely accepted that the distance between the disciplines of Landscape Architecture and Urbanism is now blurred (Vroom 2006 p.14).

The phenomena we are interested in could be described as landscape as architecture. In such architecture, the building inside and landscape outside do not merely interact as an object - surrounding relation or as figure - ground. The building is designed as an artificial landscape on its own. Landscape constitutes the inside. The landscape to architecture relation is turned inside-out. In some cases, this artificial landscape is related to the site through its shape. In others, it is rather independent or even opposed to the surroundings. The unifying factor for this category is defining a completely new order. The common feature of the selected designs is not about a new intensive relation to the landscape but about the fact that each design is making its own landscaped interior. Mostly, they leave behind certain other elements typical to architecture - walls or straight floors for example - and replace them with hills, slopes, and other features and spatial phenomena borrowed from landscape. At once these projects integrate many or all aspects of a landscape design into a building.

Landscape as a constituting element of Architecture was seldom explored so intensely as from the 1990s on. The big change was the actual integration of landscapes into actually built (or almost built) architecture.

To illustrate the phenomenon, we will briefly introduce one of the examples, which will be analyzed in our own developed framework in the poster session only in drawings. This is to be seen as a longer (even though still to short) introduction into this case (section 2). After briefly listing some reference literature (section 3) we will (in section 4) try to explain which Landscape Architectural Design Methods, in our opinion, could be useful to architects - all of which explains the background and context of the presented poster at this conference. This short paper on such a vast subject allows only a few conclusions (section 5).


The recently opened Rolex Learning Centre in Lausanne of Japanese Architects SANAA from Tokyo may well be cited as an example of the increasing success of Asian architecture in the world in general (See Poster Fig. 1). It contributed to the honors of the two principals Kazuyo Sejima and Ryue Nishizawa with the Pritzker prize in 2010 and also certainly helped Sejima’s nomination as curator of the Venice Biennale – the first woman and first Asian ever - for that same year. SANAA’s largest foreign building yet is not only an important contribution to these successes but also of particular interest as a built landscape.

The Ecole Polytechnique Federale Lausanne (EPFL) is Switzerland’s French speaking national polytechnic university founded in 1969; its German counterpart the ETH Zurich was founded in 1855. The EPFL Learning Center’s main task is to bridge the gap that disconnects the EPFL and its neighbor, Uni Lausanne, from the city. It should reestablish connections between students and the city and bridge between the academic world and society. Put in traditional terms, the program is predominantly a library, restaurants, a conference center, meeting and exhibition spaces, and work spaces for scientists – but none of these programs resemble anything that one might expect from their titles. The English term 'Learning Center' would describe a new building type for a digitized library integrated into university teaching, used even in the French documents of the University.

Even to start our description by the entry is difficult with this building – although the Learning Center is clearly limited by a vast rectangular shape. You do not enter the rectangle at the edges but through the center. Once inside, nothing is guiding the visitor in conventional ways except for the writing on its curved glass walls. Those walls inside are exterior walls around clearings in the midst of the space. As nothing is forcing the visitor on a certain path, the report of a walk-through would still be very subjective.

The Learning Center consists of only one single large public floor above ground. The undulating slab of that single floor is not always touching the equally large basement floor. It lifts up from the ground at different zones, providing entries for slipping in at every edge of the basic rectangular form. Inside the rectangle, a series of holes not only provide masses of light to the inner space but also act as axis points around which the entry paths are woven through the holes between the ground and the undulating slab. The building wraps around the approaching visitor - entering the inner landscape felt like falling into it from outer space; walking on the modest gray carpet felt like walking on the moon. The holes are an essential part in communicating a space that is dividing and connecting all at once.

The continuous plane is not indifferent, it adapts to programs with a seating range here and a platform there. Ramps in the shape of serpentine roads and rack railways for wheelchairs are abstract quotes of the alpine world, moments that the hilly city of Lausanne and the nearby Alps know quite well. The spatial dynamic of uphill and downhill inner spaces and the splendid views with bits of natural landscape framed by this artificial world connect the visitor with his surroundings. While the separation between building and nature is made very clear by materials, they are intensely connected by the spatial composition.
In the architects' design process, a very simple problem triggered a gigantic leap in the design. The discovery of the horizon as a space divider convinced the designers and made them develop all the public spaces into one single continuous undulating plane – a landscape making architectural space.

According to Ryue Nishizawa, the EPFL Learning Center in Lausanne at Lake Geneva is ‘a dramatic space, that words can hardly describe’ (Nishizawa 2005) p.11) The spatial experience at times approaches the sublime– used exhaustively in the 19th century to describe landscapes that leave the admirer without words to say. An aesthetic qualification which is incomparable in its magnitude is hardly useful for a scientific description. One cannot avoid describing this building only by its space. No intellectual framework other than the pure creation of space for people is the working ethos of SANAA – and they have made that very evident in their most ambitious international project so far.

Asked about the future of learning but also the future of their architecture, Kazuyo Sejima and Ryue Nishizawa want to create a landscape for the people (Nishizawa and Sejima 2007) – the essential contemporary scenery. This building may have been accidentally designed as a landscape, but with intention, it has programmatic influence on SANAA’s architecture, and architecture in general for that matter.

The example above shows how landscape sceneries are as hard to describe as they are splendid to discover, but withstanding the oftentimes intentionally evoked mythical connotations of the landscape experience, it is certainly a subject to be described here.

As we will see in the following, the idea of landscape has not been reflected very deeply, this despite (or maybe through) the obvious fascination of authors and recipients with introducing landscape into the interior structure of architectural designs.

In this paper we would like to introduce one aspect of this reflection on landscape architecture alongside a framework prepared by Sebastien Marot to setup (for a separate study) our analytical approach towards these (and a few other) examples. Why this is needed might be illustrated after a selection of designs with a look through the best other writings on the subject.

3. Other writings on Architecture as Landscape

In the last decade a small but remarkable series of publications appeared that noted an increase of landscape as a phenomenon of contemporary architecture. (Betsky 2002; Leatherbarrow 2004; Ruby and Ruby 2006; Allen and McQuade 2011; Sanders and Balmori 2011).

With their different priorities on either documentation or theory, all of these studies, however valuable individually, miss one specific point: there is no design analysis above mere documentation of projects. The idea of landscape is in itself complex enough; it has been understood in many different ways by landscape architects. However, their findings on this understanding of landscape should not be lost to the development to the architectural discipline.

For this conference paper, a discussion of the Idea of Landscape in anthropological and etymological terms must be omitted in favor of the common sense among the present audience (and with referral to the Bibliography). Let’s just state that the significance of landscape can hardly be overrated.
4. Methods of Landscape Design

The methods of landscape design are to a large extent dependent on how designers perceive the landscape or how they may enact it for others to perceive. To use a dictionary definition, the Landscape Architect as “a person who develops land for human use and enjoyment” (Webster 2011) is therefore a discrete kind of artist. His method may simply be put in the verb to landscape or “to modify or ornament (a natural landscape) by altering” (Webster 2011). Seeing the age, impact, scale and oftentimes limitlessness of landscapes, a designed intervention in landscape architecture is often also about designing the range and possibilities of alteration.

This specific situation - an artist in the midst of his artwork - could probably at best be compared to a giant action painting. The Landscape artist is at the scale of an ant walking across a large Jackson Pollock painting (the reference has been made to the Landscape of Man (Jellicoe and Jellicoe 1975)). Even from the beginning, in designing gardens that refer to a large, often cosmic scale, this self-reflectiveness of the gardener as a facilitator or conservator of nature has inspired the artistic attitude of the designer. Landscape Architects have always been self-aware and self-reflective vis-a-vis their position as a human against the backdrop of nature, as well as of the interrelationship of other humans within and outside the limits of his intervention into nature. In almost every design, his vision of landscape in general as a reading of the site’s specific landscape conditions form a departing point. Certainly landscape architects have become accustomed to the professional demands of cities and clients formulated from the utility of a certain program. But oftentimes, and this is what is so fascinating, the purpose of a garden or park is that of doing nothing. For most urbanites, the landscape is a place of being non-productive – and even the productive cultivated landscape becomes romanticized as an ideal world.

While many architects would depart from nature with a program like The Shelter and The Genius and Architectural Discussion (Poster Fig. 2), the landscape architect usually starts from a site like The Two Debating Allegories (Poster Fig. 3). We can distinguish four attitudes towards landscape architectural design, all of which relate to the site (Marot 1999). We will use these attitudes here to summarize some basic concepts of landscape design with a few examples from literature in line with the four categories borrowed from Marot. These four attitudes are 1. Anamnesis, 2. Process, 3. Spatial sequencing and 4. Context. All of them are at the time design methods and derived from the experience of (undersigned) landscapers. This is actually the particularity of this classification of activities respective phenomena. In the following pages we will try to first explain each of these terms related to our investigation and then use each term as an introduction into more detailed and specific aspects of landscape methods.

4.1. Landscape Anamnesis and relating the concepts of Strata and Layer

Anamnesis integrates the history that led to the present state of a landscape. Traces of history are visible and readable in most landscapes. We could talk of first, second, and third nature (Hunt 2000) and concentrate on the process from untouched wilderness, agrarian cultivation, and gardening with many kinds of higher spiritual sense and symbols. The idea of nature with constantly changing means of representation and interpretation is a central theme throughout the history of garden design and landscape architecture.

The anamnesis is usually readable in a set of strata. Each stratum is distinct sediment of a certain geological period, sometimes occurring at the place but oftentimes moved in the geological formation of landscape. Anamnesis is a term used both in geology for soil horizons and in archeology for layers of earth and rubble. We could see the landscape as a palimpsest, a metaphor introduced by André Corboz (Corboz 1983) as a piece of pergament...
or a roman wax-coated writing tablet, often reused for new writings, where the older writings always remain visible, and often are reused on new layers over time. Human usage leaves traces on the territory; these traces overlay and form a complex multi layered text or palimpsest.

It is the unique contribution of landscape architect and influential professor Ian McHarg to use map overlays and layer models (that later came back with the computer as geographical and design tools like GIS) to understand the Landscape. McHarg insisted on highways (among other interventions in the landscape) to be “designed by persons more knowing of man and the land” (McHarg 1969). As a teacher challenged to teach the environment, he realized that in order to work with increasing amount of specialists, he would need to use specialized map overlays and chronology. Layers differentiated in time would serve as a unifying rubric in communication between geology, meteorology, hydrology, biology and anthropology. The Layer model put the role of the designer in the midst of multidisciplinary intervention, a complex relationship of human interaction with his environment maintained in a systematic approach to “what the place came to be, what it is and where it is going” (McHarg 1997). McHarg was not interested in the separation into layers as a goal on it’s own but as a vehicle to further the holistic understanding of the relationship between man and nature – which also makes him one of the most influential environmentalists.

“Our eyes do not divide us from the world but unite us with it. Let this be known to be true. Let us then abandon the simplicity of separation and give unity its due. Let us abandon the self-mutilation, which has been our way, and give expression to the potential harmony of man-nature. The world is abundant; we require only a defense born of understanding to fulfill man’s promise. Man is that uniquely conscious creature who can perceive and express. He must become the steward of the biosphere. To do this he must design with nature.” (McHarg 1969)

Many layer models have been used to assemble large amounts of information in environmental planning and landscape design. To illustrate this, a few of these Layer models subsequent to McHarg will be represented here as they are applied in the author’s current academic surroundings of the Netherlands. In the Netherlands, the ideas of McHarg are of great influence not least though the persona of one of his students, Meto Vroom, a Professor of Landscape Architecture since 1966 (Roncken 2003). The rather complex layer cake of 3 + 8 + 17 successive layers in the time of McHarg are adopted at Wageningen for Landscape Architectural education into a comparably simple textbook version of an a-biotic, biotic and anthropogenic layer “triplex-model” (Kerststra, Vrijlandt et al. 1976). This triplex-model was (again similar to McHarg) also applied in practice as the Casco Concept by the founders of the Dutch practice H+N+S (H+N+S 1986; Sijmons 1991). Many variations of models resulting partially from specific projects or regional planning regulations follow in the Netherlands and from the 1990s on can be seen as an established strategy in practice and theory of both urban design and landscape architecture, with sometimes different emphasis until finally being part of Government Regulations (VROM 2001). The sometimes confusing variety of layer models vary in the purpose of mostly teaching literature – for example the 3 layers of natural, cultural, and urban for the Dutch Lowlands (Bobbink 2009) or the 6 layers of buildings, public space, urban ground plan, territory for public space design (Heeling, Meyer et al. 2009) – but may be presented here only to illustrate the influence and importance of such approaches. Similar models exist in other countries, for example in the 6 layered “Architecture of the territory” of the “Netzstadt” (Oswald and Baccini 2003) each models closing in on specific situation of the applicant practice. The holistic idea of McHarg sometimes gets lost in some of the Dutch applications in favor of a tendency to classify everything. This fragmentation especially happens in the involvement of spatial planning and a need to distribute the competences of certain layers to different state authorities. It should therefore not be forgotten that all these layers form the identity of one site, the genius loci, which not by chance carries the name of a spiritual human dimension. One recent
proposition of layer models is extended into 3 scales, 3 times and 3 layers. The triple 3 layers approach is a carefully elaborated design oriented research model that has been developed in the collaboration of two Landscape and Urbanism academics of TU Delft (Meijer and Nijhuis 2011). Large parts of quoted genealogy of the Dutch layer models in the paragraph above are abbreviated from a manuscript of this forthcoming article.

While, especially in teaching, one has a tendency to separate things into simple lists, the emphasis of design should be to connect the superimposing layers and to cherish a certain complexity. This leads us back to Marot’s term *Anamnesis* of a site and perhaps explains why he chose a term from medicine. Anamnesis is a history looked at from the perspective of the current (usually ill) state of the patient. In order to be able to act on the landscape, not only do we need designers to know the history of that place but we also their need to focus on its current appearance and project into the future. The palimpsest needs to be wiped clean to provide space for new writing. In landscape design it is strongly advisable to think of a same space holding two (and many more) contents and especially their evolution over time, as we will explain in the next paragraph.

### 4.2. Landscape Process and the related concepts of transformation and strategy

Process, according to Marot, focuses on natural and induced dynamics of landscape transformation. The effects of nature and time, but also of design strategies, are steering processes of preparing a site to grow in a certain direction. Again, similar to the anamnesis, the process is a term that can be applied to landscape as an object of observation or a subject of design. Processes can be observed (as the occurrence of natural processes by landscape ecologists) or they can be influenced (as the transformation of topographies by landscape architects) (Antrop 2001). Processes can also be observed as a spatio-temporal phenomenon within a landscape, or be used for the actual process of an evolving design; oftentimes designers make analogies between the form of the landscapes and their conceptual approach and “designing the (intellectual) process of design”.

The process of (physical) landscape transformation can be very different in its form, ranging from a clear cut to an invisible manipulation. This process is clear for example in the design of le Nôtre and the structuring of the two brook valleys of Vaux-le-Vicomte into a clear set of crossing axes compared to the almost invisible manipulation of pastoral landscapes by Lancelot “Capability” Brown. The latter are sometimes almost invisible to the untrained eye as in the Alnwick Castle for the Duke of Northumberland, a relatively small 18th century park to both sides of the River Aln.

Landscape Architects at the same time represent nature and work with it as a material in the form of Plants, Terrain or Water. As, in some gardens, ideal representation of nature is a form of perfection, the public may not even realize that the healing effect of nature is the work of the invisible hand of a landscape architect. The profession may well reach its perfection when the manipulation of nature becomes invisible or seemingly natural.

The design is a manipulation or preservation of social or ecological systems, which includes observation, thus logically the consequence of the temporality in the previously discussed *anamnesis*, and as such brings us back to a holistic impetus.

A landscape designer structures potentials and is perfectly aware of the incompleteness of his design rather than building a final solution. As landscape can hardly ever be a perfect object and a large and very orderly intervention can only be maintained with extremely costly care. Any gardener knows that a plot needs constant care to remain suitable to his user’s ideals. Therefore landscape architecture is traditionally design of environments rather than of objects. The self-awareness of being an actor in the process and the ability to imagine
and steer processes has made the position of the landscape architect increasingly strong with the rise of ecological concerns. An example of such an ecological approach is Systemic Design (Berger 2009) or the design of open and reactive systems rather than closed structures. Another typical involvement with process of landscape architects is the dominance of strategic concepts rather than formal ones. Some landscape architects even take quite a fundamental position in prioritizing the design of processes over that of space.

“What we are designing in this ecological view, I believe, are not ‘form’, ‘space’ or ‘function’ as modernists had led us to believe, but ‘system’, ‘process’, and our ‘embodied experiences’ thereof.” (Koh 2004)

Bernard Lassus called the landscape architects’ kind of intervention the “inflection of the landscape process” ... an “inventive analysis in order to make an account of the physical and historical places and to identify the process of physical evolution and practices in those places.” ... “The term process itself designates the ensemble of interactive movements of the place. It indicates how it is necessary not to stop the place, not to fix it. One could almost say that it is required to catch the place ‘on the move.’”(Lassus 1998).

From its traditionally process oriented approach, landscape architecture in many ways had a pole position among the arts at the brink of modernism. When for example the art of sculpture freed itself from designing mere objects influential Artist Robert Morris wrote in Notes on Sculpture 4, Beyond Objects:

“Fields of stuff which have no central contained focus and extend into or beyond the peripheral vision offer a kind of ‘landscape’ mode as opposed to a self-contained type of organization offered by one specific object.” (Morris 1969).

Such position beyond the scope of the object into a wider complexity of both temporal and physical scale is probably what makes landscape architecture in many eyes very apt to address the current problems humankind encounters.

As John Dewey said, that no great piece of art could have been conceived at one moment out of one single idea, great art always arises from a process: an evolving relationship between work and artist. The processes of creation and the processes of experience are connected. (Dewey 1958). The fact that landscapes change and that human activity is not merely overlaying it but interwoven with it (Ingold 2000) makes the position of the landscape designer inside the design process unique. Process driven methodology can take many forms ranging from simple models such as cultivating and harvesting the land, to the writing of scores, or steering complex social participatory models; it is in any case a crucial method of landscape architecture.

4.3. Spatial Sequencing and the concepts of perception

Spatial sequencing is an important design approach to landscape, still following the classifications of Marot. Designs are often related to spiritual storytelling or ritual processions. Also, this aspect is transformed throughout history. Especially the dynamics of motorized transportation, speed, and communication technologies have changed our perception of and dealings with landscape (Virilio 1995) but also increased the awareness of an even older “design issue ... the problem of designing visual sequences for the observer in motion” (Appleyard, Lynch et al. 1964). In ancient times Gardens and Parks where always to be designed to be pleasing to walk or maybe ride a horse through.

A textbook example of such sequencing is the Garden of Stourhead (1741-1780). It is composed of carefully considered pictorial moments inspired by Arcadian Landscape scenes
in the paintings of Claude Lorrain, of which copies bought in the Grand Tour to Italy are hanging in the gallery wing of the Stourhead House. Those Enacted scenes of buildings, Plants, Water and Rocks are laid out in a careful sequence, following the Vergils Aeneais (Leupen, Grafe et al. 1993; Reh 1996). Pictorial views are framed in the buildings, by grottoes, plantings and specific waypoints. Still today visitors of the National Trust site are advised to walk around the artificial lake counterclockwise, to experience the garden in the sequencing intended by the author. Stourhead is also a very straightforward garden, where this pictorial routing can be understood easily, as it was designed by an amateur Henry Hoare II and laid out in a very understandable way.

Not only the Picturesque Landscape, using depictions of the ideal and looking for a sublime moment, but also more rational garden compositions work with sophisticated manipulation that includes fake perspective, manipulations of the horizon, and enacting or activating topography for a theatrical effect.

The German Autobahn is a giant enterprise of such an operation of landscape through manipulation of the actual route. It has been built intentionally far from urban vista’s to raise the illusion of a giant empire (Hartzema 2011).

4.4. Context and the posterior generation of program

The attitude of Landscape Architects, according to Sebastien Marot, is working in context. Interestingly a landscape is not just a reaction to an existing context but Context is generated by landscape designs. It consists of dense functional, visual, and spatial relations and constellations. Relational structuring means the rearrangement of spatial constellations or the interweaving and joining of separate elements.

Designed landscapes oftentimes need to define their own limits and field of intervention. They create the context and oftentimes also develop programs from these interrelations. Landscape Architecture has a particular way of developing program out of the form and context of the landscape rather than the form following a preliminarily defined function (Sullivan).

The idea of context has been stressed in architectural theory since the 1960ies as a reaction to austerity of the timeless and often times relation less modern architecture. However the notion of context in landscape architecture seems very different. Since landscape architecture is more about creating a place than about placing objects, one could state that while architecture merely reacts to context, landscape architecture creates it.

A concept often looked for in gardens is the idea of harmony in the sense of communication between man and nature (in a wider sense) and as the art of joining things to create harmony (Finlay 2008).

This approach to place design rather than object design also expresses in a different relation to function of a space or program. While often in architecture the program defines the shape of an object, in landscape architecture programs are derived from a site through formal transformation. It is such differences that triggered the interest of many architects in looking for alternative concepts to functionalism.

“The goal ( …) is to rethink conventional institutional form through the concept of the field. (…), by forming the institution within a directed field condition, connected to the city or the landscape, a space is left for the tactical improvisations of future users. A "loose fit" is proposed between activity and enclosing envelope.” (Allen 1999)
Such thinking beyond the disciplines in both formal and theoretical fields should illustrate that the introduction, for sure in the case of Architecture, of the expansion of the notion of space into Landscape is always loaded with a certain expectation. Landscape in Architecture is in terms of great expectations. It implies a deliberation from a deterministic to a more open relation of meaning and content. It implies reconnection to anthropology, a deeper understanding of the existence of humans in space.

Much of the preoccupation of Architecture with Landscape is rooted in a crisis of modern architecture that arose in the 1960s and 70s. It is much more often such fundamental questions that have been treated or touched with Architecture mentioning Landscape. Gregotti called this a multidimensional approach to the environment by the architect and insisted on the necessity for architects to understand geographic space and the concept of landscape (Gregotti 1966; Gregotti 2010). Also here the author deliberately introduces a calculated ambiguity. It is in fact the increasing scale of the spatial influence of architecture onto the landscape that makes it urgent for architects to understand landscape shifting “the problematic of architectural space by elevating it to the level of geographic space” methodologically or “to find the means of intervention that correspond with different scales” (Gregotti 2010).

This visionary and remarkably early text raised expectations of a complete restructuring. Although it has been for sure influential, especially in the Italian academic context, it is not as open and relatively difficult to read. Also Gregotti may not have been giving an example with his oftentimes giant projects that made plausible his understanding of landscape. The merit for our studies is the clear referral to geography, as the anthropological method to understanding Landscape and his postulate for any architect to learn such methods, which makes it so clearly a basis for our study. Very recently Gregotti’s text and involvement with geography has been reconnected to the question of the relevance of landscape to architecture by Kenneth Frampton (1999) in an article that was also reedited for Landform Building (Allen and McQude 2011).

5. Instead of Conclusions

Much further study should conclude in a theory about the role of landscape as a concept in architectural design. The target should be to clarify the amplitude, variety, and reach of Landscape Methods in Architectural Design. The proposed research should clarify if such methods exist, if they are to be taken seriously, and what they would change in the discipline of architecture now and in the future.

Landscape methods in our age could re-establish the human condition as the main driving force of architectural creation. The aesthetics of landscape could be a means of reconciliation of man and the built environment. A development in this direction could be a basis for sustainable development with an emphasis on the human perspective.

Architecture itself needs to establish fundamentally new answers in the cultural relationship of human and nature to be able to integrate issues of sustainability. We therefore need an understanding of the concept of our own living space in relation to our world – both the highly cultural and widely popular topic of landscape could give architecture a key role in the future of our society - if it is understood.

References
Hoe een weg de Randstad groener kan maken
An integrative perspective on landscape planning and design in the network society. Wageningen, PhD thesis Wageningen University.


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Fig. 1 Rolex Learning Centre EPFL photo: Ariel Huber (see poster presentation)