Proposal for a New Architectural Theory: How to Establish a Renewed Balance between Man and Nature

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Abstract

This is a design research about the possibility to establish new relationships between architectural shapes and nature, starting from a new way to read and use the structural elements of contemporary territories: infrastructures, functional overlaying, labyrinth spaces, digital technologies, etc.

If during the past it was guaranteed a nature to reach running away from the neglected city, today everything is city and there are no more shelters because natural and urban landscape coincide.

Briefly mentioning the most significant historical ways in which human hand transformed and characterized natural landscape (Machu Pichu, Amalfi Coast, Cappadocia underground settlements, Santorini Island, etc.) as cultural references because of their extraordinary equilibrium between man and nature, we should ask why does it no more happen in contemporary landscape.

Fighting the trivial relationship between landscape and natural element of contemporary design processes, it is necessary to establish a new architectural theory, discovering an abstraction within a relationship that doesn’t deny the existence of nature nor architecture, but not putting each other in hierarchical condition. It happens in some projects by Wang Shu (Ningbo Tengtou Pavilion, Shanghai Expo 2010) or by Junya Ishigami (Japan National Pavilion, Venice Biennale 2008): the first focus his design research on working on section, the second most on the intersections in plan between natural and artificial elements.

This could lead to a new form of architectural aggregation where soft spaces arising from this condition could be naturally connected each other, goes beyond the traditional metropolis concept.

Keywords:

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Nadia Bertolino: Architect and Engineer, graduated at the University of Pavia in 2008. Doctor of Philosophy in Architectural Theory since 2013 at the Doctoral School in Civil Engineering/Architecture EU with a thesis about the role of the designer within the context of contemporary architecture. Today Postdoctoral Research Fellow at the Department of Civil Engineering and Architecture, where she conducts research on the potential of large-scale
underground design for the preservation and enhancement of the landscape and new relationships between cities and nature.
From 2008 she worked in the Laboratory for Landscape and Architectural Construction, participating in research projects of national interest in the field of Architectural Design and participate with continuity to teaching within courses of Theory and Techniques of Architectural Design, Architectural Composition 3 (Pavia-Tongji Double Degree Programme), Architectural Composition 1 at University of Pavia and Multi-Scale Architecture and Urban Design Studio 1 at Politecnico of Milan. She has participated in many international competitions and design workshops, winning Prizes and receiving honorable mentions in Lucca and Bergamo (Italy) and Shanghai (China) about the proposed reuse of the Expo Site in Shanghai.
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Author of articles, including ‘Waterscape’ in Changing Shanghai (2011) and editor of scientific publications, including ‘Contemporary architecture in the historical city’ (2009) and ‘Exercises in architecture. From theory to design’ (2013) and ‘Toward Expo. Activating urban spaces in Milan’ (forthcoming).
Urban, Natural and Third Landscapes. Definitions

Working on the landscape necessarily involves the transformation of a starting condition in which the natural element, whatever it is, constitutes the supporting structure. Although it may seem obvious to the classification of landscapes in urban and natural, it is absolutely crucial for us to understand which rules of the composition should respond to the proposal of our work and which character it should possess. ‘I already know the beauty, now I want to know only the sublime’, Carlo Scarpa wrote and, taking the message of the Romantic era, the search for the sublime is realized and takes shape only through the contemplation of nature and the awareness of all the infinite possibilities of interpreting and transformation that affects every specific environment.

Recalling the definition given by the European Convention, according to which ‘the Landscape means a certain part of the territory, as perceived by people, whose character derives from the natural and/or human and their interrelations’ should emphasize the fact that it is, according to the definition that is most familiar to our work as designers, a space that derives from the relationships established over time in a specific place between human action and natural elements. No international legal instrument had previously dealt directly and fully with landscapes and their protection, development and sustainable management, even though they are an invaluable part of the heritage thanks to their cultural and natural diversity.

The European Landscape Convention filled up this gap, being the first European convention devoted to the landscape in its entirety and to the entirety of the landscape, that should be enhanced as a tribute to history, as the cradle of European cultural identity, as a shared heritage and as a reflection of a plural Europe. However, it, perhaps above all, promotes the landscape as an everyday living environment.

The Convention therefore refers to all landscapes, whether exceptional or ordinary, which means that it also applies to everyday landscapes lacking any special remarkable features. In fact the convention’s main concern is simply what we might refer to as “everyday” landscapes, which are none the less vital habitats for the people living there, be they traditional rural or modern suburban landscapes. From this point of view the landscape express a desire shared by all to live in a high-quality non-standardised urban or rural environment. Appropriate management of the landscape must no longer be monopolised by areas of exceptional quality, but should be extended to promoting – and respecting – everyday landscapes.

The European Convention, in defining a public decision-making process, has already made an important contribution, and has assumed an increasingly important role in the integrated planning process. The objective is to make the landscape the real object/tool in all the plans and programmes that are to be

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introduced into the area, in order to preserve and enhance the value of the existing landscape and create greater awareness with regard to the new, yet-to-be constructed landscape. The process must not, however, ignore the fact that the landscape is a common asset and there is a need to share views and ideas when working with it. The interdisciplinary nature of the process originates from its potential, and requires a continuous dialogue between professionals from various sectors in the phase of critical analysis. The ability to interact with the different people involved and awareness of the complexity of the theme should be the focus of training given to landscape specialists.

It is the environmental transformation that has been the mirror of the ways of living evolution, within private and collective sphere: we just need to understand, then, which answer we could give today to the changed conditions of contemporary society through our action on the landscape itself. The landscape it is a living and changing over time entity, an infinite sum of individual actions that modify and interpret a place favouring or opposing habits, norms, laws. It is the achievement of a balance that forms and melts, it settles and becomes simpler, more spontaneous drawings or despotic visions, eloquent image of the material culture and human work.

Therefore, we should not consider landscape as something static, destined to last forever, but look for the difficult balance, perpetually in motion, between nature and human activities transforming it. In the landscape men enters in relationship each others, thus no longer in the sense of those who think they dominate and reshape nature in their own image and similarity but considering it as a relational space.

Looking for a common way to define landscape, I’m used to refer to a very clear image that has been left us by Italian painter Giorgione in which is perfectly resumed all the features of landscape: in the famous Renaissance painting The Tempest (Figure 1): on the right a woman sits, suckling a baby. Her pose is unusual because in this case the baby is positioned at the side of the mother, so as to expose her to a pubic area. This appears to signal that the mother’s realm is the everyday rather than the sacred. A man stands on the opposite on the left. He smiles and glances to the right, but does not appear to be looking at the woman. To some, he represents steadfastness; they point to the pillars behind him, which often symbolize force or strength. The painting’s features seem to anticipate the storm. The colors are subdued and the lighting soft; greens and blues dominate. The landscape is not a mere backdrop, but forms a notable contribution to early landscape painting, containing, in a balance, all the elements that contribute to give shape and character to the landscape itself: a dominating nature, an urban scene on the background, with a bridge over a small river and the rests of old columns representing the intervention by man, three human figures in the foreground. But a tempest is coming on the scene, threatening the balance between man and nature. Now more than ever we know that this balance is more and more in crisis.

We usually refer to three different kinds of landscape:
1. **Urban Landscape**, it is a quite easily recognizable category if we think to the images of the traditional cities we’re used to lived in, they are composed by rhythm and sequences of buildings, public or private, collective functions and residential, of public spaces (squares, streets), of urban parks, whose character is totally different from the natural park because they follow different compositional rules. We could say that in urban spaces man is the active part of the process, because, as always happened in the history of architecture, he is the measure of all the built space: there is no possibility to represent and design urban landscape without considering the man, as individual or as community, the most important component of the built scenes. Working on urban landscape means give shapes to empty spaces inside the city tissue: public buildings’ landscape, Plazas, parks, road landscape, waterfronts landscape, landscape of residence, considering, usual in architectural practice, the relationship between landscape and building, the scale of human body, the ornament and usage unity and focusing on shaping space.

2. **Not-urban Landscape**, is constituted by the natural environment, is the place where nature is the real protagonist of the scene, in which the man stands in a double position and we can distinguish not-urban spaces in:

   a. Natural landscape, where man is observant, as in the famous vision by Caspar David Friedrich where a man is looking to a wild natural landscape representing the endless space in opposition with the constricted human soul or with, as Magritte shows, the confined interior space where a simple window gives the possibility to escape from human condition. In this way, there is established a deep twice relation between man and nature, as Shakespeare wrote in *As you Like it*: ‘And this, our life, exempt from public haunt, finds tongues in trees, books in the running brooks, sermons in stones, and good in everything.

   b. Built landscape, where man is landscape maker, as in many different and familiar images we have in our minds related to agriculture and, in general, to every human activity that change or give new shapes to an existing situation. Therefore the place appears almost pristine, as a natural evolution of the land. The wonderful natural scenery slowly follows the shapes that the human beings gave it with centuries of work: landscape as result of age. So in these cases it is really important to understand the close link between landscape, agricultural production and sometimes manors, and how different architectural expressions are inspired not only by the landscape but also by
themselves, expression of harmony where architecture looks like the natural completion of landscape, revealing a dialogue between man and nature.

3. **The Third Landscape**, that is a new category introduced by Gilles Clement in 2003 ‘*an undetermined fragment of the Planetary Garden designates the sum of the space left over by man to landscape evolution to nature alone. Included in this category are left behind urban or rural sites, transitional spaces, neglected land, swamps, moors, peat bogs, but also roadsides, shores, railroad embankments, etc*’.

To these unattended areas can be added space set aside, reserves in themselves: inaccessible places, mountain summits, non-cultivatable areas, deserts; institutional reserves: national parks, regional parks, nature reserves. Compared to the territories submitted to the control and exploitation by man, the Third Landscape forms a privileged area of receptivity to biological diversity. Cities, farms and forestry holdings, sites devoted to industry, tourism, human activity, areas of control and decision permit diversity and, at times, totally exclude it. The variety of species in a field, cultivated land, or managed forest is low in comparison to that of an unattended surrounding space. From this point of view, the Third Landscape can be considered as ‘*the genetic reservoir of the planet, the space of the future*’.

**The Balance between Man and Nature in the History**

The vital union between man and nature has produced in the territory spectacular results, expressions of a balance that we need to be aware before taking any transformation. If there is a point of contact between landscape and architecture, this resides in harmony, or more in general, in beauty. And there is no such thing as beauty in the sterile and perpetual repetition of a creative process. Beauty, conceived as sublime, is born and dies and is born again, according to natural cycles, instinctive evolution. When human artifice is able to touch nature’s aesthetic perfection, when man designs landscape with the same skill as only nature can have, then it no longer matters whether we are facing a building or a lake, whether it is architecture or landscape. What matters is beauty alone, the sublimation of these places, in which human artifice is born, grows and dies becoming one with the landscape.

Examples are the settlements of Machu Picchu in Peru, where the clarity of the built forms emphasizes the land topography and re-characterizes it, or in the case of Petra in Jordan, a city fully carved in the rock that establishes an harmonious dialectic with the nature, in which the necessity of control of a difficult topography generates a new (and unrepeatable) building typology.

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2Ibidem.
It happens, for example, on the coasts of Como Lake, where we can found small villages and, at the same time, beautiful villas that contribute to define a typical and particular man-made landscape. This double role is well understandable from the kind of adopted architecture, in which terraces and cultivated woods are found as well as gardens and parks, from the human dimension of hard work to the research of supernatural beauty. Uncultivated and wild green spaces, clean and cultivated woods, groves, terraces, gardens and parks, and manors at last. The path seems so linear and gradual that it becomes a natural evolution, giving shape to a landscape of unique beauty. Harmony is maybe the best word to explain this concept of architecture that becomes landscape. Harmony of an architecture made by local materials, shapes and dimensions which blend with landscape, land and man. It is such a so delicate process to be able to give human artifice the same beauty which usually belongs to the nature.

Equally significant, even if starting from different needs, is the research that, during the Enlightenment, led Ledoux to design the Saline in Chaux within a very rich landscape, expressing the relationship between nature and built space according to a double-scale project: on the one hand, the dialogue between town and surrounding countryside, looking formal dictated by the new settlement whose character is strongly emphasized by the arrangement (geometry) of the natural desire to give each other the accommodation of a portion of lower scale green and intended to private use.

The desire to relate the spaces of the house with the natural landscape, seen not only as a framework on which to intervene, but as an added value to ensure a real improvement in the quality of life, did not leave indifferent some of the masters of the Modern Movement. Just think of the ‘Landscape along the river’ (1920) by Bruno Taut, in which, the model of an ideal city, whose buildings are located in constellations within a large and homogeneous system of natural parks, is strongly opposed to the model of the industrial city that was developing in that time. Compose, then, a sequence of architectural objects destined to housing within the natural landscape according to a single plan is one way to increase the theme man/nature.

To this we can add the experimentation by Wright in the project for Broadacre City (1935), now recalled and updated in the study by MVRDV for Almere Oosterwold. Here the assumption is to organize the landscape (in relation to the site) a large area of small plots for single family houses with a network of workplace (innovative farms and small industries) and public and private services. But what interests us most in the program by Wright is its strong utopian ambition, its message of a possible radical transformation of society starting right from the invention of new rules and relationships of architecture in the landscape. The proposal, complex and refined, poetic and social, does not have the connotations of utopian escape into the dream, but it offers the reality of the material culture of any American citizen the project able to transform the urban periphery in the ideal city".
No Other Places but the City

The search for relationships between the forms of living and the landscape, beyond any geographical or historical connotation, is therefore a fundamental principle of architectural practice, declined at different scales of the project and is the guarantee of the adequacy of the constructed object to context in which it is inserted. Clearly, the dependence between the shape resulting from this type of process and the rapid evolve and mutate lifestyle of the society in time. But if in the past this report has given shape to the ways of living very clear in response to the specific characteristics of a place and a time, we cannot say the same with regard to the contemporary condition. Today, the whole environment is affected by urbanization: if once, in fact, it was guaranteed a nature to reach out of the neglected city, today everything is ‘city’, and therefore, there are no more shelters.

The urban system has expanded like a network across every parts of the earth, as the satellite images by night show: there is less and less usable space to expand, less and less spaces to escape outside. The ‘somewhere else’ that used to exist in abundance as reservoir of problem solutions, is disappearing and we are supposed to establish in our planning new relationships between built environment and nature.

It is remarkable how, today, this need for renewed investigation of the relationship between the built and the natural interests most other sectors of the creative work and is only marginally compared to the architectural debate, as evidenced by the work of photographer and visual-artist from Florence, Giacomo Costa: ‘My research examines the city as a metaphor of human behavior and speaks of human feelings through the architecture. The nature is the side that man doesn’t control, which often mistreats and tries to force to his will but that certainly will never subdue’¹.

André Corboz wrote: ‘The inhabitants of a territory constantly delete and rewrite the old incunabulum of soil. The territory is no longer a given object, but the result of several processes. On the one hand it changes in spontaneous way, on the other the territory undergoes human intervention’². Today, this no longer occurs in equilibrium, and changes made by men are so pervasive as to cause a total loss of identity of those territories which until now have been characterized by precise identity elements. When architecture is no longer able to ensure the human scale of the territory in accordance with the character of the place, the measurement relationship between man and nature, it stops to exist and the city ceases to be the place where this relationship is expressed, as in the scenario of uncontrolled urbanization we have seen up to today. This raises at this very moment the need for admission of mistakes made and for a radical renewal of planning scenarios in response to new construction needs. The landscape we should refer to is the one for human life, which has no relationships with the classical sociological analysis and it cannot be expected

assuming the stability of some variables. If, as it happens, there is no possibility of prediction about social phenomena that in-form the city, there is also the possibility of less design the city itself according to the canons and traditional rules to which we were accustomed up to now. If we have always been able to define the city compared to non-city, now this axiom enters in crisis because the boundary between the two systems has stopped to exist and the demarcation line between the two areas, the first sharp and clearly identifiable, is now faded until it will be totally lost:

The study of suburban space could propose, therefore, as a new strategy the look on the dispersion to reconsider the urban phenomenon and its context that is especially cultivated space, inviting to put together figures and background, shapes that stand out on a matrix without attributing it to the countryside or the city.

Conclusions. No More Hierarchy between Nature and Architecture

Due to a trivialization in the relationship with the landscape and the natural element that characterizes many of the recent architectural achievements, it imposes the obligation for further research to establish a new theory of architecture, starting from the observation of unpredictable application on contemporary society, provides answers and solutions to re-invent the relationship between the built environment and nature. As explained by Pritzker Prize Wang Shu during his keynote lecture address at the Triennale in Milan: ‘It is the section the most important element, not the plan: the section is experience, paths, and people must be made to recover this sensitivity space’. According to this kind of design it comes the complex internal space, for example, in the Ningbo Tengtou Pavilion, built for Expo Shanghai 2010. Focused on the theme of Chinese agricultural landscape, the building contrasts with the essential formal external structure through an unexpected richness of the interior space in which the plans intersection at different heights and the alternation of full and empty returns the depth of the relationship man/nature inherent in the Eastern tradition. In fact, citing the need to give shape to places where men can recognize themselves and are able to arouse in a sense of familiarity, we must remember that ‘attempting to see or read places is not a process with a known result – places have their silences and their epiphanies – as designer we must equip ourselves to utilise multiple points of observation and states of being’.

This approach should inspire the designer, however, a new feeling of nature: ‘Many times I’ve been hinted by some oddities of human life. I mean their action of painting what their sight can understand. The fact they use to

travel. They have a special taste for gardens. When they stand in front of these activities they feel a confused feeling, whom they call feeling of nature\textsuperscript{1}.

From this awareness comes, therefore, the new way of living, the redefinition of traditional outdated distribution choices in order to give an answer to a way of life that has nothing more to do with the architectural forms on which we are used to working on.

Among contemporary examples it is particularly significant and shareable a strand of experimental research that achieves this renewed request for Nature and landscape. Nature enters inside domestic spaces, the buildings are linked to the environment through soft and indeterminate directions and spaces becoming one of the main themes of the work by the Japanese architect Junya Ishigami, curator of the national pavilion at the Venice Biennale in 2008 (Figure 2). He wrote: 'When we talk about the relationship between architecture and landscape it includes, in general, a large natural environment around architecture. Instead, I would try to think about the environment and architecture in the same way: giving life to a project following this criterion is to discover a new abstraction within a relationship that does not deny the existence nor the nature of architecture, but does not place them in a position even hierarchical relation to each other\textsuperscript{2}.

This could lead to a new form of aggregation in architecture that exceeds the traditional concept of the metropolis. Soft and imprecise spaces that arise from this condition may connect to the rest of the architecture in a natural way, so in the same way the city could return to live in balance with a new form of nature.

We need not fear, then, aspiring to create an ideal society, which is able to shape a contemporary utopia, in which the new-found and renewed relationship between man and nature constitutes the starting point. This means to intervene effectively on the design of interior spaces, because, as seen in the case of Ningbo Tengtou Pavilion or in the works by Ishigami, this is the preferred tool to open up new perspectives on nature, which can become in effect a structural part of the built environment.

\textsuperscript{1}Aragon, L. (1926). \textit{Le paysan de París}. Paris: Editions Gallimard
Figure 1. Giorgione, *The Tempest*, 1505-1508, Gallerie dell’Accademia, Venice