Representation and Landscape Architecture: Towards a New Language? The semiotic and cognitive value of representation as a relevant issue for an aware and evolving culture of landscape architecture

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Abstract

Landscape architecture has a significant relation with figurative arts since its beginnings. The cultural, aesthetic, stylistic, and artistic contribution to its project is essential. Despite that, it appears we are experiencing a contradiction because, on the one hand, we have excellent examples in which technologies bring notable advances in our culture and in the way of conceiving transformations. It seems that design evolves in a completely new way, made up of the integration of languages, contaminations, and experimentations. On the other hand, however, we are facing a certain flattening in the majority of the works that are produced worldwide. If very useful from a technical point of view and proficient in processing and representing large quantities of information, the use of digital programs seems encouraging an image-oriented approach rather than a reasoning-oriented approach, producing in most cases a homologation in the description of projects. If representation is directly responsible for the way we approach transformations, can we talk about a new evolving language? Considering as well the relationship with the European Landscape Convention, the paper aims to reconsider the role of representation, conceived as directly responsible for the way we approach transformations as well as for shaping a way of thinking related to the sensibility toward landscape values. It therefore considers the cognitive aspect of representation as a crucial value for enhancing a more aware culture of landscape architecture.

Keywords

Representation, Language, Landscape Architecture, Project.

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The landscape project is often rich in meanings, according to the complex phenomena to which it refers. Its representations amplify concepts and contents that add several meanings to the technical information. They reflect social needs, propose cultural models, transmit scientific information, and, finally, they are a vehicle for expressiveness.

With new technologies, we necessarily had to modify our approach, and this seems to be the most exciting challenge we face as designers and landscape architects today. Despite this, we can point out that there is a certain flattening of the expressive language in a majority of contemporary landscape architecture projects.

We must obviously remember the great utility of digital programs in landscape design, which is not in question from a technical-scientific point of view. They allow to create realistic three-dimensional models, to map vast territories with GIS systems, and to interacting through augmented reality. Instead, what the article wants to focus on is the cultural influence of certain practices in the landscape education and design today.

It seems we are experiencing a contradiction. On the one hand, we have excellent examples and technologies that bring notable advances in our culture and in the way of conceiving transformations. On the other hand, we are encountering a homologation in the majority of the works that are produced worldwide.

That is an approach that seems to permeate our current design culture. We can think as well that today, for example, there are design studios that deal exclusively with post-production: Mir, Plomb, The-Boundary, Darcstudio deal with digital visualization but also with graphic and visual communication. A well-known example in the field of landscape architecture is the work done by Nadia Amoroso (2012), the author of numerous books on representation. which are global visual reference points. This trend is fascinating, but in general, there seems to be a misunderstanding. There is probably a distance between those who design and those who represent and communicate ideas. The images seem to reproduce an 'international style' that applies to everyone and that everyone reproduces - a problem that also concerns the way of thinking about the project. This tendency to abdicate the representation of the project to the visualization professionals shows that representation is no longer considered by many as a fundamental part of the creative process, producing a certain homologation. This probably depends on the tendency not to consider representation the primary language of the project, which is the vehicle of concepts, information, reasoning, and creative expressions.

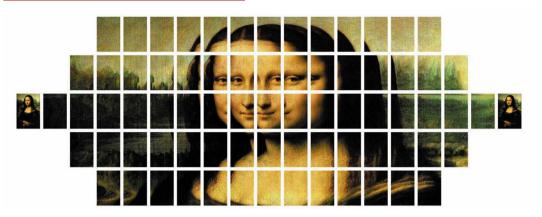


Fig. 1 – Franco Zagari, San Paolo, Fronte-Retro

Moreover, we can notice that representation is experiencing a considerable crisis today, especially in the educational system (Fava, 2019). It appears that there is a certain tendency to conceive representation as a product rather than a language, while, at the same time, many researchers seem to be rediscovering its semiotic importance as a complex cognitive system.

Part of this responsibility is may related to the way digital programs make us conceive the drawing process. In the most virtuous cases, the digital programs allow new possibilities to represent and conceive space, and this happens with a great awareness of its expressive possibilities. They are not just evidently useful in order to map and share details quickly, but they can also integrate different styles and languages, as well as multiple types of information, and make leaps of scale that only technology allows.

By the way, if very useful from a technical-scientific point of view and capable of processing and representing ever-increasing quantities of information, our way to approach to them, most of the time, seem to be image-oriented instead of being reasoning-oriented, producing a flattening and homologation in the description of projects.

If representation is directly responsible for the way we approach transformations, is it just a crisis that we are facing, or can we talk about a new evolving language? What influence do satellite representations and point clouds, for instance, have today on conceiving transformations? Can it produce instead a new way of seeing and experiencing the landscape? It is known that since the time of Leonardo da Vinci. representation is a way to investigate natural phenomena, and it is an approach that has characterized the design attitude in the modern era. The representation is precisely an intellectual and emotional elaboration of physical and cultural contents. Perception and representation are correlated in the cognitive processes we talked about, and their functioning was studied in depth in the 20th century. It is not just a question of considering the landscape as a panorama only from a visual point of view; it also involves understanding that the concept of landscape is intrinsically linked to perception, and inevitably to representation, as already mentioned.

Also, for the European Landscape Convention, this has a notable impact on the culture in reference to the landscape as something that has a cultural, social, and ecological value. Perception has a central role even today not only as an aesthetic phenomenon but also and above all as an element that allows the understanding of social, cultural, ecological phenomena, and their recognition in visible forms of the territory.



Fig. 2 – Franco Zagari, San Paolo, Fronte-Retro

What we can certainly say is that representation is the basis of an education that allows understanding the value of certain phenomena which are then recognizable in signs on the territory, in specific forms that, thanks to their identity and recognisability, become a landscape. All of this is outside the philosophical debate on the landscape and its identification in an image.

Also, considering these aspects, we can understand the interest of institutions, such as the European Council of Landscape Architecture Schools, towards both traditional and digital representations today in the field of landscape architecture. We can mention the Journal of Landscape Architecture (Jo-LA) that frequently dedicates a part of the magazine to the representation of the landscape project. The same can be said for the annual international Digital Landscape Architecture (DLA) meeting that is hosted in Dessau and discusses digital technologies related to landscape architecture.

Considering the cultural importance of representation for the European Landscape Convention also, we can say that it is, therefore, still an object of study, and we can consider it a language in evolution. About the relationship between representation and the culture of landscape architecture, we must remember first the semiotic value of representation in our culture – a language made of signs that create meaning and which can be read, understood, and interpreted. Rudolf Arnheim (1969), among many others, has shown the cognitive process that occurs through representation from the viewpoint of the psychology of perception. In his theory, perception is identified with thinking, as it makes us consider representation as a particular way of reasoning.

The same is argued by the contemporary theorist of perception Howard Riley (2013), who recalls that by drawing the designer selects and combines different elements for the communication of experience, recording and consolidating informations, and that representation fulfils the functions of a language. In general, we can consider that representation is not just an exercise; instead, it acts as a window that interprets the world. Moreover, it has always had a profound impact on the field of architecture and the project.

The cognitive process behind representation had a relevant influence for the born of a culture of landscape architecture as well. Furthermore, we can say that the link between figurative arts and landscape architecture is much more evident in landscape architecture than in traditional architecture, in the freedom of constructing ideas and in thinking – even subconsciously – of the landscape as a canvas and of the vegetation as colours and shapes that are part of the painting. 02

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This is a substantial added value to the discipline identity.Michael Jakob (2009) asserts that the painting forms the aesthetic presuppositions for the cultural interest in the landscape. Steven Heyde (2017) similarly argues that drawing practices influenced the birth of landscape architecture in the 19th century, remembering that the painter Hubert Robert took part in the design of Ermenonville to direct its aesthetic orientation.

The same is also evident in the birth of the picturesque aesthetic, so creating a garden is like painting a picture. Think about the words in the Epistle to Burlington written by Alexander Pope in 1728, a pioneer of landscape gardening in England: "Paints as you plant, and, as you work, designs." (Calvano, 1996). We can explicitly refer to William Kent as 'painter enough' to "bestow [...] all the arts of landscape on the scenes he handled" (Hunt, 1987), as well as to Humphry Repton and his Red Books with numerous handwritten sketches and illustrations. Inheriting the landscape painting of Claude Lorrain, Nicolas Poussin, and Salvator Rosa, they have exalted the role of nature in the garden, and many of their drafts suggest a particular intention to express and resolve ideas swiftly.

It is necessary as well to remember that landscape architecture descends from the Beaux-Arts disciplines to which it is a sister and that the cultural, aesthetic, stylistic, and artistic contributions of the project are essential. Just think of Gertrude Jekyll, who paints gardens as compositions of chromatic patterns with attention to the changing seasons and flowering cycles. Her drawings contain very detailed information on the plants, their position, their number, and their typology to obtain very particular effects of the colour combinations studied by her and represented in her illustrations (Metta, 2008). It must be considered that very often, the great designers were also artists, aware of applying themselves to the project. Just think of Burle Marx, who carried on his botanical, artistic, and design activities at the same time, producing pictorial works that then became references for his design and his scientific studies at the same time.

From the one side, representation can be understood as a tool for interacting sensitively with places, a way of establishing a personal relationship with places and with users, and as an antidote to the standardization and flattening produced by digital media. This can also be seen in the contemporary scene. Anton James, known for his pictorial techniques, in an article published on JoLA in 2017, argues that drawing crystallises the real value of a place and allows you to experiment with its future (James, 2017). A similar approach is that of Michel Pena, also known for his monochromatic freehand drawing. His representations are extremely sensitive in the description of places and particularly evocative in imagining their future configuration.

The representation can also be conceptual as in the work of Steen Hoyer, professor at the Royal Danish Academy of Fine Arts. In his series of representations Global Gardens, Hover (2006) creates representations of landscapes from all over the world, which expressly want to be an alternative to landscapes that are interchangeable, consumed, saved, or discarded of contemporary expressions that operate with digital and approved means. Representation, and in particular illustration, is also an expression of very refined styles, looking for graphic alternatives to photorealism. An example is the UP Studio of Long Island City that considers widespread photorealism on a global scale something to be avoided¹. From the other side, it also seems that design evolves in line with the needs felt at a social level and in design in a completely new way, made up of the integration of languages, contaminations, and experiments. From satellite cartography to point clouds to contaminations with artistic languages such as videos and photomontages, today, it seems that representation leads to thinking of the project in a more multi-scalar and more holistic way.

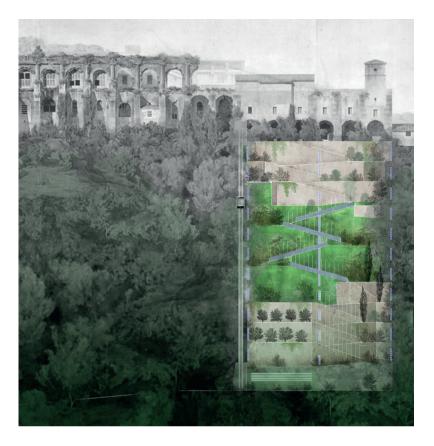


Fig. 3 – Fabio Di Carlo, Alfonso Giancotti, Andrea Grimaldi e Monica Sgandurra, Giardino di Ercole Vincitore, Villa Adriana, Piranesi Prix de Rome 2018, prospetto **Fig. 4** – Fabio Di Carlo, Alfonso Giancotti, Andrea Grimaldi e Monica Sgandurra, Giardino di Ercole Vincitore, Villa Adriana, Piranesi Prix de Rome 2018, pianta



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About this tendency, we can mention the representations of Christophe Girot (2013), which use specialized software that allows the simultaneous showing of different systems in an excessively sophisticated way. The information that is also given through video rendering is very high and, at the same time, concerns the geography, topography, existing infrastructures, and quality of the soil, with detailed and precise sections and readings in architectural terms. Almost infinitely possible levels of interpretation manifest richness and refinement that make his research one of the most innovative.

Equally impressive is the representation of the *At-las for the End of the World* by Richard Weller (2017), linked to the use of maps and cartographies in which we can find an overall image of the Earth as a single and complex system. With his atlas, Weller brings significant growth into the world of landscape design, thinking about the landscape on a planetary scale, with large reforestation projects, and simultaneously on a very detailed and microscopic scale. This cases show that the use of digital media can be a great opportunity to develop effective representation techniques also to support the reasoning creative process. They definitely lead us to a new concept full of possibilities.

We can perhaps say that, as in the XVII century, in which we acquired new ideas of space from astronomy and mathematics, representation nowadays seeks to amaze, to discover, and to create something new. The reasoning method seems to be more fluid, taking us from the large scale to the small scale, with articulated connections due to the structures of vector programs, which allow this type of relationship.

When we no longer have only a sheet or a model to imagine the transformations, but we use clouds of points and mathematically unlimited spaces as in vector programs, the transformation opportunities subsequently increase. When layers are used, and these can be easily interchanged in order, they allow contamination of styles. Yes, we can talk about a new language of contamination and experimentation that is evolving. But is it a valuable pillar in the culture of landscape architecture with the consciousness of the semiotic value of representation, something that not all works today, unfortunately, show. Despite some remarkable examples of new contaminated languages, we still feel a need for an increase in the quality of most representations we see today to also create a new way of seeing the landscape.

Through representation, we have the opportunity to integrate aesthetic and scientific languages and combine cultural and technical information. The multiple layers add value and information, and integrate their meaning, thus leading us to think about the landscape itself in a more complex and articulated way. It is beneficial for landscape architecture that is based on the values defined by the European Landscape Convention, and something that also allows a broad and shared dissemination of the values that make up the culture of the landscape and its design. To do this, however, it is necessary to remember the semiotic value of the language of representation, as stated in this article, with a precise psychological and anthropological value: a window that interprets the world, and that allows us to understand, reason, and create.

Even though digital tools have amplified the work of landscape architects for both technical and visual tasks, it is still possible to agree with Caroline Lavoi (2005) in *Sketching the Landscape: Exploring a Sense of Place. Exploring a Sense of Place*, she remarks that representation generates awareness, which is more than just information in understanding the landscape. With this awareness, these new languages can create a new way of seeing and experiencing the landscape. For this reason, representation is also profoundly educational, and in universities, it should always have an important role, starting with the study of its psychology.

If, in our world, we communicate mainly through im-



Fig. 5 –Daniele Stefàno, Eutropia, Illustrazione de Le Città Invisibili di Italo Calvino ages, representation can prove to be a useful tool, alongside other forms of representation, for the formulation of the landscape architecture project and its communication to the population. In these delicate times, we can reconsider the role of representation deeply, starting from its semiotic value, like a window that interprets the world that is directly responsible for the way we approach transformations in shaping a way of thinking and seeing related to the sensibility toward landscape values.

The semiotic and cognitive value of representation is steel a relevant issue for an aware and evolving culture of landscape architecture. This approach and vision can have a notable impact on students' minds in the overall educational field; it has been a value in defining the landscape architecture discipline since the beginning, and it can now be the way we see and shape its future.

Endnotes

¹The works of the UP STUDIO are visible at the page: <https://www.theupstudio.com/designxarch/illustration.html> (12/20)

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