The Fifth Landscape: A Transdisciplinary Approach To interpreting Perceptual Landscape Transformations?

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Abstract

The conception of "Fifth Landscape" (Repetto & Aimar, 2021) originates from the presentation 'Fifth Landscape/Landscape 5.0' held by Diego Repetto at the conference 'Shaping the City: A Forum for Sustainable Cities and Communities', 'Culture for Sustainable Cities' section, organised by the European Cultural Centre in 2018. It is a fresh implementation and evolutionary development of the concept of Fourth Landscape (non-profit association Quarto Paesaggio, 2013), and an homage to Gilles Clément's well-known Third Landscape (2004). If Clément defines the 'Tiers paysage' [Third Landscape] as "… made up of all the places left behind by man" (Clément, 2004:1) and exhorts to consider the "… the inherent mechanics of the Third Landscape - as an engine of evolution" pointing out the necessity to "teach the engines of evolution …" (ibid., 24), subsequent elaborations derive their substance from this evolutionary nature and reworking of the landscape waste. Indeed, the Fourth Landscape uses art as an engine to stimulate citizens participation in the reflection on the meaning of the suburban landscape and their role in this re-appropriation and re-interpretation, as the urban landscape is also a common good (CR Florence Foundation, 2018).

Keywords

landscape design, subsidiary energy, natural-human habitat; Ecosystem complementarity

The concept of "Fifth Landscape" (Repetto & Aimar, 2021) originates from the presentation 'Fifth Landscape - Landscape 5.0' held by Diego Repetto at the International Drawing Study Day in Genoa May 28, 2019, organized by the Department of Architecture and Design DAD, Polytechnic School of Genoa (Bianconi, Filippucci & Repetto, 2019).

It is a fresh implementation and evolutionary development of the concept of Fourth Landscape (CR Florence Foundation, 2018), and a homage to Gilles Clément's well-known Third Landscape (2004). If Clément defines the 'Tiers Paysage' [Third Landscape] as "made up of all the places left behind by man" (Clément, 2004:1) and exhorts to consider "the inherent mechanics of the Third Landscape - as an engine of evolution" pointing out the necessity to "teach the engines of evolution" (ibid., 24), subsequent elaborations derive their substance from this evolutionary nature and reworking of the landscape waste. Indeed, the Fourth Landscape, as suggested by choreographer Virgilio Sieni, uses art as an engine to stimulate citizens participation in the reflection on the meaning of the suburban landscape and their role in this re-appropriation and re-interpretation, as the urban landscape is also a common good (CR Florence Foundation, 2018).

In the *Fifth Landscape*, the concept of the centrality of image and its media impact as the creation of virtuous valorisation/revitalization processes in the landscape is explored. Employing real and virtual works, albeit temporal, such proposed activities work as practical actions to operationalise resilience in the landscape. They are new possibilities for thinking and engaging with the environment, echoing an oneiric experience. In this regard, Melis refers to the close connections among technology, art, and science from a paleoanthropological point of view, and that they are therefore "a manifestation of this redundancy, variability and diversity that we need to strengthen our resilience" (Melis in Aimar, 2021). Consequently, experiential works such as Beauty¹ (1993) by Olafur Eliasson, Imagine Peace Tower² (2007-ongoing) by Yoko Ono, Leviathan³ (2011) and Descension⁴ (2014) by Anish Kapoor, Infinity Mirrored Room⁵ (2012, 2020) by Yayoi Kusama, Astronomia Nova⁶ (2017) by Faith XLVII and Lyall Sprong, support the building of this operative perspective. The capacity to create shared memories through emotional reactions to performative events can help reinforce the sense of identity in a community and also for members of future generations functioning as emotional triggers. In this way, possible landscapes will be created by hybridising creativity (art) and the tangible (nature) to produce results in the sphere of the intangible (emotions), proposing a new way of relating the social and ecological parts of a system.

Along with the evocative mediums included in the Fifth Landscape concept, the digital approach offers potentially endless possibilities to meet the needs of an increasingly atomized and dispersed audience (Bauman, 2000) for expected, predictable (systemic shocks), or unpredictable situations (i.e. the "black swan", Taleb, 2007). While previously the issue of including every visitor in the 'on-site' enjoyment of cultural heritage at different territorial scales through multisensory projects was relevant (e.g., the Land(e)scape the Disabilities project in the Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato, 2016), today the impact of the Covid-19 pandemic on a global scale (2020-ongoing) has made clear the need to further expand this experience. Due to its flexibility and adaptability, with the help of tools such as Virtual (VR) and Augmented Reality (AR), the virtual has turned into a primary means for experiencing art venues and landscapes beyond borders.

Considering this perspective, could the *Fifth Landscape* then become a key to transdisciplinary interpretations of perceptual landscape transformations? Reproducing an artwork through modern surveying techniques to generate digital models, as well as with photography to create increasingly high-resolution images (Latina, 2016), does not seem to offer immersive ways to enjoy such content. In a world where the voracious appetite for consuming intuitive and instantaneous visual content, evidenced by the over 1.8 billion monthly users of Instagram and TikTok in October 2020 (Statista, 2020), exciting opportunities for artwork dissemination are emerging in the field of Augmented Reality. TikTok itself outlines a course of action in the app's download description: "Unlock tons of filters, effects, and AR objects to take your videos to the next level."⁷

Other AR apps like 4th Wall⁸, for instance, show how the exhibition space can be 'moved' to an unconventional location. Made for iPhone and iPad, it materializes the artwork anywhere, generating a new interaction between art, landscape, and audience. Through virtual or real imprints, the landscape becomes a spectacular experience, as in the video mapping projection of Giotto's frescoes in the squares and streets of Assisi, Italy⁹ (2020). Thus, Landscape 5.0 is composed of new forms of AR that can be defined as Spatial Augmented Reality. In it, the physical environment of the user is augmented with the projection of images and sounds. The focus is on the story by enhancing the artwork through different spatial scales. As such, it generates an entanglement of the perception of multiple landscapes. From the hard-to-use to the 'imagined' ones, where key factors are the user's hopes and dreams as the latent potential to be actively included in the reading.

However, as Pellegri and Scaglione (2021) already ask, can a digital imprint influence the future of a real landscape? In everyday reality, digital and real are increasingly intertwined and overlapping. The outcome of the digital overwriting of the real may generate a global intelligence application that, in some re-

¹https://olafureliasson.net/archive/artwork/WEK101824/beauty

²http://imaginepeacetower.com/ ³http://anishkapoor.com/684/leviathan

⁴http://anishkapoor.com/1010/descension

^shttps://www.tate.org.uk/whats-on/tate-modern/exhibition/yayoi-kusamainfinity-mirror-rooms

⁶https://faith47.com/astronomia-nova-2/

⁷https://play.google.com/store/apps/details?id=com.zhiliaoapp. musically&hl=en US&gl=US

⁸https://apps.apple.com/us/app/4th-wall/id1325881248

⁹https://www.mcarchitects.it/mario-cucinella-direttore-artistico-delnatale-di-francesco

spects, falls under user experience and performing media. Thus, the use of VR and AR in experiencing an environment increases the resilience of those enjoying it, as it multiplies the possible options for its use.

All of this has reinforced the intra-pandemic approach to cultural property enjoyment, which has led to an increasing decoupling of content and container from traditional forms of enjoyment. Analyzing monitoring data of World Heritage sites closed due to Covid-19 in 167 countries (as of December 7, 2020), only 47% kept them open, 22% shut them down completely, and the remaining 31% opted for partial closure (UNESCO, 2020). In this context, technological innovation in the remote



Figure 1-2. the Royal Park of the Castle of Racconigi, Piedmont, Italy. Coloured digital storks in origami form appear using the AR app "ARTgo" installed on a mobile device (photos property and courtesy of Diego Repetto. Authors' elaboration).

fruition of cultural services and events has overcome the physical impediment of their local or territorial enjoyment, as in the open-air contemporary art museum Kalenarte¹⁰, Molise, Italy. This may prove to be an opportunity for the democratization of use, allowing for broader accessibility. Concurrently, it generates questions for the post-pandemic period. Increasing the ability to enjoy the artwork in different ways could exacerbate a gap in the appreciation of the cultural asset. User affordability could define the level of engagement, with the more affluent enjoying themselves live while others will be connected remotely via scalar bands of access to premium multimedia content.

Current examples of new digital technologies combined with cultural heritage include several apps for iOS, Android, HarmonyOS, and Windows Mobile operating systems, among others, as supporting tools that can strengthen Tourism 3.0. In 2016 and 2017, the arch. Diego Repetto and his development team, along with the Director of the Royal Castle of Racconigi (province of Cuneo, Piedmont, Italy), tested the use of VR and AR to boost the exploration of the Royal Castle Park.

The implementation of virtual content, such as digital storks in origami form, was intended to test a new way of experiencing and visiting art venues (Fig. 1-2). Consequently, cultural assets such as parks and museum spaces would be renovated in their message and reinterpretation, transferring the concept of gamification to landscape perception. This would have integrated with new meanings by virtue of AR, where augmented objects become a source of multiple, site-specific information.

In 2021, the Marini San Pancrazio Foundation - Marino Marini Museum, Florence, in collaboration with the TuoMuseo Cultural Association, is announcing the third edition of the "Playable Museum Award," which opens the challenge to cre-

ative people and visionaries from all over the world to develop an idea for the Museum of the Future, an engaging, "playable" museum in which technology supports creativity, stimulating ideas, including through play, that can rethink the connection between people, artworks, and the museum.

The transdisciplinary working group, formed for the occasion by arch. Diego Repetto, musicians and composers Aiazzi and Maroccolo, sociologist Paolo Bertetti, space architect Valentina Sumini and illustrator Federico Bria, joined by start-up companies specializing in VR and AR, developed the "FLOATH-INGS" project^{11.}

The proposal aimed to stimulate visitors to experience the museum space in a novel way through the combination of multiple creative languages, from music to graphic art, and the technological innovation of VR environments. The installation is generated by two immersive spaces, virtual and real. In the centre, a suspension structure accommodates one visitor at a time equipped with a VR visor, harnessed and suspended in the air a few inches above the floor. The viewer, inscribed in a circle of light, floats, immersing himself in a virtual and sound. environment depicting planets and sculptural elements, wandering in deep space. The floating objects, Marino Marini's sculptures revisited by illustrator Federico Bria (Fig. 3), arise from the planets on the horizon through inputs generated by Maroccolo and Aiazzi's musical composition.

Based on the movements of the suspended viewer, variations are generated to the music, making the sound environment unique and personal each time. Visitors around the central core of the installation move on a platform equipped with sensors that allows them to perceive through vibrations the visual sensations experienced by the VR viewer, who becomes a kind of living sculptural Vitruvian figure (Fig. 4).

In the real world, one is immersed in the evocative sound environment through directional audio systems. The work aims to make the museum spaces alive and joyful, intriguing and stimulating the visitor to new ways of observing and getting to know Marino Marini's works. A new dialogue is generated between the works of the Tuscan artist and visitors, involving the technological and entertainment languages of the new generations. Finally, to generate a greater connection between visitors and the museum, sensors and music cooperate together. Using beacon sensors, small devices that work with BLE (Bluetooth Low Energy) technology used for proximity marketing, i.e. communicating with users via their smartphones, visitors can be enveloped by Maroccolo and Aiazzi's musical composition when standing near a work by Marino Marini or outside the Museum itself. It generates a unique museum sound path, which can have its beginning or conclusion in the piece "FLOATHINGS".

As semiotician Paolo Bertetti suggests in the descriptive project report of the proposed installation at the Florentine museum, the definitions of figurative forms arrive by immersing one-

¹⁰https://www.kalenartemaack.com

¹¹https://www.intoscana.it/it/articolo/origaming-cosi-la-visita-al-museo-diventa-ungioco-ad-arte/



Figure 3-4. "FLOATHINGS" project for the Marino Marini Museum (photos property and courtesy of Federico Bria. Authors' elaboration).

self in sensory hyperstimulation with the staging of ongoing processes, in the human perceptual experience, starting from sensations one arrives at categorizations and, through the contribution of the different sensory orders. It is a process that is polysemous and synesthetic in nature. The "FLOATHINGS" experience reinforced the concept of Landscape 5.0 in which the visitor, both body/perceptual subject within a landscape/ installation and object of observation from the outside, makes explicit and enacts through the technological medium what sociologists Nick Abercrombie and Brian Longhurst call the "spectacle/performance paradigm" (1998).

We live in a spectacularised world within which each of us is both a spectator and audience of some media. In today's society, everyday life is strongly permeated by media imagery; indeed, our identity is, at least in part, defined by being a member of an audience, by our relationship with certain media forms, and ultimately by our consumption choices. In a growing process of the aestheticization of everyday life, this identity is increasingly the object of a narcissistic construction, in which individuals increasingly perceive themselves as "performers." In a "performative" society, each of us is both producer and spectator, and in which media fruition practices are thus no longer limited to mere consumption but can evolve into performance and production practices.

Perceptually, through technical support and the voluntary and/or involuntary performative experiences of artists and viewers, we can see that the landscape is continually being changed, both in the virtual and physical and online environment, further defining Landscape 5.0 or Fifth Landscape.VR and AR allow the visualization of artworks, places, objects, and data also by using holograms (Art exhibition in Palermo, Italy, 2020), to be appreciated while walking between or towards an asset. The result is a new interaction between landscape and audience, in which one traverses an 'alien' environment to be built as in the game Minecraft (2009). In it, the entertainment component plays an increasingly strategic role, as it is immersive. The Fifth Landscape is an imagined landscape. A conveyor of place regeneration, where anything is possible. It investigates a truly inclusive democracy of enjoyment in tangible and intangible ways.

Therefore, the *Fifth Landscape* becomes the bearer of a choral message. Interaction through new technologies can contribute, as in the case of the "Earth Speakr"¹² project (Eliasson, 2020), to making the landscape a common good usable by all. Designed in collaboration with the Goethe-Institut, the young user can draw his or her face and record the own voice to animate the environment, plants, logs, rivers, the sky, and any other element of the landscape. In that way, children's messages are placed on a virtual map using Augmented Reality. Squares, parks, and institutional buildings both become places to encourage people to listen and means to raise awareness of climate change issues.

In addition to the use of VR and AR systems, virtual or real footprints can transform the landscape into a spectacular experience, as in the case of the urban light art, urban light and video-mapping festival "RGB Light Experience 2020" organized by the Luci Ombre Association. During this festival, an itinerant and experimental exhibition was created by redesigning urban architectural surfaces in the Pigneto and Torpignattara (East Rome) neighbourhoods with eighteen site-specific works, including the Alexandrian Aqueduct in Sangalli Park and the elevated causeway of the Eastern Bypass designed by Japanese architect Kenzo Tange. New imagery was created by focusing on a different relationship between humans and the environmental context, transforming that part of the city into a veritable temporary open-air museum.

Because of Covid, the festival/exhibition had to change its mode of fruition, in this regard, artistic director Diego Labonia said in an interview¹³: "in these times dictated by distance, isolation and fear, the RGB project has been completely rethought to allow it to unfold to its fullest potential. Instead of the usual walk along a path littered with artworks, it will be the artworks themselves that will move within the urban fabric."

To this end, two trucks were equipped to bring all the scheduled works to a different site out of the four selected each day, making them available to pedestrians, those passing by car or public transport and those watching from flat windows, but also live streaming on RGB's social channels.

¹² https://olafureliasson.net/archive/artwork/WEK110940/earth-speakr
¹³ https://www.exibart.com/fiere-e-manifestazioni/il-cielo-luminoso-sullasera-di-roma-al-via-rgb-light-experience-2020/



Figure 5-6. "Y.K. L'altra metà del cielo" by Diego Repetto and Gianni Maroccolo for RGB Light Experience 2020, the Alexandrian Aqueduct of Sangalli Park and the elevated causeway of the Eastern Bypass, Rome (photos property and courtesy of Diego Repetto).

A phygital event was created, which was namely between the physical (in presence) and the digital (streaming).

A special aspect was, for some works, the creation of soundtracks, which further intensified the surreal and immersive dialogue with the urban context, also made of the city vehicular traffic. On this occasion, architect Diego Repetto with musician and composer Gianni Maroccolo celebrated the French painter Yves Klein (1928-1962), Yves Le Monochrome, who found his highest artistic expression in blue, with an audio-video animation work entitled "Y.K. The Other Half of the Sky." The work projected in the chosen urban locations as the backdrop for the Roman light art festival depicts the continuation of Klein's "leap into the void," ideally continuing the symbolic image of Nouveau Réalisme by making it fly into the blue sky. In doing so, the artist himself becomes the sky, capturing the absolute blue in the other half of the sky. Accompanying the French painter's "leap" was the sonata for saturated bass solos loosely inspired by Yves Klein's Symphonie Monotone, created by Gianni Maroccolo, which during the performance enveloped the urban space, integrating perfectly with the daily traffic, the latter being transformed into a kind of white noise (Fig. 5-6). In addition to celebrating Yves Le Monochrome, the work pays tribute to 2020 as the year of blue, so named in late 2019 by the Pantone Color Institute. Laurie Pressman, vice president of the International Sellers of Color, told the Associated Press on the occasion of the colour nomination for the year 2020 that the blue offers stability and connection, conveying a reassuring presence and creating a feeling of great space and confidence in the future14. In these terms, the Repetto-Maroccolo duo intended to bring a message of hope to a world torn apart by the pandemic and uncertainty in the future. Despite the short duration of the festival (four days), the areas of intervention felt redeemed: each artist intervening in the architecture made them different from their everyday imagery. The public thus explored a material heritage, in some cases historical and/or functional and others aesthetically questionable, renewed by immaterial art. An ephemeral action that transforms every day into an unprecedented temporary museum landscape, perfectly in line with the concept of the *Fifth Landscape*.

All the experiences described lead one to reflect on the fact that art, being subjective, both in those who enjoy it and those who make it, draws on one's subconscious, one's emotional baggage, even the ancestral past, and the traces one unconsciously carries in one's mind. The Fifth Landscape could be defined as a kind of contemporary Baroque. If Romanesque and Gothic are materials in which architectures are emotional and intimate caskets because of the use of massive matter in the definition of spaces (Romanesque) and as a pretext for the exaltation of the ephemeral form (Gothic). In the Baroque, however, the matter becomes decoration that exists as a function of architectural space, which uses light materials in its definition (grout, wooden mouldings, paper-mâché, etc.). Baroque gives character to the scene, is scenographic, and elaborates a specific mental construction of the space concerning the container. In its being creates, precisely, scenographies: representations. The Fifth Landscape, therefore, can be called a 'Baroque 2.0', because it dematerializes the 'Baroque 1.0' by doing an additional work of material subtraction: defining a scenography that is also space, something that was previously reserved only for architecture. The Fifth Landscape is thus, in creating spaces usable by all, an 'anti-barrier action', and it is its potential to be architecture (in that architecture creates spaces) that finds a connection with the world of VR and AR, in its most pushed and innovative architectural declinations (such as living a life in a digital reality).

Lastly, *Landscape 5.0* seeks to make possible the visualisation of what one talks about and feels (even sentimentally), generating an overall meaning that appears as something connatural to the world. The significance attached to it and its impermanence define the complex contemporaneity of the landscape. As Turri suggests, the "landscape-theater" (2001) is the set where actors and spectators act in a metaphor that is then our existence, which is simultaneously shaped by themselves to host the play. Consequently, the Fifth Landscape is a narrative landscape (Socco, 1998) in which latent and unexpressed potentials emerge as if in a revanche of social justice over the worn-out dictates of tourism. It also denounces the consumerist use perpetrated to the detriment of the landscape. Quoting

¹⁴ https://www.solace-srl.com/colore-dellanno-2020-classic-blue-pantone/

geography scholar Martin Schwind, «... every landscape is like a work of art, but much more complex" in that "a whole people create a landscape, which is the deepest reservoir of its culture and bears the imprint of its spirit» (Schwind, 2015:96). In this sense, human beings, in symbiosis with the landscape, generate evocations and collective images that are cultural facts for the benefit of all.

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