ARTIFICIAL LANDSCAPES – KRISTINE JENSEN & GURO SOLLID

Examining the prerequisites for urban development nature and culture, landscape and city, city and building are no longer addressed as opposites to each other, yet rather as coherent interdependencies. In a joint effort, oscillating between realms of landscape and urbanism, the project investigates new ways to consider the concept of landscape, and suggests to do so by introducing 'the artificial'.

Addressing the relation between natural and anthropic dynamics, this inquiry delves into different strata in the city of Venice. Investigations into geographical and environmental conditions forming the Venetian city-landscape are presented alongside reflections on historic, political and representational contexts that simultaneously constitute the urban form and urban image of Venice.

Further inquiries into mapmaking and the agency of the drawing seek to investigate architectural representation. In order to organize and reorganize our cities and landscapes to respond to the challenges of our time, basic concepts and conditions of architectural development must be investigated. The project examines the architectural drawing's capability to discuss virtual as well as actual processes, recognizing the productive relationship between topographical and topological maps. Alongside the topographical interpretation of a city-landscape, the potential of the topological map is to bring awareness to time and relativity. Accordingly, the archipelago of Venice is treated as fluctuating assemblages of visible and invisible layers, identified here as artificial landscapes.

ARTIFICIALITY

The term artificial, composed by *ars* and *facere*, meaning 'art' and 'to make', derives from the Latin *articficialis,* signifying something 'of or belonging to art'. On that account the artificial implies something assembled by humans as opposed to by nature, as something un-natural[1]. Consequently, the distinction between the natural and the artificial is characterized by their fundamental division and their very identities are defined through their relation.

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[1] Douglas Harper, Online Etymology Dictionary, 2001-2019 (https://www.etymonline.com/search?q=artificial),

Seeing as the boundaries between the natural and the unnatural are steadily dissolving, one can suggest that the ancient dichotomy between nature and culture is obsolete. Yet, however insufficient, the distinction still seems a very powerful norm within society. One might argue that the concept of nature has always been that of cultural value. Throughout the centuries the distinction between the two has repeatedly been redefined according to technological changes[2]. It is of importance to acknowledge this historical relativity of the divide. Only when recognizing the natural and the artificial as inseparably intertwined, continuously reconfigured through their changing relations, one might have a reasonable discussion about the value of the artificial.

INTERDEPENDENCY _FORMA URBIS

Emphasizing on the interdependency of the natural and the artificial, the city of Venice has proven to be strongly adaptive and resilient, and is indeed a testimony of a difficult balance between natural and anthropic processes. The nature culture complex is discussed continuously in the light of the new geological age, the Anthropocene. The survival of Venice, as it is threatened by over-tourism, subsidence and eustasy, appear all the more relevant on a global scale.

Throughout the centuries different efforts have been made to preserve the Venetian lagoon. Current discourses revolving manmade landscapes, such as the relocation of land or ramparts being built against the threatening sea are mirrored in historic disputes on how to expand and preserve Venice's urban form in the Renaissance.

The main threats to the Venetian lagoon have been marine erosion to the shoreline, landfill and debris from the rivers flowing into the lagoon, as well as extensive agriculture, deforesting and ground water exploitation on the main land, all affecting the ecosystem of the region. Some of the battles to preserve the city have been temporarily won. The construction of large artificial reefs in the eighteenth century introduced a permanent defense against the sea, shaping an entire coastline at a landscape scale. Correspondingly, as the inner waters were stressed by the forceful and disorderly

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[2] Bernadette Bensaude. Nature and art, an ancient divide and still a hot topic. Paper for the Conference Natural vs artificial, University of Basel, Switzerland 2014. p.7: "The great variety of images and values attached to the natural and the artificial enables us to understand and disentangle the various ways in which technologies relate to nature. Not all technologies aim at subduing nature to the power of a designer. Some of them aim at domesticating nature or operating with nature rather than upon nature. For normative purposes, it is important to go beyond the generic categories of nature and technology and to take into account the nuances between styles of technologies and their various ways to engage with nature."

rivers, grand efforts were made to dredge, excavate and divert the rivers flowing into the Venetian lagoon[3].

Hydraulic engineer Christofaro Sabbadino (1489-1560) was a frontrunner to promote the diverting of the rivers and insisted that the survival of the lagoon was dependent on correct water management. His proposal showed how environmental challenges and natural processes were turned to good advantage as deposited mud and sediment was used to expand the borders of the city, creating numerous new artificial islands. Thus, the very process of cleaning up the lagoon played an important role in defining the unified archipelago that constitute the urban form of Venice. The concurrence of environmental and anthropic dynamics produced a unique fluctuating and transformable landscape. Sabbadino's plan showed a resilient and somewhat modern strategy, with a complex landscape approach to urban and territorial planning. "The 'naturalness' of Venice, which Sabbadino praised, did not exclude the potential enlargement of the lagoon's urban fabric", as historian Manfredo Tafuri put it.[4]

A very different approach to developing the city of Venice was posed by Sabbadino's contemporary, Alvise Cornaro. 'As an ideal recomposing of the contrasts between civitas and nature', the new landscape he recommended was also both urban and natural.[5] Yet, his interest was not for the city to expand organically with the waters, rather he was promoting a scenic city-barrier. His aim was to create a visual utopia using the instrument of perspective, emphasizing the connection between the San Marco Square and San Marco Basin, the main entrance to the city. The majestic Piazza is accentuated by the two imposing pillars mounting the patron saints of Venice, the winged lion of Saint Marks[6] and the byzantine patron Saint Theodore slaying a crocodile. To further accomplish the narrative of the Basin, Cornaro's scheme included three new artificial islands supporting a floating theatre, a scenic wooded hill and a water fountain. The floating theatre was an

[3] Giovanni Asmundo. Learning from Hydraulic Venice Landscape. Adaptive Strategies and Resilience. RI-VISTA 02, 2017, Firenze University Press, pp. 24-26

[4] Manfredo Tafuri, Venice and the Renaissance, MIT Press, 1995, Chapter 6, pp.141-142

[5] Ibid., p.156

[6] The association between the evangelist Saint Marks and Venice is linked to his supposed sighting of an angel on his travels through the Venetian lagoon. The angel stated 'Peace be with thee, O Mark, my evangelist. Here thy body will find its rest'- words that would become part of the official seal of Venice (Pax tibi, Marce, evangelista meum). The symbol of the lion representing the evangelist is seen throughout the city, most prominently on the flag of the Republic of Venice. Thomas Jonglez and Paola Zoffilio, Secret Venice 4ᵗʰ edition. JonGlez 2015, p.274

emblem for the city of Venice itself, as a theatre of the world[7]. The hill referred to the ideal garden of Eden, an advanced theme in garden architecture of the late 1550s. Along with 'the fountain of life', the three designs all had a dreamlike character, like allegories. The two proposals of Sabbadino and Cornaro establish contrasting angles to city planning. While Sabbadino concentrated mainly on environmental forces connected to the lagoon Alvise Cornaro's scenario announced the importance of narrative and symbolism.

REPRESENTATION _IMAGO URBIS

Examining architectural representation Sabbadino's contribution is fascinating, notably his masterplan for Venice from 1557. The map's colorings depict in blue the canals, in light blue the dry tidal lagoon, in white the urban areas, in green the surfaces proposed for landfill and in sepia the outline of the *fondamenta* that the author proposes to be constructed[8]. Sabbadino's preoccupation with water dynamics is clearly visible. Certainly, it is of importance to acknowledge that all maps are constructions. As a technological discipline, western cartography claims to produce objective charts of terrain, ecosystems, landforms and topography, representing a correct relational model through geometry and measurement[9]. However, it is imperative to recognize maps as social constructions of communication and visualization, composed of signs, marks and concepts that convey power and ideology, constantly constructing meaning.

The earliest known map representing Venice, Fra Paolino's map from the fourteenth century, depicted only churches and squares, creating an archipelago of monument and open space[10], revealing social and economic patterns of the medieval city. However, the definition of Venice's emblematic Imago Urbis was very much linked to Jacopo de'Barbari's map from 1500[11]. The city is portrayed from a bird's eye view, linking the urban fabric to its lagoon, surrounded by the alps in the distance, the islands encircling the city, and the mythological figures of Neptune, Mercury and the wind gods. Centre of the city -and the universe- is San Marco Square and its animated basin.

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[7] The proposal was famously echoed in Aldo Rossi's floating theatre 'Il Teatro del Mundo' for the Venice Biennale 1979-80.

[8] Renaissance Rules (https://renaissancerules.wordpress.com/2014/05/05/venices-master-plan-of-1557/)

[9] Denis Wood & Jon Fels, The Natures of Maps: Cartographic Constructions of the Natural World, in Cartographica volume 43, issue 3, Toronto University Press, pp. 189-190

[10] Sophia Psarra, The Venice Variation. Tracing the Architectural Imagination, UCL Press, 2018, Chapter 1, p.30

[11] Commissioned by Venetian publisher Anton Kolb, the map of de' Barbaric took three years to complete. The woodcut consists of six large sheets measuring 135 x 282 cm. Museo Correr, Venice

Renaissance Venice was defined not only by grand sea voyages, the birth of modern geography and the 'discovery' of the New World in 1492. Moreover, the emergence of the printing press and its unfolding in Venice altogether revolutionized mapmaking[12]. Numerous maps inspired by de'Barbari's was produced and created a dominant image of a glorious and ideal city. As architect and researcher Sophia Psarra puts it, "Like almost every representation, the woodcut superimposes an artificial coherence onto the world, making us forget that the city is different from its image. In this way, it becomes an expression of suppressed tensions and reconciled contradictions: between the organic urban form and the aesthetics of centralized composition, between parochialism and civic glory, politics and commerce, city and nature, facts and fiction. In its centered and closed synoptic form, Jacopo's map turns Venice into a figurative pictorial discourse, expressing the imaginary relationship between ideology and spatial conditions."[13]

IMAGINARIES

When addressing Venice, one is hardly satisfied by a single ideological image. More than anything, Venice seems an imaginary place, constructed through its representations. The vernacular architecture of the Middle Ages and the grand urban development projects conceived by the likes of Sansovino and Palladio during the Renaissance[14] manifests the whole city as an extraordinary monument. Additionally, the floating city is constantly mirrored in its waters, the surface obscuring and masking all things submerged. The unseen is a distinct feature of the city. Consequently, the latent, hidden and obscure has generated an image of a less tangible Venice, an imaginary Venice thriving with rituals and myth[15].

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[12] Sophia Psarra, The Venice Variations. Tracing the Architectural Imagination, UCL Press, 2018, Chapter 2, p.85

[13] Ibid., p.99

[14] During the 16ᵗʰ century grand efforts were put in motion to restructure Venice. Both Jacopo Sansovino's interventions to clean up San Marco Square and Andrea Palladio's grand design projects including San Giorgio Maggiore and Santissimo Redentore introduced new axial connections, creating visual order in the otherwise tangled pattern of Venice.

[15] Think only of the significance of the Carnival. Channeling the forces of evil, allowing them to find expression within a well-defined framework for a short period of time, the symbolism embedded in the distorted carnival mask was not to conceal, rather than to reveal humankind's lower instincts.

As a city of remarkable artistic and cultural heritage, and a city of great imaginaries, Venice has always drawn visitors[16]. The exceptionally high pressure of global tourism is a major issue in the political alertness concerning the preservation of the city. Venice and its lagoon are UNESCO World Heritage classified and will be a major case for future implementations of UN's sustainable development goals. Air traffic and large cruise ships contribute heavily to the world's total CO2 emissions and pose a great threat to the ecosystem of the region. Climate challenges including pollution and sea level rise accelerate deterioration of the building structures and urban areas, as well as having a significant impact on the morphology and landscape configuration of the lagoon itself[17]. Improper water management in the lagoon, such as canal dredging to facilitate large cruise ships, or the reclamation of land to promote industry and airport logistics, escalate the erosion of the seabed and of the salt marshes. These measures affect the seasonal flooding known as the Acqua Alta to an even greater extent than the imposing threat of eustasy[18].

Ironically, the city's survival seems dependent on its large tourist industry. The city was in effect declared bankrupt in 2017, only to find itself being sponsored by foreign investors who facilitate large restoration projects in the city. Sadly, the grand efforts to preserve Venice in its historic image seem rigid, resulting in urban spaces being reduced to scenic backdrops, the city to a living museum or an overpriced theme park. Nonetheless, endless reproductions through images, souvenirs and built replicas throughout the world, stimulate and keep the myth of the city very much alive. The imaginary and artificial landscapes of Venice seem only to expand.[19]

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[16] Venice was an important destination of the Grand Tour in the 17th and 18th centuries. As the construction of the train station in 1860 improved the logistics of the tourist flow, the city continued to be a fashionable destination during the 19th and 20th centuries. In recent years of global over-tourism, the city experiences approximately 30 million annual visitors.

[17] UNESCO, Venice and its lagoon (http://whc.unesco.org/en/list/394), 2019

[18] Jonathen Buckley, When will Venice sink? You asked Google – here's the answer, The Guardian, Nov. 2016

[19] Diller Scofidio + Renfro propose that Venice may be a city fixed in time but fluid in space: "To preserve its main industry, it must preserve its historical identity in the struggle with the modern: Venice is too small, too slow, too inefficient, it is losing its inhabitants and its authentic civil life; it is ultra-violated, ultra-exposed and it is sinking. However, the idea of Venice is more fascinating than ever, and if modernity has threatened its physical existence, at the same time it has provided endless ways to reproduce on a global scale." From the Chain City Project at the Venice Biennale 2008. The project monitored real-time gondola trips in Venice and its built replicas in Las Vegas and Macau. Out there, Architecture beyond Building. Rizolli, 2008, p.55

ARTIFACT

If Venice's urban form and urban image is inseparable from its lagoon, the very idea of Venice is equally inseparable from its imaginaries, myths and reproductions. The aim of this project is to establish a cartographic and diagrammatic drawing practice that can induce potential in these seemingly intractable entanglements. One might, of course, suggest that any descriptive map of Venice is an illusion. The labyrinthine structure of Venice is an intricate configurational system, welded together by interconnected centralities where micro patterns grow into macro structures, embodying an organically grown structure, defined by its interdependent networks. Recognizing these intertwining patterns, it is reasonable to apply a new logic to mapmaking. With the introduction of network theory, computational systems and notational field conditions, internal connections and relativity replace the former fixation on singularities and objects.

Alongside the topographical interpretation of a city-landscape, the project examines the potential of the topological map. Topology is seen as a potential input to discuss virtual as well as actual processes, seeking to bring awareness to elasticity, movement and time. The virtual is not addressed as something unreal, rather describes future landscapes yet unseen. Trying to bypass modernist binaries separating nature and culture, landscape and city, form and matter, the city of Venice is addressed as assemblages of simultaneously present layers. The interconnections outlined in the project, such as rising sea levels, tourism, preservation, mythology and image production are manifested in topological drawings that are both precise and explorative at the same time.

The survey is part of an ongoing artistic research practice that investigates the architectural drawing's ability to configure new morphological entities, and that recognizes the architectural drawing as an essential tool for creative reflection. The artificial and the artifact are both established terms connected with the 'work of art'. The map can thus be addressed as a separate work, a device that can be instrumentalised for architectural development, or a glimpse into an ongoing artistic reflective practice.