Daniele Villa Franca Zuccoli *Editors*

Proceedings of the 3rd International and Interdisciplinary Conference on Image and Imagination

IMG 2021



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Preface

For those who work in the field of education and professional development, a key figure in relation to the theme of image is John Amos Comenius (1592–1670), known as Iohannes Amos Comenius in Latin and Jan Amos Komenský in his native Czech. An eclectic character, Comenius was a philosopher, educationalist, theologian, and educator. He is considered to be the father of didactics because he concerned himself with the overall design of the human educational trajectory across the lifespan. Comenius believed that schools should be open to all: places where anything could be taught to anybody/by anyone, albeit via tailored offerings and methods [1] (Comenius 1658). His Orbis sensualium pictus (1658) was the first textbook to include pictures, which dominated over the written text. Here, he made targeted and intentional use of images, chosen with a view to fostering knowledge and learning in children [2] (Comenius 1658). Roberto Farné includes Comenius' approach in his rich overview of the diverse uses of images in the field of education, which he calls "didactic iconology"; explicitly drawing on the work of Erwin Panosfky (1939) [3], he defines this perspective as "[...] the study of images for educational purposes or, more narrowly, for the purposes of schooling. The term 'image' is the common denominator in an extremely broad and diversified range of visual and audio-visual repertoires, which primarily act as media and whose "iconic dimension" is key to the educational communication they are deployed for" [4] (Farné 2002, p. VIII). Since Comenius' day, despite encountering a host of difficulties and at times serious obstacles, images have become part of the world of school, and a crucial element of the teaching-learning process, during which they may be variously consumed, interpreted, produced, and manipulated. Images enhance all educational trajectories, from early years education with children as young as 0-3 years to university and educational and professional development research settings. Scholarly interest in the educational use of image and images themselves as a primary source of knowledge has inspired ongoing debates and processes of inquiry [5,6,7] (Calvani 2011); to be more specific, within the constantly evolving impact of the sphere of image on the world, substantial differences remain between those who understand images to be decorative rather than laden with meaning, and even at risk of distracting us from the sphere of words and numbers, and those who engage with images in all their possible forms. We should note here in passing that the iconic sphere underpins the visual thinking paradigm that was early theorized by Rudolf Arnheim, and whose enormous potential has been coming progressively to the fore [8]. Sometimes educational theory and practice still struggle to draw creatively from the multifaceted potential of constantly evolving and shifting representations and images. However, the suspension of in-person teaching and learning due to the COVID-19 health emergency and the announcement of a global pandemic by WHO (March 12, 2020) forced all forms of education to switch to distance-learning modes that involved exploiting digital instruments to the full. In this case, the world of images not only represented an aid to teaching and learning but also became the very place of possible educational encounter. Consequently, the use of images in education accelerated at a speed that would otherwise have been unthinkable [9]. The lessons that COVID has taught us, as Edgar Morin has aptly described this painful trajectory, can and must be transformed into challenges [10], which educational research and professional development must embrace and not overlook. Within the process of transformation that is currently underway, images—understood in plural and complex terms—must count among the foundational components of an alternative paradigm in which mindfulness, creativity, and openness in interpretation and production will all be essential characteristics. This conference, the first to take place as a physical encounter following a long hiatus, ably, and fully exploits the meeting of different disciplines that bring different understandings to bear upon images and use them for different purposes [11]. It is a point of interdisciplinary encounter, of enrichment and debate, and of real learning about other areas of knowledge in which images have become indispensable; it explores a shared pathway that we should never tire of pursuing.

Franca Zuccoli Daniele Villa

References

- 1. Comenio: Orbis Sensualium Pictus. Noribergae, M. Endteri, Noribergae (1658).
- 2. Comenio: La grande didattica, trad. a cura di A. Biggio. La Nuova Italia, Firenze (1993).
- 3. Panofsky, E.: Studies in Iconology. Oxford University Press, New York (1939).
- Farné, R..: Iconologia didattica: le immagini dall'Orbis Pictus a Sesame Street. Zanichelli, Bologna (2002).
- Martin, M.: Semiologia dell'immagine e pedagogia. Itinerari di ricerca educativa. Armando Editore, Roma (1990).
- 6. Farné, R.: Pedagogia visuale. Un'introduzione. Raffaello Cortina, Milano (2021).
- Calvani, A. (ed.): Principi di comunicazione visiva e multimediale. Fare didattica con le immagini. Carocci, Roma (2011).
- 8. Rivoltella, P.C. (ed.): Apprendere a distanza. Teorie e metodi. Raffaello Cortina, Milano (2021).
- 9. Arnheim, R.: Visual Thinking. University of California Press, Berkeley (1969).
- 10. Morin, E.: Changeons de voie. Les Lessons du coronavirus. Éditions Denoël, Paris (2020)
- 11. Pinotti, A.: Alla soglia dell'immagine. Da Narciso alla realtà virtuale. Einaudi, Torino (2021)
- 12. Piranesi, G.B.: Carceri d'invenzione. Roma (1761) https://artmuseum.princeton.edu/collections/objects/2959.
- 13. Fisher, R.B., Dawson-Howe, K., Fitzgibbon, A., Robertson, C., Trucco, E.: Dictionary of Computer Vision and Image Processing. Wiley, Chichester (2005).
- 14. Rossetti, D.: Il sepolcro di Winckelmann. Alvisopoli, Venezia (1823).
- 15. Scaloni, G.: Carceri. In: Mariani, G. (ed.) Giambattista Piranesi: matrici incise 1743–753. Mazzotta, Milano (2010).
- 16. Purini, F.: Attualità di Giovanni Battista Piranesi. Librìa, Melfi (2008).

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Settled/Nomadic: The Disappearance of the Project and the *Invention* of the Image. Two Projects by amid.cero9

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Abstract. The summary of amid.cero9's research presented in 2014 at the A.A. School of Architecture in London (2014/01/18-2014/02/15), "Third Nature. A micropedia", which gave its name to the homonymous and extremely rare catalogue, attempted to represent some of the research projects carried out by the studio, accompanying the written text by a corpus of images (both archival and authorial). The outcome is not the project in itself, understood as the perceptible result of assessed premises, as much the narrative image that was used or produced in order to transmit it. No longer the canonical design drawings, but rather satellite apparatuses, models and drawings directly exported (apparently) by the design software, axonometries with layers of complexity, collages, (historical) images useful for legitimising certain rifts. The image is the final aim of the research: suggestive and creative rather than plausible. Through two projects (Le Jardins de Prodiges Portables, 2013; The Aegean Paradise, 2014), this essay proposes to inquire into the role of the image, not only regarding the communication of the project, but also as an autonomous fact, whose "context" and "coordinates" become the image's *support*, in a non-conformist dictionary that proceeds by photograms: in these scenes, chance opens the doors to fields of knowledge, thought, reflection.

 $\textbf{Keywords:} \ amid.cero 9 \cdot Architectural \ Design \cdot Image \cdot Invention \cdot Garden$

1 Introduction

amid.cero9 conceals Cristina Diáz Moreno and Efrén Garciá Grinda. The studio, active since 2003, has the amorphous appearance of a multi-polar space: politics, cultural context, technical moorings and intersections between disciplines (sociology, technology/technique and mass-media) addressed through the project. The construction of a cultural territory brings about the updating of the status between the various fields of research, often occupying positions that are border-line, pop, radical, not pre-constituted, which lead the research in a reconnaissance, which is not always exclusively project-related. In the complex dialogue between different disciplines, the output of amid.cero9's research is the *image* that specifically represents the construction of the relationship that can be traced between the power of the image, spatiality, and anthropological, social

and constitutive conditions. The project, in fact, is communicated through the *invention* of images (whose construction is the demonstration of a theorem of the project) that serve as a *symbolic* radars between the expression of social and cultural relations; these images have a robust armour which inhibits spatial representation as true introduction; the project disappears, it is nothing other than the narration of the (*imagined*) existent and in its place we find *frameworks* of inventions through which to communicate the state of the art of an updated "nature". Through what tools and processes to these inventions take shape? How are they codified? The time of the image is a language chosen, among other possible ones, through which to narrate a research that is "cultural" even before being project-related: of what transformations are these images the "seismographs"? [1] The purpose of the essay is to inquire, through the use and manipulation of the productimage, the intention of amid.cero9's research to carry out exploratory missions, using representation and image as a record of such journeys.

2 System of Active Coordinates: Within the Cosmos of amid.cero9

The definition of space is the first verification to refer to: in *Breathable* [2], the intention to inquire into spatiality is not only understood as a manifestation of the visible, but also as a condition that invades the other sensory fields (also through the dialogue with architects, artists, philosophers and musicians which address spatiality [3], in that region which shares boundaries with architecture), that leads to the re-formulation of its meaning: «For us, the term space no longer refers to a vast, infinite void – that white, abstract canvas of modernity – but rather a network of relationships, a complex place where a huge number of interconnections between different agents emerge and overlap.» [4]. The spatial dimension in which architecture is thought has a phenomenological and perceptive matrix, it is based on a changing, not a fixed structure. It is not an object, but a system of relations that is constantly being updated [4]: the project is immersed in this system of "active coordinates", constructed following a correlation of actions such as «exploration, discovery, reading, codification and modification [...]» [4]. These are not exclusive of the field of the project, but rather are borrowed from other, apparently distant fields: biology, the representation of nature, or bionics.

From biology, the phenomenological perception of the world, beginning from the tools available for reception and response, determines the field of action of every living being (*Umwelt*): every living being therefore has a perception of the world that is based on the stimuli it is capable of receiving depending on its anatomical features [5].

From this, a significant consequence is derived: the meaning of time [6] and space [7] depend on the living being. This axial change forms the space in which we act [8]: a density of layers of perception that, rather than excluding inhabitants and relations, includes and translates languages and movements, often imperceptible and non-visible, precisely due to its own perceptive conditions. For mankind, one of the possible ways in which to represent its own *environment* is through visual impact: what we see describes our *environment*, it provides data concerning our knowledge or our abilities/perceptions, it defines the way in which we *are-in-the-world*.

Contrary to what Humboldt announces in his *Cosmos*, upon closer attention, there is only one possibility for representing the *phenomenal* world:

«to represent it from the pure objective and exterior aspect of the phenomenon, and then offer it as a reverberation through the senses inside man, and in the circle of ideas and emotions.» [9].

The objectivity of the description (in the field of representation) is compromised by its own *reverberations*, which interfere in the transformation of the data into images (tactile, auditory, sensory apparatuses, etc.); therefore the *objectivity* of the representation needs ex-corporeal instruments (not affected by their own perception) in order to be able to speak of an objective-physical representation of the world [10].

The world represented by Humboldt is *one* possible world, derived by the transposed reading by a human being, who in narrating it through drawings - however great the intention of being true to the real – already includes modifications and apparatuses that are predictions, and therefore project. Humboldt certainly represented what he saw, yet he represented an authorial form of a specific world: the one that is perceived by humans. Between Humboldt and amid.cero9, there is a temporal gap that transposes the means for carrying out research, yet the actions are superimposable. The tool of the exploratory journey ("exploration") appropriates the technological upgradings that permit man to be ubiquitous (GPS location systems, etc.); the process of discovery ("discovery") records variations; the reading of the *environment* ("reading") originates from the specific case in order to postulate a more general, yet valid law; the codification of the existent ("codification") permits choosing a possible representative strategy image – for transmitting the transcription; and finally the modification ("modification") introduces into the image the project (which for amid.cero9 feeds on the image, and is completed by it), as prevision of a configuration through which that specific reality can be communicated.

The ultimate aim of amid.cero9's research could be summarised thus: to narrate through the image, or rather the *invention* [11] of the image, a specific perceived reality, in which the insertion of the project becomes a pre-textual opportunity for narrating their time; the result of the research is a rendering of built images which, in the same way as Humboldt's drawings [12], narrate a "third nature".

The notion of *Third Nature*, in the amid.cero9 dictionary [13], becomes the synonym of "environment": third nature is a technical formula which was first used by Bonfadio [14], then by Taegio [15] and finally copied by Cervantes [16], understood as the introduction of the human regulatory apparatus in primigenial nature, as an added ordering element which was initially referred to the garden – symbol of other Adamite intentions [17] –, so much so that the brilliant design of the said work – whose result is an "artificial" nature – also enhances its fruits, validating the human intervention (project) as a beneficial, almost "miraculous" action.

amid.cero9 accommodates this definition at the tail end, not accepting it *sic et sim-plicter* or looking at it from the outside, but integrating its terms: if it is true that the introduction of the project tamed nature, determining a derivative landscape – third variation -, then this is the structural condition in which they "work": within the third nature (precisely, a system of active coordinates), observing the world from the opening of a "*casotto*", or "hut" [18] (See Fig. 1).

This intention of observing "nature" and reproducing its mechanisms for responding to technical issues based on it is called bionics [19]; this science undergoes a shift in



Fig. 1. Giovanni Domenico Tiepolo, *Il Mondo Novo*, 1791. Fresco, 205 × 525 cm, Ca' Rezzonico, Museo del Settecento Veneziano, Venice. Courtesy of Fondazione Musei Civici Veneziani.

definition, at the moment in which the affirmation of a "third nature" becomes the *new* natural of reference, understood as the corruption of the human in the primordial. Therefore, the work carried out by amid.cero9 becomes an exploratory-narrative inquiry that employs the *invention* of images in which the project is the construction of machines for responding to problems of a technical nature (bionics), where the narrative of the project coincides with the communication (of the "third nature"): the bionics of the "third nature".

In this space which is already saturated with relations, human interaction is also re-codified through the imagination and the use of an "abstract", "universal" outline, without traces of aggregation to cultural environments or specific origins [20] – thus negating a specific identification and promoting instead a generic universal figure –, often the representation of the silhouette – moving or fixed – of a male nude [21], which does not take away the attention from the representation, since it is only used as a measuring reference. The *actors*, in this system of coordinates, are obstacles rather than noteworthy factors, whereas the subject of the narrative is what takes place behind their back.

Two projects with similar (the construction of the garden) and complementary principles (the former sedentary, the latter nomadic) will be used as a model for narrating this "naturalist" process of invention.

3 Settled: The Aegean Paradise. Tourist Accommodation in a Garden, Symi Island (2014)

The topic inquired in this research is an alternative path to contemporary dwelling associated to the conventional tourism paradigm, undertaken on occasion of the theme "Tourism Landscape: Remaking Greece", proposed by the Greek Pavilion [22], as part of the 14th Venice International Architecture Exhibition, *Fundamentals*, curated by Rem Koolhaas. Are there, in light of the goal that va-cation time entails, up-to-date cultural conditions for dealing with this time in alternative ways? The answer to this question is addressed through a settlement system that puts back into question the conditions of

«privacy, segregation, relation, and exploitation» [23] through the proposal of a *pairidaêza* that protects the effective condition of paradise reproduced under a covering that is a sort of curtain. The spherical cap is the microcosm that protects the interior climate that in turn generates this luxuriant landscape which, by definition, cannot be the exterior climate: two continuous parallel planes – ground and curtaining – are the only boundaries of paradise which, as such, has no need of septa, walls or beams, but relies on drapes, veils and long distances (which are available only in paradise) for redefining the notion privacy.

This research is presented through some precise strategies, among which the narrative expedient for narrating the project, in which any indication of measurement is excluded. The attention does not dwell on the technical-formal conditions that allow the project to exist, and the reader is placed before the fact as if it were accomplished: the project is already part of the "third nature" and the communication of the real takes place through images. In the first act two principles are placed side by side: architecture which looks at nature so as to reproduce it (Philibert De Lorme), and nature which, in reproducing itself determines architectural contexts (amid.cero9). These two theories which mirror themselves activate a continuous play of references without, however, as yet revealing any strategy, but rather conceding to the imagination the eye of the *explorer*: a "natural" kingdom, a landscape that anticipates what they eyes will see. The second act is a representation of the spherical cap seen "from above"; this imposition does not clarify the relationships of size and volume, the being-together of the parts, nor the possible materials, only an extended stain (an island within an island) located near a coast of the Greek island. This representation contributes, instead, to make the connections to the process evanescent, as if a cell was being observed with a microscope (see Fig. 2); suggestion which is re-proposed by the studio for accurately representing the plant species, the ponds, the irrigation ditches installed under the spherical cap (a sort of "vegetal" Tuareg carpet). The last act of the narrative is an illustration that represents the space between the carpet and the curtain: between these non-coplanar planes the conditions described begin to take shape. Rare flora specimens alternate with edible vegetable species, some polarities marked in red are common spaces (the collective formula is based on cenobitic models [24]), and distances which are remarkable in terms of scale separate bacchanalian gatherings of demigods (tourists represented as such).

4 *Nomadic*: Les jardins des Prodiges Portables. Une Procession. Lausanne (2013)

The theme inquired by this second research is a proposal for the Lausanne Jardins [25] (often abbreviated as LJ), a synchronous and ephemeral installation that changes the look of the city of Lausanne between June and October of every year, through the construction of gardens (assigned by a competition), connected by a thematic itinerary and which are always accessible for the entire duration of the event.

The proposal of amid.cero9 is a procession of otherworldly *nomadic* temples that "moor" in the vicinity of the «Terrace Petit de Chêne» and are "paraded in a procession" every Sunday morning after the liturgical rituals. These small otherworldly temples are

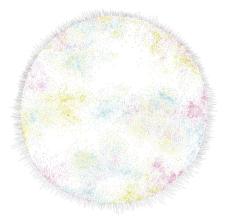


Fig. 2. amid.cero9, The Aegean Paradise, 2014. Representation of the shell-cover "under the microscope". Courtesy of amid.cero9.

copies in a reduced scale of other objects (flower vases, grottos, greenhouses, «either pocket-size, beefed-up, militarized or hyper-oversized» [26]). The series of temples

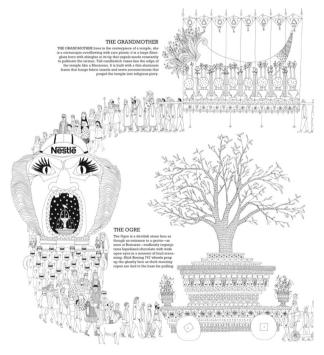


Fig. 3. amid.cero9, Les jardins des prodiges portables. Une procession, 2013. A tile (with The Ogre, Saturane and The Grandmother) composing the procession. Illustration by Josè Ja Ja Ja. Courtesy of amid.cero9.

begins with one that is dedicated to Saturn and which stands on the ground on wooden wheels; this Juggernaut-type temple – mechanically sculpted – houses a bonsai. The temple moves by way of ropes and a berthing system placed at the base of the towing jig, with every rope put in motion by human kinetic energy (each rope is moved by a bicycle). Then a temple that is the reproduction in scale of an Alpine cabin, in which air-conditioning systems installed for maintaining a constant temperature and humidity in its interior (to make them as similar as possible to those in the high mountains), are linked to glass greenhouses/reliquaries [27] for keeping plants of edelweiss. The third temple: a canopy full of rare plant species with a cornucopia at its centre [28]. The fourth temple is an out-of-scale mask (The Ogre) taken from the garden of Bomarzo and placed in Lausanne, which adapts to the laws of capitalism by endlessly regurgitating chocolate (® Nestlè [29]) (See Fig. 3). The other temples are variations on the skin of the Amber Fort in Jaipur: the jalousies of the fort become the skin of the small temple, the micro-perforations accommodate flowers. Also in this case, the representation of the project approaches the description of a ritual gathering, rather than of an ex-novo event: we stand before scenes belonging to an ancient civilisation which, like relics, narrate stories and practices from those bygone eras; however, these representations are properly inserted into the digital (understood as a dislocated reality, ungraspable for the notion of space and time), and through it related to the narrative, although building by similitude a narrative expedient.

In this case, even more than in the previous one, the evident surrender of threedimensionality, of measure, geographical reference (expressed exclusively in words [30]), and colour, indicates the interest in wishing to represent the scene outside of the specific and individual perceptive view, but rather in a univocal and apparently "objective" manner, as if concerning a universal procession to pass on to the future as the testimony of an age.

5 Epilogue: Invention as Method

These images of *invention* – precisely because they illustrate the ambition to fix the nonexistent and the invisible in a representation, in the same way as those friezes that depict panathenaic processions, are scenes that attempt to clarify the way in which thinking through images takes place, until finally codifying a path that is similar to a language, which in addition to transmitting communication (both basic and advanced), indicates the evolutionary stage of that – coeval – civilisation (from the carving in the cavern to the production of images using software programs).

For amid.cero9, the invention of the image is the method for observing and looking at the world (which is "third nature"), it is the proposal of the image of *a* world seen from the point of view *of the human*: a sort of *geography* as ambition to conquer. These images involve questions of technique and of aesthetics, they provide an account of the resolution of a problem, but also of how the said solution is not only a question of functional fulfillment; these resolutions are fully aware of the aims that the future of dwelling entails. This "third nature" is inquired upon through the image with a scientific approach, and obtains results which, all things being equal, are replicable; in other, words:

«may my *Pictures of Nature* provide the reader with some of the pleasure which a receptive mind finds in the contemplation of nature. And since such pleasure is multiplied by an understanding of the intimate connection of natural forces, *scientific* explanations and other additional elements have been included in every essay. Everywhere I have emphasised the perennial influence that nature exerts on man's moral disposition and destiny» [31].

In this regard, it is significant to identify fields with which to synthesise this type of construction.

- a. The space left for narrative representation (both observation and representation) is a distinctive sign of the method: the impersonal point of view (despite the *authorship* involved in the execution), the shifting of the eye (sometimes placed "above", others at the "microscope" level), the narrative of the "project" in the form of a story without measures;
- b. The production of images (and therefore the appearance of phenomena) is the result of collective conditions: the spherical cap for dwelling in the island of Symi, the procession of small temples thanks to the human mass that serves as their base and as conveyor belt;
- c. The detailed and pervasive presence of the plant element that accompanies the image (in the first case it becomes a vault, in the second it is venerated);
- d. The precise placement of the human element within the narrated phenomena emphasises the climatic/environmental conditions (in the first case what is proposed is the transcending of the human, whereas in the second it is the human at the service of a plant divinity).

These images are proposals of "quadratura" depictions of the landscape (no longer wishes to be grasped in its "entirety", as was Humboldt's intention, but rather communicated as a series of "spots"), which originated for being part of exhibitions (wall paintings, for example), that do not seek to break through the scene yet attempt to fix in images the flow of information which composes the "third nature". The inquiry between man and the *environment* [32], of nature as a flow that is indifferent to human action (which proceeds autonomously), the interest of man in adopting stances that are compatible with the regulatory disciplines in force that bind his or her inhabiting the Earth, as well as the need to determine collective forms of settlement ("together"), progressively abandoning the strategy of the individual, are the specific themes of the "third nature", considerations which result from the explorative missions undertaken by amid.cero9: these images are Humboldt's *Quadri*, or the representations depicted on the Tomb of the Leopards.

They will speak about the time we live in and how, in our day and age, the representation of *invention* has become a sort of seismograph for some prefigurative trends.

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References

- Cf. Various authors: 6. Mostra Internazionale di Architettura di Venezia. Sensori del futuro. L'architetto come sismografo. Catalogue of the Venice Biennale, 15 September–17 November 1996. Electa–Biennale di Venezia, Venice (1996)
- 2. Díaz, C., García G.E.: Breathable, 1 st edn. UEM, Madrid (2009)
- 3. The book Breathable (edited by Díaz Moreno and García Grinda) includes the results of their Ph.D. thesis, as well as articles on and interviews with Gernot Böhme, Avignon & Clouet Architects, Elizabeth Diller & Ricardo Scofidio, Olafur Eliasson, Brian Eno, Uriel Fogué & Fermina Garrido, Juan Elvira, NL Architects, Carsten Nicolai, Hans Ulrich Obrist, Philippe Rahm & Jean-Gilles Décosterd, Françoise Roche, Peter Sloterdijk, David Toop, Mark Wigley, Kazuyo Sejima and Ryue Nishizawa. See Op. cit. note 2
- 4. Díaz, C., García G.E.: Third nature. Three years of mundanes, carnal assemblies, El Croquis, vol. 184, p. 29 (2016)
- von Uexküll, J.: A Foray into the Worlds of Animals and Humans. University of Minnesota Press, Minneapolis, London, pp. 45–46 (2010). 1 st edn. Streifziige durch die Umwelten von Tieren und Menschen, Verlag von Julius Springer, Berlin (1934). 2nd edn. Bedeutungslehre, Verlag von J. A. Barth, Leipzig (1940)
- von Uexküll, J.: A Foray into the Worlds of Animals and Humans. University of Minnesota Press, Minneapolis, London, pp. 45–46 (2010). 1 st edn. Streifziige durch die Umwelten von Tieren und Menschen, Verlag von Julius Springer, Berlin (1934). 2nd edn. Bedeutungslehre, Verlag von J. A. Barth, Leipzig (1940), p. 52
- von Uexküll, J.: A Foray into the Worlds of Animals and Humans. University of Minnesota Press, Minneapolis, London, pp. 45–46 (2010). 1 st edn. Streifziige durch die Umwelten von Tieren und Menschen, Verlag von Julius Springer, Berlin (1934). 2nd edn. Bedeutungslehre, Verlag von J. A. Barth, Leipzig (1940), p. 53
- 8. von Uexküll, J.: A Foray into the Worlds of Animals and Humans. University of Minnesota Press, Minneapolis, London, pp. 45–46 (2010). 1 st edn. Streifziige durch die Umwelten von Tieren und Menschen, Verlag von Julius Springer, Berlin (1934). 2nd edn. Bedeutungslehre, Verlag von J. A. Barth, Leipzig (1940), p. 54
- 9. von Humbolt, A.: Cosmos. Saggio di descrizione fisica del mondo. Volume III. Giuseppe Grimaldo, Venice, p. 3 (1860)
- 10. See Repetto, P.: Humboldt controcorrente. Fondazione Luigi Micheletti, Brescia, p. 27 (2018)
- Wulf, A.: The Invention of Nature. The Adventures of Alexander von Humboldt, the Lost Hero of Science. Hooder & Stoughton, London (2016). Italian translation: L'invenzione della natura. Alexander von Humboldt, l'eroe perduto della scienza. Luiss University Press, Rome (2017)
- 12. Díaz, C., García G.E.: Op. cit. notes 3, p. 19
- Díaz, C., García G.E.: (amid.cero9), Third Natures, a Micropedia. Architectural Association, London (2014)
- 14. Bonfadio, J.: Lettere famigliari di M. Jacopo Bonfadio. Longui, Bologna, p. 206 (1744)
- 15. Taegio, B.: La villa. Dialogo di M. Bartolomeo Taegio all'Illustrissimo e gloriosissimo Ferdinando Primo. Moscheni, Milan, pp. 58–59 (1559)
- 16. Cervantes de, M.: La Galatea (primera parte). Juan Gracián, Alcalà, pp. 304–305 (1585)
- 17. Rykvert, J.: La casa di Adamo in paradiso. 1st edn. Adelphi, Milan (1972). 2nd edn. 15 (2005)
- 18. See note 4; The term "casotto" refers to the painting by Giovanni Domenico Tiepolo "Il Mondo Novo", see Fig. 1. This "casotto", which is opposed to the "canvas" referred to by the study, is the trans-migrating tool that permits anyone who looks out from a single opening to see the "new world", in other words an invention

- Gérardin, L.: La Bionique. Hachette, Paris (1968). Italian edition: La bionica, Il Saggiatore, Milan, pp. 11–17 (1968)
- 20. Díaz, C., García G.E.: Op. cit. notes 4, 31
- 21. It is interesting to point out how, despite the declared distance from the Modern Movement, a male nude, which brings to mind the reference to the Modulor, is taken as identifying outline. The choice of a male figure is probably to be considered as obsolete, in relation to the considerations concerning the cyborg as entity established for indicating the break of the biological boundary for defining the human, which perfectly falls within the theory of the "third nature". Cf. Haraway, D.: A Cyborg Manifesto. Routledge, New York, 78–79, 150 (1991). Consulted edition: Manifesto Cyborg. Donne, tecnologie e biopolitiche del corpo. Feltrinelli, Milan, pp. 78–79, 150 (2018)
- 22. The Greek Pavilion was curated by Yannis Aesopos who, *a propos* of the theme would declare: «The essence of tourism inhabitation is minimizing one's needs, when on vacation one is actually looking for less not more. It's a response to the Biennale's general theme, as posed by its curator Dutch architect Rem Koolhaas. Our time frame is the post-crisis era, where resources, both natural and financial, are fewer and there's a new way of dealing with the relationship of nature and man-made». Taken from the Greek Pavilion's video presentation. https://biennalewiki.org/?p=1131. Accessed 05 May 2021
- 23. Díaz, C., García G.E.: The Aegean Paradise. Project for the Greek Pavilion at the Venice Biennale 2014. El Croquis pp. 184, 66 (2016)
- Cf. Ungers, L., Ungers, O.M.: Kommunen in der neuen welt, pp. 1740–1972. Kiepenheuer & Witsch, Köln (1972)
- The project, which originated in 1997, is promoted by the Municipalité de Lausanne and the Association Jardin Urbain
- See. amid.cero9: Les jardins des prodiges portables. Une procession. 1st edn. S.n., Madrid, (2016). 2edn. Ruja Press, Rotterdam & Madrid (2018)
- 27. «The units are connected to three Wardian cases or you might say small reliquaries for admiring Edelweiss flowers», ibidem
- 28. «[...] a large fibreglass horn constantly expelling seeds to pollinate the tarmac [...]», ibidem
- 29. The mask bears on its forehead the brand of the famous Swiss multinational, which recalls the «fisiognomy of a typical casino sign, with the informative section (*information*, in this case, the ® Nestlé sign) and the "heraldic" (*Heraldy*, in this case the mask of Bomarzo), in other words symbolical, element», in Venturi R., Scott Brown D., Izenour S.: Learning from Las Vegas. The Forgotten Symbolism of Architectural Form. 1st edn. The Mit Press, Cambridge (Mass.) (1972). 2nd edn. (1977). Italian translation: Imparare da Las Vegas. Il simbolismo dimenticato della forma architettonica. 1st edn. Quodlibet, Macerata (2010). Consulted edition, 85 (2018)
- 30. Only in the project report is the mooring at the «Terrace Petit Chêne» narrated, cf. note 27
- 31. von Humboldt, A.: Ansichten der Natur. Cotta'schen Buchhandlung, Tübingen (1808). Italian translation: Quadri della natura. La Nuova Italia, Florence, 4 (1998)
- 32. Ingold, T.: The Perception of the Environment: Essays on Livelihood, Dwelling and Skill. Routledge, London (2000)

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