

MIND THE GAP
Landscapes for a new Era

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Topic

Gaps in Urban Landscapes – New Landscapes (Wild card: open topic)

HYBRID ARCHITECTURE_object, landscape, infrastructure

Key-words: Hybrid, Mobility, Context, Design tools

INTRODUCTION

The concept of *hybrid architecture* developed in this study considers hybrid all architecture that is at once object, landscape and infrastructure.

Hybrid architecture, pushed by the fact that it concentrates in a single architectural intervention a triple object-, landscape- and infrastructure-related nature, generates architectural answers with very specific features, and its study achieves following goals:

- 1_ Clarify the term *hybrid* related to architectural intervention
- 2_ Transform the qualities of *hybrid architecture* into project tools serving architecture in general
- 3_ Reveal the responsibility and ability of architecture to configure the common space beyond the physical area of intervention

METHODS

The 'method of grounded theory'¹ has been the methodology used.

Based on an initial hypothesis, a guiding structure was elaborated to establish the categories to be observed in a first selection of examples of hybrid architecture.

The successive analyses progressively re-elaborate the initial hypothesis and, consequently, the guiding structure of the analysis.

The conceptual framework emerges from the first graphic analysis onwards by defining itself and progressively drawing up a more and more precise definition of what constitutes a hybrid.

This increasingly precise definition of the concept of hybrid continuously redefines the selection of the hybrids themselves.

¹ Creswell, John W. "A grounded Theory Study". A: Qualitative Inquiry and researching design. Thousands Oaks, California: SAGE Publications, 2006

This continuously spiralling development —which progressively redefines and interweaves the guiding principle of the analysis, the selection of hybrids and the elaboration of the conceptual frame— concludes with the formulation of the qualities of hybrids. It defines the notion of a hybrid nature of architecture on the basis of the definition of a set of innate qualities —articulated with regard to each other— form the identity of the hybrid.

DISCUSSION AND RESULTS

Discussion and results are in this case interdependent and inseparable. They are structured in three parts corresponding to the previously referred goals:

a_Clarify the term *hybrid* related to architectural intervention

This term hybrid has continuously expanded and multiplied and this overuse has given it multiple meanings based on more or less rigorous interpretations. This study wants to rescue the complexity and richness associated with the process of hybridisation in general and with architectural hybridisation in particular.

In hybridisation, unlike what happens in the 'collage,' the original parts are no longer recognisable in the new being. The original components disappear as autonomous elements in the formation of a new entity. Unlike addition, hybridisation generates a new totality² with its own identity and characteristics. The hybrid object "ascends to a richer and more elemental totality, invigorated by a poetic union of its minor parts."³

This original concept of hybridisation forms the basis for defining the notion of hybrid architecture developed in this study.

Transferring this original concept of hybridisation to the field of architecture defines architectural hybridisation as a process that, through the act of crossbreeding (or unifying) diverse architectural natures or elements, makes the attainment of a new reality possible – a reality with its own identity and new architectural qualities that do not exist if the hybridised elements are considered individually and separately.

The hybrid architecture defined here is the result of the hybridisation of three diverse natures in one intervention: object-related nature, landscape-related nature and infrastructure-related nature.

Consequently, all architectural intervention is defined as hybrid that is at once object, landscape and infrastructure, an architectural intervention that simultaneously meets three conditions:

_It is a physical intervention that, as a result of a project, proposes an architectural space generated on the basis of human intervention.

_It is an architectural intervention, which is at the same time a landscape, beyond simply being an object placed within the landscape: using a variety of possible mechanisms (fusion, transformation, reconfiguration ...), the architectural intervention integrates inseparably into the landscape.

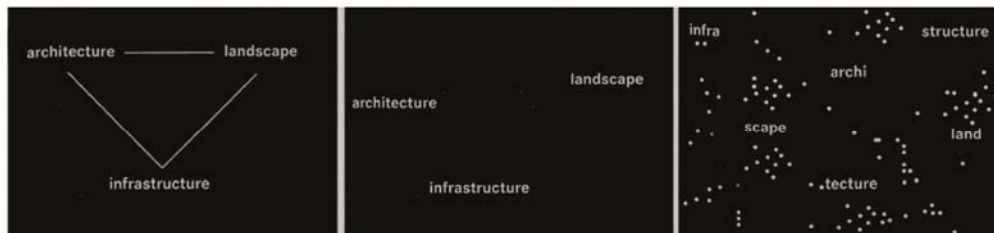
_It is at once an architectural intervention and an infrastructure, beyond its connection to infrastructure: in transforming into a section of infrastructure itself, the architectural object becomes a part of the infrastructure and incorporates its laws and mechanisms of functioning.

² von Mende , Julia & Ruby, Andreas, (2000)." Hybrid Hybris". *Daidalos*. núm.74: p.80-85

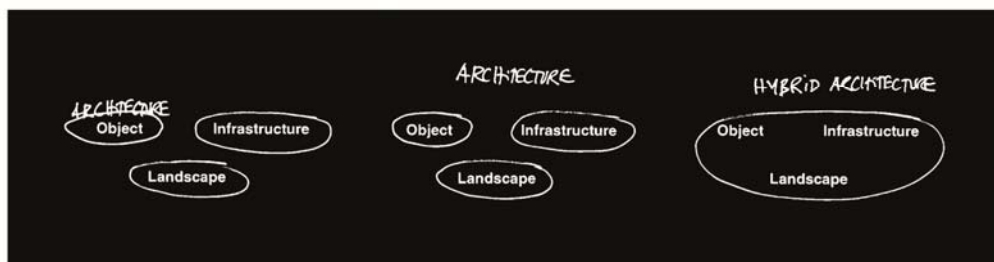
³ Kenneth I. ,Kaplan "Heterotic Architecture". A: *Hybrid Buildings. Pamphlet Architecture, LTD, núm.11*. New York, San Francisco: William Stout. Architectural Books, 1985



Alison and Peter Diagram: "Habitat in Landscape, Habitat is Landscape"



Rosalind Kraus Diagram: Hybrid Morphologies



Rita Pinto de Freitas Diagram: Hybrid Architecture

In the process of architectural hybridisation, the borders between architecture, landscape and infrastructure disappear in order to achieve a common architectural reality that simultaneously possesses this triple nature. In their diagram, "Habitat in Landscape / Habitat is Landscape", Alison and Peter Smithson depict a first step towards diluting the borders between object and landscape.

In the late 90s, taking it one step further, Marc Angèlil and Anna Klingmann describe 'hybrid morphology' as a reality in which "the borders between architecture, infrastructure and landscape dissolve, while the notion of the architectural object as a closed entity" spreads, and they illustrate this with a diagram by Rosalind Krauss.

They add the infrastructural dimension and assert the dissolution of the three dimensions —architecture, landscape and infrastructure— whereby each of the realities takes on qualities of the others in order to define itself.

In this description, architecture is associated with the architectural object, and its three dimensions interact, without losing either their autonomy or their specificity.

The concept of hybrid architecture of this study takes a third step by which the direct association of architecture with the architectural object disappears, and in which the elements that make up the triple reality of object, landscape and infrastructure lose their autonomy when they are hybridised in architecture.

Elements of landscape, sections of infrastructures and the architectural object together make up the architecture, i.e. hybrid architecture.

b_Transform the qualities of hybrid architecture into conceptual project tools serving architecture in general

Because of its specificity and since the qualities of hybrid architecture are neither the most evident nor habitual in architectural practice and conception, these qualities widen the conceptual framework of topics that are transversal and consubstantial to architecture.

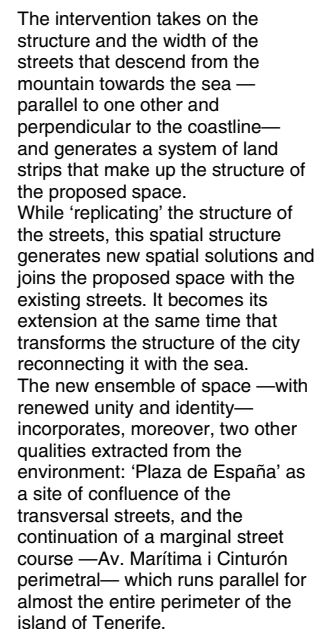
The analysis of hybrid architecture offers an extension to the conception these topics that are essential to architecture, and transforms that extension into a project tool within the reach of architecture in general, beyond the area of hybrid architecture.

Once formulated, these qualities turn into main conceptual tools concerning architectural design in general, concerning the definition of the qualities of space.

This 'division' inevitably requires delimitations —that do not exist as such between qualities that together constitute a unified reality— but the systematic representation of that reality makes its description easier.

Considering that landscape and infrastructure are elements that belong simultaneously to both architecture and context, the inseparable relationship between architectural intervention and context emerges as a core issue with respect to the hybrid's identity, and the description of that relationship becomes indispensable for its outline.

The double and simultaneous relationship of incorporation and transformation converts the hybrid into a 'revealing' element of selected qualities of the context.



⁴ Soriano, Federico. "Museu de Antropología y de la Evolució Humana, Torrepacheco, Murcia, 2006-" *El Croquis*. 2007, núm. 137: p. 252-359

regarding the LIMITS

The dissolution of the physical limits is inherent to an architecture that is at once object, landscape and infrastructure.

This dissolution is nothing more than the reflex of dissolving conceptual limits by an object that does not generate itself in a self-referential manner, but through strategies of inclusion and effects from other components within its physical environment: a hybrid emerges as the limits between architecture, landscape and infrastructure dissolve.

The dissolution of limits is associated with a reality, in which the borders within architecture shift —“the borders between architecture, infrastructure and landscape dissolve while the notion of architectural object as a closed unit disperses”⁵—and it is also encompassed by a wider reality of the dissolution of limits between disciplines:

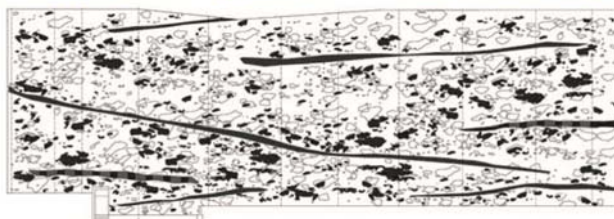
“The classical delimitations between various scientific fields are subject to a basic re-assessment: disciplines disappear, [...] and takeovers on the borders of the sciences take place, from which new territories come into being. The theoretical hierarchy of types of knowledge gives way to an imminent and, so to speak, ‘plane’ network of investigations, the respective borders of which never stop shifting.”⁶

The term ‘dissolution of limits’ was chosen as an expression that encompasses the triple condition of limit that characterises hybrid architecture: diffusion of limits, dissociation of limits and multiplicity of limits. These three aspects will structure the content of this subchapter:

The diffusion of the limits of an object is associated with the loss of a limit’s role of border as a result of its transformation into a space of transition.

The dissociation of the limits of a hybrid object describes the fact that limits can separate themselves from the physical reality of the object so as to situate themselves outside of the area of intervention.

The multiplicity of limits is the consequence of the co-existence of various limits in a single object.



“The colour (of Mount Cabezo Gordo) is special, those who might call it reddish, upon a second look at photographs, see that it has changed to a golden colour. Against its volume, the empty voids of the abandoned mines emerge like black shadows. [...] The project means to refer to these reflections. It does not want to lean on the mountain, pierce or violate it. It has looked for an intermediate position, neither far away from the access road and thus separated, meaning that there would be no intimacy between the two, nor on top the Cabezo, endangering its history and what is still hidden in its interior. [...] But the project also wants to gain some attention. It has to be a singular piece on a singular mountain. [...] Cabezo Gordo itself wants to be seen from far away.”

The facade is conceived as a new surface of Mount Cabezo Gordo. The definition of its surface takes on the colour, the folds, the density, the irregularity of the black openings in reference to holes of the mines...

Seen from the road, the two surfaces are superimposed, recreating a visual reference to Mount Cabezo Gordo in the landscape.

The borders of Mount Cabezo Gordo shift and are situated along the new borders of the proposed construction; while at the same time, the borders of the proposed construction are situated along the borders of the mountain.

Museum of Anthropology and Human Evolution, Torre Pacheco_Federico Soriano, 2006

⁵ Angéil, Marc & Klingmann, Anna, “Hybrid Morphologies - Infrastructure, Architecture, Landscape”, *Daidalos*, 73, oct 1999, pp.16-25

⁶ Lyotard, Jean-François. *La condición posmoderna-Informe sobre el saber*. Madrid: Ediciones Cátedra, S.A. 1998

regarding the GROUND

With the notion of limit as border transcended, the mechanisms of continuity which are established between a hybrid and elements of its environment, as well as the necessary physical continuity demanded by a hybrid's infrastructural condition, imply a specific form of relationship between architecture and ground. A relationship of interdependence is established, and can be defined by three characteristics: the transitive relationship with the ground, the reconfiguration of the ground and the figure-background relationship.

It is precisely on this contact and continuity with the ground that a hybrid lays the foundations for its ability to convert the architectural object into landscape and infrastructure simultaneously.

Through strategies of greatly increasing —both physical and conceptual— continuities with the environment in general and in particular with regard to its relationship with the ground, hybrid architecture maximises the physical continuity between an object and its immediate physical environment.

This clear decision for a transitive relationship with the ground is a prerequisite for the infrastructural condition to materialise in a hybrid, and means something even more important than that: it is the transcended differentiation between object and ground.

The difference between ground and object becomes blurred and a fusion of ground and object is introduced.

Hybrid architecture transcends the differentiation between architectural intervention and ground, the definition of the physical qualities of the ground transforms into a project element, and these qualities will define themselves with and on the basis of the architectural proposal.

Transformed into an integral part of an architectural project —and inseparable from the whole of the architectural intervention— the ground reconfigures itself on the basis of laws defining the project.

For a hybrid architectural object “the ground constitutes neither a given nor a reference”⁷, and its existing qualities before the inclusion of the project are not conditional to the project, nor do they incorporate themselves in it as pre-existing dates.

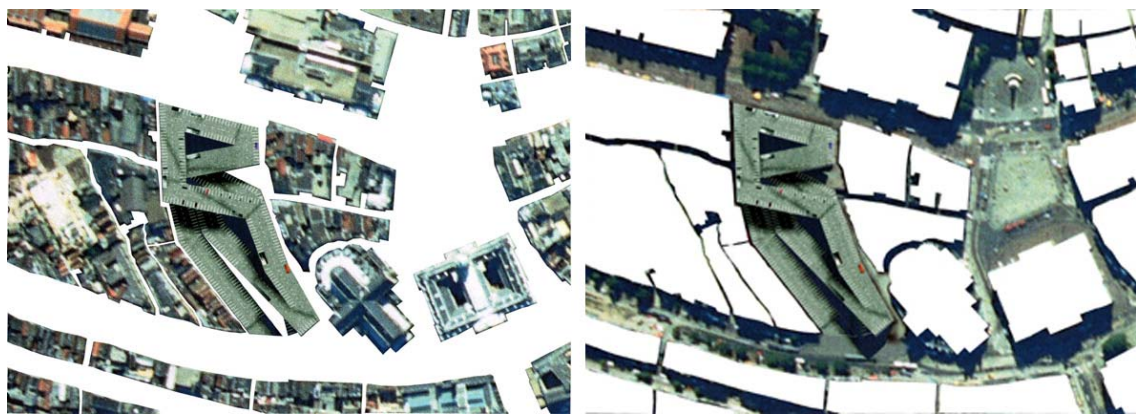
This specific form of operating with the ground —linked to the dissolution of limits— to which hybrid architecture is subject, has a special impact on the topic of the figure-background relationship traditionally associated with the relationship built space – void space, as a consequence of a relationship between architectural object and ground that is based on differentiation.

The hybrids, by “definitely leaving transcended the differentiation between figure and ground”⁸ and the corresponding principle of the psychology of Gestalt⁹, abandon the solution of ‘polarity’ that is substituted by a situation of ambiguity where the relation to a duality stops being pertinent or useful to explain architecture.

Hybrid architecture is figure —is object— without the necessary presence of a specific ground, but simultaneously it is also ground.

Hybrid architecture, without dispensing with its object dimension, is conceived simultaneously as an unfolding of the ground, as an integral part of the landscape, as a fragment of an infrastructural system... a whole series of elements that can be considered as ground.

In the hybrid, the figure-ground polarity dissolves.



Parkhouse Karstadt, Amsterdam_NL-Architects, 1995

⁷ Zaera, Alejandro & Moussavi, Farshid. “La reformulació del sòl”. *Quaderns d'Arquitectura i Urbanisme*. 1998, núm. 220: p. 36-41

⁸ Angéil, Marc & Klingmann, Anna. “Hybrid Morphologies – Infrastructure, Architecture, Landscape”. *Daidalos*. 1999, núm. 73 : p.16-25

⁹ Köhler, Wolfgang. *La psicología de la Gestalt*. Milano: Giangiacomo Feltrinelli Editore, 1967

regarding the SCALE

The inseparable relationship between object and context and their impact on one another introduces the indispensable references to the topic of scale.

In the case of hybrids, the concept of architectural scale assumes a specific meaning, which expands the group of existing definitions of the concept and is formulated by the following expression:

The scale of hybrids coincides with the scales of the context that have generated the object and which the object impacts upon. The scale of hybrids is multiple.

The definition of scale of hybrids and their analysis, without excluding other possible definitions or conceptions of the architectural scale, shines a spotlight on this concept and constitutes an interesting thought, which can be extended to architecture in general.

This definition implies three qualities:

The interdependence between scale and relationship to the context, the concept of scale associated with the analysis of an object's qualities rather than its size and the fact that hybrids contain multiple scales at the same time.

Scale and relationship to the context are interdependent concepts: the scale of a hybrid object is defined on the basis of the architecture-context relationship.

To determine the scale of a hybrid, an observer must interrogate the object on its relationship to the context. An observer who researches this relationship to the context must look for the kind of relationship that the hybrid establishes with the context: the incorporation of chosen elements of the context into the genesis of the hybrid and the impact of the hybrid on the context.

Based on this analysis, the scale of the context that has generated the intervention, as well as the scale of the context which the intervention has impacted upon, are determined as scales of the project.

On the one hand, a hybrid object extracts references from the context to define its own mechanisms of conceptual generation: it selects specific qualities —order structures of the environment— to transform them into order structures of the project, into mechanisms of spatial generation.

In this way, the scale of the context that has been a reference for the hybrid architecture, is included in the architectural intervention and transforms into scale of the intervention.

On the other hand, once 'returned' to the context from which it extracted references, context and object make up a new, reconfigured and inseparable physical reality.

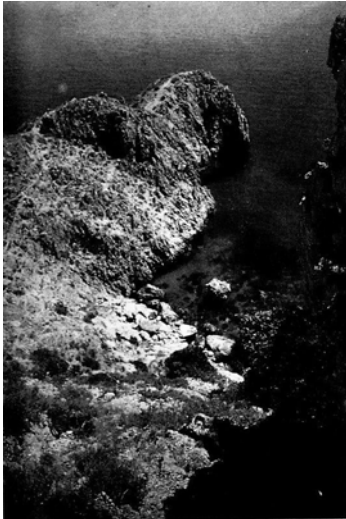
A hybrid replicates certain selected qualities of the context and generates itself with the intention to make latent realities of this very context emerge. In this way, the scale of the context which the intervention effects impacts upon is included in the architectural intervention and it is also the scale of the intervention.

Having thus defined the analytical process allowing a determination of the scale of hybrids, we can now analyse the relationship between scale and dimension in order to verify how the scale of an object is independent of its size despite being "measurable".

Even though the scale of the hybrid object can be associated with a territorial area with a dimensional value, the dimensional aspect of the scale of the architectural intervention itself is not associated with the size of the object but with the range of the territorial area to which it refers and which is included of the qualities of the intervention, in its reference to the territory.

Whether the scale of the intervention is large or small does not depend on the size of the object, but on the size of the territorial area to which it refers.

The hybrid object will have various territorial scales referring to measurable territorial areas and it will be the comparison of the various territorial areas that will allow references to larger and smaller scales related to one intervention.



Independent of their size, the scales of the Casa Malaparte are the scales of the physical and geographical conditions that the proposal selects and "replicates:" the depression of the slope of the mountains that seems to want to detach the 'Punta Masullo' and plunge it into the sea of Capri, the flatness of the mountaintop, parallel to the surface of the water that opens towards the horizon, the network of paths of different hierarchies connecting the mountains with the Punta Masullo and its peak and descending along the slope towards the sea...



Casa Malaparte, Capri_Adalberto Libera, 1937

regarding the MOBILITY

In analogy to the previous reflections, where object and context were shown to be inseparable elements in an architecture that is simultaneously object and landscape, in the following it will be described how object and mobility are inseparable elements in an architecture that is simultaneously object and infrastructure.

In a hybrid, the space allocated to mobility becomes more relevant and indispensable for the comprehension of the architectural space.

The fact that the architectural object incorporates the infrastructural nature into its own implies the precondition that this object becomes an integral part of an infrastructural system of higher order. At the same time that it possesses the autonomy characteristic of all architectural objects, a hybrid is also a section of infrastructure integrated in a wider infrastructural system with its own laws and functioning. In its incorporation into this system, the hybrid has to abide by a part of these laws so as not to disturb the correct functioning of the system.

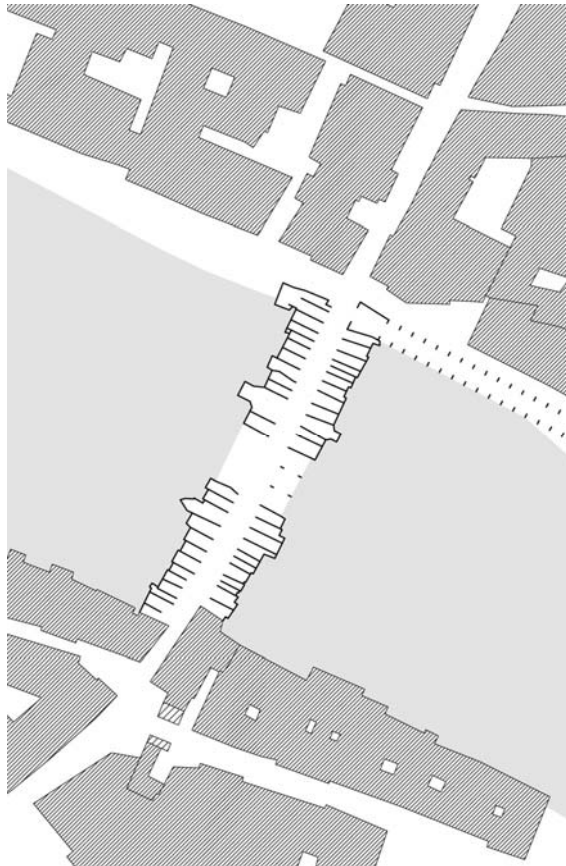
The hybrid itself becomes a physical fragment of an infrastructure conceived to absorb flows of circulation and transforms the issue of mobility into a core feature of its own conception, with significant consequences on the configuration of the space.

The fact that mobility becomes a core quality of the architectural intervention has particular ramifications for both the programmatic dimension and the order system of the architectural intervention.

As far as the programmatic dimension is concerned, mobility becomes an integral part of the core programme of the project.

As far as the order system is concerned, the fact that the hybrid object belongs to an infrastructural system of a superior order will result in the necessary incorporation of part of the laws defining this system of a superior scale as an ordering system into the genesis of the hybrid.

Both realities are formative in the definition of the qualities of the space of a hybrid.



Pont Vecchio, Taddeo Gaddi_Firenze 1535-45

The Ponte Vecchio, as a bridge and the street that it is, has as a primary programme and its principal demand the creation of a space that favours the mobility of persons and vehicles. But it is an urban element that is simultaneously bridge and building and that integrates other characters related to mobility: areas of intermediate mobility such as the exhibition areas of boutiques, areas with a rather predominantly

c_Reveal the responsibility and ability of architecture to configure the common space beyond the physical area of intervention

_Implicit in the value of the hybrid is the value of an architectural practice that assumes all its responsibility in the configuration of the qualities of the common space, as well as all its potential for urban transformation and reconfiguration of the landscape.

_Implicit in the value of the hybrid as well is the value of an architectural practice that is conscious of its inevitable impact on physical reality —beyond the limit of its area of intervention— and that maximises its compromise with that reality.

_Implicit in the value of the hybrid is the value of an architectural practice that wants to shorten the distance between the disciplines of the architectural project, urbanism and landscape design.