

SEAty_ living beyond the waterfront dynamics outcomes and risk of a new trend

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ABSTRACT:

The growing number of projects for floating structures or artificial islands in response to the problems of urban congestion or environmental emergency requires a critical reflection on the perspectives and the risks implied in this new trend of urban water colonization. This paper intends to test the hypothesis that the value of a new and emerging issue of Architecture can be recognized to this trend and, through a comparison with a series of experiences, wants to bring to the attention of the debate a number of questions which, for exigency of synthesis, analyze in particular the morpholinguistic issues related to the diffusion of this new architecture theme.

CONFERENCE THEME: Identifying or assessing emerging trends and fields in architectural research

KEYWORDS: waterscape; colonization; fluid; environment; mimetic language

INTRODUCTION

“non in terra neque in aqua sumus viventes”

trad. “not in the land nor in the water, we are living”

Paolo Diacono (720-790 d.C.), describing the high water of Venice.

The issue of the requalification of the *waterfront* has deeply characterized the debate on the urban project in the last ten years, allowing to investigate the capability of the architecture project as instrument of regeneration of these areas once dismissed, but charged of identity-making and landscape values to resemantize.

The experiences of London, Bilbao, New York, Boston, Genoa, Valencia, Buenos Aires, Barcelona, Rotterdam, Oslo, Hong Kong, etc., demonstrate the consistency with which these processes of urban regeneration in coastal areas will spread like a virus positive and fruitful. In recent years, is to establish that what Prof. Rinio Bruttomesso, president of Cities on Water defines the process of “*Global waterfront renaissance*”.

The *Global Waterfront Renaissance*, is explained as the ancestral need to seek water. Water is our most important resource of life. Equally it is natural for defining and ecological events, as it is for regional economic and social structures. The smell of the sea, the sound of a river and the infinite dimension of the ocean are the aspects that make unique and extraordinary the places on or near water.

In the contemporary cities, from the vestiges of big urban port systems in abandonment, always more often, new parts of city rise, that use the heritage of this huge *reservoir* of free soil, introducing new functions compatible and coherent with the presence of water. The number of case studies, of the realizations, the amount of theoretical studies and the researches on the theme of the *waterfront*, begin to configure it as a new rhetoric figure of the urban *logos*. Today, a new, and in part, dangerous trend seems to affirm itself with global diffusion. A trend that aims to expand the urban boundaries *beyond the waterfront*, through a progressive colonization of the water. The Burj al Arab, the sail skyscraper of Dubai, now definitely become a *kitsch* icon of unbridled and inappropriate luxury; the OMA project for an artificial island in Azerbaijan; the futuristic utopias of floating cities for a million of inhabitants in *Vincent Calabaut*; but also the airport of Kansai of Renzo Piano or the project for an off-shore port of BIG architects and the floating neighborhoods so widespread in the United States and the northern Europe, are just some of the cases that define a new scenario in

evolution that requires an interdisciplinary reflection and that, for the architects, opens the field to ethic, morphological, typological and linguistic considerations of great conceptual importance. Most of these projects, in fact, regardless of whether they are designed as floating structures or artificial islands, don't use the water as a proper material of the architecture or as an element of the traditional *solid-liquid* dialectic, but rather as a *new territory* to which they refer often in mimetic terms. The water becomes the nature from which to draw specific formal references to reuse as linguistic elements. This process of *invasion* of the boundaries of what could be described as the *liquid territory* happens under the pressure of two main motivations.

The first of the reasons for this *invasion* has to be searched in the growing need of spaces for the already congested coastal metropolis that find an unique opportunity in the space offered by the immensity of the sea to give space to new needs (more or less necessary) and functions mostly related to the big infrastructures (ports, airports, sports facilities) or the luxury residentiality¹.

A second reason, of more utopian and futuristic matrix is linked to motivations of environmental nature particularly related to the catastrophic paradigm which provides that the expected rise in the average sea level will lead to a gradual abandonment of coastal areas with the consequent need to find space for the populations settled in these².

These two motivations, also if anticipating the same result of a partial but progressive colonization of the *liquid continent*, seem inspired by deeply antithetical inspirations.

If, in fact, the first is based on the desire to give response to a purely utilitarian and speculative request or to proceed to the growth of the already immense coastal megalopolis; for contrast the second is connoted with strong characters inspired to the social utopia of environmental brand aimed to rescue from the expectation of continuous floods and the progressive sea level rise, that humanity, whose disregard towards the natural balances has led to this state of perpetual environmental emergency.

In this case, these projects of *see colonization*, water can be ascribed to the area of environmental design at least according with the definition given by Maldonado that is:



Figure 1: Kansai Airport, (www.pref.osaka.jp)

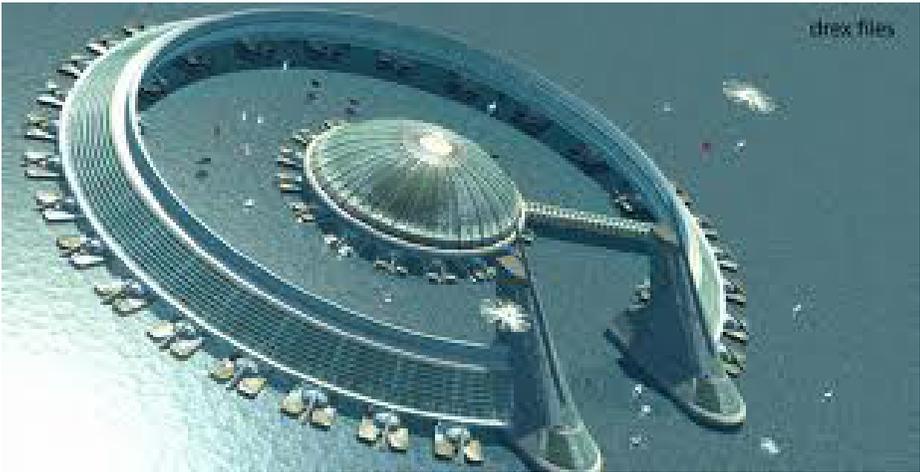


Figure 2: The Venus Project of Jaque Fresco (www.thevenusproject.com)

“that practice aimed to the environment preservation, that is, to the problems relative to the process of its adaptation to the mutable exigencies of the society and to the resources management.” (Maldonado,1970,15)

The ancestral attractive ability of the water and its relationship with the architecture of the cities reconfirm a constitutive, and full of theoretic and conceptua ideas, archetype. A certain aquatic architecture seems deeply inspired by the “*things of water*” to which it is assigned a force enduring and immortal, an objective and eternal functionality whose spirit, almost as a guarantee of coherency and adaptation to the surrounding landscape, is introjected into the project. So the aquatic landscape becomes the world to which making reference in imitative, almost mimetic terms. The city of Venice or that of Bangkok, the myth of Atlantis, but also the archetype of the piling, demonstrate how the issue of the water colonization has obliquely crossed the human history and how today, at the light of the considerations made, once again it becomes an issue endowed with its specific autonomy.

Although it may seem premature and apodictic to assert it, against the consolidated culture of the city that has, especially in the last four decades, generated a wealth of critical approaches and realizations of architectures that draw their same sense from the urban *logos* - and not naturally for a mere reduction of scale - so it can be affirmed that, under the new trend of *sea-colonization*, a new area of architectural attention is gradually consolidating, an approach with a strong brand identity in the architectures that aim to *recognize* the water in the measure in which they pervert it with the introduction of infrastructural or residential functions.

In this sense it manifests itself a world of iconographic references, a collection of emphatic and rhetoric figures all equivocally inspired and sometimes truly obsequious toward the aquatic spirit or the world to this directly connected in terms both of utility (ships, boats, sails, etc.) and abstraction (islands, wave motion, wind, etc).

It is possible to affirm that this *incongruous list* (the hulls, the waves, the sails, the wind, the marine ani-mals, the anchors, the cranes, the gangways, the large scale of Le Corbusier’s steamship, as well as that of the small boat) disordered and friendly to the place, perhaps for the same novelty constituted by the attention that the contemporary directs to the aquatic landscape, is going to recognize a corresponding list of possible metaphors, which propose themselves as durable for a long period of time. In this way, in the recent experience of the aquatic architectures the risk of homologation reveals itself, which coincides with an impoverishment of what Freud defined “the *overdeterminations* and the *condensations of the expressive forms*”, many of these recent examples appear, that is, to satisfy - giving up the intrinsic valence of the architecture to be polysemic - an unique meaning, beyond that dependent on their function and corresponding with the desire to reveal their *appertaining* to a particular context. As the dialogue that the project establishes with the place is always based on

a legitimacy of its existence, this must not lead to a process of deduction from the context of the elements structuring the route and design outcomes. On the contrary it could be argued that the quality of the project is measure of the critical *distance* that we are able to establish with the context. However the rhetoric aquatic figures with archetypal connotation, justifiably limited in number, will not mean, for the procedural status of the design process, a limitation in the variety of their architectural declinations.

So this *limitatio*, that does not always lead to a *concinmitas*, makes to rise the possible figures to the dignity of *type*, as it has often happened in the history of architecture: an art that has in the articulation of the combinations, in their *composition*, rather than in the invention of the elements to combine its primary methodological foundation.

Here's how the universe of the architecture of water colonization appears as a field of preferential conceptual experimentation to investigate those relationships between project and context that others places have developed for longer time and with greater wealth of experience.

“Designing and constructing a building means producing an intersection between the willingness of the artifact of self-determinating, to grow up free from any conditioning as if it was built in an absolute vacuum, and the opposite tension towards its becoming final concretion of a historical process of construction of part of the world, as result of that long layering of tracks, tissues and monuments that has given form to a place.” (Purini, 2005.189)

Trusting in *Purini's* intuition, which sees an armistitial relationship between the internal tensions of an architecture that wants to be thing and the conditioning of a context that brings it back to *sing in chorus* with other consolidated elements of the landscape, it seems legitimate to extend the criticality of this practice to the port context, however highlighting some probable peculiarities.

It is legitimate to argue that the list and the historical stratification of the elements that limit the figural autonomy of the projects for these architectures, is both in number and density smaller respect to the traditional urban context.

I. LEARNING FROM WATER:

THE SPASMODIC RESEARCH OF ADEQUATENESS TO THE CONTEST

“In the word form is implicit, among other things, an ambiguity of meaning that is useful to highlight. The architectural form of a phenomenon is in fact on one side the manner in which the parties and the layers are arranged in the thing, but at the same time the power of communication of that disposition. These two aspects are always co-present, but, while there is anything without form, the form has powers of esthetic communication disposed on very differentiated levels.

It could be called form the first aspect and figure the second; the value of figure is never intended as zero; we can always recognize its tracks even if at the level of extreme deterioration. Therefore, it is beginning from the figure that the sense of the phenomenon is traceable, reconstructable its totality, the plurality of its constitutive elements, of its proposals.” (Gregotti 1966.54)

Vittorio Gregotti in this reflection, from his most famous writing on theory of architectural design, *Il Territorio dell'architettura*, puts, with extreme clarity and efficiency, the question of the complex relationship that the discipline creates with the world of the form and how this establishes continuously, in a way more or less direct, more or less conscious, a relationship with a figure. In particular Gregotti makes to coincide with the figure the potential of esthetic communication of an architecture work, giving to this latter a valence of psychological nature even before than an objective one. The figure is for Gregotti the elementary unit of the project; to this he gives the value of sense of the total architectural organism, to this the role to bring back into a synthetic unity the whole complexity of the architectural phenomenon.

In the *aquatic landscape*, the figurative characterization of the form of the architectures appears in many cases as a process that allows an immediate decoding.

In the substantial landscape uniformity of the water, which repeats its landscape, in a widespread and undifferentiated way, one can trace the continuous repetition of architectural forms that appear all inspired by the same figures.

In this continuous reiteration, we identify the formal principle of the *consonance*, which defines the first and most characterizing of the two extremes within which the formal poetics of the *architectures on the water* oscillate.

The second extreme can be identified, for counterpoint, in the dissonance intended, in this case, as the presence, in the architectural forms, of a substantial figurative indifference, respect to the context, more extensively the apparent absence of a connotative willingness, in the meaning in which the term appears, as already explicated, it constitutes a potential of esthetic connotation.

Even from a brief survey on the most recent production of *aquatic* architectures, offered by the sector advertising industry, it seems indeed that these, whatever their type, intend to answer *in primis* to a desire of *appropriateness* of the context. Appropriateness to the surrounding liquid landscape, precisely *consonance*. "The architecture is construction of an adequate real space, which evokes visually the appropriateness" (Lukacs, 1960.33). These architectures, three-dimensional set of the most recent works of water colonization, seem constantly to run after the adequateness to the context. In these terms the position of Lukacs proposes an own attitude of these architectures, which seem to arise inspired by a principle of coherence, which is not showed, with equal insistence, in other contexts recognized and circumscribed.

By virtue of their *aptitude to the adequateness* all enjoy a principal *immediate evocative value*, in these we recognize, as the children do with the clouds, familiar figures, by reducing the complexity of the forms to iconisms of the aquatic figures.

The iconic power of the forms of marine and industrial landscape almost rediscovered and appreciated since the beginning of the Modern Movement, made Le Corbusier to express himself so in *Towards an Architecture*:

"The architects live in the poverty of the school education, in the ignorance of the new constructive rules, and their concepts are happy to stop to the doves that kiss each other. But the bold and wise constructors of steamers, create buildings near which the cathedrals are all small, and throw them into the water!

Anonymous engineers, mechanics at work between the mold and the fat of the workshop, have designed and built formidable things like steamers. We are terrestrial unable to appreciate, and it would be nice that was given us the opportunity to do the miles of distance corresponding to the sight of a steamer, to teach us to admire the work of the "regeneration".

(Le Corbusier, 1923)

So it happens that some architectures, built near water, define their form from a circumstantiated world whose main figurative references are made not only by the natural elements connoting a neighborhood, already present and available and elevated to the paradigm of modernity for their absence of figurative intention.

This spasmodic research for *adequateness* of the architectural forms to the marine environments, or in general to the aquatic ones, is not immune from the risks of ephemeral redundancy. In fact, where this redundancy, rather than by a critical revision of the figures of the aquatic landscape, is led by a *mimetic process*, which aims exclusively at the research of a mere formal homologation of the new architecture to the context, it happens that the boundaries of a self-referential *aquatic mannerism* appear.

A mannerism that makes to decay the *form* reducing it to its most immediate and exterior condition of *image*. Against an ephemeral conception of architecture Vittorio Gregotti recalls to a *critical realism* as an interpretative filter to put against an esthetic communicative meaning of the discipline:

"It does not move (the critical realism e.n.) - Gregotti writes - against the imagination, but against its ideologization, that is against the image as representation of the market show, against its attempt to reduce the architecture to image, to theatricalizing event, to incessant novelty, to imitation of multimedia, that is, once again, at the total dependence from instruments became purposes" (Gregotti, 2005.36).

In few other contexts like these, the contemporary designers want particularly to make understand that they are aware of working in a certain context: that is, they shrink away from a disciplinary research based on the tradition of history, to encourage a much more reassuring mannerism, at the

point to reconcile us, recognizing it how profoundly true, with a possible peculiar paraphrase of Celine's famous aphorism that wanted to be the only view of the sea *evocative, for the bourgeois, of deep thoughts*.

The *formativity process* (Pareyson 1988), that enables the design approach in these contexts, seems to be inspired by a single common mind.

As it happens in the colonial territories, in which the characters of the motherland are emphasized for a longer time than in the same mother country, after that they have already set in this and considered provincial residues, so it will happen, perhaps still for many years, until the exhaustion of the phenomenon that we analyze, that the aquatic architectures will tend to exasperate their aquatic features.

This design approach can be assimilate to the transference induced by a sense of guilt that directs the forms to take on the features more specifically aquatic, almost to redeem themselves for the introduction of extraneous activities.

2 CONSONANCE AND MIMESIS AS

LINGUISTIC PRETEXTS

These architectures on water put themselves with regard to their context in an attitude of *mimesis*, as well as it is intended, in the meaning introduced by Auerbach, of *represented reality rather than representation of reality*.

Auerbach introduces the concept of *mimesis* as the tension to a realism intended as "*willingness to observe theoretically the earthly life*." Where to the ad-verb *theoretically*, the author matches the idea of an interpretative act of the constitutive elements of the reality, intended as such. The architecture of the *consonance*, also of that which takes place in areas near the water surface, seems to refer to this concept of *mimesis*: it is an interpretative act of the reality of the landscape that surrounds it. This reading is approached following two main categories of *emulation*. A *mimesis* of functionalistic type: architectures that *imitate* the machines produced by humans to challenge the waters, and a *mimesis* of organic type: architectures that imitate the natural elements drawn from the reality of the sea, such as its liquidity, the movement of the waves, the blow of the wind, animals and sea monsters. The compliance, more or less conscious to formal consonances proper of the aquatic world, translates itself into an extremely differentiated range of architectures for the most varied functions.

Those architectures that derive their own formal para-digms and the compositional syntaxes from the world of the machine and the water-related industry belong to the first category of the consonances of mimetic functionalist type.

Considering, only to mention some examples, the Silodam complex, designed by the Dutch firm MVRDV.

This apartment complex, completed in 2002, stands in the middle of one of the channels of the port of Amsterdam. The design is inspired, in an obvious way, to the containerships that populate the ports around the world, and entrusts its identifiability to the reiteration on the facade of modular elements of different colors that correspond to the individual residential and commercial units. The building seems to want to pursue a process of *self-construction*, the random combination of materials available in the same site. The process of esthetic *formativity* appears influenced by the accidental, but profitable responsiveness, to a condition of involuntary: the obsessive presence and availability of the containers, whose iteration suggests common modularities also to the residences, instigate the authors to use them as elementary and available morphemes for other uses and combinations.

The same process is valid for the famous Burj al Arab in Dubai, where the evocation of a sail spread out to the wind appears suggestive, but ambiguous and pretentious, as one of the main problems faced by its designers is precisely of opposing to the force of the wind. The Nemo project (*National Center for Science and Technology*) in Amsterdam enjoys mayor reputation. Here the reference to the form of a ship is explicitly sought in the pattern of a ship prow that juts out over the water. Further the use of the metallic coating in color green water helps to evoke the naval image and establishes



Figure 3: Silodam, MVRDV Architects (www.mvrdv.nl)

a relationship of continuity with the color of the sea. The project *structures* a square placed on its cover, to which you can access by a ramp that follows the wedge-shape profile of the whole building and defines a public terrace overlooking the port of Amsterdam. The organic world of the sea is, as mentioned, the second family of categories of mimetic references to which these architectures seem to be inspired, whose results in many cases, also having the ambition to manifest themselves as very modern architectures, look like some illustrations of science fiction of the first half of the 19th century. In this second category especially those utopian projects that, seeking answers to the potential environmental crises of the next future, foreshadow floating buildings or whole floating cities.

And 'this is the case for example of the floating oceanographic observatory designed by the French architect Rougerie Jaque (www.rougerie.com), whose formal references, that clearly look to the world of crustaceans, seem to come out from a novel by Jules Verne.

The same mimetic and emulative matrix is pursued by Peddle Thorpe Architects in the project for a floating pavilion for Expo 2012 in Yeosu, Korea. The pavilion thought to host a traveling exhibition on the theme of the expo "The living Ocean and Coast", is inspired by the world of the submarine biology, emphasizing the aspects related to the fluidity and the dynamism.

In this kind we can include also the utopian floating cities of Vincent Callebaut: expandable organisms based on the drawing of spores of marine vegetation, are seen as refuges of the future for the population settled in those coastal territories that the sea level rise will make uninhabitable. Lilypad, this is the name of the amphibious city designed by Callebaut, is designed to be able to accommodate 50,000 inhabitants and has been thought as an autonomous organism from the energetic and faunal-vegetal point of view.

To conclude this brief review of "aqua-form" projects it seems appropriate to mention the project of the island in the Mur River in Graz, Austria. Vito Acconci's work stems from the need to create an object able of making the river enjoyed and connected to the urban context.

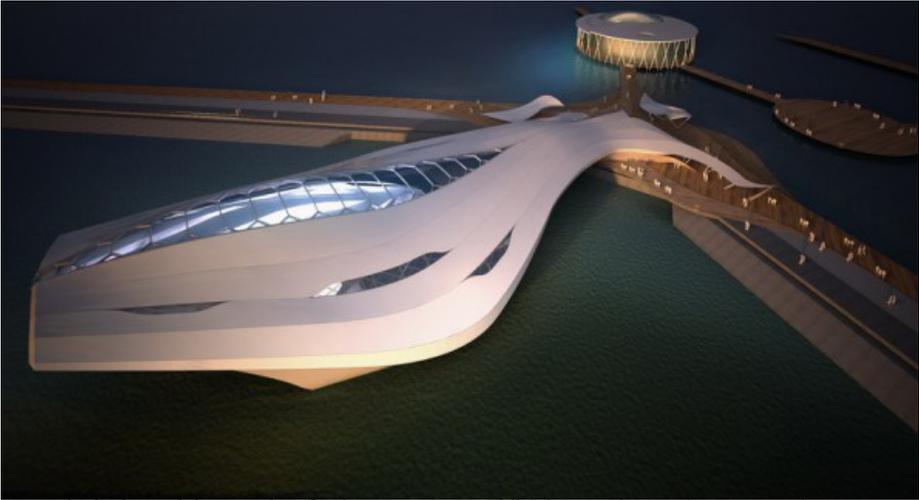


Figure 4: Fluid, Amphibian Pavilion for the expo 2012, . Peddle Thorp Architects: (www.pta.com)



Figure 5: The floating ecopolis of Lilypad. Vincent Callebaut:www.vincent.callebaut.org

Acconci creates a platform of connection, a shell with organic and enveloping forms played on the dialectic concave-convex. This shell contains several functions: a small bar, an outdoor theater and a playground for children.

3 THE POSSIBLE ARISE OF AN AQUATIC MANNERISM

The analyzed cases highlight how the project themes are equivalent with coherency everywhere in the world. To this reiteration of the project themes it seems to go increasingly corresponding an equally clear diffusion of analogous syntactic linguistic morphemes. The total coherence, with which analogous responses are defined for analogous problems, finds in the field of the colonization of the *liquid territory* a design procedure that seems to be inspired by a, non coded, common “*style*”, almost an *international style* that seems to inspire these architectures to a *suprapersonal and common manner to form themselves* that often corresponds to a substantial impoverishment of the conceptual and formal offer. Often these appear to pursue the research on a relationship between form and context from the reversed signs in which the form follows the context, the function suits to it. The result is often attributed to a casual *formalism*.

These architectures seem to be inspired by an explicit metaphorical willingness encouraged continually in the research on emulative relationships, and entrust all their *communication qualities* (Dorfles 1970) to the reiteration of linguistic elements to which it is entrusted the task to mean simultaneously their belonging to the aquatic context and their being taken out, in dependence of the new functions introduced. In the reiteration of museums in the shape of ship, of terminals in the shape of waves, of residential buildings in the shape of container, it is implied a tendency to the exaltation of the symbolic aspects. The terms of this overtaking, when too insistent, risk the *Kitch*, as “*operations that constitute the esthetic meal of the vast majority.*”

Just as the *International style* was the response in the *stylistic* side to a set of pressures induced by the advent of new technologies and the pursuit of new proposals, so the reiterated functional and linguistic remakes of these architectures seem to face an equal storm. What now anticipated finds a strong motivation for the formation of a linguistic *koine*, also due to the design materials that offer themselves available in the aquatic landscape.

Despite the variety of the accents that every author makes explicit and his specific determination to force the uniformity of this context searching for specificities dictated by the individual context, it is however possible to identify elementary abacus of morphological references, common at the point that they can be encoded, even if at the cost of a partial arbitrariness.

The comparison of the reports of figurative consonance of these architecture with the context and the limited list of the possibilities to deal with the water surface, characterizes a process of constant standardization. A standardization process that certainly doesn't have the force of aspiring, according with the classification proposed by Jacob Burkardt, to the definition of *organic* architecture style. Burkardt meant with the term *organic* that style, present only in the Greek period and in the Gothic one, with its autonomous original symbolic production. Burkardt identified, for counterpoint, in the derived style all the architectural experiences “*forced*” in comparison with the history, never *independently creative* (Burkardt, 1991).

CONCLUSION

This contribution is not to provide definitive conclusions. Rather intends to submit to the debate an issue that is emerging in architecture: the colonization of water for purposes related to infrastructure or to the residence and the worrying and unique aesthetic trend that characterizes these projects. It is believed that this process underway, requires the establishment of a wealth of critical awareness that do not degrade this emerging theme of architecture in an aesthetic fashion. The question that arises is: the growing need of space in our congested cities in the coming years may require a greater use of architectures on the water?. If this trend will be confirmed, the conceptual paradigms of the architect must be prepared to confront a new “tectonic” considering the water, not as a scenic backdrop but as a new *habitat*.

The architectures for the *liquid territory*, although in many cases seem inspired by the same emulative and mimetic tension toward the context, don't appear equipped with an appropriate creative independence. At most one could speak of a decline of fashion in-tended in the meaning of Simmel as the "*charm of the beginning and end together, the charm of novelty and at the same time of the caducity.*"

The complexity of the arguments that allow to find in a repetition of similar attitudes the affirmation of a style, in Architecture as in other artistic or artisan expressions, is such that doesn't allow the access to this term solely on the basis of representative cases of a trend. The history of the styles, their presentation on the stage of the formal evolution, is deeply influenced by the times, the manner and the protagonists of this statement, by the critical paths, by the treaties and the recognitions that mark its birth perhaps only after their extinction.

The *style* corresponds to a specific, original, unusual and historicized worldview that finds in the specificity of an artistic technique its appropriate representation. This *Style*, really a new *environmentalism*, consists in the diffusion of recognizable features, not requiring a theoretical foundation of which anyone can see the tracks.

Thereby recognizing, if not properly and still, the dignity of style to the universe created by contemporary interventions in the areas near the water, at least the affirmation of a *manner*: a widespread and comprehensible approach, but with different accents that however don't make themselves incompatible each other, which build up, therefore, a fruitful relationship with users, generically disposed to recognize that congeniality.

"It is enough a look to the common experience to accept that often it happens to us of imitating what we had almost produced or to have produced what we had certainly imitated: the congeniality offers similar situations, similar exigencies, close problems, common stimulations." (Pareyson, 1988.23)

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ENDNOTES

¹ Thinking to the projects for the Kansai airport, or to Stefano Boeri's proposal of a floating stadium for the city of Genoa, or also to Asadov's project for the recent concourse for floating boulevards along the river side in Moscow.

² See related to this point the work carried on in Holland by Deltasync (www.deltasync.nl) that studies the possibility to protect the Dutch cities from continuous floods that tormented them for centuries, proposing constructive typologies without foundations and able to float on the water.