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Designing with Uncertainty: A Collaborative Approach to Coastal Change in Vias

Thomas Beillouin¹ and Alessandra Marcon²

 ¹ UMR AUSser 3329 (Observatoire de la condition suburbaine) École d'architecture, de la ville & des territoires Paris-Est
12, avenue Blaise Pascal
77447 Marne-la-Vallée Cedex 2 France

e-mail: thomas.beillouin@paris-est.archi.fr

² Dipartimento di Culture del Progetto / UMR AUSser 3329 (Observatoire de la condition suburbaine) Università Iuav di Venezia Santa Croce 191 Tolentini 30135 Venezia (VE) Italy

e-mail: <u>a.marcon@latitude-platform.eu</u>

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Abstract: In the past few years, numerous authors formulated the hypothesis that the informal city offers several original amenities: lightness, adaptability and social cohesion for example. The acknowledgement of these assets risks to hide, on the one hand, the limits of informality, and on the other hand, the first vocations of the city. Collectivising basic services and regulating their use, providing accessibility and ensuring the permeability of the ground, guaranteeing safety for inhabitants and goods: these are some of the purposes territorial planning and design usually intend to fulfil.

On the Mediterranean coast, in the south-east of France, the municipality of Vias has seen an informal residential fabric develop since the 1960s. Mainly used for leisure, the plots are now exposed to coastal risks. In the trail of the Xynthia storm, the awareness of these risks leads the French Government to launch in 2015 a national experimental approach to strengthen the knowledge of the affected territories. The ambition is to set up local strategies aimed at adapting territories to coastal change and reducing their vulnerability. Among the experimental sites, Vias has the peculiarity to combine both risk-related themes and the specific issues of informality.

In Vias, the cooperation between the Government, the local authorities and the inhabitants quickly takes an exceptional direction. The dimension of the site is particularly significant: 2,500 leisure plots in part occupied by illegal constructions. The means employed are equally impressive: for three years, a dedicated team led by an architect has been organising a series of workshops to develop an adaptive masterplan. The latter should allow a more sustainable transition of the coast. The approach is exemplary, but numerous doubts are emerging in a context marked by contradictory injunctions. How to experiment without admitting uncertainty?

Originally written for the 4th City Futures Conference organised by the European Urban Research Association and the Urban Affairs Association¹, this article provides a critical analysis of the method used to design the adaptive masterplan of the coast of Vias. It fits into a thematic session entitled "Inhabiting Outside the Law: The Variety of Housing Informality/Illegality in Western Countries", itself included in the first of 6 conference's tracks called "Cities and Spatial and Social Justice - Creating More Inclusive Cities".

¹ The 4th City Futures Conference held in Dublin from 20-22 June 2019.

Introduction

On a global scale, 60% of the population lives in coastal areas; a constantly growing presence, which generates significant economic wealth but at the same time increases the vulnerability of human facilities to coastal hazards: erosion and marine submersion. Global warming and the resultant sea level rise are also contributing to this increased vulnerability.

In France, during the last decade, several emblematic events have recalled the vulnerability of coastal territories. The storm Xynthia, which occurred in 2010, resulted in numerous deaths due to marine submersion. As a result of the winter storms of 2013-2014, the important retreat of the Aquitaine coastline led to the evacuation of the building "Le Signal" in Soulac-sur-Mer, blatantly illustrating the problems related to coastal erosion.

Since 2010, public action and scientific research have demonstrated an awareness of this vulnerability: the coasts are now considered as territories at risk. In response to marine submersion and coastal erosion, the State has undertaken relatively different actions. They responded to the marine submersion by the triggering of an emergency plan and the release of a 500-million-euro budget, while considering the coastal erosion resulted in the launching of a national experiment on several pilot sites, aimed at feeding a draft law that is still in the making. For its part, scientific research has intensified: it aims to better understand the processes of risk production and on the other hand, it seeks to initiate a thorough reflection on the conditions of a more sustainable development of the coastline.

At the same time, the recognition of informal forms of urbanization was improved. The Law for Access to Housing and Renewed Urbanism (Alur), has helped to identify precarious constructions as real places of habitat². The draft Law on Coastal Adaptation to Climate Change, presented to the Parliament in 2016 and then abandoned, was favourable to the temporary occupation of the coastlines exposed to natural hazards. The proposed arrangements could have made it possible to adapt or even regulate certain coastal areas today illegally occupied and exposed to coastal hazards.

Between 2013 and 2015, the Ministry in charge of Ecology launched a call for projects in direction of coastal local authorities. The aim was to define a national strategy for an integrated coastal zone management, built on field-based examples. Five sites were selected in order to imagine new scenarios of territorial reorganization towards the integration of coastal retreat³. Among these sites, the municipality of Vias is a very special case. Issues related to natural hazards and to informal habitat intersect in this area identified as "natural" by urban planning documents. About 14 campsites and 2,500 recreational grounds, in part illegally occupied, are simultaneously exposed to erosion, submersion and flooding [figure 1].

After this experiment, the municipality of Vias has sought to specify the modalities of recomposition through the elaboration of a *plan guide*⁴ between 2015 and 2018. This mission was entrusted to a multidisciplinary team coordinated by Frédéric Bonnet, director of the Obras Architects office. We were both personally involved in this work as architects and urban designers. To develop the plan guide, the team implemented an original method of co-construction through the simultaneous mobilisation of the State administration, the inter-communal technical services and the landowners. The purpose was to improve the knowledge of the site and to accompany the municipality in its long-term territorial re-composition. Through a retrospective analysis of the method, this article examines how the project is able to engage dialogue between informal housing issues and institutional stakes. It also stresses the limits of such an approach, and prolongs the reflection initiated by Frédéric Bonnet in a previous article (2016). The results presented in this article are not the conclusions of an academic research, but they illustrate the scientific value of this highly empirical project.

² The law ALUR contains provisions related to traditional habitats, mobile habitats and demountable housing.

³ Petit-Bourg (Guadeloupe), Ault (Normandie), the Aquitaine Coast (Nouvelle-Aquitaine), Hyères (Var) and the communes of Vias et Portiragnes (Hérault) were selected.

⁴ In France, a *plan guide* is a masterplan specifically conceived to integrate existing elements, to manage contextual evolutions and subsequent changes in the long term.

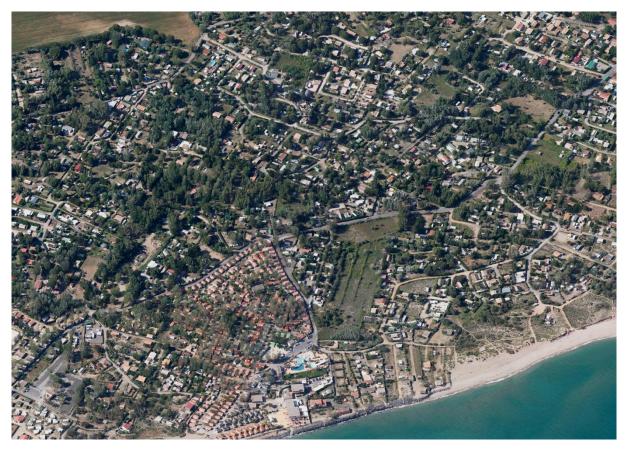


Figure 1. Aerial view of the West Coast of Vias. In this picture, the huge presence of huts is clearly visible. Source: Communauté d'Agglomération Hérault-Méditerranée.

In Vias, project conditions are characterized by a double uncertainty. On the one hand, the impact of global warming and sea level rise on natural hazards is difficult to assess. On the other hand, there is a lack of official data and a poor knowledge about habitat forms that aren't recognized by institutions. However, whether it is climate warming or informal housing, our society appears unwilling to accept uncertainty. A significant part of environmental sciences presents the lack of knowledge as a hindrance to global warming adaptation. This is illustrated by the accumulation of modelling studies of hazards, allowed by digital tools, which fuel an endless quest for precision and strengthens the legal dimension of urban planning. Moreover, throughout the 20th century, the development of the French territory established a clear frontier between natural spaces and urbanized spaces, between "empty" and "full". This dichotomy leaves little chance for informal habitat, unpredictable by definition, to prosper.

If the refusal of uncertainty seems dominant, some thinkers and researchers suggest, through their works, that another intellectual position is possible: uncertainty could be integrated as a fundamental condition of a society's project as well as a territorial project. This is shown by the emergence of new fields of reflection in urban planning around such concepts as chaos (Christensen, 1985), in-between cities (Sieverts, 2004), reversibility (Scherrer and Vanier, 2013) or collective construction (Diaz, 2016).

The project approach led by the Obras office in Vias is part of this trend. On the one hand, it starts from the observation that the elaboration of a plan guide is an original answer that allows to address the complexity of the issues raised by these specific territorial conditions. On the other hand, it considers that a more careful observation of informal habitat and the unconventional mode of living of its occupants can help to revisit urban adaptation strategies. These assumptions are questioned here. This article explores three hypotheses:

1. The development of informal housing in Vias would be explained not only by a favourable social, spatial and economic configuration, but also by an alternative appropriation of the coastline on the margins of official development operations.

2. By involving State, local public authorities and landowners together, the collaborative approach developed in Vias would allow for more balanced relationships between the institutional framework and the self-managed environment.

3. Territorial planning would benefit from associating the formal and the informal more closely.

As a first step, a brief historical review will highlight the tensions and links between official planning and informal habitat development, two dynamics which marked the coast of Languedoc Roussillon in the second half of the 20th century.

In a second step, the article explores the concept of plan guide and the different stages of its elaboration throughout participatory process in the case of Vias. The contributions and the limits of this experimental method are discussed.

Finally, after demonstrating that the qualities of the informal can contribute to the renewal of urban adaptation strategies, we will expose the limits of the Vias model regarding conventional modes of living and more global evolution of the French coastline.

1. The Emergence of Informal Housing in a Changing Environment

The shore is by nature a changing and uncertain space. It has indeed often been described as a "territory of emptiness" regarding its former spatial configuration (Corbin, 1988); geographers and historians have also shown that its resources had been exploited long before it was urbanised: salt production, fisheries, pastures (Papy, 1931, 1935; Baron and Goeldner-Gianella, 2001; Garnier, 2018). The coast of Languedoc-Roussillon might be more changing than any other: it involves many wetlands such as lakes, lagoons and marshes that are fully part of its ecosystem. Those places always have hosted lightweight dwelling types meeting mobility requirements, in connection with natural hazards and the seasonal rhythms of agricultural, hunting and fishing practices (Rouquette, 2010; Cadoret and Lavaud-Letilleul, 2013). The 20t^h century was marked by the decline of this traditional housing and the settlement of a new generation of shanty dwellers. Their practices are part of a completely different logic, mostly turned to nature and community life (Cadoret and Lavaud-Letilleul, 2013; Morisseau, 2013). Is there a link between the changing nature of this environment and the emergence of informal housing?

1.1 A Socio-spatial and Economic Background Favourable to the Growth of Informal Housing

At the end of the Second World War, along with the implementation of paid holidays, departures on vacation are democratizing. Seaside tourism, appeared during the 19th century, takes on a new dimension. It is based on the use of cars, an individual means of transport that enlarges the accessibility of national territory and promotes autonomy. Tourism reflects an aspiration to evasion from conventional urban life. Its spreading to the lower-middle classes particularly illustrates the emancipation from an everyday life tightly framed by the modern working conditions (Dumazedier, 1962; Picon and Prelorenzo, 1999).

Whereas holidays on the seaside become widespread, lightweight leisure dwelling offers a simple answer to these new expectations: it allows to live surrounded by nature. Its development meets a great success over the whole French seaside. The idea of temporary occupation will reflect in different types of lodging. On the one hand, camping will start developing along with objects like tents, caravans, camping cars, etc. On the other hand, mobile structures that are able to be placed everywhere will start to be produced: huts, alike the one conceived by Le Corbusier in 1951; modular constructions, such as the Tetrodons designed by Henri Ciriani in the 1970s; house trailers, that embodies the standardisation of this kind of habitation. These objects illustrate the construction of a coastal specific scenery (Toulier, 2016).

At the same time, Languedoc-Roussillon experiences a severe abandonment of agricultural land. As phylloxera destroyed a major part of the French vineyard at the end of the 19th century⁵, the too specialised local wine economy had been weakened for many years (Racine, 1980). For small farmland owners, the development of tourism through lightweight leisure dwelling was an opportunity to convert their wasted fields. In Vias, the aerial photos taken since the 1960s clearly show the division and the ongoing transformation of fields into leisure plots, where a heteroclite lightweight dwelling spreads (Obras, 2016). Several factors explain why this way of inhabiting emerged in that social, spatial and economic context: a social demand for affordable leisure estate close to nature and protected by a limited accessibility increase among lower-middle classes; on the opposite agricultural activity decrease leading to reforestation.

1.2 Informal Housing on the Side-lines of the Mission Racine

Alongside the emergence of lightweight leisure dwelling, the development of a popular tourism in Languedoc-Roussillon had given birth to small seaside resorts, mainly intended for local users (Sagnes, 2000). Whereas seaside tourism is becoming a mass phenomenon at European scale, the French State see the territorial development of Languedoc-Roussillon as an opportunity to transform a marshy and unproductive coastline in an attractive destination. In order to lead this economic development, the State implements a powerful planning tool: The Inter-Ministerial Mission for Tourist Development of the Coast of Languedoc-Roussillon, or Mission Racine, that remained active from 1963 to 1983 (Picon and Prelorenzo, 1999).

This operation intends to reclaim nature trough engineering and technology in order to create a habitable ground hosting new seaside resorts. Marshes are drained, earthworks require huge technical means and containment is systematically implemented (Racine, 1980). To legitimise its action and justify the reorganisation of the territory, the Mission Racine spreads a pejorative discourse depicting the original site as decadent. This rhetoric draws its arguments from old sources, which already had emphasized the infertility of this coast for too long remaining shunned out of economic development (Lenthéric, 1876; Racine, 1980; Depraz, 2017). Informal housing is logically condemned: it must be erased for the site to recover its lost splendour and dignity (Racine, 1980; Cadoret and Lavaud-Letilleul, 2013).

Although, the West Coast of Vias and its thousands of huts are developing at the edges of the Mission Racine. How to explain the fact that these two processes are happening at the same time? At the scale of the Gulf of Lion, the Mission Racine establishes an alternation between tourist units and natural zones, strictly separated from each other. Whereas tourist units are highly developed, natural zones are preserved from urbanisation. The informal housing of the West Coast fits into one of those green caesuras, taking advantage of a "gap" with poor economic value. If the Mission Racine never encountered any consequent opposition (Delpous-Darnige, 2017), the hut's development that interfered with this operation might be read as an alternative proposal to a strictly voluntary urbanism. Indeed, the hut's model is particularly developed by retirees of important French companies, whose incomes are often very low. In spite of coastal erosion, marine submersion and flood which threaten the inhabitants of the West Coast, the State still consider this territory as a natural zone. Today, its adaptation to risks is constrained by this irregular situation.

1.3 A Denial of Reality?

As a matter of fact, the West Coast of Vias is inhabited: the hut's sprawl, that took place over several decades, has led to the implementation of electricity network, mailboxes and garbage collection. Furthermore, the owners of these leisure plots do pay taxes. However, this situation isn't recognized as such by the different French administrations (Bonnet, 2016). Several official documents seem to be denying the existence of these constructions. Despite of the laudable ambitions they are aimed at, these elements of regulation contribute to suspend the area's evolution, which is counterproductive in a context where reduction of vulnerability is a prime necessity.

⁵ The phylloxera aphid was accidentally imported from the United States of America; it caused a serious crisis in the wine growing sector by decimating vine plants.

First of all, the cadastre doesn't include any record of built areas: the extent of the plots is the only information available. The owners had to organise on their own to have a complete geometric survey established. By not identifying the constructions, this incomplete cadastre does not recognise any legitimacy for these. Then, the City Development Plan identifies the West Coast as a natural and agricultural zone, even though planning permissions were granted in the past. Again, this classification refutes the existence of what looks like a neighbourhood. Finally, if the Strategic Flood Risk Assessment helped to officially acknowledge the territory's vulnerability, its aim couldn't be achieved: the inaccurate zoning and the highly restrictive regulation have limited even more the possibilities of adaptation and the prospects of regularisation.

The lasting legal uncertainty around this situation contributes to keep this informal housing illegal, indeed seems to support its destruction. That is not new, nor surprising: in the past, the State used to refuse these precarious dwelling types, deemed undesirable in a context of territorial economic development. By selecting Vias' application for the call for projects, the State has consciously chosen to work on this topic. The launch of this experimental approach thereby testifies a certain open-mindedness.

2. The State, the Experimentation and Its Limits

In June 2015 the Hérault Méditerranée Agglomeration Community launched a consultation for a "Mission to develop, monitor and implement a plan guide for the West Coast of Vias in a context of coproduction", additionally to the National Strategy for an Integrated Coastline Management. A multidisciplinary team, coordinated by Obras architects, was engaged in a four years framework agreement, with the aim to analyse possible adjustments that reduce the vulnerability of a territory under coastal risk. The team is composed of Mageo (infrastructure and hydraulic engineering), Alphaville (urban programming), Horizons Paysages (landscape architecture), CG consultant (mobility expert), the sociologist Étienne Ballan and Lazare Avocats (lawyers), according to the expertise developed during previous risk-prone sites studies. The experimental dimension of the plan guide allowed, among other aspects, the co-construction, combining the interests and the participation of Governmental public institutions, local authorities and site landowners.

2.1 From Relocation to Re-composition: Formalising Uncertainty?

The mission was launched in February 2016 and inhabitants were involved since the beginning by taking part in the knowledge improvement process and in the exploration of the project objectives. The first phase of the mission, called "analysis and issues", involved a long exploration process composed of two stages: a direct cognitive survey of the inhabited environment through visits, interviews and workshops; a study of the physical geography of the site (geomorphology, landscape units, hydrogeomorphology) and the analysis of its evolution through the observation of historical aerial photos. Thanks to this idiographic approach, it was possible to describe in detail what institutional documents omitted.

First of all, the analysis showed that the human presence is substantial: the site is a 380 hectares widely inhabited area consisting of 2,500 plots mainly occupied by secondary residences, which are combined with 14 open-air accommodation sites. In summer the whole site welcomes in total 25,000 visitors. Although mainly dedicated to summer tourism, the site is permanently inhabited by 150 families living in precarious conditions. All private residences are organized in landowners' associations called "Associations syndicales libres" (ASL), particularly fond of the site, sharing the values of a community life. This social dimension is reinforced by the signature of a Heritage Charter under the aegis of AgroParisTech University (Obras, 2016). Second of all, an advanced analysis of the site topography revealed a more complex relief characterized by lower zones and higher zones up until 2.00 - 2.25 m above sea level. The highest zones are located on the residues of an old dune near the beach, and towards the inside, away from the erosion zone. Finally, a historical analysis showed an increase in vegetation diffusion, as the arrival of tourism started to replace agriculture. Actually, in these zones, the habitat is rich of wild growing vegetation that is acting as a biodiversity reserve. (Obras, 2016).

Overall, this milieu, which can be defined as inhabited, is now officially identified as a natural flood zone, covered by the Strategic Flood Risk Assessment, an overlap of conditions defining its complete immutability. In this experimental context, the team suggested to accept risks as a project stake, recognising that "zero risk" is completely unachievable (Beck, 2001). This approach embraces the idea that it is possible to define a level of risk acceptability. In this way, the project is oriented towards the idea that the

maintenance and the promotion of a risk culture, rather than a restrictive one, can help in rebuilding the balance of this fragile inhabited environment (Bonnet and Morel, 2016).

Trough inclusion and shared objectives, the initial intent of an asset's relocation evolved into a notion of long-term re-composition of the West Coast. The primary objective of vulnerability reduction was maintained, considering the condition of uncertainty, linked to unpredictable political, social and environmental changes. This re-composition, based on the detailed observation of topography, water level heights and human settlements, could allow a slower process of restructuring. The process would reduce the number of occupants, while allowing the seasonal residency status only in some limited areas that would accept the installation of a more resilient and adaptable architecture.

Even if the particular conditions of the re-composition were to be better defined, all actors involved, from associations to local governmental services, understood the opportunity of such an approach. But, beyond the desire of experimentation and sharing, the project had to face legal barriers, defining a new phase of uncertainty [figure 2].



Figure 2. Photograph of a workshop during the co-construction process. The Flood Risk Assessment plan is discussed to find new adaptation strategies in spite of the restrictive regulation. Source: Obras Architects and Thomas Beillouin.

2.2 The Limits of the Participatory Dimension of the Plan Guide in Vias

According to Alexander Chemetoff, a plan guide is "an evolutionary working tool allowing all the actors of the city to share a project" (Place publique, 2007, p. 39). A plan guide "defines the conditions for sharing and registers the project on a large scale and in a long time" (as cited in Devisme, 2007). The participatory dimension is then fundamental for this urban design tool, which is based on:

1. The relationship with the existing conditions. A plan guide retains what is already on the spot and rereads the site history through landscape (Chemetoff, 2010);

2. The idea of designing the urban project as an art of metamorphosis through a long-term process (Violeau, 2011);

3. A continuity that is primarily material (Brun and Adisson, 2013).

The idea of a co-constructed project, planned on a very long period, is built through four phases: information, consultation, dialogue and co-decision (Adam, 2016). These phases are in fact the foundations of the implemented approach, where the mission of Obras office represents only the starting point of a process that in principle was much longer. Despite this long-term perspective, the participatory dimension was blocked before the co-decision phase while facing a complex regulatory impasse. Although participation is understood as a way to improve social acceptability in the process of decision-making (Rémi Lefebvre, 2007), the legal complexity here restricted any form of openness to a more experimental and shared project.

2.3 A Regulatory Impasse

The participatory nature of the project construction was critical as it brought together dimensions that rarely intersect one with another. But the implementation of the plan guide remains linked to a top-down approach, as any other urban practice (Tapie-Grime and al., 2007).

Despite the fact that the human occupation of West Coast implies a certain level of vulnerability, the State denied any form of habitat. The more detailed knowledge of hazards, together with the exploration of the soil topography, could have paved the way for a new resilient project. The plan guide would have had no negative impact on the risk upstream and downstream, integrating crisis management and the promotion of the risk culture. Instead, the case only helped to test in situ a strategy that was only imagined at a theoretical level.

Indeed, after heated debates on this sensitive issue, the French Government never implemented the Law on Coastal Adaptation to Climate Change. In contrast to the rigidity of the regulatory requirements, the West Coast remains identified as natural, inscribed in the green caesura of the Mission Racine. Beyond the particular case of Vias, all the coastal municipalities are expecting an answer. In the absence of a legislation that clearly defines the legal and financial arrangements for this adaptation, municipalities are unable to implement a long-term strategy. In order to deal with emergency situations, they sometimes have to build new protective structures: dikes, barriers, breakwaters, etc. Very recently, an interdepartmental commission of experts conducted a new investigation on coastal territories, in order to define a new law project. The elected representatives and the coast inhabitants are still expressing their weariness.

Despite this tension, convinced that "the project is a knowledge producer" (Viganò, 2012, p. 12), we evoke the idea that the elaboration of the Plan Guide of Vias can be reviewed *a posteriori* to identify important lessons about the qualities and the limits of informal housing.

3. Formal/Informal: Tensions, Complementarities

The analysis of the informal phenomenon in Vias, which includes a large part of the illegal constructions of the regional coast (Cadoret, 2013), allowed us to assume a critical position towards informal occupation, a reality with many aspects, both in terms of qualities and limitations. A first critical look to this artificial occupation, allows to recognize some distinguishing features from the more conventional forms of urban settlement, which are also to be found in its social, economic and environmental traits (Bonnet, 2014).

3.1 Informal: A More Virtuous Way to Occupy the Coast?

On the whole, this system is a set of private plots served by a labyrinth of roads and largely occupied by very disparate constructions knotted in a wooded environment. Apart from some "hard" buildings, most of these secondary residences are composed of cottages, mobile homes, shelters, caravans and self-made features according to the taste of each occupant. In a more conventional urban context, this freedom of action would certainly have been limited. Likewise, the atypical governance system is built on a certain leeway, but shared between associates. Through the establishment of an association status, the ASL has a certain autonomy of action. On the one hand, it has the obligation to meet the local needs of the community in terms of equipment (construction and maintenance), and on the other hand, it guarantees compliance with environmental management rules: a more or less measured concern for landscape aspects, the sharing of standards of good living together, the adjustment of accessibility devices, the definition of a protocol of parking standards, garden maintenance, etc.

This set of independently determined criteria contributed to the conditions for the production of a built milieu that demonstrates a number of qualities: it has a reduced impact on the ground waterproofing, it is defined by a certain disassembly or reversibility of an architecture which, finally, by its structural conformation, is detached from the ground and ensures hydraulic permeability throughout the site. From an economic point of view, these arrangements freely chosen by the occupants regulate a set of plots which are much more accessible than the real estate products offered in the rest of the Languedocian coast. Indeed, the transaction market in Vias creates the conditions for keeping moderate prices that allow modest households and buyers from different social backgrounds to access this holiday location. Finally, in this inhabited context, away from urban life and immersed in a natural environment, the landscape plays a particularly important role. It maintains a temperate microclimate during the summer season, it provides ecological continuity between protected natural sites within the coast, it preserves the soil drainage capacity and provides a qualitative framework for outdoor living.

Taken together, these qualities contribute in their entirety towards structuring a landscape that distinguishes from any other seaside resort on the coast of Languedoc-Roussillon [figure 3]. Informal housing has undeniable qualities from which the classical urban planning could wisely draw inspiration. Supporting this argument, numerous authors emphasize the cleverness of these forms built through informal processes, pointing out the failures of institutional frameworks. However, a critical look to these habitats seems to be necessary to avoid the danger of an over-evaluation.



Figure 3. Axonometric views of two of the numerous illegal dwellings: limited occupation of the soil, rich presence of wild vegetation and lightness / flexibility of the structures. Source: Obras Architects.

3.2 A Necessary Criticism of Informal Housing

On this point, the French architect and urban designer David Mangin has a more balanced position: he proposes to consider "what could be more 'formalised' within 'informal urbanism' (networks, public spaces, comfort, activities...) and, in return, what could be more 'informalised' within 'formal urbanism', which appears over formatted in Europe and particularly in France, to get out of the rigidity that impedes evolution" (Mangin, 2018, p. 2). What are the limits to the informal urbanism of the West Coast?

First of all, the community way of life tends to create enclaves that affect the site's accessibility and the clarity of public spaces. The territories of the different ASL are like the typical urban fabric of suburban allotments: they extend on wide areas, generating a complex network of private roads and they are entirely closed in their perimeters. This spatial organisation turns out to be impervious. Moreover, the community-based way of life can also be questioned per se: beyond the pooling of material resources, are the inhabitants really enjoying privileged relationships with their neighbours? The ideal of living together, which used to animate these communities in the 1970s, seems to have been lost over the generations. Today, the attraction of the seaside leads to a diversification of practices and lifestyles on the entire French coast (Garcez and Devillers, 2009). If the community model has its advantages, it doesn't appear as a relevant answer to all the contemporary needs expressed by the users and inhabitants of the coast.

Second of all, the fact that informal housing is not neutral for the environment must be pointed out. We demonstrated that informal housing was based on a concept of immersion in nature and disconnection from cities, mainly through lightweight structures. But isn't this disconnection a myth? Indeed, in spite of certain reversibility, these constructions are more permanent than they appear and generally stay in the landscape for a long time. They come along with the exploitation of natural resources, such as groundwater, and gradually result in the deployment of new infrastructures: electricity, water or sewage networks for example. Additionally, the concept of disconnection suggests the possibility to settle anywhere, without any consideration for risks nor natural environments. That is the reason why the State dismantled most of the huts built on the coast of the Camargue (Minvielle, 2005).

Finally, we must remind the tense ecological circumstances in which this informal housing takes place: global warming, sea level rise and natural hazards threaten the inhabitants of the West Coast. In Vias, inhabiting outside the law equals accepting the contingency to lose your property without having the guarantee that you will be authorized to rebuild it, due to an ambiguous legal context.

Conclusions

The emergence of informal habitat on the West Coast of Vias results from a double dynamic. On the one hand, we have shown the existence of a combination of social, spatial and economic factors favourable to the development of this original way of living. On the other hand, we have shown how the economic development of the Languedoc-Roussillon coastline, through major state-run operations, has led to pushing informal habitat into margins rather than eradicating it.

By selecting the municipality of Vias as a territory of experimentation for the adaptation to the coastline retreat, the State has shown its willingness to take better charge of the specific problems related to the informal habitat. In a second step, the method proposed by Obras office to develop the Plan Guide of Vias, based on field experience and co-construction, attempted to bring the State, the municipality of Vias and the owners closer together around common principles. This approach has enabled these different actors to acquire and share a better knowledge of informal habitat. However, the operational conditions have not been achieved: the regulation has not been softened and the situation has remained unresolved. So, this is a partial failure facing climate change emergency. More generally, this approach illustrates the return of the State to field investigation to nourish the law, a virtuous method that is part of an ancient tradition (Sauzeau and Acerra, 2012). But the inability of acting calls for questioning the actual efficacy of such experiments (Billé, 2009).

Conventional urban planning and informal housing differ both in their processes and in the qualities of their resulting urban tissues. The development operations undertaken by the State on the coast of Languedoc-Roussillon have helped to separate nature and the city, while relegating informal housing to outside urban areas. As it developed in a green caesura, the informal habitat of the West Coast of Vias has gradually been structured to form another type of "light city" (Bonnet, 2016). By adopting a critical stance on these two ways of transforming the landscape, we have shown that these categories, far from opposing, actually respond to different needs and uses while not contradicting one another. These observations lead us to the conclusion that, as suggested by David Mangin (2018), the territory needs these two dynamics.

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