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LANDSCAPES OF DESIRE: BETWEEN THE LAND AND SEA

PAISAJES DE DESEO: ENTRE LA TIERRA Y EL MAR

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ABSTRACT

Landscapes of desire explores the necessity and the desire to reimagine and valorize the discredited landscapes, between the land and water, along the Portuguese coast: from Cova do Vapor to Cabo Espichel. Vulnerable urban landscapes in the face of contemporary climate challenges. In the landscapes, which circumscribe the sea, there are different fragments of discourse that due to abandonment by the destruction caused by extreme climatic events, such as flooding and coastal erosion, need a new history.

This period of increasing segregation between the city and the sea, urges us to rethink a new way of connecting human beings and the sea. The decoding of the morphological characteristics of the space between land and sea, of the architectural elements that compose it, is possible through the reading of the forms that resist over Time. The abstraction of forms allows us to interpret the contemporary coastal territory and to define new urban and architectural paradigms for desired landscapes between land and sea.

We consider it is important to explore new approaches and methods to enhance and transform these landscapes because of their architectural value. A possible path for the physical and emotional repair of the ruined landscapes along the coastline.

Key words: coastline, landscapes of vestiges, memory, Utopia, Cova do Vapor

1. Introduction

"It is at the coastline that the maritime world touches the terrestrial world" (Mack, 2018: 266).

Today, the coastal landscape has been progressively altered by natural and anthropic actions. "The different dynamics that build and deconstruct the coast (...) resulting from tides, currents, meteorological phenomena, sediment drift, but also resulting from human action" (Figueira, 2020: 3). The coastline has a sensitive character and is composed of two systems, the natural, the landscape: and the anthropic, the city. The line which divides the city, and the sea is in constant movement and oscillation; hardly having the same form yesterday, today, and tomorrow. These spaces between land and sea have been transformed into a humanized, urban landscape and revealed to be a place of search for a utopian landscape. However, due to climate change and the rising sea level, nowadays this urban landscape is at risk and in decay.

The case study of this article is located in Portugal, namely on Península de Setúbal between Cova do Vapor and Cabo Espichel. This essay explores the questions and hypotheses launched in the final work of a master's project in architecture and urbanism developed at the Lisbon School of Architecture, University of Lisbon. This article is based on the hypothesis of imagining the reconstruction of a ruined element. In particular, the possibility





of re-appropriating a defensive structural element in ruin with urban functions. According to new methodological approaches, that consider the environmental component and challenge the field of imagination.

"The value of modern architecture can be questioned, given its poor performance and impermanence" (Perez Arce,1980: 36). Nowadays, we are faced with places devalued due to the impermanence of architectural value. In the timelessness of the contemporary world, we are placed with the choice between opposing or accommodating the process of ruin of the elements in the landscape. We believe that to bring into being the importance of the value of the elements sometimes means accepting their decay into a ruin, to the point of transforming it into a vestige. The ruined landscapes on the coast represent a memory of the place, they are places of desire that do not deserve to be forgotten. The re-appropriation of these landscapes, beyond new functions, should focus on preserving the form and identity of the place.

"Destruction attacks the seemingly perverse phenomenon of deliberately creating the ruin" (Harbison, 2015: 9). The invention of a ruin coincides with a deconstructive process, which results from the action of time, on an architectural object. Thus, the principal objective is to design and reimagine a ruined place that has endurance over time. Purini (2000) affirms that the ruin is an object, which results from different times and allows transformations "the times of the project curve around an overlap of childhood and old age, in an ideal and mysterious suspension" the ruin can be interpreted as an end or reveal a start. This is an architectural and urbanistic approach, which presupposes the action of time on an architectural object, its transformation and successive re-appropriation. Designing the end and the start of the ruins, allows us to recover the beauty, functionality, and quality of the site for an uncertain future.

2. Places of desire

"A map is not the territory it represents, but, if correct, it has a similar structure to the territory, which accounts for its usefulness" (Korzybski, 1933: 58). Whenever we know a place, we recreate a mental or physical map, which allows us to find it, describe it and imagine. The space between the city and sea is known for its landscape value, but it is also characterized by hazards, such as coastal erosion and rising sea levels.

The landscapes that inhabit the shore of the sea have always been desired as a resource for the development of urban settlements. Initially these places were a support for fishing life. In the XIX century these landscapes were recognized for their beneficial value to health and turned into places for leisure. Therefore, living near the water is connected to necessity and pleasure and that is why they are called places of desire. Aristotle in The Politics. 384-322 B.C affirms that "The city is formed at first to preserve life, the city remains to ensure the good life".

Mainland Portugal is characterized by 943 km of coastline where around 70% of the Portuguese population lives during the year, a number that increases to 80% in the summer months thanks to tourism (Dal Cin et al,2020). There are around 35 coastal towns along the coast that interface with the sea and have formed and developed due to their proximity to the water body. According to Proença (2018), the relationship with the sea was the structuring element of the form of the coastal city. The sea orients, in symbolic form, the urban geometry and contributes to composing the public space bordering the city and the beach, the seashore street.

Over the years, due to the bravery of the sea and the movements of sand, this mediation space has undergone several transformations in the shape of the coastline. Especially between Cova do Vapor and Cabo Espichel, the different types of settlements that exist are vulnerable and exposed to extreme climate events. Particularly in Cova do Vapor, houses have been and continue to be progressively moved to a safe location and the vestiges of former occupations remain in the sand. In face of the historical and cultural value, the resilience to continuous



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transformations and the intention to remain in a fragile place, facing coastal erosion, reveals the need to rescue this landscape of desire, close to the sea. Thus, if the places of desire are at risk of disappearing because of climate change, we need to construct new urban interpretations to observe the territory's transformation. Observing the urban fragments in the landscape allows the rewriting and consequent valorizing of the memories of the places.

3. Tracing lines in the sand

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"The Point is the most concise temporal form (...) The Geometric Line is an invisible entity (...) By surface we mean the material surface destined to receive the content of the work "(Kandinsky, 1970: 35; 61; 101). According to Kandinsky, in abstractionism art there are three principles: the point, the line and the surface. The space between these two points of the coastline can be interpreted and redesigned according to this artistic concept establishing a coexistence between two areas of investigation: art, architecture, and urbanism. The coastline is pointed by different structures abandoned and submerged on the surface. The geometric lines have an invisible character and are a result of the different dynamics of territory occupation in the past and present. The boats, the awnings, and the nets stretched across the sand draw invisible lines that inform new principles of occupation. The surface is the coastal landscape, the stage where all these actions emerge.

Lines are drawn on the long stretch of sand to set off on a journey, to meet up or to find each other again. The instrumental role of straight lines and grids in human understanding and appropriation of the world is universal. Lines that tell the stories of the work of the fishermen, of the toil of the men who push their boats onto the water, but also of the joy of summer days and of the beach umbrellas opened under the sun. Lines from the past, drawn when the houses were dragged by force of men and with the support of oxen to a place safe from the floods. Lines drawn by the tides and storms that darken and smooth the surface of the sandy ground. Movements that make the ever-changing sandy surface a surface where to write about departure or arrival, of the architectural journey. During the journey we recognize elements that enable us to orient ourselves in the landscape.

"The form of the city in the present moment is the collective physical inheritance of all the individual actions that conform it in the past" (Proença, 2014: 34). The form of the coastal landscape, beyond natural events, results from the various human collective and individual actions. In fact, these actions reveal and are the history of the past of this territory. The memories emerge from these coastal occupations, which are a contribution to the valorization of the landscape, in its constant movement of consolidation and deterioration.

"The time of the spaces and the built becomes for a surface in constant metamorphosis but that nevertheless stands out for its resistance and ability to be interpreted" (Dias Coelho, 2014: 21). It is particularly from this capacity of reinterpretation that the vestige landscapes have the opportunity to survive. In the same way, the city is permanently building itself and has this characteristic of dealing with the ruins as physical marks and scars of time, which survive its constant transformations.

In the space between sea and land there are fixed and ephemeral elements, landmarks in the landscape that geometrically and symbolically orient the city. These elements are beach huts, military buildings, sacred buildings, coastal protection infrastructures, and marginal streets with distinct existence cycles, but even the apparently permanent are progressively destroyed by the force of the water and time. "The permanence of elements in the city depends on their capacity for being transformed and adjusted" (Pérez Arce, 1980: 248). Therefore, the permanence of these elements in the landscape depends on their capacity to resist and adapt to the continuous evolution and consolidation of the territory.

"The last surface architecture, the limits of the wrecked lands, at the very moment of the arrival of heaven at war; they marked the horizontal coastline, the continental limit" (Virilio, 1998: 12). The Northern coastline of Europe is dotted with several ruins, bunkers that belonged to the old fortifications of the Atlantic Wall, a set of vestiges of World War II history submerged in the sand and rocks, sometimes as fragmented breakwaters. The presence of these elements in the landscape mark the end of an occidental military war, however they may be the beginning of new paradigms due to its ability to suggest our imagination.

Also in Russia, in Kirovsky, there used to be a fishing village, which was abandoned in 1964. A place that was once desired is at present just a group of ruins of buildings abandoned and in decay with the advance of the sea. It is important to question and consider the dignification of these contemporary elements dispersed in the territory between sea and land. Can they be considered as a heritage in the landscape? Are they "untouchable" architectural objects? There is a necessity to integrate them into a new utility that has latent the sphere of imagination. As Dias Coelho (2014) refers, the importance of the built city as a physical object always in metamorphosis stands out for its capacity to be reinterpreted. In this hypothesis, the identification of the meaning of the discredited and submerged structures along the coast is necessary, so that we can build architectural and urbanistic solutions, which coexist between the memory of the place and the utopia.



Fig.1 Collage of the recovery fragments of the old fishing village in Kirovsky and the old bunkers in Germany. Source: From the authors, 2021

The collage represents the composition of a visual metaphor of the cognitive and creative process, which can be essayed in the Cova do vapor. It represents a line that drives the desire that the fragments and vestiges, which are by the sea, can return to land, to the place where they have always belonged.

3.1. Tracing lines in the sand: an architectural journey in Cova do Vapor



Fig. 2 Plan of the territorial location between Cova do Vapor and Cabo Espichel. Source: From the authors, 2021

This essay describes the long line of sand overlooking the sea, between Cova do Vapor and Cabo Espichel, on the Setúbal península, not far from the Portuguese capital, Lisbon. "A large expanse of sand, just sand and sea, boats like stranded crescents and a few fishermen mending their nets. Not a rock. Sand and sky, sea and sky. On one side, the formidable red wall, plunging down, faints little by little, until it enters the sea, all purple, at Cabo Espichel " (Brandão, 1923: 65).

The territory between Cova do Vapor and Cabo Espichel is characterized by different types of urban occupation, which due to storms and erosion phenomena, have over time been relocated further and further away from the water line: such as in the case of Cova do Vapor. In this landscape there are elements and grids formed by lines of memory, which should be described and acknowledged to design urban adaptation. In fact, in the low sandy beach stretching between the mountains and the sea, with a length of approximately 30 km and a thickness of 150 m, exist fragments and vestiges, physical marks that characterize the urban morphology and

provide the authenticity of the landscape. Lines that tell stories about the fishermen's work, ephemeral and orthogonal lines that compose a grid in the sand. The vestiges are the coastal defense infrastructures, shipwrecks, and military structures abandoned ruins, destroyed by the time and force of the sea.

Cova do Vapor is an exceptional place because it is located between land and sea, precisely at the meeting of the Tejo river, with the Atlantic Ocean; geographically and toponymically defined as the Margem Sul do Tejo, in the district of Setúbal, in the municipality of Trafaria. The municipality has approximately a territorial area of 71 km2, where about 174,030 inhabitants live, of which 200 permanent inhabitants live in Cova do Vapor (Census, 2011).

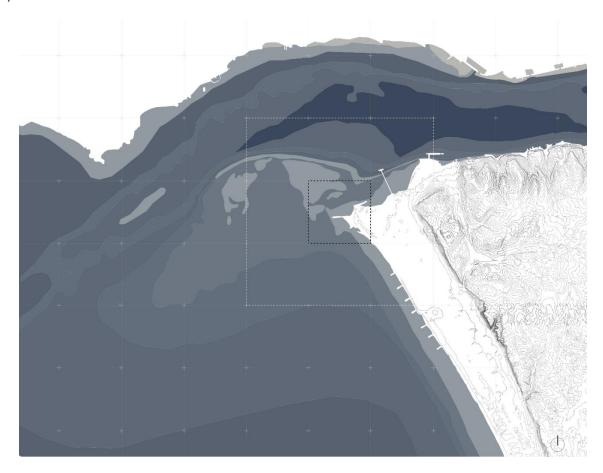


Fig.3 Plan of the Cova do Vapor and the bathymetry. Source: From the authors, 2021 $\,$

"Essentially Cova do Vapor emerged due to a single factor, the increasing interest as a bathing area, and that had a greater massification from the 1930" (Mateus, 2010: 14). The first settlements were made by fishermen, who lived far from the coast and had the need to inhabit the dunes closer to the sea. However, with the advent of tourism the interest in beaches increased and this place was recognized as the Lisboa-Praia, a land of bathers, where locals could enjoy their summer holidays.

The coast became a humanized landscape due to the desire to inhabit a territory composed of dunes. In this small urban settlement by the sea, wooden houses were built on stilts placed over the dunes. Initially these houses had a more ephemeral character, however, with time, they became permanent in the place. Thus, a settlement was formed near the sea, which had a fragile character due to its constructive composition, which allowed it to be easily transported away from the strong tides. The beach of Cova do Vapor was composed of an extensive sandy beach, which allowed pedestrian access to Forte do Bugio at low tide. However, due to the

sand extractions necessary for the construction of the Lisbon embankment, the stability of the coast was affected, and the coastal flooding started. The old Lisbon beach and the small wooden houses that inhabited the shores disappeared and were drastically dragged by the strong sea waves. The present disposition of the houses of informal occupation, are the result of a succession of transformations over time, and the wooden stilts have been replaced by settlements with more resistant materials.

Cova do vapor is notable for its particularly unique urban fabric and for its identity and seductive character. The narrow streets are the result of various overlapping and configurations of the place. When we walk through the streets it seems that we are invading private property, but in fact these streets belong to all locals and visitors. Due to the inexistence of a qualified public space, it is in these streets that boats are parked, people sell fish, and children play ball. These streets can tell us the history of the place, they are the history.

The houses are relatively close to each other, with some having the privilege of overlooking the beach area or the Tejo River, while others are arranged on narrow streets with a visual relationship to the exceptional spaces - the largos. "The houses in Cova do Vapor are of utmost importance to their owners. Its exterior is therefore the target of a large investment, since this is where the symbolic role of communication is associated. The house is, at the same time, a source of pride and a demonstration of ownership, and its aspect, a differentiating element" (Ribeiro, 2015: 123). Although illegal in character, they are a symbol of heritage and resistance. And they support an emotional and affective value, because they were built by a group of Men, who shared the same desire - to remain in this place.

"(...) Today we observe a clandestine agglomeration, with a population that can be classified in two groups. Mostly people who chose this place for its location and self-built their second homes. Another population born in this same location, of scarce income, predominantly working in the city of Lisbon" (Fernandes, 2017: 1). The population of this urban nucleus can be characterized between permanent and seasonal residents. A large percentage of the population only moves during the summer period and during weekends, when there is a larger affluence of people which causes more weaknesses than opportunities in the place. "The neighborhood of Cova do Vapor is strongly oriented to various maritime activities that differ according to age and ways of life, but that deep down, accentuate and awaken social and human relationships" (Mateus, 2010: 7). Besides the local population, this urban nucleus is frequented by surfers, fishermen and tourists; and fishing is one of the most present activities as well the nautical sport activities which are bodyboarding and surfing.



Fig.4 I. Cova do Vapor and the Búgio Lighthouse; II. Aerial view of the densification; III. Urban fabric. Source: From the authors, 2021

"The sandy shore is a complex system whose transformations are gradual and progressive in their variables, due to winds, tidal cycles and now the effects of sea level rise. Yet, due to the erosive effects of the rising sea level, there is a progressive decrease in the natural dune system which brings the seashore line closer to the urban settlements" (Dal Cin & Proença, 2021:1). In this territory with a large landscape richness geography and social status is at risk due to the rising sea level, which causes a gradual approach between the city and the sea because of coastal erosion. "This area has suffered many physical changes, mainly due to the movement of sand from the coast, which naturally or through human action, has caused serious changes in this coastal area" (Mateus, 2010: 17). Coastal erosion is one of the most evident and concerning problems in the territory, because of climate change, which causes the rise in the average sea level. As a result of the coastal erosion event, this small settlement has suffered drastic changes in the shoreline. Although it lacks defensive structures, these structures are not sufficient as a response to the existing problem.

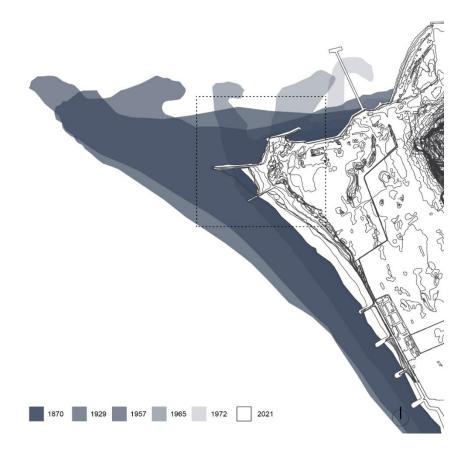


Fig.5 Transformation of coastline between 1870 and 1972. Source: From the authors, adapted of Fernandes, 2019

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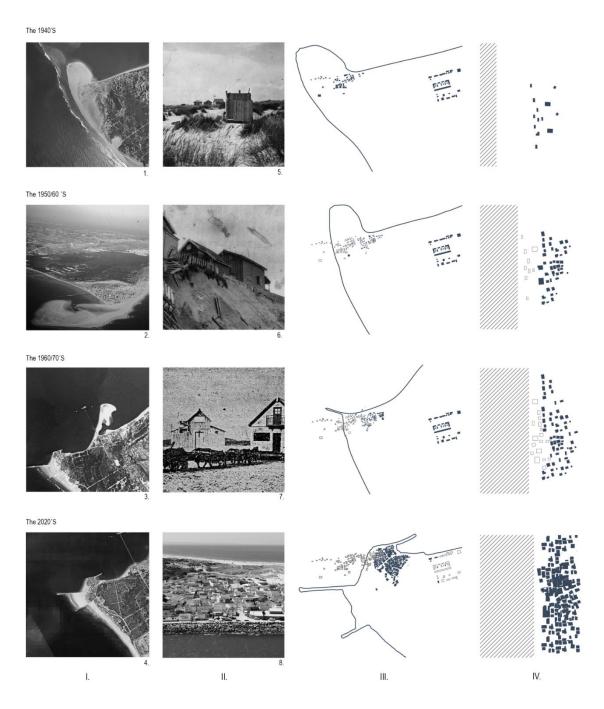


Fig.6 Diagram of the transformation on the territory. I. Aerial photographs, Source: From 1. Santos (2010); 2. Almada Virtual; 3. Santos (2010); Google Earth. II. Historical photographs, Source: 5. Eduardo Gomes 6. Lúcia Oliveira; 7. José González in Memórias Coletivas Cova do Vapor: 8. From the Authors. III. Occupation Evolution. Author 's Edition. IV. Retreat and Densification, Author's Edition, 2021

The limit between the land and the sea is drawn by two analogous relations: the advance of the sand and the advance of the sea determine the way we inhabit this mediation space. In Cova do Vapor the advance of the sea has originated a continuous transformation of the coastline has influenced the evolution and impermanence of the built space. As the advance of the sea designed the limits, the houses progressively retreated to a safe place in the dunes. In the matrix it is possible to understand that between the 40s and the 50s and 60s several

houses were dragged and destroyed by the force of the sea. The houses that survived were dismantled in a collective work of men with the use of "yoke of oxen", which facilitated the displacement of the houses. Between the 60s-90s, after the construction of the pontoons, the urban grid gradually continued to develop in an irregular and spontaneous way between two limits - the sea and the Mata de São João da Caparica. In the diagram, it is understood that the approach of the shoreline to the built space, decreases the permanence of the desire place. However, Cova do Vapor never disappeared, because the desire to inhabit this place allowed it to be reinvented year after year and repositioned nearby.

As in other contexts, the fishing village Shoyna in Russia is gradually being buried by dunes, due to the action of the wind predominant in this area by the shore of the Barents Sea. In this place it is possible to touch the highest point of some roofs that were partially underground and walk-through sandy streets. On the beach you can see a collection of vestiges and shipwrecks, which mark the history of the place. The progression of its current state and without any measure of preservation this place faces the dystopian reality, the desert, by the sea.

In a similar situation, the city of Chinguetti in Mauritania is progressively invaded by sand from the Sahara Desert. In certain aerial photographs of the town, only the traces of the old habitations are visible submerged in the grains of sand. The place is gradually buried with the formation of the dunes and consequently the traces of the vestiges drawn in the sand remain.

A sculptural installation representing the 13th century Jacobins Convent in Toulouse was realized in Paris. The artist installs in the interior space of the building a bucolic landscape, which is perfectly controlled by sand. A certainly provocative and utopian work of art. In the first examples the ruins are the vestige of a dystopia, which gradually inhabits and destroys the landscape, and in the second example the ruins are inhabited by a landscape built with desire.







Fig.7 I. The village of Shoyna, in Russia, Source: From Alexei Golubtzov, 2013; II. The city of Chinguetti. Source: From Giulio Aprin Blog,2021; III. The sculptural installation The Garden of Whisper, Source: From Niina Azzarello in DesignBoom, 2016

4. Drawing (a)temporary forms

The design of (a)temporary forms can be underlined between the memory of ruins and vestiges and utopia. "Utopia is the literary invocation of a place so perfect that it cannot exist in reality. But that is exactly what we should strive for" (Ingels, 2021: 5). The term Utopia was created by Thomas More, in his canonical work Utopia in 1516. Symbol of More's imagination, the city of Amaurota is described. "The city is surrounded by a high and massive wall" (Mumford, 2007: 66). The Civitas Solis by Tommaso Campanella was a utopian masterpiece written in 1602. The author, inspired by many ideals of Plato and More, describes a city protected by seven





concentric walled fortifications around a central temple; it resembles the city idealised by Thomas More. The two utopians manifested and defined what an ideal city should look like among religious, social, and political-philosophical patterns. The city of Amaurota and the City of the Sun architecturally are analogous in that both had high, defensive walls as a compositional principle.

These utopias represented a response to the problem society was facing. Similarly, these utopian ideas, an architectural and urbanistic approach to Cova do Vapor is proposed, an ideal reconstruction adapted to nature and respecting the principles of the territory. A defensive wall that defines a new structural limit integrated into the site. In this way, it will be possible to avoid the gradual disappearance of the building caused by the advance of the sea and return the desire landscape, the lines of the sea.

Utopia is a place that can achieve perfection. It is to this extent that the ruined landscapes between land and sea should be imagined. Utopia allows for new approaches to build the future of territories in crisis and devalued. "Sometimes, idealizing a utopian strategy can help respond to some contemporary problems affecting architecture and cities" (AA. VV, 2019: 9). It is important to use utopia as a method to respond to contemporary problems of ruined landscapes. However, a place of desire can become a dystopian place if no solution is implemented.

"Utopia is born from the desire for a better reality than the existing one, a dream that has historically corresponded to unattainable visions and idealizations of perfect societies" (AAVV, 2019: 8). Utopia, the desire for a distant ideal for the reality being experienced, is ultimately a source of inspiration. A form of poetic innovation that allows us to imagine a project in the uncertain future of climate change. Continuing to live in urban landscapes threatened by the effects of rising average sea levels, flooding, and erosion, is marked by the utopian idea of a thread linking time, the past with the future, with space. In other words, it does not imply the dystopia of having to abandon places, their memories - individual and collective - and their urban and architectural vestiges.

It is very difficult to describe a utopia, its perfection, without running into the limitations that it might impose on individual or even collective freedom. Explaining a utopia implies that we know what the parameters are to achieve perfection, but how can we know what is actually perfect? The fact is that man has always dreamed of achieving a utopian landscape, as a refuge from the existing reality. One of the first landscapes designed were gardens in the search for harmony in nature. In landscapes there should be beauty and purity of form and rigor of proportion to achieve perfection between man and nature. Many philosophers and utopians idealized what would effectively be a utopia, as previously mentioned, some provocative solutions corresponded to the discontentment of the society in which they lived. We realize that the way to achieve the ideal has its origin in a reality that is integrated in dissatisfactions and displeasures.

"We travel through utopia to reach beyond utopia" (Mumford, 2007: 32). In the near horizon and in the distant future, some weaknesses and potential in the intention of the project are recognized. It would be simple to say that there is no conflict in the convergence of a utopian solution with reality. The act of designing timeless forms, which support the action of time, is a challenge for which we must stand, through the utopian spirit. The design of a *monumentum*, for an uncertain future, a memory that lives beyond the past and supports sedimentation and has the capacity for transformation and adaptation. The main purpose is for ruined landscapes to live beyond the desire. For as long as we have the freedom to dream of a possible utopia, it is a sign that we are still made of dreams.

The description of the search for a possible utopia can become indescribable. One of the weaknesses, which we may face in the future, is to try to describe a utopia to the point that it becomes indescribable and dystopian. Describing a utopia is a real antithesis. For, at the same time that we try to describe what is perfect, we



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unconsciously describe what may be imperfect. Utopia and dystopia are two prisms that awaken our reality. Dystopia is a more pessimistic vision and can become real when there is a giving up of places, which were and are of desire. The present challenge is to use dreams and resistance to re-appropriate ruined places and at risk of abandonment, otherwise they can become undesirable and uninhabitable places.

However, utopia is also guided by temporalities, which allow us to idealize solutions for (a) temporary forms. The time of the past, with a historical valence, the present, which we live in permanent questioning, and the idealized future.

4.1 Drawing (a)temporary forms: imagining time

"The imaginary figures have more emphasis and truth than the real ones" (Pessoa, 2019: 496). Time is crucial in the space and image of a landscape. The definition and composition of timeless forms are related to the action of time as the main element generating the recurrent transformations of places. Drawing (a)temporary forms that emerge from the interpretation of the territory is a path and a solution that is adequate to the uncertainty of the future and the consequent transformations caused by climate change.

According to a theoretical reflection on the valence of the ruined landscapes between the two extremes, Cova do Vapor and Cabo Espichel, there is a necessity to put into practice contemporary architectural and urbanistic approaches, which emphasize the character of the landscapes, which in the future may be condemned to abandonment. The narrative of a tangible future ideal, the reconstruction of the seafront, begins. It is intended that in this narrative, it will be possible to experiment with new paradigms and solutions for the various coastal territories that are also in crisis.

As previously mentioned, Cova do Vapor is a landscape that is at risk due to coastal erosion caused by rising sea levels. The action of the sea and the strong tides have caused the reduction of the sandy space. The houses that are situated on the coastline are constantly being moved away, others do not survive the raves and the strong winds and in the worst scenario, others are taken away by the sea. The ones that resist continue to remain uninhabited for lack of safety. However, the people who live there do not give up on this place. In the winter they face the sea with fear and apprehension because they are conscious of the reality that they have to face cyclically. Defensive methods exist, but these are no longer sufficient as an answer to this constant conflict with the sea.

The fact is that in this place the desire to inhabit the coastline landscape predominates over the fear and risk that exist. In this place, the relationship between Man and sea has become insecure, unstable, and nostalgic. Through this architectural design we intend to save the *saudade* of inhabiting the margins of the sea. It is intended to resuscitate a forgotten place by the sea and to provide a new dialogue between land and sea.

This work has the objective of revalorizing coastal spaces, in proximity to urban areas. The places that inhabit the sea are progressively condemned to abandonment. The gradual advance of the sea and coastal erosion have been one of the problems present in the intervention territory. In this case it was necessary to define a strategy for new forms of expansion of coastal cities, considering the problems mentioned before. In Cova do Vapor the rise of the sea level, coastal erosion, precarious housing, and the lack of qualified spaces for public use are the principal causes for the development of an innovative urban solution that preserves the memory and identity of the existing urban fabric.

This urban solution is theoretically supported by an artistic and conceptual concept, which reveals a new meaning for coastal landscapes. Thus, "art- is capable of constantly producing new meanings (Purini, 2000:





68). The proposed strategy is based on three principles: Point, Line, Grid. The points are the reference elements, landmarks in the coastal landscape. The line represents the defensive structures - breakwaters - lines perpendicular to the coastline, which can be inhabited. Between these structures a grid is generated, based on the territory's morphological characteristics, which organizes the composition and the placement of the elements. In view of these three principles, we aimed to decode what urban expansion might look like in the vulnerable context of rising mean sea level. The proposal is based on two main types of elements: the ephemeral and the permanent/fixed ones. As a response to the existing problem, namely coastal erosion, the materialization of a pontoon, a permanent structural element, which has the capacity to accommodate the urban needs of Cova do Vapor. The ephemeral elements are wooden structures, which respect a module and a method of aggregation, which allows a new expansion of the urban grid.

In a first analysis of the place, it was possible to understand the lack of articulation between the built fabric and the surrounding space. Thus, it was necessary to define a grid that begins at the beach of Cova do Vapor and extends to the urban agglomeration. The proposed orthogonal matrix aims, in addition to a new urban expansion, the reorganization of the limits of the existing built fabric, preserving the identity of the existing grid. The proposed grid materializes with ephemeral structures (awnings, cabins, huts, and temporary housing) along the coastal space. The composition of the grid design has as its principle the rhythm of lines perpendicular and parallel to the sea, stemming from traditional beach occupations existent along the Portuguese coastline.

"The coexistence of ruins and buildings in use is a form of relationship between the existing and the new, but this relationship can also occur when existing fragments are recycled and integrated in a more elaborate way" (Perez Arce, 1980: 10). Drawing and thinking about a process of ruin allows us to understand how places can be transformed and adapted. The visionary and architect Rodrigo Perez Arce explores the evolution and the transformation in time of Le Corbusier's Chandigarh city. He essays the idea of ruining and building on the modern city, as a critique of the crystallization of the places, which are in constant metamorphosis. He essays on the city ruin and its reappropriation and occupation, densifying it with new spaces.

"The very permanence of elements in the city depends on their ability to transform and adapt, there are buildings or parts of cities that are consolidated to the extent that they can be closely associated with the character of a particular city; while the contiguous collective use of these buildings and parts of cities results in continuous changes in their architecture" (Perez Arce, 1980: 58).

Extending from this reference, the proposal explores four times, or more precisely four phases of the project's evolution: the existing; the built project; the ruining and the re-appropriation. The existing state corresponds to the form of the urban fabric in the present time. The second phase represents the built time and corresponds to the composition of a fixed element, a pontoon that will redesign the new seafront. The interior organization of this defensive structure is inspired by the design of the existing urban fabric, the way the wall is modeled is deeply referenced to the specific context. Besides being a defense wall against the force of the waves, it has as a particularity the reinterpretation of the existing urban fabric, which informs how the spaces are modeled and built. This structure awakens the return of the city's contact with the sea, a sea that was once feared, but is now tangible through look and touch. By going through this element, we find different experiences and forms of appropriation, from a shelter for the boats, a fisherman's dock, a market, local commerce, and different living spaces as articulating elements of the public space.

As a response to the necessity of a new urban expansion it is proposed to develop a building prototype, which reaffirms the mobile character and the historical value of the place. The prototype allows a new urban expansion articulated with the existing. These elements are organized between land and sea according to a line of ephemerality. The beach supports are organized according to a seasonal hierarchy, in other words, the more ephemeral the element is, the closer the relationship with the sea becomes.

"The accumulative construction of the city is a relevant alternative to the dispersion and fragmentation caused by modern urbanism. It can reestablish continuity in space and time, linking the dispersed fragments together and generating a sense of historical identity by connecting existing and new pieces" (Perez Arce, 1980: 4). As mentioned previously, the city is not a static object and is in constant transformation, which can cause the fragmentation of the landscape. In the third phase, the process of ruining is envisaged. With the intention of building a fragmented architectural landmark, a monument, that will prevail for a distant and uncertain future and have the capacity to adapt itself. The proposal foresees the action of time and the ruin of the pontoon and its re-appropriation, through ephemeral structures that connect the dispersed fragments so that the sense of identity of the place remains.

"A city that is built is, at the same time, a city that is destroyed; and it is precisely in the way of articulating this dual operation of construction and destruction that lies the possibility for cities to develop harmoniously, since the ideal is that construction is done with as less destruction as possible and, above all, that this destruction is nothing but an intelligent adaptation to new exigencies" (Goitia, 2014: 189). In the fourth and last phase, the reappropriation of the contemporary ruin by the sea takes place. The reappropriation is supported by ephemeral and seasonal structures, which can be aggregated according to modules and allow new uses and functions to inhabit the fragments. The proposal anticipates the ruin of the pontoon due to the action of time and successively its reappropriation. With the intention of building an architectural work, a monument, that will prevail for an uncertain future and that has a capacity for transformation and adaptation. Thus, the ruins of the pontoon are inhabited by ephemeral wooden structures, which allow the continuity of its use, even in its ruined state.

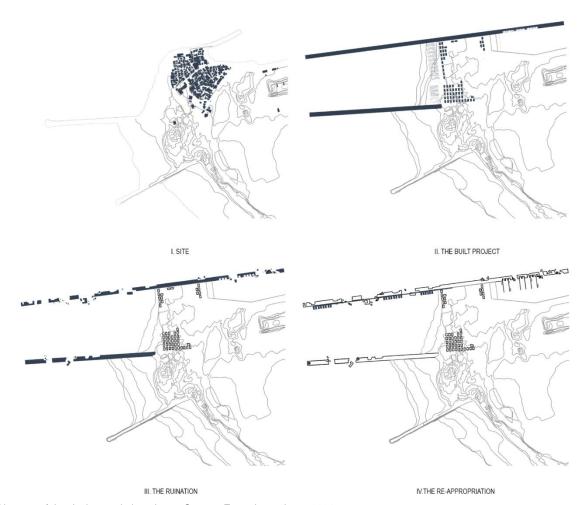


Fig. 8 Diagram of the design evolution phase. Source: From the authors, 2021 $\,$

5. New forms for fragments

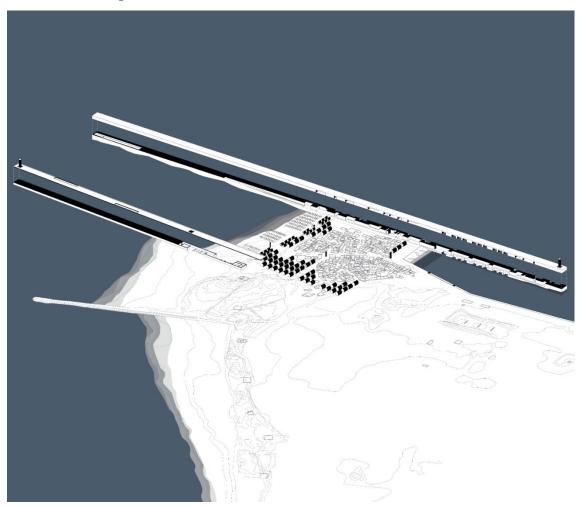


Fig.9 Axonometry of the project in Cova do Vapor. Source: From the authors, 2021

"It is with these contradictions that it will be necessary to build the architecture of our years. If we can no longer use the ruins of antiquity, but only the ruins of the present for this purpose, they will remain to mark the distance with which we are forced to measure ourselves constantly" (Gregotti, 2006: 131). The fragmented landscapes by the sea are places that invite the imagination and preserve memories and also "(...) the permanence of antecedent traces, which correspond to a morphological heritage that attests to the urban object's resistance to transformation "(Proença, 2014: 33). Vestiges are a tool in architecture, which allows to build the city of the future. They are historical and architectural elements, which survive time and support the memory and identity of the place. According to Clément (2019), the future of architecture is the ruins. The ruins near the sea stand out for their beauty, they are scars of a time, which can no longer be recovered, but reappropriated. It is important to emphasize the survival of ruined landscapes for the permanence of the authenticity of a place.

"Utopia is the beginning of all progress and preparatory essays for a better future" (Mumford, 2007: 28). The principal intention of the essay is to expose the importance of designing places which, even if in ruinous condition, maintain performance in the uncertain future. What landscapes do we desire? Landscapes that are capable of being re-appropriated and re-imagined while respecting their morphology. The future is certainly uncertain, but our main function is to explore methods and solutions so that seaside landscapes are not

condemned to pure decline. Abstraction makes it possible to interpret the contemporary coastal territory in order to outline new urban and architectural compositional dictates. These fragmented landscapes are made up of collective memories that must be enhanced. The survival of places with a discredited coastline is in the memory of the places. Independent of the destiny of Cova do Vapor, it is important to reinforce that this place by the sea is the pure landscape of desire where the effort and the dreaming spirit led to its realization and permanence in the place, despite the uncertainties and the fears that it will not resist extreme events.



Fig.10 The Invention of the Ruin. Source: From the authors, 2021

In conclusion, the landscapes of desire are those that prevail in the image of time and space. They are notable for their unique and singular character, and at the same time speculative. Places that do not deserve to be forgotten and abandoned, but eternally lived and reappropriated, through adaptation to recurring natural and anthropic transformations. Initially, we idealized the landscapes through collage, an artistic tool, which allows

us to put together different fragments of art to create a new narrative for the desired landscapes, where hope inhabits the ruins and fragments on the shore.

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