

W

Fábio Christiano
Cavalcanti Gonçalves*
Flora Oliveira de Souza
Cardoso
Leonardo Brasil Mendes
Ana Rita Sá Carneiro
Lúcia Maria de Siqueira
Cavalcanti Veras

HERE THE SEA CRASHES IN
IS THE BIRTHPLACE OF A
LANDSCAPE: RECIFE, *THE
CAUSEWAY OF THE SEA*

ABSTRACT

This article deals with the landscape of the Calçada do Mar (Causeway of the Sea), a reference to the alignment of sedimentological rocks called reefs, which has taken shape off-shore in the city of Recife (Pernambuco, Brazil). The objective is to understand the socio-cultural significance of this landscape, which is associated with the birth and growth of this 'urbe'. To grasp what this means, a reflexive analysis is developed on the notion of landscape by following a phenomenological approach, which is associated with observation and direct experience in this space. On doing so, there is discussion on the relationship between nature-subject and nature-object of the Calçada do Mar, as to how this has been objectified and subjectivated in the city. It is concluded that in the history of the formation of Recife, the Calçada do Mar is presented as the myth of the city's foundation, in the sense of its being a topological genesis and image-filled point of reference, which today, because of direct experience in the space that shapes it, its meaning is potentially revealed in the landscape.

* In memoriam.

KEYWORDS

Recife (PE). Reefs. Landscape.

ONDE O MAR ARREBENTA
NASCE UMA PAISAGEM: RECIFE,
A CALÇADA DO MAR

RESUMO

O presente artigo trata da paisagem da *Calçada do Mar*, referente ao alinhamento rochoso sedimentológico denominado arrecifes, situado na costa marítima da cidade do Recife (Pernambuco, Brasil). O propósito do estudo é compreender a significação sociocultural da paisagem em questão, fortemente associada ao nascimento e crescimento desta urbe. A fim alcançar tal objetivo, desenvolve-se uma análise reflexiva sobre a noção de paisagem a partir de uma abordagem fenomenológica, associada à observação e à experiência direta no espaço. Nessa perspectiva, também é discutida a relação entre natureza-sujeito e natureza-objeto da *Calçada do Mar*, na forma como ela tem sido objetificada e subjetivada na cidade. A conclusão aponta que, na história de formação do Recife, a *Calçada do Mar* se apresenta como um mito fundacional, no duplo sentido de gênese topológica e referencial imagético e também que, atualmente, por meio da experiência direta no espaço que a conforma, sua significação é potencialmente revelada na paisagem.

PALAVRAS-CHAVE

Recife (PE). Arrecifes. Paisagem.

INTRODUCTION

This article discusses the relationship between a natural element of geological shape –the off-shore sedimentological reefs of Recife – and the genesis of that city. Its name is derived from that topological feature, which comes from the Arabic word *al-racif*, which means “causeway or pathway of the sea”. It should be noted that this derivation is not only established as a mere toponymic coincidence, but it can be expanded to present itself as a landscape built at the time when the city was founded and shaped.

Given this assumption, the aim of this article is to reveal the line of reefs that was shaped just off the coast of Recife as a matrix landscape, thus making its meaning emerge as the topological and image-filled genesis of this city. Specifically, the article sets out to discuss the landscape of the geographical accident called *Calçada do Mar* as an object of social and cultural significance, thus going beyond its recognized paleobiological importance, thereby establishing itself as a landscape that acts as a reference to Recife. The guiding question that arises is: to what extent does the *Calçada do Mar*, besides its biological and material importance, as a condition of implanting the urban locus in Recife, present itself as a landscape of socio-cultural significance of Recife?

This study is put forward based on the intuition that the *Calçada do Mar* brings in a latent, but not explicit way, a fuller meaning, beyond its condition as a natural object, thus revealing itself as a landscape that is a reference of the city of Recife, and therefore brings out, in an underlying manner, the idea of genesis and the myth on which this *urbe* is founded.

Ever since the city was founded, this site has been apprehended as an object to be materially appropriated, either to extract its natural resource (in order to use the sandstone to construct buildings in the city), or as a support for infrastructure constructions (such as a wall to contain the sea and the Picão Fort¹) or for constructions of a contemplative use (such as the old Bath House and the set of sculptures by the artist Francisco Brennand. In addition, there was a more recent proposal of “Urban Re-qualification of the Mole from Brasília Teimosa to the Park of Sculptures”²). Thus, in the most diverse forms of spatial appropriation of this geological configuration, there is evidence of its significance to Recife culturally and as a reference point.

Therefore, in the theoretical-methodological scope, a phenomenological approach is developed, based on (reflexive) observation and on direct experience of the *Calçada do Mar* landscape, thus placing the researcher both as a subject and an object of this experience as an intentional experience or rather, an intensitive one³, from which a reflexive analysis is promoted, in the sense defined by Embree (2011). The material dimension of the *Calçada do Mar* is associated with the sensitive dimension, thereby objectifying it as a topological place, and subjectivating as a locus of socio-cultural significance.

Reflexive analysis⁴, as a procedure of phenomenological interpretation, is the moment at which the apprehension of the landscape is synthesized, between the inner world (of the subject) and the external world (that surrounds it), between subjective and objective, thus making it possible to think of it from the

¹The Picão Fort was also known as the São Francisco da Barra Fort, the Castle of the Sea, the Barra Fort and the Laje Fort.

²Description / presentation of the project, as set out by the Municipality of Recife, in 2009: “Project for urbanizing the port mole, from the District of Brasília Teimosa to the Park of Sculptures, in the District of Recife. It foresees the improvement of the environmental and aesthetic quality of the general landscape of the area, thus making the spaces treated adequate for the disabled and dealing with the landscapet. The works include the river pier; spaces of being and contemplation; a bicycle path; a walkway; kiosks; a police station; a group of toilets; roads for vehicular and pedestrian traffic and parking”. Available at: <http://www.recife.pe.gov.br/2009/08/12/prodetur_nordeste_ii_168023.php>. Accessed on: 10.12.2014.

³Intentionality, according to Embree (2011), is much more than “purpose”. It refers to the way that subjective processes are directed to objects, such as processes that refer to the past and to the future.

⁴Reflexive analysis, in the sense of Embree (2011), differs from irreflexion, because the latter allows us to reach only the appearance of things, based on sensations, guided by a merely contemplative attitude. For its part, reflexivity is the activity related to thought, to mental processes and to conscious observation.

present, in its memory and reference relationship, between past and future, thereby seeking the meaning of the phenomenon from the direct experience undergone by the subject (in the way that it presents itself to the subject).

Faced with such guidelines, it is necessary to understand the process of instituting the landscape from the cognizant subject. Therefore, the article is theoretically structured on Georg Simmel, in his seminal text “The Philosophy of Landscape”, and is based on contemporary reflections on the subject, drawing on Adriana V. Serrão, Augustin Berque and Michel Corajoud.

In order to understand the landscape as a topological and referential genesis, support is found in historical research on the formation of the place, in order to understand how this landscape was shaped when the city of Recife was founded, and how this landscape has been “constructed” in an image-filled way as a reference landscape for Recife. This reflection includes contributions by Jacques Le Goff and Pierre Nora, specifically with regard to their understanding of memory, history and identity, thereby shedding light on some iconographic elements and bibliographical data collected about the *Calçada do Mar*.

As a result, the article starts by problematizing the *Calçada do Mar* as a genesis landscape, which is situated in the current context of urban development which Recife is undergoing, especially due to the redesign that its coastline has been subjected to, in the midst of the real estate pressures of vertical occupation of these spaces.

Then, the reefs as a foundational element of the city of Recife are brought into the discussion during which a historical approach is taken to the development of this *urbe* from this off-shore line of rocks. The relationship between nature-subject and nature-object is discussed in order to reflect on how the *Calçada do Mar* presented itself and presents itself as a determining natural element to protect the city against the crashing of the sea, and how it has been objectified in the processes of appropriating and using this space. Finally, the *Calçada do Mar* is approached through its state of being a hybrid landscape, between *nature* and *culture*, which reveals natural and inseparable cultural attributes, thereby constituting the socio-cultural meaning of this urban *locus*.

THE CALÇADA DO MAR (CAUSEWAY OF THE SEA)

Recife’s line of reefs, as a geological element, was officially baptized as the *Calçada do Mar*, based on the Brazilian Commission of Geological and Paleontological Sites (SIGEP – Geological and Paleontological Sites of Brazil), recording it thus in 2013 under the classification of sedimentological site, according to the definition of Barreto et al. (2010) and Winge (2013).

The *Calçada do Mar*, therefore, is a sedimentary reef – of formed by rock just off-shore – comprising sands and gravels cemented by calcium carbonate (that shapes sandstone), arranged in a line along the coast of the city of Recife (Figure 1), from the south to the north, specifically from the beach of Boa Viagem, passing by Pina beach in the District of Brasília Teimosa, and from



Figure 1: Aerial photo of the alignment of the reefs at high-tide from Boa Viagem beach – Recife, PE. In the background. Pina beach (District of Brasília Teimosa). Author: André Emery (photo by courtesy).

⁵This breach is not easily observable due to the dynamics of tides, floods and ebb tides. But an indication of the lack of sandstone in the identified stretch can be noted because there is a retaining wall, which was built to contain the advance of the sea in this stretch of Pina beach, on the edge of the District of Brasília Teimosa, precisely to supply the natural protection that it no longer had at that point.

⁶The name Mauritiópolis (Mauritsstad in Dutch) refers to the city planned and developed by Count João Maurício de Nassau-Siegen, on the then island of Antônio Vaz, in Recife, today the districts of Santo Antônio and São José, when he was responsible for administering that territory, in the period of Dutch domination in Brazil, between 1630 and 1654.

there to the District of Recife (at the mouth of the Beberibe and Capibaribe rivers). It lies between latitudes 8°04' and 8°08'30" south and longitudes 34°51'30" and 34°54'25", is about 10km (ten kilometers) in length, and its width ranges from 15m (fifteen meters) to 25m (twenty-five meters), where, according to Barreto (2010, p. 3), "the aspects of the geological evolution of the formation of Holocene plains are recorded on the site, including the last transgression and subsequent regression on the coast of Pernambuco and Brazil".

It is observed that this off-shore rocky line of sandstone has a breach⁵ at the height of Pina beach, which divides this geological complex into two parts, one of 6 km, from the north side of Pina to the District of Recife and another of 4 km from the south part of Pina to Boa Viagem. This breach is attributed, in part, to anthropic actions of the past (Barreto et al., 2010), which probably date back to the Portuguese and Dutch colonization period, when sandstone blocks from the reefs were removed to construct buildings in the then townships of Olinda and later in Mauritiópolis⁶ – Recife.

It is worth noting that, within the scope of the municipal legislation of Recife – Master Plan (Law 17.511/08) and Municipal System of Protected Units (Law 18.014/14) –, the *Calçada do Mar* is inserted in an area recognized as being that of a *natural environment*, since it is part of the seafront and its coastal reefs, a state that guarantees that it is deemed to be a *protected unit*.

On the other hand, it is observed that there is a social appropriation of the space, as a result of the ebb tides that uncover the geological structure and allow a reconfiguration of the beach and the use of the water in the localities of Pina and Boa Viagem. It is observed that during low-tides, the uncovered geological structures act as protective barriers against the advancement of the sea, thereby forming natural pools that are appropriated by people, who can enjoy bathing in still waters. But, equally, it is asked: does such appropriation recognize the signifying importance of the *Calçada do Mar*, in addition to its protective function that it offers by providing bathers with warm and calm waters, in which to relax and have a good time?

Geological structures such as the *Calçada do Mar* are, however, an object of preservation interest provided for in the Federal Constitution of 1988, in its article 205:

It falls to the states and municipalities, in consonance with the Union, in the terms of the law, to protect areas of cultural and environmental interest, especially reefs, public water reservoirs and their basins, resting, feeding and / or breeding sites of fauna, as well as areas where endemics and rare genetic

banks occur and those inhabited by rare, vulnerable, threatened or endangered organisms. (CONSTITUTION OF THE REPUBLIC, 1988, emphasis added)

In line with this perspective, the International Declaration of the Rights of the Memory of the Earth⁷ is presented, in which we highlight one of its presuppositions: *“Our history and the history of the Earth are closely intertwined. The origins of one are the origins of another. The history of Earth is our history, the future of the Earth will be our future.”*

Thus it is believed that by revealing its hybrid state, of nature and culture, and of genesis, as a constituent foundational landscape of Recife, in addition to explaining its immanent condition, allows a broader perspective on this element to be taken. Thus, a reflexive look on Recife is allowed, like a mirror that is able to induce an introspection directed at understanding the meaning that is expressed in a city which is already revealed in its toponym: Recife, which derives from reef, this term coming from the Arabic word al-racif, meaning causeway or pathway of the sea.

As a result, it is evident that the construction processes in the city, if not attentive to this landscape, can have a large, adverse effect on understanding Recife as a city, intrinsically associated with a geological structure that, although latent, seems to constitute itself in an immersed landscape, metaphorically speaking.

THE REEFS AS AN ELEMENT OF THE FOUNDATION OF THE CITY OF RECIFE

As a former Portuguese colony, the area in which part of today's city of Recife lies was conceived for exploration, about which an extremely utilitarian, extractive and exploratory view has always prevailed. Thus, the rocky reef, from its first contacts with the colonizer, was appropriated as a raw material from which buildings and other structures were constructed and, above all, used as a natural anchorage and barrier to still the turbulent waters, thereby facilitating navigation (SOUZA, 2002), as can be observed in Barreto (2010) and in the image produced by August Stahl⁸.

The sandstones of the beach of Recife (PE) are also of historical importance, since they allowed the Portuguese to moor in the region, in the first half of the 16th century as the reefs function as natural anchorages and a protection barrier; vessels, especially those coming from Europe, enjoyed easy access that culminated in establishing the Port of Recife. (BARRETO, 2010, p.3)

The intense flow of ships enabled sugar cane and brazilwood to be transported to European markets and resulted in an anchorage being consolidated and in small-scale trade in peddled goods near the port area becoming established (SOUZA, 2002).

⁷International Declaration of the Rights of the Memory of the Earth (Digne, 1991). Comunicações dos Serviços Geológicos de Portugal, 1991, pp.147-148. Translation by Miguel M. Ramalho. Available at: <http://www.progeo.pt/pdfs/direitos.pdf>. Accessed on 10.12.2014. This Declaration was made in the city of Digne-les-Bains, France, within the framework of the 1st International Symposium on the Protection of Geological Heritage which was held from 11 to 13 June 1991.

⁸Available at: <<http://brasilianafotografica.bn.br/brasiana/handle/bras/2322>>. Accessed on: 14.07.2015.

Therefore, in general, the historical references about the current Port of Recife translate a utilitarian view of the rock sandstones and the intention of leveraging the activities of the port, thus broadcasting the existence of a place with good navigation and anchorage near the town of Olinda. The Reverend Baer's text, transcribed by Mario Sette (1978, p. 31), and the image drawn by Diogo Campos Moreno in 1616 (see REIS, 2000) make this clear:

Southwards from Olinda a sandbar stretches out (...) against which the sea pounds; on walking for a good hour or more along the sandbar, one comes upon a small settlement; (...) at a cannon shot distance from this settlement on the Olinda side, a castle or fort stands on this bar (...) right in front of the castle of the fort, there is another castle which is an octagonal tower; between the two castles where the water has the width of a cannon shot, ships enter (...) and they load in the settlement which is situated at the end of one of the bars where there were many warehouses.

⁹ Available at: <http://digitalizacao.fundaj.gov.br/fundaj2/modules/visualizador/i/ult_frame.php?cod=228>. Accessed on: 14.07.2015.

However, what is the foundational element of the city of Recife? Are they the rock reefs or is it the Port? It can be understood that the foundational element is the rock sandstone to which form and use of port was given, due to its propensity for being a natural anchorage. Thus, it is understood that Recife, without its being animated because of its port, would not constitute a centrality, and therefore break the dominion of Olinda, the state capital at that time.

Thus, historically, the Port, as it was founded on the rock reefs, was constituted as a centrality and, consequently, began to stamp a mark on the people who settled there, were born there and coexisted there, thereby constructing a reference based on the reefs – a natural anchorage: “[...] these reefs inspired the names that the city of Recife has had over time, namely: ‘Arrecifes dos Navios’ (‘Reefs of the Ships’), ‘Porto dos Arrecifes’ (‘Port of the Reefs’), ‘Porto dos Navios’, (‘Port of the Ships’); ‘Ribeira Marinha dos Arrecifes’ (‘Marine shore of the Reefs’) and ‘Recife’ [...]” (BARRETO et al., 2010, p.3).

This mark is constructed from the port-mercantile activities⁹ which induced an interaction with the reefs. According to Mario Sette (1978, p. 29), “the waves slammed into the wall of reefs, threw up screens of spray, and quickly fell and drenched the rocks planted by God so as to give shelter to a town and to name it.”

In ways that contextualize this same element more poetically, Joaquim Nabuco quoted by Mario Sette (1978, p.63) states: “[...] the ocean comes in and breaks itself against it in a sheet of foam that splashes upon the extensive reef that guards it like a trench, an immense prayer bench, on which the eternal pounder of lands will kneel for centuries [...]”.

Note that Joaquim Nabuco gave a mere breakwater the function of guarding the city and calming the ocean, and he also gave it the effect of forming sheets of foam. Given this, and making use of an expression of Simmel's (2009), “we are before the landscape, the natural and that which became the artist.” But when did the genesis of the *Calçada do Mar* as a landscape take place? Did Joaquim Nabuco invent it?

According to Cauquelin (2007) it is impossible to define the beginning (the genesis), because the landscape as a mixture of culture and nature does not allow a beginning to be dated, but it does allow the emergence of a notion of landscape to be arbitrated.

On the other hand, what can be verified is the permanence of this sense of the genesis, foundation, and of the continuity of a town, impregnated on the rock reefs as the object and subject of a history, thus reaffirming not only the toponym that gives its name to the *urbe* but also the account of understanding landscape, as a product and process of human construction, which to some extent is self-determining, but yet is substantially determined by man.

In other words, on the stones that gave their name to the city of Recife, there are identity marks that establish its link with its past and with its present.

THE CALÇADA DO MAR: A LANDSCAPE OF POROSITIES

This article seeks, albeit briefly, to reach an understanding of the notion of landscape, from the perspective of revealing what the *Calçada do Mar* – a line of reefs – is. This is anchored on philosophy, as a means of unveiling an understanding of categories of thought in order to build a reference basis for discussion.

The notion of landscape is approached based on Simmel, in his text *The Philosophy of Landscape*, published in 1913. For Serrão (2011), it is Simmel who was the first to emphasize the landscape as a category of thought, as an object of knowledge in the field of philosophy. It is grounded on the relationship between man and nature, since “for Simmel, the landscape is an experience of the modern individual, which was ignored in previous ages when a feeling of Nature prevailed” (SERRÃO, 2011, p. 18).

This bias to understanding the notion of landscape seems opportune, especially when dealing with an element that is eminently of Nature, such as the off-shore rock line on which we ponder, metaphorically and also literally, as a boundary between here and overseas – a portion of nature that is recognizable in its natural constitution and in its cultural significance.

One does not want, by so doing, to force a culturalization of *nature* – to create another nature that can only exist in the minds of men – but to establish the points of contact that this geographical element, in its very condition as a natural element, has maintained, at least since the 17th century. It is interlocked with an idea of cultural creation, which is the city, by virtue of this element having made it possible, in effect, to establish a port, and hence the foundation of Recife.

It is understood, from Simmel, that *“the landscape ... as a ‘part of nature’ implies the perception of a small whole that is cut out of the natural totality ...”* (SERRÃO, 2011, p.16). This act of taking cuttings is, therefore, an eminently human process of apprehending the world. This extract from Nature – a line of reefs – was understood as a founding element of something else – the city – possibly of a landscape that was not given but had been presented from an intention, from a formulation of the subject, since *“if the elements are there and are identifiable one by one such as rivers, hills, trees, clouds, houses ..., to see them as landscape implies precisely the synoptic apprehension of a unity that is not there”* (SERRÃO, 2011, p.16), but which we bring together in our reflections.

Attention is drawn to the recording of this line of reefs, represented by the naturalist Charles Darwin, in the 19th century, when he passed through Recife. According to Barreto et al. (2010, p. 2), *“Charles Darwin¹⁰ mentioned the reef of the city of Recife, calling it ‘a remarkable bar of sandstone’”,* and drew this geographical accident, depicting it in a cross-section in 1841.

At the moment when Darwin cut out the off-shore line of rock, while conditioned by the purely geological aspect, in his mind-set as a naturalist, could it not be configured a *“for-itself”*, that is, this element with a unit of understanding?

If we go back to this question in the context of the 17th century, when the Dutch occupiers decided to establish their place of residence there, could we not suppose that a port and a town were probably already seen before it was brought into effect? And this is how, in the poem of Carlos Pena Filho entitled *“The Beginning”*, this image emerges:

At the point where the sea runs dry
And the sands rise
They dug their foundations
In the deaf shadow of the earth
And erected their walls
From the cold sleep of the rocks:
Then they set up their flanks:
Thirty blue flags
Planted on the coast.
Today, it is serene, it floats,
Half stolen from the sea,
Half from the imagination,
For it is from the dream of men
That a city is invented. ¹¹

Carlos Pena Filho (1999, p. 129)

This process of apprehending the landscape is then understood from an excerpt from nature, which constitutes a new totality, a new unity. Thus, the configuration of a landscape is understood as an image from an intention, moved by cognitive act of the subject (what he calls *“Stimmung”* – *“disposition of the soul”*) when, when cutting out of nature a fragment (apprehended and formed in unity) reveals, as a reopening, a landscape (as a separate autonomous entity).

¹⁰ *“In entering the harbour of Pernambuco, a vessel passes close round the point of a long reef, which, viewed at high water when the waves break heavily over it, would naturally be thought to be of coral-formation, but when beheld at low water it might be mistaken for an artificial breakwater, erected by cyclopean workmen. At low tide it shows itself as a smooth level-topped ridge, from thirty to sixty yards in width, with even sides, and extending in a perfectly straight line, for several miles, parallel to the shore. Off the town it includes a shallow lagoon or channel about half a mile in width, which further south decreases to scarcely more than a hundred yards. Close within the northern point, ships lie moored alongside the reef to old guns let into it”.* In: Darwin, C. R. 1841. *On a remarkable Bar of Sandstone off Pernambuco, on the coast of Brazil.* The London, Edinburgh and Dublin Philosophical Magazine (Ser. 3) 19 (October): 257-260, 1 text figure. Available at: http://darwin-online.org.uk/converted/published/1841_pernambuco_F266.html. Accessed on: 10.12.2014.

¹¹ *“The Beginning”*, excerpt from the poem titled *“Practical Guide to the City of Recife”*.

Thus, Simmel shows us that *“nature, which in its being and in its profound sense knows nothing of individuality, thanks to the human eye that divides it and from the parts it constitutes particular units, is reorganized to be the respective individuality that we call landscape”* (SIMMEL, 2009, p.7).

Therefore, it is understood that it is because of the relationship between a “self that sees” and a “self that feels,” that a fragment is withdrawn from the chaotic unity of the world a fragment, and one reorganizes it from one’s experience and feeling, thereby constituting a new unity (a new totality), which is the landscape, and thus it is constituted in a “[...] peculiar way of apprehending natural things, which, precisely as a form, resides in the spirit and not in things; is not a given in itself, but implies a for-itself” (SERRÃO, 2011, p.17).

It is from this perspective that it seems that evidence is provided that the place about which we are speaking, which consists of stone and water, reveals itself as a landscape, because the off-shore line of rocks of the sea, although it may present itself today as a simple natural element present in the line of the city’s horizon, has consisted of a “for-itself” for a long time. But one can still ask: and what does this element represent today? Although the purpose of this article is not to enquire of people today about their perception of the *Calçada do Mar*, this question is not lost because of this, but it serves as an inductor of our discussion, based on the understanding of the city’s construction history and on observing the use in space, which was cut out *a priori* as landscape.

For this reason, another question is asked: how can the *Calçada do Mar* be understood as a landscape? It is via the understanding of the architect Michel Corajoud, based on the notion of porosity that we enter into this reflection: *“In a landscape, the unity of the parts, its form, is worth less than extracting them; there are no frank contours, each surface trembles and is organized in such a way that it opens essentially to the outside”* (CORAJOUD, 2011, p.216).

About this, Serrão understands that *“each landscape tends, because of this porosity of its ‘frontiers’, to spill over its physical limits, to open itself to the outside and even to fuse with the interstitial elements of contiguous landscapes [...]”* (SERRÃO, 2011, p.214).

This porosity implies relationships are established between the element itself – the object *Calçada do Mar* – and that which circumvents it, it being therefore understood that *“the landscape is the place of the relational where all places are only comprehensible by reference to a group which is integrated, in turn, into a much vaster set”* (CORAJOUD, 2011, p.217).

We pause here to say that the metaphor of the porosity of the landscape, in the case under study, is also manifested literally in the element on which we are conducting a theoretical examination. The porous state is manifested in the rock element – sandstone – of a sedimentary constitution, insofar as its material constitution guarantees, by being permeable, a relationship of direct and continuous exchange with the environment in which it is found, and is impregnated by it¹².

¹² Porosity is a characteristic of sandstone that is perceptible to the naked eye, and is a rock that is easy to identify in 17th century constructions in Recife. Although sandstone has been used as a construction element of support pillars of many of these constructions, it is at the same time an element that is fragile at the simple touch of the hands, due to its high porosity, and so breaks up somewhat easily and once again becomes sand and sea gravel.

By means of the image formed above, one arrives at the notion of landscape as mediation, as offered by Berque, who may explain this relational capacity of the landscape well as “[...] *dynamic interactions that constitute the means (milieux) of implanting communities*” (SERRÃO, 2011, p.21). For Berque, “*the medium is a relational entity, built by diverse mediations that are established between their constituents, which are both subjective and objective. The landscape is one among them*” (BERQUE, 2012, p.41).

It is observed that the *Calçada do Mar*, from the composition of its constituent element, sedimentary sandstone, has as an immanent characteristic the condition of being permeable, porous. And this condition is present in the relationship established with man. Otherwise, this off-shore line of rock, as laid out on the coast of Recife, was understood as a natural harbor. Using this perception, this natural element would have transposed or widened its meaning, from a mere geographical accident to a landscape that acted as the reference of a culture that was born. But this image was not given, it was created by man, from a necessity, which enabled him, in a condition that could be apparently inhospitable to found a city, because of the aggressive force with which nature manifests itself (the force of the sea), to see a place to shelter people and their development.

It seems then that the notion of the landscape as a medium, offered by Berque, is given even more energetic life: “*The mediance animates the landscape. Therefore, it can be considered with an equivalent of what the Chinese called the ‘intention’ (yi) of the landscape or the ‘propensity’ (shi) of things*” (BERQUE, 2012, p. 41).

This understanding reveals, first of all, that the sandstone bar in question can be understood as a landscape, both because of an intention/propensity to form a port and because a city was founded from it, as the *locus* of permanence of a community.

Added to the previous understanding, the Italian philosopher Rosario Assunto understands the landscape as a synthetic unit and space of existence, in which “[...] *temporality is an essential element for the definition of the landscape*”, considering that “*a space without time will never be a landscape*” (SERRÃO, 2011, p.27).

Associated with this approach, Corajoud argues that “*indeed, in the very flesh of the landscape, all the stigmas of the past are imprinted and endure. The landscape is a memory and I can interrogate it*” (CORAJOUD, 2011, p.217).

If the *Calçada do Mar* presents itself as a place of memory, that is, it includes the existence of a temporality, which is past, present and future in itself, and one can interrogate it to enquire about its constitution, in time and space, we conclude that here a landscape (the *Calçada do Mar*) is dealt with which has legible space and time.

Thus man, as a temporal and spatial being, it is believed, is able to grasp the *Calçada do Mar* as a reference for himself, because the conditions for this are still materially present and are potentially sensitive. In it, we can find the subjective and objective nexus that interconnect past, present and future, expressed in the porosity of its geological flesh.

THE CALÇADA DO MAR AS A LANDSCAPE THAT ACTS AS A REFERENCE OF RECIFE

What, in this landscape, would allow man to recognize himself, starting with this rock formation where the waves of the sea break? What attributes would these be? For Le Goff, “[...] *memory is the essential element of what is commonly called identity, whether individual or collective [...]*” and he further states that the search for identity “[...] *is one of the fundamental activities of individuals and societies today [...]*” (LE GOFF, 1992, p. 476).

Memory and identity are intrinsically linked, but they have different temporal domains: “*memory, where history grows, which for its part feeds it, seeks to save the past to serve the present and the future*” (LE GOFF, 1992, p. 477). Memory nourishes identity, serving directly contemporary man who by using this is perpetuated in the future.

The landscape of reference would then have the capacity to involve subject and milieu through its extraction, thereby perpetuating the memory produced throughout a process of events and marks and it is, in the end, a place of memory. Pierre Nora points out that places of memory have a fundamental reason for being which is “[...] *to stop time, is to block the work of forgetfulness, to fix a state of things, to immortalize death, to materialize the immaterial, [...] to grasp the maximum sense in a minimum of signs [...]*” (NORA, 1981, p. 22).

However, “*stopping time*” is not literal, as this is impossible and undesirable, especially when it comes to an element of natural origin – the reefs – that exists under the degenerative action of creative nature itself, and which has undergone interventions on account of a utilitarian vision of 17th century man who sees the conditions for establishing a port in the rock formation. This is what Nora exalts in describing in a passionate way the great value of places of memory, that they “*live from their aptitude for metamorphosis, in the unceasing emphasizing of their meanings and in the unpredictable thicket of their ramifications*” (NORA, 1981, p.22).

The metamorphosis leaves marks. At each transformation of the *Calçada do Mar*, another line is written on its rock surface, telling a little of the history of Recife. It is a landscape that undergoes a whole trajectory of re-significations, and that expresses a culture whose birthplace was there, and arose from the port-mercantile activities. Nowadays there are different forms of appropriating this place: there is no uniqueness regarding the signs associated with the reefs – it is a landscape of porosities. So how does this landscape still resist, thereby taking us back to the genesis of the city of Recife?

All along the extensive line of rock, there are different contacts with the continent, as Barreto et al. show (2010, p. 5): “*Each beach [Pina, including the locality of Brasília Teimosa and Boa Viagem] presents socio-cultural occupational patterns of its own. The region of the body to the north [Pina/Brasília Teimosa] is occupied by a strong association of fishermen, who live by commercializing and cooking fish, this today being considered an important spot of cultural tourism. Further south, on Boa Viagem beach, there are numerous hotels and residential buildings*”. The economic profile of these two forms of living is configured as opposite

extremes, which is expressed in the very shape of the city. Brasília Teimosa (Figure 2) is the result of an occupation that began in 1947 and today is classified as a Special Zone of Social Interest (ZEIS, in Portuguese), according to the Law of Use of the Land of Recife. The district of Boa Viagem (Figure 3) has large tower blocks built to a high standard.

Next to the District of Recife (Figure 4) another type of contact occurs – this was where the port use was intensified, and is the most “urbanized” stretch of the *Calçada do Mar*. The users of this area are usually tourists who cross by boat from *Marco Zero*, in the District of Recife, to the Francisco Brennand Sculpture Park (Figure 5), which was built on the reefs. One can see in these areas a cult of the old and the historical, but the artists’ sculptures give a surrealist “air” to the landscape, and recall the skyscrapers in the distance, located in Boa Viagem.

These three stretches (District of Recife, Pina/Brasília Teimosa, and Boa Viagem) are inhabited and used by groups who, in the first instance, have different social interests and practices (Figures 6 and 7), which cannot be seen as similar, nor do they dialogue with one another, but they may have in the same object a relationship of cultural reference, without neutralizing the subjective feelings of each individual.

In this landscape, in which many different stories coexist, we live and move like actors on a stage; at the same time, we are also spectators. We shall appear in every act, crossing a square or talking to friends; but as we look around, we know that we are also a landscape: we recognize the meaning of our actions and of what we do. Therefore, we can say that landscape is the interface between doing and seeing what we do; it is the territory no matter how we perceive it and, in this way, it includes all our actions in step with those of nature. (NÓS SOMOS [WE ARE] ..., 2012, p.16).

If as is put in the passage above the document “We are the landscape”; that individuals produce the landscape and at the same time perceive themselves in it, how would the construction of a collective identity of a city like Recife take place? It would be through collective perception, which is “[...] when we contemplate a particularly spectacular panorama, we are aware that it is not only us who perceive this beauty, but that this sensation is shared by many more people [...]” (NÓS SOMOS..., 2012, p.16).

The key to the collective perception of the *Calçada do Mar* lies in the image-filled, foundational character of the city, of a genesis landscape that allows a reflexive look on Recife. The need for this recognition comes in a way that emerges, given the contemporary processes of redesigning part of the city’s maritime sea-board, which, unless pay heed to this landscape of socio-cultural importance, tend to deconstruct the memory and identity of the City of reefs.



Figure 2: View of Brasília Teimosa from the reefs.
Author: Fábio Cavalcanti (Dec. 2014).



Figure 3: View of Boa Viagem from the reefs.
Author: Fábio Cavalcanti (Dec. 2014).



Figure 4: The *Calçada do Mar* urbanized.
Author: Fábio Cavalcanti (Dec. 2014).



Figure 5: Francisco Brennand Park of Sculptures.
Author: Flora Oliveira (May 2014).



Figure 6: Reefs in their natural state.
Author: Fábio Cavalcanti (Dec. 2014).



Figure 7: Uses on the Beach of Pina.
Author: Fábio Cavalcanti (Dec. 2014).

FINAL REFLECTIONS

The *Calçada do Mar* was presented, throughout this investigation, from different perspectives that were complemented when constructing a narrative of the landscape. Aspects related to time and space responded because of the unification of the diverse interpretations or representations of this place, because of the diversity of elements and attributes that influence one's perception of its phenomena.

Among the aspects considered, as regards the variable of time, the history of the formation of the city brings us clear indications that the reefs offer themselves to the understanding as a genesis landscape, because it brings with it the idea of a foundational myth of Recife, thus taking us back to the 17th century when the first social activities in community began to develop in the settlements of Olinda and Recife; although, to a certain extent, the same reefs have been emulated by official historiography, in which the process of development of the city-port is told with a focus on the productive activities on the isthmus - on the continental portion which connected these two tons - very often without indicating the reefs in the context of setting up and shaping the city.

Regarding the variable of space, the reefs were directly related to the port use, due to the natural condition that the local geomorphology presented, and still

presents, of a natural harbor for vessels, which puts this geographical accident in a direct relationship with the man of yesteryear and today, since the identity of a port still subsists in the same space, sheltered by the ever-lasting off-shore line of rock.

The establishment of this relationship between the natural element and man, between object and subject in space-time, confuses the reefs with the very constitution of what became the city of Recife; this confusion is not devoid of meaning, since in this process such an element, besides serving as an inspiration in the designation of the toponym of the place, fulfils a comprehensive totality of what in essence constitutes this city.

Thus, from a space-time extension what is revealed is a landscape coming from the cognitive act of the subject, as a landscape permeable to multiple sensations, as a landscape of porosities. A landscape that extends beyond its physical and material boundary, and thus exists through subjectivity and coexists, probably intersubjectively.

From this, it is understood that the *Calçada do Mar*, in its material dimension, is structured on a place of memory; which shapes an image retroacted in time, but not as a relic, but as an active element that rearticulates the history of the people with space, thereby giving it meaning to the present.

Thus, man of today, as a temporal and spatial being, is able to understand the *Calçada do Mar* as a landscape in which it references itself, because the conditions for this are undergone; both in the object and in the subject can be found the nexus that go back to the past and situate it in the present, thus instigating him to reflect on the "nature" of this landscape as a "for-itself". This potential is further developed by the condition that the reefs offer to the contemplative use of leisure by people, thus guaranteeing baths in gentle waters, at low-tide, when pools shaped by nature form. Object and subject, then, in this case, are interdependent *corpuses* given to the porosity, which allow each other to be impregnated, a sensitive owidening pening of looking being all that is required.

Therefore, in agreement with the assumption put forward at the beginning of this article, it is considered that the *Calçada do Mar* brings in a latent, but not explicit way, a fuller meaning, beyond the perspective of physical geography, which is expressed as a landscape of sociocultural and referential relevance for the city of Recife.

Finally, we emphasize that the concerns presented here derive from a properly theoretical proposition about an empirical object, out of which new insights on this off-shore line of reefs, especially as to the ways that people, as cognitive subjects appropriate and perceive it. The contribution of landscape philosophy associated with the historiography of place and with observing its current uses has made it possible to glimpse that there is a pressing need to embark on a comprehensive approach to the city of Recife based on the landscapes that identify it. Undoubtedly, the *Calçada do Mar* gives a boost to all the significance that sustains the socio-cultural

representations that are made of this landscape, as a city-port bordered by a “causeway”, on which we must let our gaze go for a walk, with the delight of someone who truly does so, with a view to re-making acquaintanceship with this city.

REFERENCES

- BARRETO, A. M. F. et al. Arrecifes, a Calçada do Mar de Recife, PE: importante registro holocênico de nível relativo do mar acima do atual. *Sítios Geológicos e Paleontológicos do Brasil*, v. III, p. 251-262, 2010. Available at: <<http://sigep.cprm.gov.br/sitio040/sitio040.pdf>>. Accessed on: 12 May 2015.
- BARRETO, A. M. F. et al. Arrecifes, a Calçada do Mar de Recife, PE: importante registro holocênico de nível relativo do mar acima do atual. In: WINGE, M. et al. (Ed.). *Sítios Geológicos e Paleontológicos do Brasil*. Brasília: CPRM, 2013. 332 p.
- BERQUE, Augustin. Paisagem, meio, história. In: BARTALINI, Vladimir. *Cinco propostas para uma teoria da paisagem*. Curso de Pós-Graduação da Faculdade de Arquitetura e Urbanismo da Universidade de São Paulo. São Paulo: USP, 2012, p.31-42.
- CAUQUELIN, Anne. *A invenção da paisagem*. São Paulo: Martins, 2007. 196p.
- BRASIL. Constituição (1988). *Constituição da República Federativa do Brasil de 1988*. Available at: <www.planalto.gov.br/ccivil_03/constituicao/constituicaocompilado.htm>. Accessed on: 14 July. 2015.
- CORAJOURD, Michel. A paisagem é o lugar onde o céu e a terra se tocam. In: SERRÃO, Adriana Veríssimo. *Filosofia da paisagem. Uma ontologia*. Lisboa: Centro de Filosofia da Universidade de Lisboa, 2011. p.215-227.
- EMBREE, Lester. *Análise Reflexiva*. [Ebook]. Bucharest: Zetta Books, 2011.
- LE GOFF, Jacques. *História e Memória*. Campinas: Editora da UNICAMP, 1992. 553p.
- NORA, Pierre. Entre memória e história: a problemática dos lugares. Trad. Yara Aun Houry. In: *Projeto História: Revista do Programa de Estudos Pós-Graduados em História e do Departamento de História da PUC-SP*, São Paulo: PUC-SP, 1981. p.7-28. Available at: <<http://revistas.pucsp.br/index.php/revph/article/view/12101/8763>>. Accessed on: 14 July 2015.
- PENA FILHO, Carlos. Livro Geral Poemas. In: LEÃO, Tânia Carneiro (org.). *Guia prático da Cidade do Recife*, Recife: Graf. e Edit. Liceu, 1999.
- NÓS SOMOS A PAISAGEM: como interpretar a Convenção Europeia da Paisagem. Florence: Giunti Progetti Educativi, 2012. 37p.
- RECIFE. Lei n. 17.511, de 29 de dezembro de 2012. *Promove a revisão do Plano Diretor do Município do Recife*. Recife, 2008. Available at: <<https://www.legisweb.com.br/legislacao/?id=177629>>. Accessed on: 14 July 2015.
- RECIFE. Lei n. 18.014, de 09 de maio de 2014. *Institui o Sistema Municipal de Unidades Protegidas (SMPU Recife) e dá outras providências*. Recife, 2008. Available at: <<https://leimunicipais.com.br/a1/pe/r/recife/lei-ordinaria/2014/1801/18014/lei-ordinaria-n-18014-2014-institui-o-sistema-municipal-de-unidades-protegidas-smup-recife-e-da-outras-providencias>>. Accessed on: 14 July 2015.
- REIS, Nestor Goulart. *Imagens de vilas e cidades do Brasil colonial*. São Paulo: Edusp: Imprensa Oficial do Estado de São Paulo, 2000. 411p.
- SERRÃO, Adriana Veríssimo. *Filosofia da paisagem: uma ontologia*. Lisboa: Centro de Filosofia da Universidade de Lisboa, 2011. 502p.
- SETTE, Mário. *Arruar: História pitoresca do Recife antigo* (Coleção Pernambucana), v. XII. Recife: Governo do Estado de Pernambuco, Secretaria Estadual da Cultura, 1978. 368p.
- SIMMEL, George. *Filosofia da paisagem*. Covilhã: Universidade da Beira Interior, 2009. 18p.

SOUZA, Maria Ângela de Almeida. *Posturas do Recife Imperial*. 2002. 266 p. (Tese) Programa de Pós-Graduação em História UFPE, 2002.

WINGE, M. et al. (Eds.) (2013) *Sítios Geológicos e Paleontológicos do Brasil*. Vol. III. Brasília: CPRM, 2013. p.252-262.

Author's note

Research sponsoring: CNPq

Editor's note

Date of submission: 04/11/2016

Acceptance: 05/03/2017

Translation: Roderick S. Kay

Fábio Christiano Cavalcanti Gonçalves

Universidade Federal de Pernambuco (UFPE). Recife, PE.

CV: <http://lattes.cnpq.br/2099527475718318>

Flora Oliveira de Souza Cardoso

Universidade Federal de Pernambuco (UFPE). Recife, PE.

CV: <http://lattes.cnpq.br/6985985149585165>

flordeoliveira@gmail.com

Leonardo Brasil Mendes

Universidade Federal de Pernambuco (UFPE). Recife, PE.

CV: <http://lattes.cnpq.br/2570261353572394>

lbrasilmendes@yahoo.com.br

Ana Rita Sá Carneiro

Universidade Federal de Pernambuco (UFPE). Recife, PE.

CV: <http://lattes.cnpq.br/9554652433700829>

anaritacarneiro@hotmail.com

Lúcia Maria de Siqueira Cavalcanti Veras

Universidade Federal de Pernambuco (UFPE). Recife, PE.

CV: <http://lattes.cnpq.br/9146853256447280>

luciamveras@yahoo.com.br