



Research & experimentation Ricerca e sperimentazione

THE LOGIC OF LIMITS APPLIED TO THE TRANSFORMATION OF CONTEMPORARY LANDSCAPE: THE VELOPARK OF LOULÉ

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HIGHLIGHTS

- The role of motorization as an agent of urbanization is changing in urban areas.
- Healthier lifestyles and the promotion of sports are transforming the city's public space.
- The scale of human action and the speed of the world of technology are creating an *in visu*-shift.

ABSTRACT

As a result of the commission of a Landscape Architecture project for the surrounding area of the Municipal Stadium of Loulé, Portugal, this extraordinary opportunity arose to carry out a speculative investigation into the "logic of limits" in the transformation of the contemporary landscape. The motivations of the client - the Municipality of Loulé - which triggered this public competition, must be underlined for the singularity of an order that, in the National and European context, presupposed the idea of "designing for openness" between a Municipal Stadium and the city's public space. The cultural context in which this competition was launched also shows a clear paradigm shift in the design of the city, since it shows a clear concern with healthier life models, where the will to "abandon the automobile" repositions the role of motorization as an agent of urbanization in the second half of the XX century, in view of the growing role of the "multimodal citizen" of the 21st century. However, the scale of human action and the speed of the world of technology in which we live today, unleash unparalleled challenges in the transformation of the landscape, in the form of problems - here referred to as *in visu*-shift - that go beyond the regional and local dynamics of our cities.

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1. Introduction

The project for the surrounding area of the Municipal Stadium of Loulé (M.S.L.) in Portugal began with the desire of the Municipality of Loulé to promote and requalify the city's public facilities and their surroundings. In this context, the Municipality of Loulé launched the initiative to requalify the sports areas of the city, by increasing its relationship with their surroundings and providing for conditions which made formal and informal sports practice compatible (M.L., 2016). As part of this initiative, in 2016, a Landscape Architecture competition was launched by the Municipality for the Stadium and its surroundings with the following objectives: to enable a greater integration of this sporting area with the city, allowing for a higher permeability and visibility, for the city and of the city; and promote greater urban and social cohesion between the public spaces of social neighborhoods with the surrounding area and the rest of the resident population (M.L., 2016). Regarding this last objective, and having the M.S.L. as a case study, the city of Loulé is part of a group of ten European municipalities that are currently participating in the European project "Urbact Network: Vital Cities", whose main objective is the promotion of sports in urban areas, thus promoting social inclusion, healthy and active living.

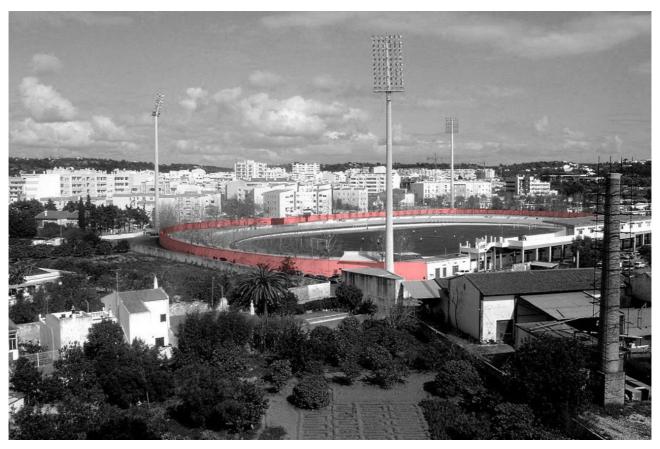


Figure 1: Municipal Stadium of Loulé and the existing wall, to be demolished. *Source: Copyright 2017 Eduardo Costa Pinto, Frederico Vital Soares*

To respond to the premises of this competition's specifications, the project proposal should involve altering the existing solid wall, which delimits the stadium in approximately 3/4 of its perimeter (Figure

1), to a "solution of fencing", which ensures the visual permeability of the surroundings to the sports equipment (M.L., 2016).

The desire to counter this programmatic logic, which would create a linear boundary between public space and private space, led us to investigate and reflect upon the condition of boundaries as an architectural fact in the landscape during the proposal's elaboration phases. In other words, how the construction of a limit may or may not define a "qualified place" in the urban territory. And in a deeper sense of the word "limit": in what ways can architecture and the transformation of the landscape engage us in the experience of the limit, in its physical and symbolic dimension, building places of mediation and exchange, but also of conflict, and therefore, of *poetic high voltage* (Taínha, 2006)?

2. LANDSCAPE, THE EXPERIENCE OF LIMITS

... Forever, has man had to establish limits to give meaning to the world (Berque, 2011).

The "notion of border" is as old as the first human communities. As such, it lives within us in the way we observe and continually transform the world around us. From the ancestral human need to draw a line between everything that was known and everything else; between the domestic and the wild, between artifact and nature, or between the earthly and the divine. To the setting of borders, for instance, in the Roman Empire, which often coincided with geographical features of the natural landscape, such as the great water courses (Rhine, Danube, Euphrates, etc.); a condition, for military purposes and fiscal control of the neighboring populations (the barbarians), which was also visible in the precarious and transitional way of life, and in the collective imagination itself, of the inhabitants of *limes*, whom the Romans called *liminatei*. To the establishment of the limits of modernity, which make for nowadays' headlines, such as the free movement of people, goods and services, taking form in walls or in the opening of borders, in fences or in the absence thereof, in presidential executive orders or acquis expressing or not expressing these wills.

And therefore, when we talk about landscape and its limits, we are talking about both physical and symbolic limits, made as much of the representative cultural imagination, individual and collective, as of processes and systemic relations that occur in a certain place (Pinto, 2016). In this line of thought, landscape could be defined as the border between *natura* and *cultura*, a border that defines a cultural, spatial and temporal territory where the human being continually transforms what exists in more or less a wild state, inside and outside of himself. But landscape is also the reading and interpretation we do, individually and collectively, in the attempt to grasp the world around us; and the resulting interaction between this reading and the cultural and biophysical processes which continually alter the earth's surface (Nunes, 2010). In fact, the construction of boundaries in the landscape with human intervention stems precisely from this reading, and from the need to create order and organization, to give order to disorder, to give order to entropy, and to the chaos around us. And it is also from this need that the search and the construction of patterns arise, within our brain, when we observe random events in the landscape; patterns we build, first and foremost, for survival. Like the cognitive phenomenon called apophenia, which explains our ancient ability to recognize, for example, even in the grasses of a savanna, the head of a camouflaged lion preparing to attack us. And so, when we speak of boundaries in the landscape, whether physical or virtual, spatial and temporal, if we think where this need to set limits originates, which basically delimit sets of patterns around us, it comes primarily from a primordial necessity of having to fight for survival and of being able to separate, as individuals and as a community: what is good and what is bad for us; what we can organize, what we cannot; or still, the phenomena we can explain and phenomena for which we have no explanation. And in our Western European Culture,

these limits may be visible in our collective imagination, for example, through "lines" separating good from evil, paradise from hell, "good from bad government," civilized from what is strange, terrestrial from extraterrestrial, human being from other animals, or, more recently, from all that we call machines. And in turn, these lines can be materialized in the landscape, *in situ*, through fences, walls, borders, fiber optic cables, but also, through biophysical limits, already more or less transformed by human action, as mountain ranges, coastlines, or the atmosphere itself.

But if landscape is also the reading and interpretation of a reality that surrounds us, in other words, the defined boundary between each of us and the world around us, and between us and the other, that space becomes more difficult to apprehend and to delimit, since it results in the form of movement between subjective world and objective world, two worlds that do not stop interacting. And this is also why this movement, which Augustin Berque called a *trajection* (Berque, 2011), presents itself in the form of paradox, when we try to build limits in the landscape, since it diverts us from the idea of landscape as an accomplished image, or a strictly imagined reality that can be framed to give way to a process, where the temporal dimension associated with the idea of limit is inevitably present. From this perspective, limit also refers to a being's maximum degree or last point of existence; the moment when a being's expansion reaches the final degree of its capacity for self-realisation (Serrão, 2016). But as a movement, the idea of time also cannot be understood here as a watertight entity, but rather as an "elastic transition" between different moments. With this said, if landscape is also this time-space movement between these two worlds, is it possible and, if so, in which way can the construction of limits *in situ* mediate this process?

If by limit we mean a line separating contiguous spaces, such as the fence of a property that separates public space from that which is private, the materialization in the landscape of limits of this nature always implies the creation of mutually exclusive spaces. However, in landscape, limits can also be understood as places of exchange between two or more realities and therefore may present a spatial and temporal thickness, made of several natures. As for example: saltmarsh, brackish wetlands (which result from the boundary condition between freshwater, upstream rivers, and seawater downstream); or the zone of mediation par excellence - between the life of the meadow and the forest - the edge; or the coastal dune systems, complex transitional structures between the sea and dry land. But also limits: the maritime fronts, the doors of the *hinternmer* of a city (Henriques, 2016), and its ports, for example, where raw materials, products and services are exchanged; or by complementarity with the "land behind", which have the doors of their *hinterland* in the squares and markets, and where everything arrives and leaves, beyond the frontier of the city territory; to the threshold of a door, as a place of transition between public and private, and which belongs to both.

And this idea of limit, not as a line of disjunctive function, but rather as a place of mediation and exchange, also explains the importance of spaces of this nature given the diversity, complexity and productivity they contain. And, consequently, the importance of each transformation in the landscape inscribes, *in situ* and *in visu* (Roger, 1997), the values that these places represent for our culture.

3. THE ALGARVE LANDSCAPE AND THE "GAME OF LIMITS" OF MODERNITY

In the so-called Anthropocene Age, it seems to be a commonplace, nowadays, that the idea of "unlimitation" has become synonymous with both the scale of human actions and urban spaces and contemporary metropolitan areas. In this sense, Muñoz (2009) speaks of a contemporary "a-territorial" urban space, without precise physical limits, and in the same line of thought, Mumford (1961) presents us with the "universal conurbation" as an apparent inevitability of the urban future. Also, in the last decades, several were the authors who addressed the theme of urban frontiers from different perspectives, namely: *Megalopolis* (Gottmann, 1964), *Miles City* (Sudjic, 1992), *Metapolis* (Ascher, 1995),

Generic City (Koolhaas, 1997), Città Difusa (Indovina, 2001), Sprawltown (Ingersoll, 2006), among others. However, in our opinion, this reality of the "unlimited city" hides a deeper problem, which manifests itself today in the transformation of the landscape to different scales. That is, the Western Modern Classic Paradigm (Berque, 2013), or the separation between the physical world (the natural phenomena) and the spiritual world (where the myths, the sphere of values, or the collective imagination of each community reside). And on the scale of our cities, its effects are now very visible, since never before, it seems, had there been so big and diffuse a gap between those two spheres, between the physical limits of the metropolis and the sphere of its symbolic limits.

At the beginning of the 21st century, we are far from the physical limits of the Roman city and its *pomerium*. And this contemporary "de-stratification" of the collective imagination vis-a-vis the biophysical context - what we might call *in visu shift* - happens and is visible, for example, either through the reach of our daily commuting movements, through the distance from the provenance of the products we consume, or still by the speed of communication with the other side of the world at the distance of a click. And so, in the contemporary context, the scale and complexity of our actions make it difficult to read and perceive the limits of these spaces. And with this, we lose *the sense of how a city is the result of a situation and how it is stuck to its surroundings* (Figure 2) *through strings, bundles of tubes, ditches and paths on which the streams of matter and energy sustaining the urban metabolism travel* (Henriques, 2016). And in this continuous movement between imagination and context, the same is true when we speak of "bundles" of culture, of values, of signs and meanings that construct the urban syntax.

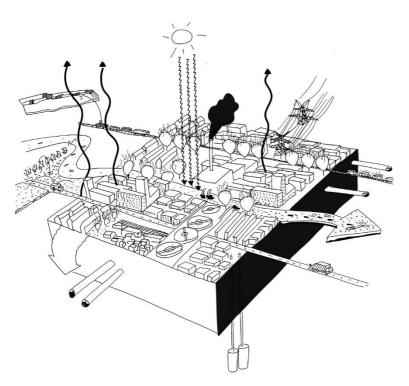


Figure 2: Transect: "Urban by nature". Source: IABR-2014: Urban by Nature

It is important, therefore, to reflect on the way in which science, technique and democratic individualism modernity continually removed the limits within which traditional media were reproduced (Berque, 2011), dismantling the landscape as if it were static and replaceable by a machine built by independent and self-sufficient sectors (Telles, 2013). And since this inheritance of the industrial paradigm versus the rural, of the mechanical vs the organic, allowed and continues to allow for the culture of rootlessness (Ferry, 1995) to be build, at different scales, in the Algarve landscape, in the form of multiple detachments in face of its cultural and biophysical context, and in the creation of disjunctive monofunctionalist spaces we can observe, for instance: in the models of urbanization consummated in seasonal metropolitanization (Martins, 2014) and visible throughout the region; or through the insistence on extensive monocultures, such as the extensive areas of eucalyptus plantations on the

Coastal and Eastern Algarve (Magalhães, 2016); - or still for the construction of built areas in places with no ecological aptitude for building (Magalhães, 2016), with special emphasis on the municipality of

Loulé. And in any of these examples, the idea of limit comes associated with an exclusive (or almost exclusive) function of everything that is external to it, and a resulting "logic of compensation", which seeks to minimize and mitigate all the negative externalities of a given transformation. As Martins (2014) explains, we are faced with the constitution of urban forms of a global nature that enunciate a process of territorial transformation, namely in the social, cultural and economic uses of a given space ... bringing together a particular morphology as a place of materialization of the contemporary capitalist economic system, of the commodification of space and urban culture as products ready to be consumed, constituting a new model of urban transformation, in which [and in the case of the Algarve this is very evident] the entertainment of tourists becomes central. And this is precisely the logic of references to the universal: on all planes, these references tear, as a matter of principle, the veil that limits the horizon of local media - its phenomenic bubble (Berque, 2011).

Considering the city as the emblematic setting for a sustainable or dystopian outcome for the planet (Bina, 2016), we are interested in looking particularly at the limits of our cities and the "prosaic landscape of home", which influence how we live the metropolis on a day-to-day basis and how we commit to those places. And in the last decades, and as an alternative to this model brought about by the world of technology, concepts of "global landscape" (Spirn, 1985; Telles, 2013; Corner, 2006; Batlle, 2011) point, in the future, to the need to think the city and the landscape in a systemic and complex way, irrespective of the scale of action to which this transformation operates. For Telles (2013), in the global landscape [there is no room] for concentrationary urbanism ... instead, we must promote the formulation of a global landscape that includes the different forms and functions of rural and urban landscapes. In the same line of thinking, Corner (2006) suggests that the thematics of organization, dynamic interaction, ecology, and technique point to a looser, emergent urbanism, more akin to the real complexity of cities and offering an alternative to the rigid mechanisms of centralist planning. In this sense, if the alternative to the future of the "regional city" also means the replacement of the machine-oriented metropolitan economy by one [economy] directed toward the goods and goals of life (Mumford, 1961): how can we propose a type of urbanism capable of responding to all these challenges? That is, capable of anticipating "change, openendedness and negotiation", responding to a more hybrid reality - "liquid modernity" - a condition that so well characterizes the uncertainty, fluidity and diversity we find in today's urban spaces?

4. THE VELOPARK OF LOULÉ: FROM MUNICIPAL STADIUM TO MUNICIPAL PARK

Science does not know limit as threshold, it does not have the experience of the doorway, it creates its own limitations, which leave nothing out (leaving everything else out).

(Molder, 2007)

The project to reclassify the area surrounding to the L.M.S. arises as a response to the program's intention to eliminate the current wall, which delimits the stadium grounds for approximately 370 meters of its perimeter. This wall has become obsolete as a limit, a generator of mutually exclusive spaces. In the current situation, everything that belongs to the "world" of the L.M.S., lies inside; outside of it, we have the public space of the city.

The existing wall (Figure 1) functions as a security and control element for accesses to the stadium and hold the land in specific situations. But the healthier models of urban life and the contemporary challenges inherent in the use of such a space by sportspeople and the population in general require other solutions, namely: - creating spaces for informal sports; - promoting and integrating modes of soft mobility, together with local and informal dynamics for the practice of running, walking and cycling; - creating rest and shadow areas to increase the bioclimatic comfort of the space; - increasing connections between the L.M.S. and surrounding areas; - re-ordering access to the L.M.S., the road structure and the

parking lot (outside the scope of this project).

In order to respond to these objectives, expressed in the competition specifications, we sought to reconcile and enhance the diversity of everyday uses with the high carrying capacity to which the place is subjected. In order to reach these objectives, a new "design for openness" was proposed, through the reconfiguration of this limit, using a strategy that uses traditional structuring elements of the Algarve landscape, materialized in three distinct construction processes: topographic modeling, walls and pergolas (Figure 3).



Figure 3: Aerial view. Source: Copyright 2017 Eduardo Costa Pinto, Frederico Vital Soares

A new boundary is created from a system of topographic modeling, in landfill and excavation, which allows for the entire perimeter to be enveloped, where the wall existed before, celebrating the contact with the city, configuring a park and creating a new "threshold" between these two worlds. With the formalization of this morphological solution, justified by the argument of constructing a signal of a very clear geometry, we intend to build a unitary system of reference, very coherent throughout the territory of the stadium. This system can also withstand and react to different formulations and program contexts over time.

This new topography enables the creation of an infrastructure and a program: such as a cyclable and "pedestrian ridge" - *bonus-track* - on the North "bench"; and a South-facing slope where built in benches naturally stand out, in lawn spaces, freeing up appearing rest areas (Figure 4).

And this topographical gesture also enables the creation of a place of dialogue between the municipality and its inhabitants, since the boundary between public space and the interior of the stadium is very flexibly adaptable to different uses, different timetables throughout the day, or to more or less intense levels of space programming (Figure 5). As if it were a moving dune, advancing and retreating according to the energies of the system.

The infrastructure quality of the topography proposed here is further revealed by its capacity, not only to host a program, but also to provide a response to a number of functions, thus organizing various systems: drainage, irrigation, lighting, security, mobility and access to the stadium.



Figure 4: View of the *bonus-track* and the North "bench". *Source: Copyright 2017 Eduardo Costa Pinto, Frederico Vital Soares*



Figure 5: Transect-infrastructure, with the topographic solution proposed for the North "bench". Source: Copyright 2017 Eduardo Costa Pinto, Frederico Vital Soares

To reuse parts of the existing wall, these become land support, and only the crown is destroyed in order to keep the wall invisible (Figure 6). New small walls, with sitting width, are erected, serving to increase the system of land containment structures necessary for the proposed spatial configuration.



Figure 6: Proposed terrain profile and existing wall (---) rehabilitated for land support. *Source: Copyright 2017 Eduardo Costa Pinto, Frederico Vital Soares*

The construction of this topography generates two contrasting conditions, since, along the *bonustrack*, one side of the slope is predominantly turned northward and the other southward. On one side, a surface of minimal reception of solar radiation at ground level, on the other side, another surface of maximum solar reception, which enhances two completely different conditions for vegetation development.

On the east side of the stadium, an oval square paved in natural stone is proposed to create an area of informal sports training/practice (Figure 7: Pr). Framing the square, an organized green space in

order to promote integration, leisure and inter-generational sport practice is developed. In the exterior South part of the stadium, a slightly concave meadow area was designed to receive the clean drainage water, lead here through a geo-drainage system. Besides its function, this wet meadow will be important as a framing tool and will also serve to host active recreation, such as frisbee or beach volleyball (Figure 7).



Figure 7: Masterplan. Source: Copyright 2017 Eduardo Costa Pinto, Frederico Vital Soares

The stadium becomes a rest and leisure equipment which, preserving the old sports program, proposes new forms of appropriation.

Once the Velopark structure and the proposal itself were consolidated, it seemed to make sense for us to evoke the history and the glory of cycling in Loulé. It occurred to us that, as there were several publications about cycling in Loulé, we could study them to "tell" the history of this sport, so important locally in the national panorama, accentuating the achievements of various personalities of the region. Once this information was filtered, the idea was to treat it graphically in order to inscribe it on the pavement of the area of intervention (Figure 8). A graphic composition, in synch with the landscape architecture project, also allowed to bring the symbolic world that history and ancestry bring about to the Velopark.



Figure 8: Top view from the *bonus-track* and the graphic composition on the pavement, with the following inscription: "I saw the fig tree and that was it, for me, the race was over - Tónio Caucau" (Gomes, 2012). *Source: Copyright 2017 Eduardo Costa Pinto, Frederico Vital Soares*

5. Conclusion

As we saw earlier, the association between landscape and limits, and the resulting reading, also result in different ways of transforming our landscape and the territories we inhabit, forms that also transform us in different ways.

Our interest in this subject is exactly this point, that is: how do the boundaries we idealize as communities, materialize in situ and transform the earth's surface and our lives? And how do these boundaries come back to us, transforming the sphere of our values, and draw the portrait of a community?

Architecture as experience of the limit (Tainha, 2006), in the case of the Velopark of Loulé, will only be complete with the beginning of the "second life" of this project, so to speak, and with construction itself, so that its inhabitants may appropriate this new "qualified place", and engage, or not, with it. Nonetheless, we believe that the implementation of the ideas presented here, which correspond to the Execution Project phase, already outline a clear framework of values that seeks to respond to the expectations of the community and the Municipality. These values demonstrate a clear paradigm shift regarding the way of life, which seems to gradually steer clear from the protagonism given to the automobile in the design of the city, to privilege the relation of its inhabitants with the public space and the practice of healthier lifestyles. We believe therefore, that the materialization of these ideas will generate a rapid appropriation of this place, that in the last years has been cut off from the life of the city. But we are also aware that any project of Landscape Architecture is always a collective construction and an "open-ended" process, which never gives us the illusion of being complete.

Paraphrasing the architect Manuel Taínha, the appropriation of the landscape requires action, active participation translated into acts, gestures, events, as witnessed by all the grammar of landscape architecture: forests, borders, meadows, paths, walls big and small, pergolas, banks, urban voids, etc. It is our task, then, as in the past, to understand the overlapping of all these limits that form intertwined multidimensional webs in the construction of a landscape. And the ability to observe and read this web of relationships will also result in an opportunity to act in a more informed, conscious and responsible way in the continuous design of the world, thus erasing and building new limits in the landscape.

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