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The ShoppingScapes and the infrastructural city

Abstract

Metropolitan landscapes gained, in the last few decades, new forms of materialization due to a double-sided factor: the full infra-structuration of the territory and the potential offered by the auto-mobilization of the populations. This change of paradigm turned possible for commercial enterprises to discard the functional and scale mixture found in the traditional urban centers and to prefer creating their own, fully accessible, new peripheral centralities. Currently, cities have to be understood not as central places by themselves, but as nodes in an extensive web of interactions that are shaping how we experience the urban daily life at the relational scale.

Recently the commercial market seems to have reached stagnation, which is forcing investors to rethink their competitive strategies and to find new business models, from where the e-commerce is arising as a future trend. Can ShoppingScapes, as we know them, be in danger of disappearing?

Keywords: Commercial spaces, territorial city, infrastructures, network urbanism, private car

1 Changing times

This paper is registered under *ShoppingScapes*'s sub-theme "territory and landscape", and consists of the presentation of some of the author's reflections about the correlation between the contemporary metamorphosis of the urban tissues and the development of new patterns of urban living in occidental society. These reflections came to light as a part of the author's ongoing research process for her doctoral thesis in architecture and urban planning, which is seeking to evince the role of infrastructures as engines of urban reorganization and territorial development in the peripheral areas of the Portuguese medium-sized cities.

In fact, these days it is undeniable that the urban layout is generically very different from what it was twenty years ago, as it has been under some major transformations, along with modifications in society itself. For example, the city where I grew up, Coimbra, is a shocking example of these radical transformations: the vital and exuberant urban buzz I was accustomed to in my childhood wanders has morphed into a languish quietness I mirthlessly witness nowadays (Fig. 1).



FIG.1 Praça 8 de Maio Coimbra. Coimbra's downtown was, until a few years ago, the city's commercial center par excellence. Nowadays, downtown is visited mainly as part of daily commute routines, or by touristic reasons. Source: <http://sonsoflyon.blogspot.pt/2009/07/coimbra-anos-70.html> and <https://maps.google.pt/>

Erstwhile, and until quite recently, a city's downtown functioned as a gathering area for a wide range of commercial activities, public services and enterprises, which had their stores, front offices and headquarters based there, and for the heterogeneous mass of people that flowed through, whether on purpose (to shop, to use the services, or to work in one of the offices), and in the meantime, to profit from the

presence of mixed activities in a single place, or as a hasty part of a daily commute routine.

The scenario of the dynamism of the Coimbra's downtown activities now exists only in my memories, as everyone seems to have found better places to go to: the enterprises and the commercial activities moved away, causing the abandonment of many of the buildings which rapidly become degraded; while the public services that remained aren't enough to maintain the old ebullience and aren't successfully creating the effect of attractiveness for complementary activities, fact that is further emptying the streets and decreasing both the real and the perceived safety (Fig. 2).



FIG.2 Video surveillance camera at Rua Olímpio Nicolau Rio Fernandes, Coimbra. Some parts of the city center are being monitored since 2010.

Source: http://sicnoticias.sapo.pt/incoming/2012/01/11/videovigilancia_baixa_coimbra_lusa.jpg/ALTERNAT
ES/w960/videovigilancia_baixa_coimbra_lusa.jpg

The bizarre thing is that Coimbra is still district's capital and its downtown is still the center of the urban perimeter, so one wonders about what happened that resulted in a dramatically change of the old, well known, paradigm of urban agglomeration.

2 Why commercial spaces left the city center

In order to answer this question, first we have to understand how and why the city's traditional organization has changed. To exemplify a city's downtown arrangement, one can observe what Neal (2013: 90) calls a *network structure*: it's *inter-organizational* (every organization depends not only on those with which they interact directly, but also on the whole system of organizations); it's *market oriented*

(buying and selling products or services is generally the main goal of the interactions); it is *hierarchical* (the interactions follow a predefined pattern, usually on a vertical rank of status); and it is also *embedded* (every organization is constrained in its actions by the expectations of the other organizations in the network). Notably, none of these concepts rely on a city's political boundaries, nor on population size, or even on the density of use of the space. Instead, they concentrate on the patterns of the relationships between organizations - they focus on the density of the interactions and see them as a network of connections.

The problem is that both the political power and society itself recognize the city as an independent and centralized entity, which has well-defined and apprehensible physical boundaries according to the tradition of the *good* mono-centric model of human agglomeration, while, in reality, the organizations that compose it have reframed the concept of centrality and have multiplied the ways to be central. This mismatch between expectations and reality is the key reason behind society's misunderstanding of the changes to the urban paradigm and is the reason why this reality remains understudied.

In fact, the consequence of this reframing is that the urban shapes traditionally associated with the central places are not anymore the only ones that can represent them; instead, centrality now depends on the levels of proficiency and cooperation within a network and the truth is that nowadays the canonic center of a city rarely is its most efficient place. What is physically being produced is a direct result of the independent search for that efficiency, which ends with the fragmentation and multiplication of the spatial forms of the city's layouts, and with the polarization of the urban territory.

This means that, if in the old model of the mono-centric city, downtown is the most efficient place for commerce, culture, education, industry, services and corporations alike, in a polarized (or polycentric) city, the picture becomes more complicated: each activity displace itself in favor of locations that can offer more valued features and respond better to the activity's particular needs. Industrial enterprises for example, depend on fast access to the expressways and highways and on the constant circulation of raw materials and finished products, while commercial and health activities prefer the easy access for a large amount of people, and the availability of big, free areas to convert into parking. On the other side, many big corporations tend to locate their headquarters in those peripheral sites because they value the lower prices of the allotments, while still maintaining front-offices in downtown areas for the sake of proximity to their clients.

What is behind this transformation is the advanced form of capitalism that dominates the contemporary developed world which, associated with the globalization of the economy, gives rise to the *Generic City*: [t]he great originality of the Generic City is simply to abandon what doesn't work – what has outlived its use" (Koolhaas, 1995: 1252). The financial interests of the organizations and the power of consumerism of the society are dominating urban landscapes, and the downtown areas of our cities aren't corresponding to the speed of times – they are becoming inadequate and out of fashion.

3 From the concentration to the extended use of the territory – new patterns of living

In fact, we are witnessing a major step change in the way our cities work at the territorial scale. In the case of commercial activities, the abandonment process of the downtown started with the realization that the canonic city center wasn't anymore the most accessible place for shoppers: that people were having major problems to get downtown, to move around and to park their cars (Fig. 3). On top of this, a new shopping behavior became more prominent as consumers now prefer the convenience of having a variety of choices in one single place over the necessity to wander throughout several streets in order to reach a particular store, as is the case of downtown. For these reasons, commerce found more beneficial to move out to the peripheral locations, cluster into single shopping and leisure oriented complexes, and definitively leave the city center.



FIG.3 Rua das Flores, Porto. This is one of many possible examples of the inadequacy of the canonical city center to the contemporary needs. Source: <https://maps.google.pt/>

Even though the contemporary urban system seems to lack the density, the coherent urban fabric, the distinguishable boundaries and the conventional forms and uses of urban public spaces which we were accustomed to see in the *canonical city*, the fact is that in this case the velocity and the autonomy of the displacements are more relevant than the physical proximity and the functional mix (Ascher, 2010: 124). Nevertheless, there are three structural characteristics of central places which one can find on both models, which proves that both are valid realities: maximum accessibility, directionality and symbolic mark. Maximum accessibility defines the contemporary attitude of convenience of the displacements within the urban territory; directionality is the measure of the exceptionality of the functions and their consequent power of polarization; the symbolic mark is what gives a place its notoriety, usually by publicizing an idea or ideal.

It is understandable why the full infra-structuration of the territory - not only in terms of the roadways, but also of the electric and water supply, the sewage, the telephone cables and even the high speed internet, in short, that "huge proliferation of the paraphernalia of connection" (Koolhaas, 1995, 1254) that we all know - have such a great impact on the settlement patterns of the commercial clusters, as they provide the baseline for the social and the economic organization of the contemporary urban living.

As always, the need for communication emerges as the *strong force* that holds the system together and influences its dynamics and patterns. Indeed, the urban growth has always been correlated with the development of the transportation facilities, and historically one can notice that the city has adapted its working model to the dominant conveyance at each moment (Tarduchy, Grandal, Fuente, 2011: 229): if formerly cities grew up around the rail transportation systems, developing centralities within walking distance of train stations and using the train lines as backbones of their expansion, the contemporary cities are using the rhizome of the roadway infrastructures as the basic element for their urbanization.

In Portugal, the trigger of this process was the implementation of the 1985` Plano Rodoviário Nacional (National Roadway Plan) (Fig. 4), which, with the help of the European Economic Community`s funds, motion the construction and development of a network of fundamental and complementary national roadways. This network helped to maximize the potential urbanity of the territory and to structure the metropolitan shapes. The urbanization process continued, but under new forms: the internal growth of the agglomerations (densification) was replaced by their expansion, through the absorption, on their daily functioning, of new territories (urban fringes, areas *in-between* cities, towns and villages). The result was the

blurring and vanishing of the boundaries – of the physical and social differences between the city and the country (Ascher, 2010: 63), while places themselves became a product of the network effect – “configuration generates attraction”, Hillier (2002: 154) would say – rather than simply a location on a cartographic surface.



FIG.4 1985 Portuguese National Roadway Plan. Source: Pacheco (2001)

It is also assumed that the independent, auto-mobilized access is now the norm. Contrary to what happened when the city, as an entity, held the monopoly of the necessary (public) infrastructures and equipment for human displacement, the crescent self-motorization of the urban population ended up promoting the fragmentation of the importance of the physical proximity, and developing new ways of traveling throughout the territory. Accessibility can no longer be simply measured as the physical distance from home to downtown, but must include several destinations, purposes and geographies. The new pattern of displacement must be understood under the light of the concept of *relational proximity* and be measured in *time travel* among the different parts of the urban territory.

This concept of *relational proximity* is rooted on the dilution of the importance of the crossing effect in favor of the *tunnel effect* (Ascher, 1995: 36) between sites, and results in a reduction of the people's comprehension of the urban space as a whole

and on the limitation of their *mental maps* to the individual journeys they take inside the urban network (Grande, 2002: 172). In fact, because people can now develop different activities at different points of the territory on a daily basis, each individual sees the city in a slightly different way, according to his or hers private cartography - the network of the specific paths of their interest (Neal, 2013: 74) - while the rest of the city remains more or less anonymous, much like a void in their map of displacement and knowledge.

4 Characteristics of the roadway infrastructural networks

It is clear that contemporary cities are developing new centers by taking advantage of the roadway infrastructures. These new polarities are likely located along portions of the main roads, ring roads and expressways (and often next to their articulation nodes with the highways) and have become the brand new, cool and fashionable side of the city (Barnett, 1996: 103).

Roadway networks, more than any other kind of urban infrastructure, are currently shaping how we experience daily life in the city: they define the boundaries of neighborhoods and districts helping us know where we are, and channel our movements towards some places and away from others, making some parts of the city bustling centers of activity and other parts quiet and peaceful (Neal, 2013: 70). In fact, cities are changing from being central places to being nodes in an extensive web of interaction, supported, and in a sense generated, by fast transportation and real-time communication networks. This way, urban polarizations are entirely by-products of the roadway infrastructural networks (Read, Rooij, 2008: 285). One could state that the old canonic city was more territorialized and had more roots, while the contemporary city is becoming increasingly reticulated and de-territorialized. The fact is that nowadays the reality involves the permanent intersection between the two, and it isn't possible to separate the territory from the network besides analytically: network is simultaneously an element of territorial development and a disrupter of its political and administrative frontiers, in a continuous process of remaking and re-territorializing the urban space.

Regardless much of the urban space is zoned by the *Planos Directores Municipais* (Municipal Master Plans) as equipment; the trend is to restrict them to the vicinity of the roadway infrastructures in order to make the space worthwhile for investors. The result is that commercial spaces are now rarely available at any other location, and are rarely complemented by other activities the way they were found in the old city

centers (Barnett, 1996: 27). Plus, despite the fact that the roadway networks allow for the effective link between distant points on the territory, they usually do not create a pattern of compact use of it, or even a continuous frontline along the roadway - Domingue's *Rua da Estrada* (2009) describes a rather particular reality. The equipment (not only the shopping centers, but also industry and enterprises, as well as other services such as health, cultural and educational organizations) prefer to cluster near the connection nodes between roadways of different levels, never filling the whole space and leaving many interstices (*in between* spaces) behind, to be used by other forms of territorial occupation, and helping their own isolation. In reality, they are creating specialized, mono-functional polarities, which generate cartographies of direct relations between objects with reduced complexity and hybridization and high segregation and thematization (Muñoz, 2010: 67), while repudiating their direct surroundings.

This happens because cities are structured according to the *physics of fluids* (Ascher, 2010: 162): starting on the major axis that assure high debits of communication and mobility of people, information, goods and energy, and following with the secondary and tertiary branches that distribute them to their final destination, the new patches emerge around the high choice routes, which progressively become the new spaces for *central condition* (in a new, radically different, signification from what was known before).

Theoretically, bigger distances imply higher costs and more travelling time, however there are extremely remote places that turn out to be very accessible - the accessibility of a place depends on many factors: adequate location in relation to roadway networks, variety of ways to get there, infrastructures quality or traffic intensity, among others (Tarduchy, Grandal, Fuente, 2011: 268). Nowadays, our major highway systems are conceived, in the interests of speed, as linear organizations; that is to say, as arteries. In fact, diffusion and polarization are two sides of the reality of the contemporary city (Mumford, 1964: 246): the first demands a closely articulated network of roads, ranging from a footpath to a six-lane expressway and to a transcontinental railroad system, the second demands a closely articulated network of electric and telecommunication cables, water and sewage supply and drainage and wireless internet. The conjugation of both creates a city.

In fact, contemporary urban thinking uses a combination of network and Christaller's central place ideas (Read, Rooij, 2008: 286) to make sense out of the polarized cityscape. If in the old days the accessibility to the city's resources depended on their spatial concentration, nowadays the most important is the celerity to get to them. Of course the *territorial city* is served by the same classical public transportation systems

of the canonic city, but as the urban territory is continuously expanding, it becomes more difficult to properly cover the entire territory with public transportation, and in many cases, when it is possible, the affluence and celerity of the transportation isn't good enough to become an option. Consequentially, it is very difficult not to be dependent on the private automobile, and people who don't own a car are increasingly limited on their perambulations. Contrary to the public transports, private car provides speed, freedom, convenience and comfort, factors that prevail as important advantages among the urban citizens, making it the standard from which the city is planned and organized (Ascher, 2010: 163).

5 Characteristics of the ShoppingScapes

From the part of the commercial organizations, the existence of a network of infrastructures is a seductive factor for them to seek a location outside the consolidated urban perimeter. Under the influence area of the roadways, these organizations can take advantage of the high accessibility, the access to the technological and telecommunication infrastructures, and the connection with equipment and services of public interest. They are usually located in the vicinity of important population concentrations, at the big communication nodes, which assures them optimal accessibility conditions, both for the local and regional markets (materialized by the easy access for private vehicles coming from both the main city and the surrounding agglomerations), and for the national and international markets (materialized by the easy access for corporate heavy vehicles that come to discharge their products).

In this case, there are two different models that commercial equipment may adopt: if their activity is related with retail or hard discount business, they usually choose to aggregate themselves in open-air parks (composed by mixed used containers that function as isolated and mono-programmatic enclaves), where they can profit from the synergy with other organizations and from the corporate image and common services (Fig. 5); but if their activity is related with shopping centers promotion, they choose the single building model, segregating themselves from their natural and built surroundings and developing a nearly *autistic* character (Fig. 6).



FIG.5 Albufeira's retail park, example of a commercial open-air enclave. Source: <https://maps.google.pt/>

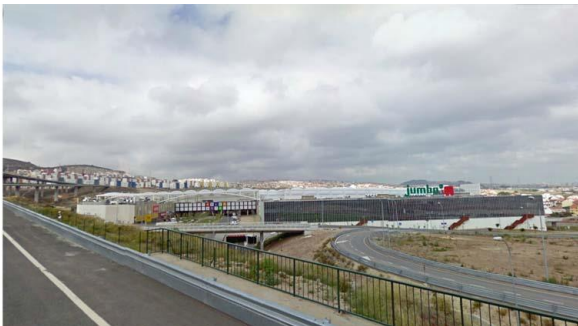
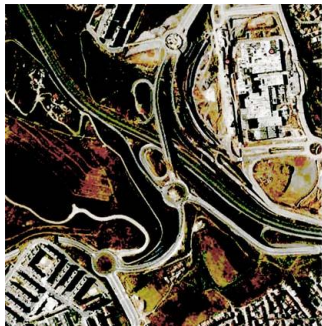


FIG.6 Dolce Vita Tejo, example of a single building commercial enclave. Source: <https://maps.google.pt/>



FIG.7 Loures Shopping, a linear background. Source: <https://maps.google.pt/>

Commercial equipment may not pay much attention to their natural and built surroundings, but, on the other hand, the relation that they establish with the roadway is carefully calculated. In fact, visibility at the roadway edges is an important

commercial resource, as the intensity of the traffic is synonym of potential influx of clients. In this case, they may opt to show themselves as:

- A *linear background*, which is a continuous façade along the road resulting from a sequence of aligned buildings (Fig. 7);
- A *visual emergence*, which is a building that, due to its shape or particular elements, is easily identifiable on the landscape, as the Venturi's *duck* (2000: 117), (Fig. 8);



FIG.8 Allegro Alfragide, a visual emergence. Source: <https://maps.google.pt/>

- A *volume assemblage*, which is a composition of buildings that form a cluster, normally with shared characteristics, such as architectonic language, scale and density of the set (Fig. 9).

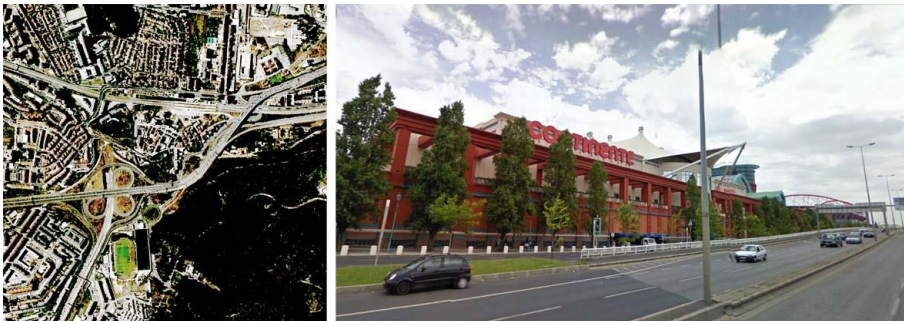


FIG.9 Centro Colombo shopping center, a volume assemblage. Source: <https://maps.google.pt/>

Any of these types of buildings (Moreira, 2012) can be assisted by visual references, which are stand out advertising elements designed to be visible from the road, like Venturi's *decorated shed* (2000: 117). Their purpose may be to draw the attention for a certain nearby shopping center, clarify directions to get there, or to advertise for brands or products that can be found in the shopping center (Fig. 10).



FIG.10 Examples of visual references: drawing attention at Parque Mondego Retail Park; clarifying directions to reach a supermarket at Penafiel; advertising for chain stores at Sintra Retail Park. Source: <https://maps.google.pt/>

Notoriously ShoppingScapes have a vital need to draw the attention of an appreciable amount of people and often fight amongst themselves for affirmation. Even if two shopping centers are localized at close distance, none of them will favor the passage between them: walking from place to place is nearly impossible, and the relationship of one building to the next will be purely a product of the circumstance (Barnett, 1996: 42).

6 Growth and stagnation of the urban territory

From the territorial point of view, since the 1970s that the development of the Portuguese country is being based on the concentration of investments and urban densification along the coastline, while increasingly neglecting its diffuse interior zones. This model of development is related with the establishment of the welfare state after the Carnation Revolution on the 25th of April 1974, and with the enhancement of the local power, now assigned to have a direct involvement in the planning and production of the developable land. The establishment of this model promoted several processes of public and private investment of infrastructural and real-estate characters, which ended up extending the urban tissues far beyond their traditional centers (Serôdio, in Domingues, 2006: 12). Another major shift occurred in the 1990s, already after the consolidation of the roadway network set by the 1985` *Plano Rodoviário Nacional*, with the explosion of the motorization rate of the population, that is now more independent and mobile in its ways of inhabiting the city. This fact definitively transferred the ancestral role of the central public spaces as

the places for exchanges and travelers' meeting to the mass circulation spaces and to the fashionable shopping centers.

Over the 1990 and 2000 decades, the globalization of the economy transformed the world into an intense network of communications and transactions of people, information, goods and energy. In this globalized world, the state power was definitively surpassed by private initiative, more flexible and segmented (Grande, 2002: 164-165). Indeed, over this period, city councils viewed private initiative, and particularly investments in shopping areas, as an opportunity to develop and infrastructure their territories and generate new urban spaces without having to directly invest themselves. However, despite having a non-negligible capacity of investment, the private actors also have their own logics, dedicated to the goal of making profit by attracting the population to their commercial spaces, and not especially by creating new interesting public urban spaces. As a consequence of this, by this time urban and architectonic structures are on permanent evolution, as each initiative creates new supporting infrastructures made on the best interest of their commercial spaces, and not necessarily on the best interest of the citizens.

While approaching to the second decade of the XXI century, the commercial market seems to have reached stagnation: investors have been noticing a retreat on the population's consumption (certainly assisted by the global crisis) and are having a hard time searching for interesting, less explored, new markets. Moreover they start to notice a change on the population's shopping behavior: the accessibility and freedom aren't already enough (Ascher, 2010: 119), and consumers are starting to pay more attention to alternative ways of shopping, namely the e-commerce, which provide 24 hour open stores in any device connected to the internet, worldwide. This is forcing investors to rethink their competitive strategies and to find new business models.

With this scenario in mind one should consider what is the course that the ShoppingScapes are going to follow in the near future: Will they survive the economic crises and re-flourish in their role of backbones of the community's flows? Or will they collapse under the qualities of the e-commerce? Can the ShoppingScapes, as we know them, be in danger of disappearing?

7 The future of ShoppingScapes

Throughout this paper we stressed the fact that developing connection infrastructures is an effective way to improve relations between different parts of the

city. In fact, the infrastructuration of the peripheral territories to the city nucleus can provide them with the conditions of urbanity that they wouldn't be capable of creating by themselves, bringing them closer to the city and transforming them into active urban elements. In fact, in order to achieve the city's full potential, the accessibility of the population to all the new urban resources is mandatory, which has been achieved mainly due to the crescent auto-mobilization of the population.

Of course, this *territorial city* we live in today is very different from the ancient model of the mono-centric and dense city, but one should not forget that cities are living palimpsests, and that they have the ability to integrate and overlap the different layers of their history (Ascher, 2010: 30) in their present reality. Furthermore, the cleavage between center and periphery is far from being a peculiarity of the (so called) *deregulated* contemporary city: it has always been present in those moments of adding new constructions and new parts to the initial city (Grande, 2002: 23), and have always been successfully surpassed.

That's why it's necessary to end the nostalgic representation which considers that all urban manifestation must be dense and continuous. Even though it is true that density and spatial continuity have their interest (and have advantages from the ecological point of view), the truth is that the contemporary way of living, based on the speed and ease of individual displacements, generates and potentiates other urban territorialization that must be taken seriously. The extended, porous and discontinuous tissues are active parts of the XXI century city (Ascher, 2010: 107), and makes no sense to continue to debate the mosaic of questions raised by their existence, without considering the structures that support them and the populations' desires.

If we manage to conduct the study of contemporary urban morphology to focus on the new spaces created by the affirmation of the infrastructuration of the territory, the end of the old dichotomy between city and countryside may finally see its end. In its place, the use of the term *network* should be increasingly used, in order to create an understanding of the articulation between the different territorialities and their internal structuration which will benefit us all.

Undoubtedly one can say that nowadays the infrastructural networks dominate the city: these networks are not only empowering certain territories and disrupting the political and administrative frontiers, but are also virtualizing many of the communications, and especially the commercial ones. It is a trend that started with on-line professional enterprises like Amazon or Asos; that have gained an all new expression with the entry of the individual, small-scale businesses, announced on

specialized web-pages such as E-bay and Etsy, or on personal Facebook pages; and that is becoming the norm also for many chain stores, such as Fnac or the Inditex group, hoping to cope with the decrease of profits on the physical stores and to step into the true convenience of shopping virtually anywhere, anytime. This e-commerce trend will likely continue in the future, reason why it is important to include it in a broader discussion about the new hybrid *network-related* concepts that are likely to better represent the contemporary and future ways of living.

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