

UDC 711

Thereza Carvalho

PhD, Associate Prof., School of Architecture and Urbanism,
Fluminense Federal University, Brazil, Rio de Janeiro, Niteroi
e-mail: thereza.urbandesign@gmail.com, therezacarvalho@id.uff.br

ACTIVE BORDERS, POLYCENTRIC CITIES, MISCELLANEOUS MAKERS

Abstract: This article presents the results of research conducted on selected emerging polycentric spatial structuring processes, in Rio de Janeiro, Brazil, based on changes of land use and users observed on the border zones of selected centralities. Borders have been conventionally regarded passive frontiers between different areas, or, as 'urban frames' to a main attraction that defined a centrality. The research revealed different urban roles that inner border zones performed, when and where informal urban change processes were accepted. From the inherited notion of fringe belt, the study focuses on how inner borders have multiplied and were reinvented to serve the purposes of city-making and support the livelihood of a variety of miscellaneous makers. A brief revision of the concepts of urban fringe belts, evolutionary perspective, multicultural space in contemporary cities and moving relational spaces are presented. The methodological procedure adopted addresses the issue of cumulative temporal aggregation of uses, users and meanings, changing urban form bordering contemporary urban interventions. The active border idea was associated with singular attributes in one or more qualitative dimensions, visually perceived but not necessarily spatial, surrounding a given centrality, that aggregated cumulative multiple individual initiatives with collective repercussions. It usually contained routes of access which margins have also benefitted from the same attractiveness. This paper argues that permission to new usages was the major asset. Active permissive borders can help to enhance the attractiveness of the centrality it surrounds and, in some cases, overlap with neighbour boroughs borders, strengthening connections between different centralities and defining new networks.

Keywords: active borders, polycentric cities, urban morphology, multiple morphogenetic processes.

Introduction

"If boundaries are in focus at all, they are always flexible and in motion",
Martina Löw, 2016

Based on the inherited concept of fringe belt, as developed by Conzen, relating borders to different time periods, this study focuses on how borders were reinvented.

A brief revision of the concept is presented. It starts with the evolutive perspective adopted by Conzen, and the three categories he identifies, the inner, the middle and the outer belts, considering different time periods and length of duration. They signalled a process of change going on. The accelerating rhythm that distinguishes recent urban evolution, under pressure of larger scales of economic interest, shaping new large scaled spaces, has generated different spatial patterns, new borders and new road networks, often disconnected to older urban fabric. Polycentric cities, with polycentric social groups and their inherited practices of land use, with some genetic capital to lend them both character, are forced to adapt.

This paper deals with those 'adaptations'. It explores the question how multiple processes of appropriation of those new borders, regular and informal, respond to different purposes and

forces of attraction and repulsion. Fieldwork was conducted in 2016 and 2017, with assistance of postgraduate student Wandilson Almeida and undergraduate student Thiago Amorim. In order to attain it also aims to contribute to the discussion on how those new and old forms of appropriation occur in the small scaled borders of everyday routes and public spaces. Fran Tonkiss' perspective on informal and deregulated processes of urban change in city-making is examined in the light of both Doreen Massey and Martina Low definitions of space – as moving relational spaces (Massey, 2006) and space as atmosphere (Löw, 2016).

Context

Accelerated large scale urban transformation process observed in Rio de Janeiro, Brazil, has motivated this work. It was designed to serve larger economic scales of business with a corresponding larger scale of urban and land use change. It denies or reduces connections with older urban fabric, otherwise contiguous. It is also indifferent to older border zones. Their designers and decision makers are not interested in the past, they conceived a differently ordered future and whoever threatens this perspective will be treated as a menace.

The social, economic, cultural value of the organic is often denied, associated with 'spontaneous' informality, and thus, transgressions to be banned with no permission to change. Urban vitality sometimes survives in the older border, organically configured and active, that managed to escape market intervention.

This paper argues that in fringe belts, as *space of transition*, *permission* is one major attractive key factor for its occupation. It also proposes that, in those circumstances, active boundaries are major assets for urban vitality renewal. Existing concentrated wealth as well as concentrated inequalities will affect, though, their shapes, forms and contents.

Unlike established and regulated urban fabrics, the permissive nature of the fringe belt offers possible uses and occupation that are considered informal, which, in some cases, acquire an individuality that attracts, aggregates and stimulates the rapid consolidation of new urban fabrics. It also applies to the starting process of appropriation of new inner borders (or boundaries) recently introduced in the urban fabric that separate one large scale urban project from the pre-existing city – as in the downtown port area in Rio.

Although the infrastructure of those sites is still precarious, it is in most cases produced and installed 'informally', that is without the involvement of the public sector. The prevailing features are self-provision of housing and urban services, with an emerging centrality, vital for the new inhabitants, all together providing the basic conditions of spatial appropriation and livelihood for their miscellaneous makers. They result from the accumulation of spatial appropriations that, once aggregated, tend to consolidate, acquiring identity and value, for the makers and, in some cases, recognition from other social groups. New central areas have thus emerged, with various degrees of vitality, connected to pre-existing ones and a new fringe belt is formed further away, open to other possibilities of accumulation of individual appropriation with collective impacts. Self-regulation is negotiated as a local social agreement in the subsequent stages of consolidation.

This paper argues that boundaries turned active through the process described above, reduce social and economic inequalities and to acknowledge and support them in that role would be a matter of spatial justice.

Relevant literature

Jeremy Whitehand, in "Urban Morphology, Architectural Typology and cities in transition" (2001), indicated three trends in the Conzenian School of Urban Morphology. The first one, micro morphology, deals with spatial relationships between physical changes to ordinary housing, how the building of a house extension influences similar doings in the immediate neighbourhood. It relates the scale of those changes to the size of the plot and density of the housing development, and all those "changes are clustered over time and space according to various studies of spatial diffusion". Some studies associate the creation of fringe belts to slumps

in housebuilding and decrease in land value, defining the boundaries between different morphological regions. The second trend identified by Whitehand focuses on the relationship between morphological periods and typological processes. It highlights and explores the genetic approach in Conzen's evolutionary perspective.

Last but not least, the third trend studies the links between decision-taking and urban form and addresses how numerous separate decisions combine to create "regularities" or emerging spatial patterns in the urban fabric. Whitehand emphasizes that in Conzen's original work the people who created the townscape were rarely ever mentioned. He focused on the process and not the 'makers'.

Fran Tonkiss' (2013) approach to "City by design: the social life of urban form" illustrates the third trend pointed out by Whitehand. The author defines contemporary design "as a matter not only of iconic architecture, flagship projects or ambitious masterplans, but also of formal and informal practices that shape urban environments, produce and address urban problems, organize people as well as organize space" (p.1). She denounces how current processes of urbanization and practices of city-making "tend too often to intensify environmental problems and compound social and economic inequalities" (p.2). Defining urban form in a multidimensional way, where "material structures and physical spaces" interact with social, economic, legal and political modes of organization, she relies on the assumption that space is equally relational and moving, almost fluid as in Martina Löw's perspective where space is regarded as "atmosphere constituted by the subjective experience of material things". Also Doreen Massey (2006, p.29) proposes to acknowledge space as product of inter-relationships, to understand space as the sphere of possibilities of plural contemporary narratives (ours) where multiple historical perspectives coexist and to acknowledge space as unfinished, always in construction. As she emphasizes the living character of space and **the moving attribute of emerging spatial patterns, she highlights the social and economic practices that turn fringe belts into active boundaries and, in some cases, into linear centralities.**

The observed gap

What motivates, and who makes, under what conditions, fringe belts into active borders and, in some circumstances, into linear centralities? What forces are at play?

Tonkiss points out that the informality of the urban processes should not be seen "simply as an index of abandonment or disempowerment; not only because informal practices are a productive sphere of operations for the urban poor, but because elective informality is frequently an index of power and privilege for urban economic elites". **Presenting the subject of informality in this widened perspective Tonkiss reveals the close relationship between deregulatory processes, applied by the elites, when it suits them, and the informal practices of the poor, as their only 'option' of no choice.**

This paper understands that active fringe borders are not planned. Most times they are informally produced as result of multiple separate decisions made by different persons, often unknown to each other. Conzen highlighted that the evolutionary perspective cannot address only the outward expansion and neglect the rich variety of phenomena that happens inside.

Polycentric space structures, produced by aggregation of informally created local centralities that emerged and consolidated gradually, under different circumstances, are essential to livelihood. They generate their own multiple *shifting active boundaries* in the place of fringe belts often condemned as deviant transgressions to the established order.

How the paper proposes to contribute to the observed gap

The relative inertia of the physical structures that characterise a city is constantly overcome by the speed of change that distinguishes contemporary urban areas and society. Innovations occur more quickly, with greater intensity and impact in the city and these impacts have spatial consequences. They sometimes attract aggregate, sometimes expand and sometimes retract in

different rhythms of change, at different periods of time and with equally different shapes and urban forms.

This paper examines the boundaries turned active subsequent to multiple initiatives of appropriation, in different physical scales, accumulating in the same space and consolidated over different periods, undertaken by a variety of individual and collective decision makers.

The relations between urban form and decision making – focusing on the way in which many initiatives taken at different times but in the same space – combine to create recurring spatial patterns in the urban fabric. This consideration appears in the original formulations of the English School of morphology, particularly in the formation known as the fringe belt. Conzen understands the fringe belt as a ‘frame’ that spatially marks out one morphological region from another. As such, it connects the identities of different historical zones of the city through the visible separation of different morphological periods.

This research identified the fringe belt as a *space of transition* in which *permission* is the highly attractive key factor that attracts socio economic uses, reducing segregation. The ring of satellite-towns around the master-planned city of Brasilia illustrate the point.

Unlike established and regulated urban fabrics, the permissive nature of the fringe belt offered possible uses and occupation, considered informal. Its singularity gradually attracted, aggregates and stimulated the rapid consolidation of new urban fabrics. This applies not just to ‘favelas’ turned into boroughs but also to the significant transformations of state sponsored social housing developments constructed on the edges of the city. Devoid of almost everything, initially mono-functional, some of those housing estates have been transformed and absorbed by the city as neighbourhoods with their own central areas based on the accumulation of individual changes in space and time.

The study draws on Martina Löw’s approach to the subject to address multiple aspects of the active border concept. She highlights one special attribute which is that “boundaries are a special space case of space constitution in as much as they cannot be understood solely in terms of the arrangement of social goods ... they always involve the constitution of two spaces and several places...” (p.xviii). Those various places have, in some circumstances, acquired important social, economic, and cultural meanings, strengthening identities otherwise invisible.

Hypothesis, objectives and methodological procedure

The hypothesis is that shifting active boundaries are associated with multiple individual initiatives of space appropriation, city-making in different physical scales, accumulated in the same space and consolidated over different periods of time, with collective social, economic, cultural and spatial consequences.

Methodology: genetic dimensions and process of change in the borders of public spaces

“... space as a simultaneity of stories so far.” (Doreen Massey, 2009, p. 33)

This paper understands that Conzenian evolutionary approach supports the ‘genetic’ metaphor and the methodological assumptions built into the analytical procedure adopted. It emerges from studies done in Rio de Janeiro, of urban re-configuration of large-scale low-income housing projects and of squatter settlements, from 1970’s to 1990’s. Later and gradually, it developed into a research project geared to identify visually perceived interrelationships between public space and the public, applied to pre-existing urban fabrics subject to the impacts of large scale contemporary urban projects for multiple purposes. Successive fieldworks carried out during the last ten years (2007, 2009, 2010, 2011, 2012, 2013, 2014), focused on the visible traces of *individual cumulative space appropriations*. The analytical results showed how the forces of – *attraction* triggered by some visually perceived singularity, and forces of *aggregation* triggered by envisaged space fruition – are interwoven. In the cases studied, they have built urban

fabrics attracting other ‘space producers’ and enhanced *consolidation and positive identity building stages*. Apparently, the visually perceived spatial or non-spatial attractive singularities, in different dimensions, triggered the improvements identified in the studied urban fabrics. Those forces of configuration, and attributes in various qualitative dimensions, defined forms and functions of street level stores that bordered the squares and streets. Together, at the same time and space, and in sequence, the ripple effects of those perceived singularities showed signs of consolidation with prospects of permanence, and of building identity and appreciation of belonging. They have also helped defining different levels of centralities and enhanced vitality. Other public agents and the public sector have encouraged, permitted, condoned or rejected those ripple effects, according to different prevalent cultural models.

Encouraged or rejected the urban changes and changing forces reaffirm the affinity of the concept of vitality with the public space as sphere of multiple possibilities, of plurality, where distinct trajectories coexist in permanent interrelation.

Therefore, this paper understands that the active borders are neither a repository of different inherited identities, already incorporated and legitimised by the dominant narrative, nor a palimpsest of ordered layers. **It is rather the building site of old and new belongings, on the making.**

The perception of these multiple perspectives materialised in distinct spatial practices, in different times, based on different but interrelated dimensions, and scales, favours the recognition of distinct configurational processes. These multiple processes correspond to different views about beauty, pleasure and enjoyment that public spaces of various natures, with distinct qualities, under certain conditions, can offer.

The case study

The field work was carried out by my Master student, and supervisee, Wandilson G. Almeida Jr. The segment of the port area of Rio de Janeiro, analysed herewith, called Porto Maravilha, is undergoing an intense process of transformation currently the focus of attention, intentions and intervention by the Civic Authorities and the private sector. They are in different phases of development, some building sites contain pre-existing elements from different periods, with distinct uses and forms of occupation, a mix of contemporary and those remaining from other periods – forms and functions which coexist in the present¹.

The focus on the genetic capital of individual public spaces – and on the networks of relationships and connection established between them – seeks to identify traces and reflections of the constitutive spatial characteristics and their effects on vitality, use and the forms of occupation in an urban fabric produced by different agents at different periods.

The analytical perspective adopted considers the powers of **attraction, aggregation and consolidation** of urban and architectural interventions in the space. These interventions occur on different scales. The accumulation of **individual spatial appropriations on a micro-scale** often has collective aggregative repercussions, ‘ripple effects’, with a tendency towards consolidation on both the form of urban configuration known as organic and on the form of planned property developments². Acting together, they tend to **attract and aggregate** an accumulation of multiple uses and complementary activities associated with urban vitality in the time and spaces involved, as sources of activity that stimulate growth and reinforce the urban fabric. **Consolidation** of these

¹ The territory, particularly the space we inhabit, is the plane of confluence of natural and social processes of coexistence and configuration of the surroundings one lives in. Under certain conditions these processes appear as links in the same chain, through the convergence of discourse, events and powers that cannot be reduced to each other, but perceived as forming a network of multiple meanings. When those conditions coexist and persist, city, landscape and society come together to weave affective relationships, acquiring common meanings and tending to be consolidated with prestige and enhanced identity.

² In my pos-doctoral research (2008-9) I developed a ‘zooming in’ approach to study urban transformations in Lisbon along a six hundred years old street, axis. I found support on Bacon (1968), Whitehand about Conzen’ micro-scale urban morphology, (2001), on Caniggia (1976).

forms of occupation reinforces and enhances the **attractiveness** of those exceptional attributes or spaces, expanding their area of influence. The **consolidation** is gradual and cumulative and tends towards enhancement of the group and a strengthening of its identity. Under certain conditions a tendency towards perpetuation can often be seen; the generation of attraction leads to new investments which will in turn reinforce the individual features and their power of attraction, and so on, successively in different timescales expressed in the architectural and urban form.

Throughout the 20th century the central area undergoes a series of highly visible large-scale urban interventions. Major road infrastructure works are outlined in successive urban plans: Agache, Doxiadis, Pub-Rio and the 1992 Plano Diretor planning regulations. The regeneration project, 'Porto Maravilha' (2009), is currently in the construction phase.

Its 2015 version dismantles the elevated section of the Perimetral ring-road, but maintains the capacity of the road network by expanding the construction of roads and tunnels and installing a tram system. A new structure of land ownership and subdivisions along some stretches has been generated and allows considerable expansion of building patterns.

This expansion, however, does not seem to consider the criteria that have marked the configuration of the original fabric – streets for people, walkable roots in the shade, edged by buildings with balconies that allow users to look at the visual and functional diversity of the flow of people and trade of various different origins. This period of transition, when several large-scale interventions are taking place simultaneously at different points in the region, is a good time to focus the work on axes and routes. The process under way still allows identification of the configurations and uses of earlier urban fabrics and consideration of how these relate to the alterations resulting from the various projects in progress.

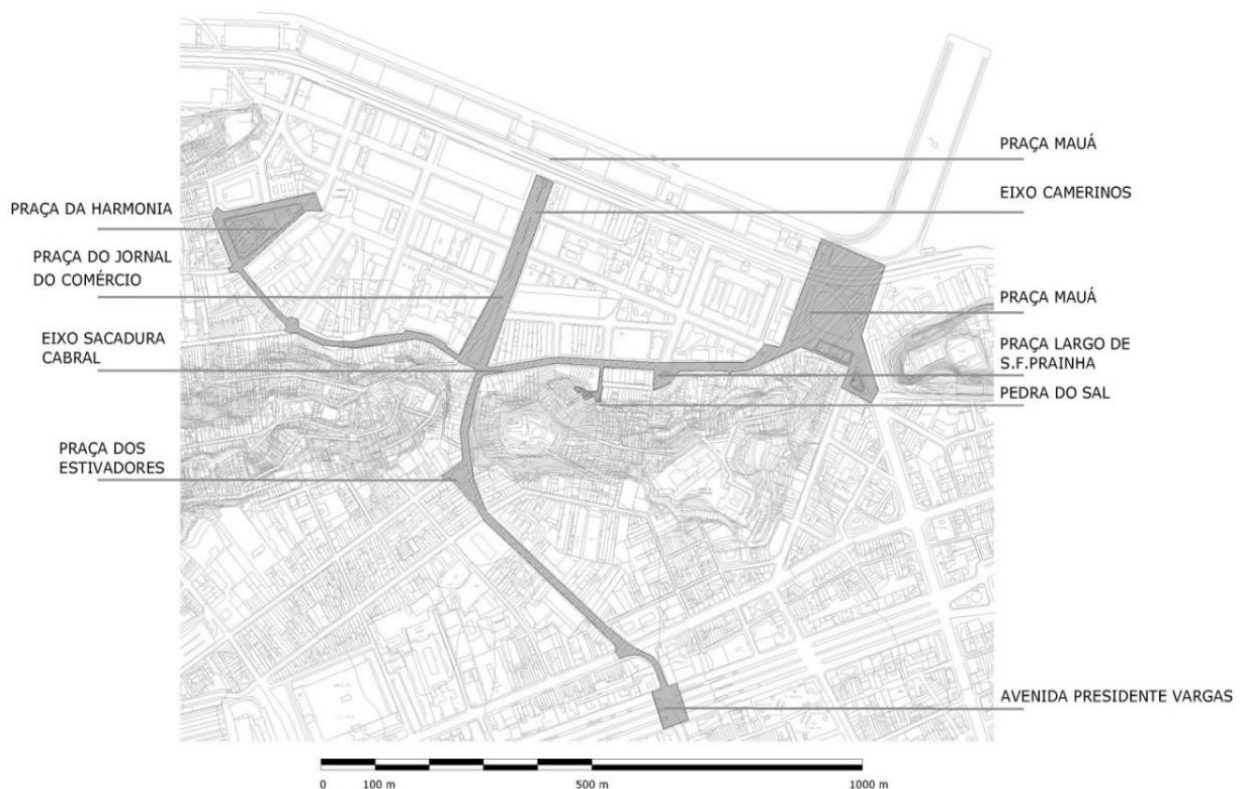


Figure 1. Location map of axes and public spaces analysed



Figure 2. Part of the map of the city of Rio de Janeiro in 1914, after major urban interventions by Mayor Pereira Passos, such as the Quayside and Avenida Rio Branco. Source: Biblioteca Nacional

A section of the Port Area in Rio de Janeiro

Definition of the area of study is focused on the public space, the borders shaped by multiple uses of neighbouring streets and the connection routes to other complementary public spaces. The choice of public spaces, with the multiple uses they attract and their interconnection network, took place through a series of preparatory recognition visits coinciding with the initial studies about the urban history of Rio de Janeiro's port region.

Two perpendicular axes were defined, the first named the Sacadura Cabral, running from Praça Mauá to Praça da Harmonia. The second is the Camerinos axis, which connects the quayside with Av. Presidente Vargas. These axes meet at the Praça do Jornal do Comércio, whose origins are the Valongo Quay and later the Imperatriz Quay. Definition of the axes and spaces for analysis enabled the establishment of three scales of work: 1:10,000, 1 : 5,000 and 1:1,000.

The 1:10,000 scale allows the observer to contextualise the axes within the fabric of the city. The 1:5,000 scale covers the demarcation of axis extremities and allows the observer to interrelate the spaces identified on the routes. Finally, the 1 : 1,000 scale breaks down the axes into small segments and offers a closer view for richer identification of the multiple uses provided by the public spaces. Definition of the axes, the categories of analysis and the scales of reading, together with the study of the urban records, provided the basis to explore the hypotheses of configurational forces at play in shaping the public spaces presented in the table below.

The photo illustrates a particular morphological configuration where Avenida Rio Branco meets Rua do Acre and Avenida Venezuela meets Rua Sacadura Cabral. In both cases the spatial convergence of streets originated in the earlier occupation of the region and the new grid conceived in the early 20th century. The architectural typology displays three different time frames, with the traditional occupation of houses on the edges of Morro da Conceição on one side of Rua Sacadura Cabral, the two-storey 19th century trade houses and the 50's and 60's buildings on the southern side of Praça Mauá.

SACADURA CABRAL AXIS: MAUÁ – HARMONIA		CONFIGURATION RATIONALE	HYOPOTHESES OF CONFIGURATION FORCES
	SACADURA CABRAL AXIS	Route between the sea and the hill, connecting the three beaches of the region (16 th and 17 th centuries)	The three beaches formed the city's secondary bays, facilitating port activity
	PRAÇA MAUÁ	Port activity develops on the old Prainha (17 th century)	Part of the city's secondary bays, facilitating port activity
	PEDRA DO SAL	Rocky seaside outcrop separating Prainha from Valongo (17 th and 18 th centuries)	The shortest route between Prainha and Valongo, and access to occupation of the Morro da Conceição.
	ADRO DE SÃO FRANCISCO	Shoreline promontory (17 th century)	Territorial demarcation of Morro da Conceição
	LARGO DE SÃO FRANCISCO	Shoreline sand area (17 th century)	Flat area in port activity region
	PRAÇA JOURNAL DO COMÉRCIO	Bay for port activity (17 th century)	Bay in secondary location and direct route to more downmarket areas of the city, favouring informal activities in the main port.
	PRAÇA DA HARMONIA	Seaside market in port activity area (19 th century)	Flat area in port activity region with access to the region's main road route.
CAMERINOS AXIS : QUAYSIDE – AV PRESIDENTE VARGAS	CAMERINOS AXIS	Connection route between the city's secondary bays and the heart of the town through a valley (18 th century)	The route is outside the city, beyond the walls and connects an alternative port with the heart of the town. It probably developed with slave trade and related activities in the main port at Praça XV.
	QUAYSIDE	Area suitable for expansion and the establishment of major warehousing and transport infrastructures (20 th century)	Landfill changing the original coastal line changing the Bay area into a more downmarket area of the city.
	PRAÇA DOS ESTIVADORES	Midway between the port and connection to the city (18 th Century)	Natural broadening of the valley route, suitable for stopping the mules and gradually aggregates another settlement
	JARDIM DO VALONGO	Edge of Morro da Conceição, near the Valongo route (19 th century)	Construction of a garden to erase traces of activities connected to the slave trade.
	LARGO DE SÃO DOMINGOS	Urban space around the church (17 th century)	Older square with trade uses around the Church. It was later completely altered, extremely reduced, with the opening of Avenida Presidente Vargas.

Figure 3. Synoptic table of urban configuration hypotheses



Figure 4. Photograph of where Rua Sacadura Cabral meets Avenida Venezuela.
A point of convergence of different morphological regions and time frames

The **attractive features** of the urban fabric of the past have **aggregated** different investments which have in turn **attracted new contributions** in the present. The original function of Rua Sacadura Cabral was to connect the various bays along the shoreline between two squares, the current Praça Mauá and the Praça da Harmonia. As the route consolidated, the edge facing the bay was occupied by wharfs which were later removed to make room for urban expansion provided by the landfill forming the Quayside. That is when Prainha bay is transformed into Praça Mauá, connecting Avenida Central with the Quayside, Rua Sacadura Cabral is singled out along the route and also receives investments at the Praça Municipal (now the Praça Jornal do Comércio) and the Praça da Harmonia.

Rua Sacadura Cabral retains the function of connecting Praça Mauá and Praça Harmonia, and its history illustrates the power of its heritage in **attracting** and **aggregating** investments such as the Hospital dos Servidores, the premises of the Companhia de Desenvolvimento do Porto Maravilha, the Museu de Arte do Rio, and a number of local bars (pubs), nightclubs, bistros and restaurants.

The analyses identifies, in a specific block, a few mono-function buildings that discourages other possible uses and users, with the exception of a tower block whose base has a series of shops facing the street. Buildings of the older fabric contain a diversity of ground-floor uses that feed the street's attraction as a pedestrian route. These are mixed-use buildings with a variety of trading activities, such as restaurants, snack-bars, hotels, bank and domestic appliance shops. The route itself contains complementary activities, such as newsstands, shoe repairers and street traders.

The active borders have moved into wider spaces according to changes in the rhythm and nature of expansion of the main centrality. They have also moved according to the work of time, here understood as the stage of consolidation of the main closer centrality to which the border related spatially. They have reinvented themselves, along everyday routes to work pools, tuning in with emergent attractive singularities.

As a space of transition one major attribute of the active border, more visible, though, in the small-scale space and time, was the powerful attractiveness of the delicate balance between permit and control that distinguishes it.

Conclusions

The new projects defined for the port area present no affinities with the pre-existing typologies. The large physical scale that distinguishes the new communal facilities, such as museums, aquarium and open public spaces such as the ‘promenade’ and the Praça Mauá itself, allied to the singular nature of the architectural forms of the Museu do Amanhã and the AquaRio are different from the morphology of the organically shaped surrounding landscape. It seems geared to meet a new social scale in terms of quantity and diversity. These are large spaces in the port area intended for larger holiday public, and also for the eyes of foreigners attracted by the world image of the “Wonderful city”, which some hope will attract and legitimise the “Wonderful Port”.

While some attention is being paid to the historical heritage, particularly in relation to the traces related to the slave period, the new permitted patterns announced by businesses on a guided visit during the fieldwork period point to significant changes in the planning parameters for the area, where property development appears to be the desired scenario for the future. The question arises, who is desiring it? New typologies of buildings and land division, recognised as prestigious by society, with the symbolic value once confirmed by market value, will certainly have an effect on the surroundings. If the so-called “neighbour effect” identified by Conzen is given free rein, it could put some pre-existing urban and architectural forms at risk, along with all their symbolic content and identity.

The simultaneity and rhythm of all these changes transform the relationships between society, territory and the civic authorities, replacing ancient certainties with uncertainty, insecurity and confusion. Some authors have attributed the growing trend *for self-preserving conservatism* to these uncertainties and insecurities.

This growing spiral of actions and reactions to the “closure of fields”, whether they are rural, as in the distant past, or urban like now, have not historically had a *happy ending*. Segregations, split the territory and penalised thousands of people in the past. In those days there was the ‘new world’ as a ‘retro-area’ for housing the surplus population- but now? Where are we going?

References

1. Bussiere, Simon (2015). Book review, ‘Cities by design: the social life of urban form’, *Urban Morphology*, 19, 107-108.
2. Conzen, M. R. (1960). *Alnwick, Northumberland: a study in town plan analysis*. London: George Philip.
3. Kostof, Spiro (1991). *The city shaped- urban patterns and meanings through history*. London: Thames and Hudson.
4. Löw, Martina (2016). *The Sociology of Space, Materiality, Social Structures and Action*. New York: Palgrave MacMillan.
5. MASSEY, D. (2009). *Pelo Espaço: uma nova política da espacialidade*. Rio de Janeiro: Bertrand Brasil.
6. PAVIANI, A. (1999). *Aldo et alli. Brasília – gestão urbana: conflitos e cidadania*. Brasília, Editora Universidade de Brasília.
7. CARVALHO SANTOS, T. C.; COELHO, C. D. O Capital Genético das Redes de Espaços Públicos: mutações e persistências. In: GAZZANEO, L. M.; AMORA, A. A. (orgs.). *Ordem, desordem, ordenamento – urbanismo e paisagem*. 1ª ed. Rio de Janeiro: Coleção PROARQ/UFRJ-FAU, 2009, v. 3, p. 284-303.
8. Tonkiss, Fran. (2013). *Cities by design: the social life of urban form*. Cambridge, UK: Polity Press.
9. Ünlü, Tolga (2009). ‘Thinking about urban fringe belts: a Mediterranean perspective’, *Urban Morphology* 17, 5-20.
10. Whitehand, Jeremy (2001). British urban morphology: the Conzenian tradition. *Urban Morphology*, 5(2): 103-109.
11. Whitehand, Jeremy (2007). Conzenian Urban Morphology and Urban Landscapes, *Proceedings 6th International Space Syntax Symposium*, Istanbul, 1-09.