Crossing the borderline takes you to heaven: working classes consumption tourism and frontier conurbations in South America

Andrea da Costa Braga

Universidade Federal do Rio Grande do Sul, Faculty of Architecture, PROPUR - Sarmento Leite, 320/5° - 90050-170 Porto Alegre - RS - Brasil Porto Alegre, Brazil e-mail: andreabraga23@gmail.com

Décio Rigatti

Universidade Federal do Rio Grande do Sul, Faculty of Architecture, PROPUR - Sarmento Leite, 320/5° - 90050-170 Porto Alegre - RS - Brasil Porto Alegre, Brazil e-mail: driga2000@yahoo.com.br

Abstract

The borderline between Brazil and Uruguay (South America) is punctuated by "twin cities" settlements established for surveillance since late 19th century. Insulated from the denser urban net spreading from Porto Alegre / BRAZIL and from Montevideo / URUGUAY, they became important commercial nodes.

Uruguay government created tax free zones in some of these towns from 1985 on, to strengthen the region economy. From 2005 on, Brazilian ever increasing economical stability and favorable exchange rates turned these borderline sleepy towns into overcrowded weekend bazaars.

The discussion focuses on the "borderline conurbations" urban structures in consolidating trends and patterns of regional working classes consumption tourism and its impacts on built heritage conservation, land use patterns and centralities. Spatial transformations promoted by the allocation of touristic and shopping infrastructure are analyzed using Space Syntax methodology to describe the importance of spatial structure for tourist's movement about the conurbations. (147 words)

Keywords: consumption tourism; tax free zones; urban structure; frontier conurbations; centrality.

Introduction

The borderline between Brazil and Uruguay has been settled through the 1851 and 1909 Treaties and extends for 1068.4 Km (http://www2.mre.gov.br/daa/uruguai.html), after almost two centuries (late 17th century to mid 19th century) of territorial disputations that started between Colonial powers and lasted through the rising of South American Modern Nations (Brazil, Uruguay and Argentina). The area, scarsely populated and mainly rural until today was of economical and strategic importance for the parties competing to achive its sovereignty. South American frontiers usually don't cope with cultural differences; they are the byproduct of struggles between armies and power groups to settle their hegemony towards the existent social net which was, somehow similar. Differences emerge from affiliations to leaderships and are reproduced according to their prevailing patterns.

The setting of actual borderlines and the establishment of surveillance / military settlements scattered along it, implied in a mirror-like choice of building spots: a village built in Brazilian territory causing the rise of a Uruguayan one opposite to it, and vice-versa, in order to restrain permeability and vulnerability on both territories. The consequence is an impressive symmetry on both National

Governments locational choices and the recurrence of twin-cities phenomena along the borderline's whole extension. There are six pairs of "twin cities along Brazil Uruguay borderline, two of which are "dry border" ones that constitute our studied cases. These locational choices were effective in producing commercial entrepots that facilitated the exchange between both countries that, due to insulation from Brazilian main ports were linked primarily to Montevideo (Figure 01).

Social and economic practices often disregarded political struggles between Nations, forming a "real" frontier territory which shrike and expanded according to economical and political advantages perceived by locals, establishing an authentic transnational "way of life" through commerce, seasonal work and social networks (BRAGA & RIGATTI, 2009).

The frontier social pattern of interaction is marked by a pretense invisibility or unawareness of the *stranger* (here mentioned as in HILLIER & HANSON, 1984) as a way of coexistence. Despite cherished statement of national identities and territories, everyday life functions on the assumption that *local* is everyone: Brazilians and Uruguayans, no matter on which side of the border they are moving about. *International* and *transnational* exchange in all levels is routine and Uruguayans and Brazilians play foreigners / strangers on their daily movements. Culture and social practices acquired mixed national standards, even if living together doesn't imply in a shared identity. (CHASTEEN, 2003).



Figure 1-Left to right: Brazil (IPEA); Borderline between Brazil and Uruguay (MRE); Main roads connecting Rio Grande do Sul / Brazil and Uruguay (source: IPEA)

We discuss the processes that turned two international conurbations located along the Brazil-Uruguay borderline into attractive destinations for "weekend tourists / shoppers" and evaluate the impact of touristic industry on urban planning policies in both countries. For that, we present the cities we used as study cases, outline the distinctions between the tourism fluxes toward them and the most outstanding transformations in their urban structure and land use patterns promoted by touristic industry using Space Syntax methods and tools.

Brazil-Uruguay frontier zone physical context and economy

The frontier zone between Brazil and Uruguay consists of low plains of fields called *pampas*. The bioma *pampa* covers 2% of Brazilian territory, exhisting only in Rio Grande do Sul territory (65% of its surface) and covers the whole Uruguay territory. The vegetation resembles an open *savanah* with forests along water courses. Inland, the relief map displays occasional low hills called *coxilhas* and along the seashore a large coastal plain originated by the tides formed a stretch of wetlands puntuated by lagoons, swamps, fields and dunes – the TAIM ecossystem, protected since 1986(Figure 02).



Figure 2-right to left: Pampa coverage area (source:ICMbio); Cerro Palomas (Livramento)@Daniel Badra; Taim seen from 471 road (source: SeTUR-RS); Uruguay touristic highlights (source: OTUy)

The natural landscape played an important role on regional history, since it contributed strongly for its insulation and determined the way in which the territory of Uruguay and Rio Grande do Sul have been occupied. Suffice to say that the coastal area between Brazil and Uruguay is of difficult accessibility and harboring conditions are very bad. For that fact, only since 1970 (the opening of BR471 road) allowed a proper communication between Chuí /BR and the Brazilian urban net through Brazilian territory, Until then, communication was mainly done through Uruguay railroad and road system.

BENTANCOUR and SCHAFFER stress the earlier economical and cultural linkage between Montevideo (Uruguay Capital city) and the borderline urban net. Since the region economy was based on cattle breeding and their correspondent processing plants (slaughters, woolen goods and meat plants), most part of its goods were exported through its port and railroads, reinforcing the idea of a "regional" identity and economy shared by both nations. The region is, until nowadays markedly rural, consisting of large rural plots. Besides cattle breeding, rice is cultivated mainly along the Atlantic Southern coast.

Nevertheless, great inequalities might be perceived on local governance and economical opportunities, mainly because of the discrepant size of both countries. Uruguay urbanization is concentrated around Montevideo area (45% of urban the country's population) and is a "small" country compared to Brazil – 3.4 million inhabitants, equivalent to Porto Alegre Metropolitan Area. Its Northern region displays the worst development and unemployment indexes. In1986, Uruguay government allowed "free shopping zones" within the Northern borderline urban net, which, in time, became a development asset for local communities. This commerce has been consolidated by summertime tourists coming to Brazilian southern beaches from Argentina and Uruguay by car. Brazilian borderline cities developed home ware supplies commerce (clothing, food and electric/electronics), both subject to the American dollar / local currencies floating exchange rates. Novelty is the ever increasing flux of Brazilian tourists toward these cities, attracted duty free shopping their main attractor.

The study cases: Chui/BR - Chuy/UY and Santana do Livramento/BR - Rivera/UY

The conurbations studied are the two "dry border" ones existent along Brazil_uruguay borderline. It means that by the time the cities were founded there was a stretch of "no man's land" separating both settlements, which in time became a neutral gathering field for both communities and the axis through which the conurbation was formed.

These conurbations as a spatial display of multiple social territories, places marked by more than one border or frontier: they might be either, social, cultural, or economical ones and established according to the strategies required by historical switches. Nevertheless, they are strong indicators that urbanization is a consequence of significant transformations suffered by national economies and social expectations in both countries.

Santana do Livramento (30°53'59,33"S) was settled in 1857 as a military camp and, in 1862 Rivera (30°53'21,47"S) was built right in front of it, after Uruguay has been recognized as an independent

nation (1848). Equally distant from Porto Alegre and Montevideo (500 Km), both cities became stock exchange centers for imported products arriving from Montevideo (Uruguay capital) and weapons, leather, meat and other agricultural goods. The easier communication with Montevideo thorugh railroad, as well as the attraction exerted by its cosmopolitism always marked the region character denoting a stronger empathy towards the Plata culture. The installation of a slaughter and dry meat multinational plant (Swift Armour, 1910) brought up progress and urged the growth of towns and improvement on infrastructure since responsible for local economical summit as provision supplier during both World Wars and employing Uruguayans and Brazilians indistinctively.

Both cities spread in connection with each other, along the border line and reinforcing the link between their symbolic centers, mirrored by the borderline. The conurbation has now more than 170,000 inhabitants and spreads for more than 15,000sq Km. The once "no-men land separating the settlements was transformed into a promenade (International Park). After 1960, both cities suffered a considerable economical decay and stagnation due to primary goods (agricultural) collapse of prices at international market. Even so, population grew by means of internal migrations (from rural area to cities), following Latin American patterns of urbanization and Rivera is today, the 5th Uruguayan city in size. The once cosmopolitan towns with theaters, cinemas, sophisticated stores, coffee shops and *art deco* mansions slid back into ostracism.

Functioning as a gateway between Montevideo/UY, Buenos Aires/AR and Brazil Southern Coast, the Rivera-Santana do Livramento conurbation have seen its tourist movement increase each summer since 1985. Travelling mainly by private transportation, Argentinean middle class families used it as shopping pit stop on their way back home as long as exchange rates are favorable for their currency. Supermarkets and shops are over dimensioned for daily consumption but suitable for transient commerce.

From 2005 on, advantages on exchange rates called attention of middle class Brazilians for duty free "cities" along the border with Uruguay, which increased the volume of tourists and diversified their origins. Present economical alternatives for these conurbations seems to relay on services and commerce linked to the touristic demands, specially hotels and restaurants. The kind of tourisitic fluxes remain linked to main holydays and (winter) vacation, since its position inland ,Rivera became a preferential destination for weekend shoppers, most of them coming from *Rio Grande do Sul* central region and surrounding towns. Its economy seems to be awakening with exchange stability (Figure 3).



Figure 3- GoogleEarth ©2007; top down: Sarandi, Rivera main commercial street (FRibeiro); 1959 postcard of the International Park; Tour buses parked on Cerro do Marco (FRibeiro)-source: www.filhosdesantana.com.br

The case of Chuy / UY (1888) and Chuí / BR (1927) is quite different: both cities are, from the start, commercial entrepots. Chuí /BR was insulated from the rest of the national territory until 1970, when a road linking it to Rio Grande Port was opened (BR 471). While Chuy (33°41'40,16"S) is closer to Montevideo (320Km), Chui (33°41'28,41"S) is 500Km distant from Porto Alegre. Since 1930, both cities were linked to Montevideo (Ruta 9 / 19). Chuy is linked to the Rocha department and Chuy is a recent municipality (2000).

Settlements start with the building of Portuguese fortresses and are surrounded by natural reserves and fortresses now belonging to Uruguay cultural heritage. Chuy / UY was built earlier, an effort to populate the area with nationals, granting land to minorities groups responsible for most of the land parceling in order to contain the Brazilian appropriation of rural land in Uruguayan territory and minimize the borderline ambiguity (Figure 04).

Chuy/UY and Chuí / BR are small settlements living out of commerce and services, especially during summertime when the region receives a great amount of Uruguayan tourists, attracted to the Atlantic beaches and ecotourism. Due to its proximity to Montevideo, Chuí /BR became a wholesaler centre (from 1975-2000) for Uruguayan consumers. While the exchange rates were favorable for Uruguay, the Brazilian city developed a strong commercial net of wholesalers, supermarkets and clothing shops.

The conurbation is very small (less than 10,000 inhabitants) and urban spread is constituted almost of low income dwellings meant to absorb migrant rural population on both sides of the border. Brazilian tourists "discovered it" after the opening of BR 471 road in 1971. The conurbation business is commerce (96% of its income) linked to tourism (source: FEE-ITEPA). Tax collection doubled between 2001/05, but between 2004 / 08 its population decreased. Almost the opposite happened to Chuy/UY, which population doubled on these same years.



Figure 4- CBERS sattelite ©INPE; top down: Chuí/BR ©Airton Villa; aerial view of barra do Chuí ©Margi Moss source:http://360graus.terra.com.br/extremos/brasildasaguas.06;Ave Uruguay/BR and Brazil/UY sectioned

Peculiarities of Regional Tourism and official measures to promote and improve it

For a start, the improvement of tourism industry in Brazil is quite recent and is linked to official efforts (from municipalities and local governments besides the Federal Government) to promote regional and homeland destinations.

It is important to state it because Uruguay is a completely different case: official initiatives to promote homeland tourism is a constant since the late 1960 and is associated to the welfare state initiatives towards a more homogeneous and even society. Governmental lodging net (bungalows for rent / camping sites with good infrastructure) and other touristic facilities on the so-called Uruguayan touristic hotspots (mainly associated to summer leisure) are well known and used by the general public. The Rocha district, where Chuy is located, counts with several governmental touristic facilities like the ones mentioned above and is well divulged by official touristic channels. Rivera, on the contrary, is not even mentioned as a touristic destination through the same channels which focus mostly on beaches, resorts and ecological branches.

On the Brazilian side, insulated and local initiatives to promote tourism on the "pampa" region appeal to its cultural heritage – a sort of country way of life – which for us is similar to the North Ämerican "Wide Wild West". Rural and ecotourism actions started exploring regional heritage from 2000 on in association with gastronomy and wine industry. As much as the "gaucho" way of life is perceived by Brazilian society as a value – *churrasco* (barbecue) is a national gastronomic asset from Amazonia to Bahia it is not strong enough to spin national tourism to such insulated area on high level.

Besides that, the average Brazilian tourist is a consumer and shopper rather than a contemplative / peripatetic wanderer. The built heritage in the area is not strong enough to compete with the baroque highlights found further north in Brazil. National tourism in Rio Grande do Sul remains linked to its Northern area, where "snow, cold weather and an European background" can be experienced. The Rio Grande do Sul Southern region is not listed by the Federal Government as tourism inductor nor benefits of any kind of official action to promote it as a touristic destination.

Despite that, borderline cities have always received a constant flux of regional and local tourists: for shopping, to attend to folk music festivals or horse parades and also because their "international" allure contributes as a powerful attractor, since Brazilians are incredibly fond of anything "foreign".

Acquiring accurate data on touristic fluxes to Chuí and Santana do Livramento became our private "Mission Impossible". There is empiric evidence that the number of Brazilian tourists improved dramatically on the past 3 to 4 years, when the exchange rate for the American dollar (our main economical referee) reached its lowest levels in decades. According to WTO, Latin America is leading the growth of global tourism industry in 2011(15% which is approximately three times the global average) and Brazil had its touristic fluxes increased up 11% for the same period (http://www.dadosefatos.turismo.gov.br).

If general data on Brazilian touristic fluxes are obtained through airports flights schedule, it means official data on roads movement is even more inaccurate. There is surveillance equipment placed on Federal roads that capture vehicle general movement but don't demonstrate their direction in or out cities. Road patrol placed at the entrance of Santana do Livramento reported that during June 2011, 108,000 private vehicles got into the conurbation coming from Brazil (origin-destiny research is nonexistent); during July, 2011, 135,000 vehicles headed to the same city. As for rental touristic buses, average 140 get in Santana do Livramento each Fridays and Saturdays for the same period.

Retrospective data is also nonexistent, because the two officers working on that post "sensed" an extraordinary increase on the road movement this year if compared to last year and decided to produce some statistic data on their own judgment. According to one of the local entrepreneurs (the owner of one of the 5 Santana do Livramento hotels, a pool taken among duty free shop owners, indicated that during July, 2011, average invoice was next to one million dollars.

From those reports we can depict the following tendencies aroused by empirical observation:

- a) that touristic fluxes are mainly regional (since they travel by car or buses);
- b) that tourists stay for short terms (usually weekends and holidays);
- c) that 5,880 tourists arrived each weekend by bus;

- d) that at least 200,000 tourists visited the city by car on June, 2011 and at least 270,000 visited the city during July;
- e) that the main motivation to visit the cities is shopping tourism.

MAFFESOLI (2001) states that motivations for touring might be fruition and consumption when gastronomy, leisure and shopping act as inductors of a sense of belonging to a social group, since the evidences of shared interests remain after the journey. Our hypothesis is that this summarizes our cases: since Brazilian reduction of social inequalities improved and its economy strengthen the need to display economical well being improved among middle classes. Travelling abroad and acquiring luxury goods are strong symbols for social and economic upgrade and Brazilian society is getting more and more sophisticated in its consumption patterns, especially when it comes to beverage, food and cosmetics, the duty free shops leading products. And now it is possible to experience and acquire all that across the street / borderline.

Methodological procedures and references

We intend to demonstrate how the urban structure of these cities absorb touristic fluxes that doubles the city's population and why tourists might feel at home shopping on their streets by exploring the issue through the social dimension of space. The frontier social system is marked by a pretense invisibility or unawareness of the *stranger* (here mentioned as in HILLIER & HANSON, 1984) as a way of coexistence. Despite cherished statement of national identities and territories, everyday life functions on the assumption that *local* is everyone: Brazilians and Uruguayans, no matter on which side of the border they are moving about.

Ambiguity marks spatial and transpatial relations and the way urban space is produced and managed according to specific national and cultural parameters, then generating hierarchy and complementarities between the two cities of the conurbation. Cultural and social practices acquire mixed national standards; the most notorious is the spoken language: *portunhol*. Even if the conurbations have no geographical barriers, resembling one whole city, they are still composed by two urban "places", where social and cultural parameters differentiate the urban configuration, and consequently expected co presence, movement, and social appropriation of space. Where *international* and *transnational* exchange in all levels is routine and Uruguayans and Brazilians play foreigners / strangers on their daily movements, and more than often nationals from one side live across the border and work in a foreign country territory urban structure differentiations becomes instrumental for a wider range of social interchanges.

Peculiarities of national cultures show on the way the urban grid spreads and peripheries are formed. And through our analysis we demonstrate how these distinctions are being explored (instinctively) by local entrepreneurs to deliver adequate answers to consumption tourism demands and actual patterns. If the area of influence of urban economy lower level is continuous, that is, for the poorest and less privileged classes of individuals, spatial continuity is still a very important factor for their daily survival strategies (SANTOS, 1979); it is also true when it comes to tourists willing to experience the local ambience. As much as for upper classes and elites, transpacial solidarity nets and spatial discontinuity are favorable for reproducing and accumulating capital, it is also true that the most efficient shopping tour is based on the possibility of acquiring the most number of different goods in the same place which is easily reached from the outside, that is, peripheral.

We use Space Syntax theory and methodological tools to evidence structural and morphological peculiarities of the conurbations and highlight the typological differences and dominances that emerge from a single urban grid generated by two national societies. Space Syntax associates urban grid topological features to social expectations of encounter and movement. Our target is to explain the importance of accessibility and diversified co-presence granted by the urban structure on the development of touristic services and commerce.

By decomposing the urban grids into axial maps (HILLIER & HANSON, 1984), and after that, processing the obtained graphs using MindWalk® (FIGUEIREDO, 2002) set of tools, some measures and correlations were selected to describe how morphological differences driven by cultural and social distinctive patterns give way to shared or all inclusive centrality processes. Through a spatial description of accessibility hierarchy is possible to analyze how grid deformation produces different patterns of permeability which define patterns of co presence between locals and tourists (HILLIER and HANSON, 1984) and pedestrian movement potential (HILLIER et al, 1993).

The Space Syntax measures used to describe the spatial configurations is Global (Rn). The correlations of Integibility (global integration / connectivity) and Choice Map (most frequently used nodes in journeys from / to all spaces in the system -HILLIER et al,1987) enable to identify distinctions of centralities and explain why this matters when urban planning measures should be conciliated with the promotion of other touristic highlights besides shopping. Graphs indicate integration values through a colour scheme ranging from red (most integrated lines) to blues (more segregated lines).

Discussing urban structure and social integration

Santana do Livramento / BR and Rivera / UY configurational description

Santana do Livramento Global Integration (Rn) map is a quilt of grid patterns separated by voids (hills, military headquarters, abandoned plants) connected by a deformed wheel macro system of longer and more integrated lines that outline the road connections to Rio Grande do Sul / BR (BR 290 and BR158), and to Montevideo / UY (*Ruta* 5). Following the logic imposed to the urban system by the high integration values of the main road system, punctual centralities were formed along it, anchored by big scale commercial activities.

From the old city core (an orthogonal grid) and starting directly from the road system, the city spreads as a tree like urban structure forming highly insulated enclaves, coherent to Brazilian patterns of urban growth and suburbanization, where the population is clustered into up and low market residential neighborhoods (RIGATTI, 2003), discontinuous on the territory. That reproduces the uneven Brazilian social and economical structure, answering only to property development speculation logic, which also forces the increase of urbanized perimeter with low density rates (BRAGA AND RIGATTI, 2009).



SANTANA DO LIVRAMENTO syntatic measures left: Global Integration (Rn) center: RR Integration right: Fast Choice Map

Figure 5 – SANTANA DO LIVRAMENTO CONFIGURATION

The orthogonal grid (old city core) most integrated axis links Livramento and Rivera symbolic city centers perpendicular to the borderline. It concentrates hotels, low cost shops, restaurants and most part of the city touristic facilities as well as the remains of its architectural heritage. The commercial activities are coherent with the orthogonal grid low hierarchy and control levels, providing good conditions to an even spread of movement and co presence of locals or strangers (tourists) and land

use diversity. The role of the orthogonal grid towards the constitution of centralities based on natural movement equity potential and inductor of diversified co presence are clarified.

The "X" shape axes (RR Integration graph) starting on the border line and enclosing areas that are potentially more integrated than in local and global graphs, represent the oldest city suburbs that housed slaughter and dried meat plants and concentrated the most part of job offers until 1960. As workers were indistinctively Brazilians and Uruguayans, their accessibility amidst the system were required as well as a shallower configuration that could provide coexistence of social, cultural and national diversity of workers. It also connects the old railroad station and its surroundings which are submitted to heritage preservation on the city urban plan and included in tourism enhance policies that intend to reopen the railroad for scenic trips to the surroundings.

Choice map displays the importance of ring roads system to regional and international transit inside and through the city. It means that accessibility is concentrated on these axes and there are few options to cross the settlement except through them. Complexity; fragmentation and clustering typical of weak city governance parameters, subject to market laws as well as discontinuity of urban planning public policies is easily perceived. The first urban plan for the city was established in 2007 as required by constitutional law.

The analyses also reflect that if social investments target segregation, urban spread patterns deconstructs the once accessible grid structure by means of investing in a morphology that captures movement in and out the city (ring roads with higher Global Integration levels) and favors new kinds of centrality that are intrinsically linked to private transportation. This might be reason enough to facilitate the coming and going of tourists travelling by car and fulfill their expectations to make the trip and shopping as efficient as possible.

Rivera/ UY urbanized area is much more compact and axial lines are longer. Similarity of Integration measures means that accessibility is non-hierarchical, the configuration is shallow, permeability and system is easily apprehended by local and strangers indistinctively, characteristic of the orthogonal grid that dominates the Rivera spatial system. Fuzzy movement and co presence between locals and strangers (HILLIER & HANSON, 1984) and indistinctive locational patterns of land use are consequent to the configuration non-hierarchical character (FIGUEIREDO & AMORIM, 2007) allowing a theoretical pulverization of centrality along the urban area and meaning that is the ideal environment for consumption tourism.

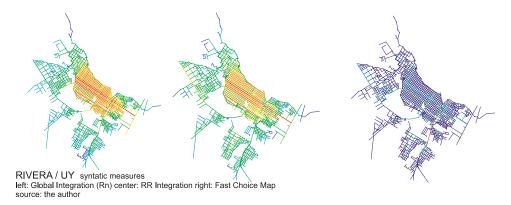


Figure 6 - RIVERA / UY configuration

The city grew through the extension of its longer axes parallel to the border line maintaining the orthogonal grid pattern despite the local topography. Some hierarchy of centrality is given by its two longer axes: Sarandi, running perpendicular to the borderline concentrates the symbolic uses, commercial activity and, since 2008, when Brazilian economy started to overcome crisis and currency was strengthen, *Sarandi* is suffering a major commercial restructuring by means of recycling its historical buildings (banks and cinemas) that were closed since long to accommodate new duty free

shops and hotels (bigger in size and displaying a more diversified selection of products) as a consequence of the always improving tourist fluxes.

The orthogonal grid area retains richer dwellings and sophisticated commercial activities and operates as a large center full of activity, movement and core of the city social life. Segregated dwelling areas have been recently incorporated to their governance system as a way to absorb traditionally rural population into urban areas. The social differentiation comes from the opposition rural / urban recent background more than from economical classes. Cultural and educational differences are the first reason for spatial segregation.

Urban planning focuses mostly in the improvement and qualification of public places within the orthogonal grid and even distribution of infrastructure systems among new governmental housing expansions. Unlike the Brazilian case, city centre was not emptied or degraded, on the contrary, land plots and dwellings are more valuable than ever on the city core and the mix of land uses is real and evenly scattered.

The differences between Brazilian and Uruguayan social and spatial dynamics became evident through social and spatial lives found in both cities centralities. Rivera centre is a consolidated place which maintains its symbolism while updates the uses and activities that apply both for locals and foreigners. Santana do Livramento centre has been emptied of its symbolic significance and centralities shifted according to cultural and social expectations based on more excluding co presence patterns, therefore leaving the shallower old centre spaces for local interfaces mostly. It seems more like a symbiosis that structures the conurbation, since its configuration is a whole new system in which the orthogonal grid captivates integration, and therefore centrality and provide a shared field propitious for diverse co presence and distributive movement that constitutes a single centre at the same time local and global (BRAGA & RIGATTI, 2009). Global Integration highest values for the conurbation are concentrated mostly along the orthogonal grid. The street system that runs along the borderline is included in the set of most integrated lines instead of acting as a barrier between the cities, giving away the conurbation symbiotic structuring process.

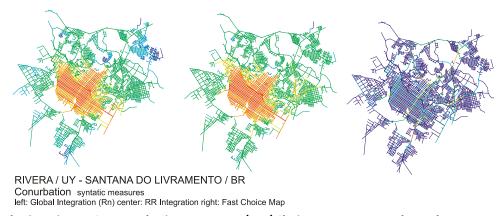


Figure 7 -The conurbation Rivera –Santana do Livramento Rn / RR/ Choice Maps; source: the author

Choice map captures preexistent ringness of Santana do Livramento Choice Map, but selects from Rivera urban grid only the most integrated axis which is composed by its main commercial streets, the ones functioning as modern promenades and duty free shops zone. The conurbation has a cosmopolitan centre in Sarandi- Rivera and a local centre at Andradas- Livramento which is peripheric to the Rivera one.

The afflux of Brazilian tourists since 2005 is causing a considerable change in location patterns of duty free shops. As they travel mainly by bus and the hotel net is deficient, they usually don't stay overnight and parking areas for buses became a problem near the centre. A huge duty free shopping mall is being built on the confluence of BR 290 and Ruta 5, right on the borderline and at the conurbation Eastern end. This will probably cause a shift on the kind of movement / land use of the area, since it's placed on one of the Conurbation Choice Map outlined axes.

Chuy/ BR and Chuy / UY configurational description

Chuí / BR system is small. Its Global Integration (Rn) map shows Uruguay avenue (parallel to the borderline) as its most integrated axis. A deformed triangle that has Uruguay avenue as its basis and sides composed by BR 471 with the customs office at its vortex surrounds a small stretch of orthogonal grid that concentrates centrality functions and land use (city hall, hotels, restaurants and shops). The intensity of commercial land use is also stronger on this stretch of Uruguay Avenue, corresponding to the triangle basis. The city stretches inland (N) through new land parcels corresponding to low income housing estates. Urban voids clearly cut the urban grid development parallel to the border line and their segregating effect is strong to restrain permeability parallel to the borderline. Therefore, the city seems to be made of several mismatching urban grids with very high average depths, connecting directly to its most integrated axis. System Integibility is low meaning that a stranger/ tourist has to relay on only one axis to perceive and access all the other parts of the system.

Mixed uses are ordinary at the central area, with a commercial ground floor topped by dwellings. The city Eastern periphery, displays the road linking the Brazilian customs office to the Uruguayan one, and the road leading to the shore. Hotels, motels, petrol stations and warehouses are placed along this stretch of BR 471 on the city outskirts. The urbanized perimeter can be considered large due its extremely low densities and its segmented urban grid. Once more, the discontinuity logic of Brazilian urban spread is noticed and spatial segregation among social classes is given by the ever increasing metric distance from the most integrated axes.

Centrality is linear, along the border line. This is coherent to the fact that Chuí / BR majority of shops and commerce targets Uruguayan public, especially wholesalers that supply Montevideo and regional shops (clothing, house ware). The central streets perpendicular to the borderline and connecting directly to BR 471 and to Chuy / UY centre and customs office have the most intense commercial activity on their 2 blocks immediately close to the borderline.

Choice Map (Figure 06) only highlight that the most important street of the town, vital to vehicular and for foreigners circulation is the avenue running parallel to the borderline and the actual only possibility to access all neighborhoods. System's logic lay on the interface with Uruguay, being the connections to Brazilian territory less important, therefore the city first expansion dealt with the improvement of interface area with the facing town.

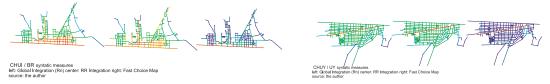


Figure 8-left: CHUÍ / BR configuration / right CHUY/UY configuration, source: the author

Chuy / UY system is slightly bigger than that of Chuí / BR. Its Global Integration (Rn) map is quite uniform, with the orthogonal grid patches displaying a general level of integration lower than that of Chuí / BR. Exception is the diagonal cutting the entire urban grid and connecting *ruta 19* to *ruta 9* and BR 471. This avenue has no commercial activity at all and canalizes heavy load traffic from inner Uruguay to international roads. It cuts the grid in a way that establishes a peripheral limit to the city symbolic, institutional and commercial centre. Ruta 9 encircles the city Eastern limit and the customs office is set outside the urban perimeter halfway to other coastal villages on the Atlantic shore. The axis constituted by avenida Brazil (running parallel to the borderline) continues to the next Uruguayan city (19 de Julio) forming the road Ruta 19. On avenida Brazil, apart from the stretch correspondent to both city centers, where main duty free shops, casino and restaurants are located, residential use is dominant. Commercial use spreads towards the city Eastern fringe (close to Ruta 9 and coastal towns and resorts). The strength of the diagonal axis cutting the city in two halves is important in identifying the city parts and also to orientability in global and local scale.

The city is also horizontal, mainly composed by single family dwellings. Centrality is not linear, spreading on the Northern part of the orthogonal grid, especially on the stretch of avenida Brazil (parallel to the borderline) between Artigas and Numancia and on the blocks surrounding the main square (limited by Artigas, Amazonas and Guaiba streets). In this area is possible to find hotels, restaurants, duty free shops up to 3 stories high. It contradicts tendencies depicted from Rn map and indicates that to understand the city centrality is necessary to analyze it as a conurbation.

Choice Map highlight that the most important street of the town is the diagonal running E-W and cutting the urban grid in two halves. It also limits distinct morphological zones, where the orthogonal grid changes proportions (blocks tending to a more rectangular shape) which represent newest urban expansions. It also makes clear that the most important axis is the one that enables free circulation through the urban area, The city centre built stock is being renovated and new duty free shops are being built close to the junction between Ruta 9 and avenida Brazil.

The conurbation itself explains the functioning of both cities, fact that is difficult to grasp analyzing the cities separately. All the Syntatic graphs for the conurbation Chuy-Chuí make clear the spread of centrality along the borderline, a shared linear centre for both towns and its immediate adjacencies contained by road accesses on both sides. It seems to be a consequence of the small system size coupled with the symbiotic effects of the conurbation itself. The diagonal highest integration implies that the connection between Uruguayan and Brazilian countryside is extremely important for regional economy and the borderline street system is the core of both towns and forms a linear centrality to the conurbation. I dare to say that the Chuí-Chuy conurbation is almost like a single city, its system illogical and impossible to perceive separately, sharing centrality in all senses as well as social and spatial segregating patterns.



Figure 9 - The conurbation Chuí / Chuy Rn / RR / Choice Map; source: the author

Final comments and unanswered questions

We identify a clear trend on Rivera governance and urban planning responding to the pressure and demands of consumption tourism improvement in the past few years: retrofit and reusing of existent buildings along the Sarandi street, allowing old banks and cinemas that have been closed for years to be reformulated into hotels and duty free shops. This is consistent with the outline of the city urban plan (2002) that focuses on the renewal and conservation of the city "belle époque" character, provides new urban design for its main open spaces (squares) while allowing the necessary improvements to 'attract' tourists with cosmopolitan features inspired by Montevideo and Buenos Aires. Entrepreneurs appeal to an aura of sophistication, promoting their products with degustation séances and a more elaborated décor.

Rivera centre, which has historically been the conurbation leisure centre, even for those from "across the border", is changing its character but maintaining its figure. Its wide sidewalks and cafes turned to the passing crowds are now busy with tourists always in a hurry to shopping.

The old Casino is being restored thanks to a partnership between the municipality and Conrad group from Punta del Este.

Meanwhile, Santana do Livramento municipality struggles to recover its former "glory" and pleads Federal license to operate duty free shops on this side of the border. There isn't a structured project to convert its architectonical heritage into a valuable asset for entrepreneurs seeking to spread the local boarding / hotels net nor restaurants. There aren't either strategic a plan to develop conservation or renovation actions based on touristic demands.

We stress these aspects because cities are perceived by the capitalist logic of tourism industry as an economical asset, some sort of merchandise. If so, why not explore its possibilities in order to promote and preserve the local heritage? If crossing the borderline takes shoppers / tourists to heaven, why not explore the opportunities presented by the situation to avoid erasing communal assets from the map and sending local values to hell?

References

Braga, A. C. & Rigatti, D. (2009). *International conurbations along Brazil-Uruguay border: how ambiguity drives spatial patterns and social exchange*. Stockholm: KHT

Braga, A. C., Rigatti, D. & Reckziegel, D. (2008). *Categorias de comércio na fronteira Sul do Brasil: Santana do Livramento / BR e Rivera / UY*. São Paulo: USP

Chasteen, J. (2003). Fronteira Rebelde. Porto Alegre: Movimento

FEE. (2011). Dados Estatísticos dos Municípios do RS. Porto Alegre: Secretaria de Planejamento do Governo do Estado

Figueiredo, L. M. (2002). Mind Walk. Recife: UFPE

Figueiredo, L. M. & Amorim, L. (2007). *Decoding the urban grid: or why cities are neither trees nor perfect grids.* Istanbul: ITU, Faculty of Architecture

Haesbaert, R. (1996). Regiões Transfronteiriças e migração brasileira em países do MERCOSUL. Foz do Iguaçú: SIF

Hillier, B. & Hanson, J. (1984) *The social Logic of space*. Cambridge: Cambridge University Press Hillier, Burdett, Peponis & Penn. (1987). *Creating life: or, does architecture determine anything?* London: Architecture & Beahviour

Hillier, Penn, Hanson, Grajewski & Xu. (1993). Natural Movement: or configuration and attraction in urban pedestrian movement. London: Environment and planning B

Medeiros, V. A. F & Holanda, F. R. B. (2007). Structure and size: Brazilian cities in an urban configurational world scenario. Istanbul: ITU, Faculty of Architecture

Neves, G. R. (1990). A rede urbana e as fronteiras: notas prévias, Porto Alegre: FEE

Oliveira, A. O. (2010). Os protagonistas da história dos Campos Neutrais, Rio Grande: Biblos

Rigatti, D. (2004). Centralidades dinâmicas urbanas – crescimento e transformação na estrutura urbana de Porto Alegre. PROPUR

Rigatti, D. (2009). Measuring Conurbation. Stockholm: KHT

Schaffer, N. O.(1993). *Urbanização na fronteira: expansão de Santana do Livramento*. Porto Alegre: UFRGS Rudzevsky, L., Teixeira, PR et alli. (2008) "Turismo e patrimônio vistos pelas comunidades de municípios do litoral médio e sul do Rio Grande do Sul". V *Anptur*, Belo Horizonte, 23-25 August.

De la Torre, Óscar (1997). *El Turismo: fenómeno social*. Ciudad de México: Fondo de Cultura Económica.

Gonzalez Viana, Maria del Carmen. (2006) Turismo y Ciudad: nuevas tendências.

Buenos Aires: Turísticas.

Gutiérrez Brito, Jesús. (2007) La Investigación Social del Turismo. Madrid: Thomson,.

Maffesoli, Michel. (2001) *Sobre o nomadismo, vagabundagens pós-modernas*. Rio de Janeiro: Record. Dos Santos, A. D. (2006) "A organização social das fronteiras: etnografía do cotidiano fronteiriço Chuí/Chuy.

Brasília: UnB, thesis for obtention of Master Degree in Social Sciences.

_____. "Banco de dados Zona Sul RS" (2009). *Boletim Informativo ITEPA 20*. Pelotas: EDUCAT / UFPEL Indice de Competitividade do Turismo Nacional – 65 destinos turisticos indutores do turismo nacional Relatorio Brasil 2010 www.dadosefatos.turismo.gov.br