

## **Marginal heritage:**

### **Studying effects of change in spatial integration over land-use patterns and architectural conservation in the old town centre of Natal, Brazil**

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#### **Abstract**

This paper synthesises a study that aimed to contribute knowledge for reinforcing the official status of the old town centre in Natal, Brazil, as a Preservation Zone. It seeks to demonstrate how change in the city's spatial configuration has affected land use patterns and led to the destruction of older buildings. Space analysis procedures were developed to investigate: the transformation of Natal's integration core in a diachronic perspective; relations between axial integration and the construction and conservation of buildings over time; and possible effects of current redevelopment actions over the surviving heritage. Findings indicate that: most integrated axes along successive periods, tended to attract institutional edifices, upper class residences, then commercial buildings of mixed status; every time the integration core was transformed, former well-integrated streets tended to stagnate as new construction concentrated in the new well-integrated ones; buildings in streets which were part of the previous integration core and later become part of the periphery of the new integration core suffered disfiguring conversions for commercial use; the configuration resulting from ongoing/planned redevelopment will lead to a general increase in the area's average integration and to its insertion within the margins of the new expanded integration core. Although an increase in commercial value seems desirable when an effort to overcome urban decay is in progress, such findings urge the need for envisaging specific development strategies for preservation zones in a society that does not recognise architectural heritage as an asset and for whom its conservation is, in itself, a marginal issue.

#### **Keywords**

Spatial configuration, land use, conservation of architectural heritage, Brazilian old town centres

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#### **1. The problem**

This paper presents findings from research that investigated relations between spatial configuration, land use patterns and the conservation of architectural heritage in Natal, Brazil, an issue that often goes unexplored in preservation studies and when conservation strategies for historic sites are being discussed. The study synthesises successive work stages that have been developed since 1999 by the research team at MUsA/UFRN ("Base de Pesquisa em Morfologia e Usos da Arquitetura, Universidade Federal do Rio Grande do Norte"). Its aim is to contribute knowledge

for reinforcing the official status of Natal's old town centre - neighbourhoods of Cidade Alta and Ribeira - as a Especial Historic Preservation Zone ("Zona Especial de Preservacao Historica" - ZEPH).

The official debate concerning the development of action for conserving Natal's ZEPH, continuously addresses certain issues but overlooks others of at least equal importance. The need to identify and evaluate architectural remains of acknowledged stylistic, historic or cultural appeal, to utilise the available operating urban infrastructure to its full capacity, and to envisage strategies for overcoming declining land values are usually highlighted whereas configuration processes underpinning the combination of those factors are missed out.

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This study seeks to contribute some new insights towards that debate by exploring how certain spatial and functional issues that underlie the study area's occupation process at successive stages relate to diverse states of architectural heritage conservation over time, and by investigating possible consequences of ongoing redevelopment interventions, in the light of these findings.

A diachronic modelling developed in earlier studies (Trigueiro, Medeiros and Rufino, 2001), revealed that Natal's integration core shifted from Cidade Alta to Ribeira, back to Cidade Alta, then towards the newly designed neighbourhood of Cidade Nova and, finally, to where it now remains, thus proceeding to expand, at rapid speed, after the 70's. Both processes - displacement and fast expansion - seem to have played crucial roles in the dismantling of the architectural patrimony in the old centre. Every time a fraction of the grid structure dropped out of, or was reinserted in (or around), the city's integration core, changes in land use brought about a reconstruction wave. Findings also suggested that the more recent expansion process has been the most deleterious, especially to Cidade Alta, which changed from a commercial town centre to a peripheral commercial sub-centre. This led to a closer examination of the global-to-local effects in the neighbourhood of Cidade Alta, which was investigated at progressive levels of configuration inception with reference to the major urban complex. Hypotheses concerning a possible speeding up of the architectural dismantling were confirmed.

As evidence suggests that the process described above has contributed to weaken the area's potential as an heritage centre and to undermine efforts designed to fulfil its official status of a protected zone, it may be argued here that current urban planning actions developed at a more or less global scale might jeopardise current conservation guidelines, predominantly focused on a local scale, if some of their global "side effects" are not taken into account. Previous (but recent)

interventions based essentially on the scenic revamping of key sites into entertainment outlets have been short lived and inefficient. It was then argued, (or perhaps hoped) that those actions would become “seeds” for the emergence of a “cultural enclave”, capable of fostering new uses and higher land values. It is believed that the reasons behind those failures are closely associated with the fact that the project failed to address the problem from a global configuration perspective. It seemed, therefore, to have highlighted the need to discuss spatial configuration issues as a standpoint for possible alternatives to current conservation strategies for Natal’s ZEPH.

In this study, a set of analytical procedures similar to what had been worked out for Cidade Alta was extended to Ribeira, thus covering the whole of Natal’s ZEPH. It also includes a deeper and more detailed insight into the relations between spatial configuration, land-use patterns and heritage conservation for both areas as well as a simulated modelling of planned and/or ongoing redevelopment interventions that may affect the ZEPH’s grid structure.

The modelling of ongoing and/or planned redevelopment actions indicates that the process described above is to be intensified as Natal’s integration core tends to expand even further over the ZEPH, engulfing, in its boundaries, a big chunk of Ribeira, where many important architectural remains have survived disfiguration.

## 2. Natal’s Special Historic Preservation Zones

Officially founded “a town” in 1599, as part of a defence scheme to protect colonial possessions in South America, Natal remained little more than a hamlet for over two centuries, in spite of its rather pompous original designation that often inspired mockery. A famous remark is attributed to a friar, Frei Agostinho de Santa Maria, who found “Natal to be not a town at all” (In Portuguese: “Da cidade de Natal, nao ha tal”) when he visited it in the 18th century (apud Cascudo, 1980). The settlement spread down from the hilltop where the “town” was founded - within the present “bairro” of Cidade Alta -, along the south bank of the Potengi River, that originated the state’s designation of Rio Grande do Norte, and around its harbour - within today’s “bairro” of Ribeira (Figure 1).



Figure 1: Natal’s Special Historic Preservation Zone - ZEPH - within the city’s present urban occupation

Slow but continuous growth during the nineteenth century was followed by a series of booms in the twentieth century: in the 20's, when Natal became an obligatory stopover for the newly established Europe-South America air route; in the 40's, when the town supported an American air base; in the 50's and 60's when Brazil started shifting from a rural to an urban nation; and from the 70's to the 90's, when the urbanisation process reached its peak and Natal achieved metropolitan status. Despite its fine historic buildings and the great natural beauty of the site, the old "bairros" of Cidade Alta and Ribeira began to lose their former residential and commercial status from the middle of the twentieth century onwards.

Since tourism has become a major issue in the Northeast Region of Brazil, where Natal is situated, old town cores have been recurrently considered - by politicians, developers and public officials alike - as potential sites for creating "cultural milieus" capable of reversing the de-valuation tendency these areas have shown in the last decades and of functioning as alternatives for the "sun-and-sea appeal" of the region. Officially declared a Special Historic Preservation Zone in 1984, Natal's old core has been targeted by a few rounds of action towards that purpose. These actions have mostly been based on the assumption that specific functions can attract visitors and enhance the use of buildings and public spaces, especially in the evenings and at weekends. They have included the revamping of buildings into cultural and entertainment facilities and some tidying up of facades, streets and squares. However, these "attractors" have not proved strong enough to generate desirable levels of vitality. Squares and public spaces - animated in workdays, but nearly deserted otherwise - carry on being used primarily as transition routes from bus stops and parking areas to shops and offices. Tourists come and go in their search for seaside spots without being aware of an "older town" in their vicinity. Former residents have moved to other neighbourhoods, their abandoned dwellings being progressively occupied by a poorer population. Part of the area's building stock is falling into decay. Most old houses have become disfigured through coarse conversions and many have been demolished to give way to small shopping malls and parking lots.

However, the observation of the streets and squares of Cidade Alta and Ribeira in weekdays shows that most of the area continues to be a "centre", defined as an area that attracts and generates movement by concentrating a variety of urban functions (Hillier, 1999), since in most of the area, retail, service, administration, business and religious activities intermix in a compact and inter-accessible layout.

This somewhat contradictory picture led to the question of whether a positive correlation between activity levels and heritage loss could be verified and motivated a survey of Cidade Alta's pre-modernist buildings in 2000, designed to ascertain how much of the architectural heritage had survived as compared to what had been recorded in an inventory developed eleven years earlier (Albuquerque and Alves, 1989). Space analysis techniques were then used to investigate Natal's spatial configuration in the light of the architectural ensemble found to have been preserved, modified, disfigured or destroyed in Cidade Alta. (Trigueiro, Medeiros and Rufino, 2001). This survey revealed that very few well-preserved buildings were to be found alongside the most "lively" streets.

In the present study the survey was expanded, updated and complemented to include modernist architecture in Cidade Alta as well as pre-modernist and modernist remains in Ribeira, so that the whole ZEPH was approached and a further reflection on some factors underpinning the resulting panorama could be attempted.

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### **3. Describing and representing the ZEPH's spatial configuration**

The central propositions underlying the investigation procedures adopted in all phases of the research - part of the analytical resources of the space syntax methodological approach - are that "(...) *configuration is a set of interdependent relations in which each is determined by its relation to all the others*" and "(...) *the fundamental correlate of the spatial configuration is movement*" (Hillier, 1996: 35/152). According to Hillier:

*"(...) the structure of the grid considered purely as a spatial configuration, is itself the most powerful determinant of urban movement, both pedestrian and vehicular. Because this relation is fundamental and lawful, it has already been a powerful force in shaping our historically evolved cities, by its effect on land-use patterns, building densities and the part-whole structure of the city."* (Hillier, 1996: 35/152)

Hillier and his collaborators suggest various analytical procedures to investigate grid structures. Linear representation was chosen in this, as well as in previous phases of the research, due to its capacity to evaluate movement potentials from the very configuration of the street grid, thus enabling its investigation from a diachronic as well as a synchronic perspective. It lets the researcher envisage not only what is going on in terms of movement in a certain urban area but also what might have gone on when that area was part of a diverse structure and no satisfactory account of its movement pattern at that time is available. Another resource of the method is its ability to bridge the gap between global and local structural properties

in street grids since these may be represented and analysed at virtually any level of insertion within the urban complex from, for instance, neighbourhood borders to metropolitan scale.

The linear representation in this study phase was calculated through the application of Ovation® (Application developed by Space Syntax Ltd. and UCL research team) and results were transferred to a GIS (Geographical Information System, Arcview® 3.2) tool. Modelling procedures focused on measures of integration and their resulting integration core. The dimension of the integration cores here considered varies from 10 to 25% of most integrated lines according to the size of the complex being examined. Because the modelling was worked out fourteen times to account for the diachronic transformation and for gradual levels of inception of the ZEPH in the larger complex, results are presented in graphic scale only, as this conveys a clear visual articulation with land uses and architectural recording

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In order to evaluate the extent to which Natal's ZEPH's present state of conservation relates to land-use patterns and to the city's historically evolved grid structure, three questions led the investigation: (1) how Cidade Alta and Ribeira related to Natal's integration core over time; (2) how the transforming integration core related to land-use patterns and architectural conservation; (3) what effects may be expected in the near future as consequences of ongoing interventions on the present configuration.

In this study the street grid of Natal was represented and analysed at seven successive stages of urban occupation as recorded in period maps and/or historical references: (1) 1777, (2) 1864; (3) 1924; (4) c. 1940; (5) 1970's; (6) 1990's; and (7) at present.

The present street grid of the ZEPH was further represented and analysed at four levels:

- a - Embedded in the whole street complex of Natal plus those of the neighbouring conurbation municipalities of Parnamirim, Macaiba, Extremoz and Sao Goncalo do Amarante - same as (7);
- b - Embedded in the whole street complex of Natal, city official limits considered;
- c - Embedded in the urban area that includes most of the present expanded integration core;
- d - Embedded within the borders of all adjacent neighbourhoods (bairros);

These progressive inception levels helped overcome methodological limitations such as the so-called edge effect (Hillier, 1996: 163) as well as a polarisation tendency resulting from the presence of some extremely segregated enclaves (shanty towns) located within the ZEPH limits. They also helped fine-tune integration values, especially when observed through graphic scale, by stretching or concentrating the scale, as the case may be (i.e. lines whose integration values varied visibly within the ZEPH appeared quite uniform when a larger complex was considered, because they were concentrated around the middle of the scale).

All inception levels were further re-analysed to include the alterations in the ZEPH's street grid and its surroundings, due to ongoing redevelopment interventions, listed as follows:

- a - the construction of a second bridge over the Potengi River (Redinha-Santos Reis Bridge), joining Natal's southeast and northwest sides;
- b - the redevelopment of the grid in a seaside neighbourhood (Praia do Meio), to create extra access routes to and from the bridge;
- c - the extension of a main thoroughfare in Ribeira (Duque de Caxias Avenue) and of another, in Petropolis, that functions as an extra link to Praia do Meio and the bridge (Floriano Peixoto Avenue);
- d - the redevelopment of a square, in the heart of Ribeira (Augusto Severo).

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The integration patterns resulting from the various occupation expansions over time were then compared, and the present day integration values were correlated, at every analytical level, to the following variables observed in the field, as defined below:

- a - Land uses: commercial (offices, service, mix); institutional; residential; industrial; retail; in transition (buildings to let, for sale); empty buildings; demolished buildings; others;
- b - Heritage conservation: buildings that are preserved; modified; or disfigured, as concerns their original features;
- c - Stylistic affiliations: buildings (of whatever level of conservation) whose predominating formal surviving vestiges show evidence of their original construction period.

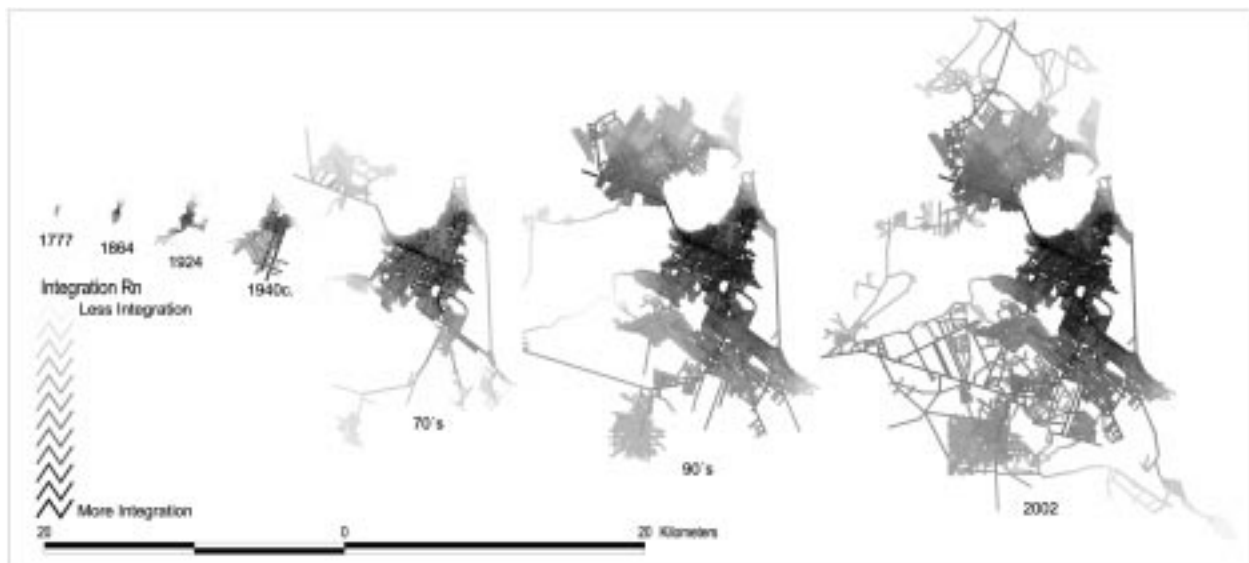
These were recorded according to seven categories - five basic types and two intermediary types. Basic types are edifices whose predominant formal vestiges date from a same stylistic tendency ñ colonial, eclectic, proto-modernist, modernist or recent. Intermediary types display two of these tendencies in equivalent proportion - hybrid 1 (colonial + eclectic), hybrid 2 (eclectic + proto-modernist).

The full body of data, comprising quantified axial maps of Natal's ZEPH at each inception level with/without ongoing interventions as well as the buildings classified according to categories a, b and c, was then exported to a GIS formatted database from which correlations and final analysis were developed.

#### 4. When spatial integration rhymes with architectural disintegration

As has already been mentioned earlier on, previous research stages have shown that Natal's integration core shifted and expanded following its urban growth over time (Trigueiro, 1999). As the grid - squeezed amongst dunes, sea and river - spread in the only possible directions, the ZEPH was gradually pushed towards a peripheral situation in terms of configuration (Figure 2). The most integrated axes, once located in Cidade Alta, shifted first northwards, to Ribeira, then southeastwards, to the newly developed bairros of Petropolis and Tirol - the then "Cidade Nova". A succession of new integration cores was structured. All of these included some of the ZEPH's street grid up to the 70's, when north-south orientated thoroughfares, crossing the city and intersecting the road leading to the only bridge, were opened and a new core was configured. The core formed around the 70's, has been rapidly expanding since then and especially as the occupation of the north riverbank speeds up.

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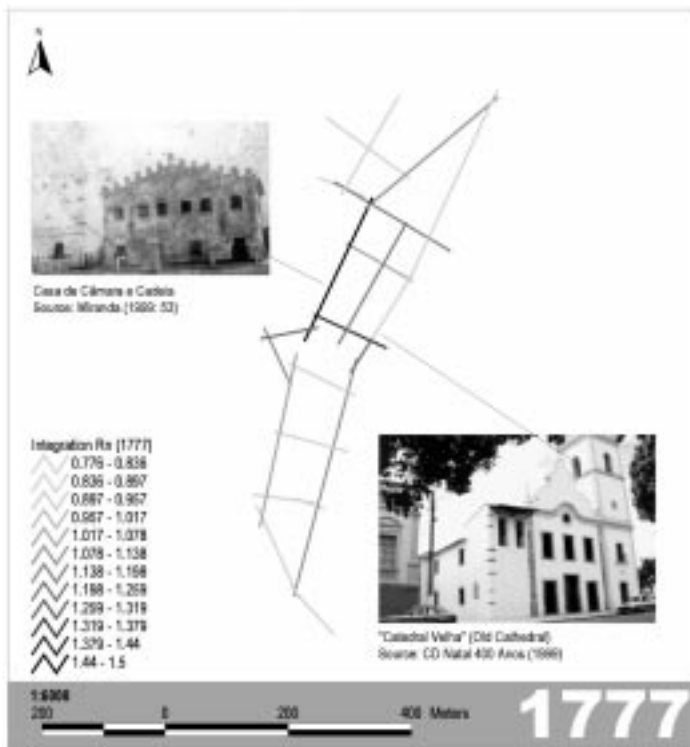


**Figure 2: A diachronic modelling of Natal's grid structure from the late 18th to the late 20th century**

The axial maps of Natal in 1777 and 1864 show that new important buildings tended to be sited in most integrated streets at each period. In 1777 (Figure 3) the most important church, the "Matriz de Nossa Senhora da Apresentacao" or "Catedral Velha" (old cathedral) and the "Casa de Camara e Cadeia" (town hall), archetypes of both religious and secular colonial powers are to be found in the two most integrated axes.



Figure 3: Modelling Natal in 1777: important colonial buildings erected in most integrated streets



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As the integration core migrates northwards towards the grid that joins Cidade Alta and Ribeira, in 1864, important buildings, sporting the nouveau neo-classic trend, occupy the new highly integrated streets (Figure 4). These include the Government Palace and the Port Authority headquarters, symbols of a new era for the then Province of Rio Grande do Norte, recently equipped with its own modern harbour.



Figure 4: Modelling Natal in 1864: important 19th century buildings erected in most integrated streets

The modelling of Natal's 1924 and (circa) 1940 grid configuration were worked out over the same map, produced in 1924 (Miranda, 1981), which displays the ZEPH and its surrounding neighbourhoods, including the initial occupation of Cidade Nova - opened and planned streets and buildings. For the 1924 representation only the opened streets (full lines) lined with buildings were considered. The linear representation of c.1940 takes into account the complete grid structure, including planned streets (dotted lines).

In 1924, the integration core defines a web linking Cidade Alta, Ribeira and Cidade Nova (Figure 5). This modelling is a strikingly faithful description of the new emerging milieu that characterises the epoch as the first urban boom Natal experienced. Two of the most integrated axes define the crossroads that, for many decades, was an epicentre of town gossip - the “Grande Ponto” - favourite haunt of senior citizens who to this very day gather around shops and cafes to evoke times gone by. A most integrated axis represents the street - Rio Branco Avenue - that contained the best commercial establishments of the time and that carries on being a busy shopping area, though of a rather diverse nature. All other highly integrated axes have developed into commercial streets. Some of the streets in Ribeira are also part of the core thus confirming the important commercial role this “bairro” has played at the time, although it must be stressed that the linear representation misses out the variables that were, in fact, Ribeira’s most important attractors then - a busy port, a seaplane terminal and the main rail station.

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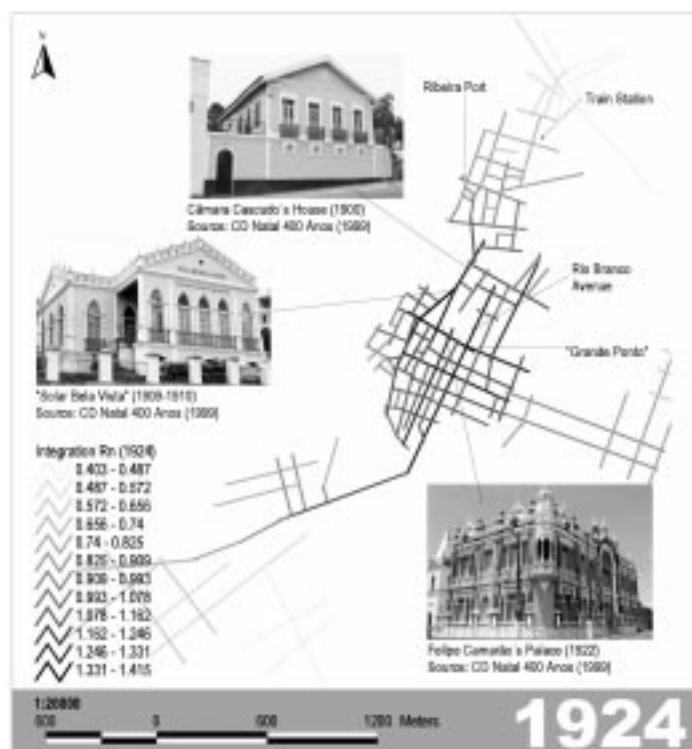
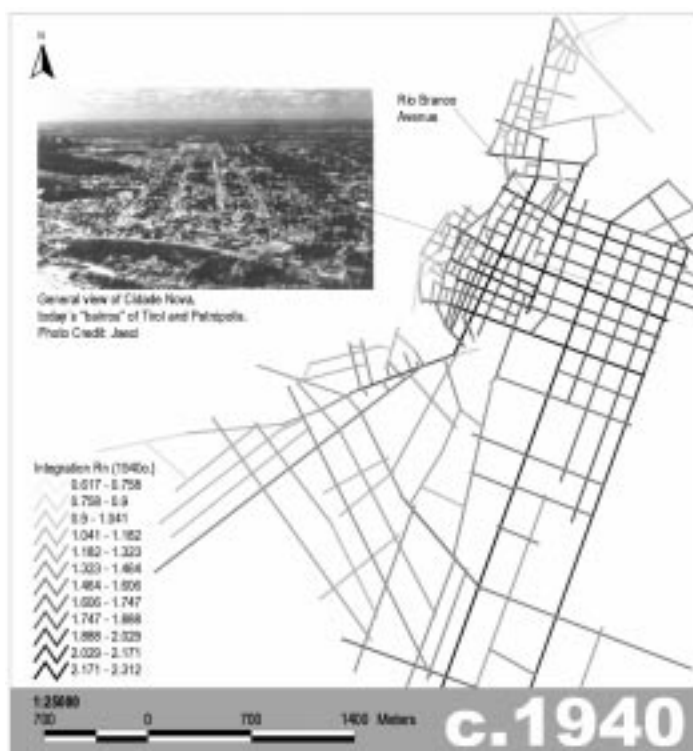


Figure 5: Modelling Natal in 1924: important eclectic buildings erected in most integrated streets

In the representation of Natal's configuration around 1940, Rio Branco Avenue is again emphasised as the most integrated street - reflecting the reality of its high commercial status (Figure 6). The integration core begins to shift southeastwards over the regular grid of Cidade Nova, the first purpose-designed residential neighbourhood (in 1901), which developed, in the first half of the 20th century as the upper class suburb. It is still a top value commercial and residential area now rapidly turning high-rise. This movement demarcates the second urban boom and, it is believed, the starting point for the subsequent decline of Natal's ZEPH, especially of Ribeira, whose location becomes more and more that of a cul-de-sac in relation to the global urban occupation and whose ethos will soon resent the absence of the wartime bustle.

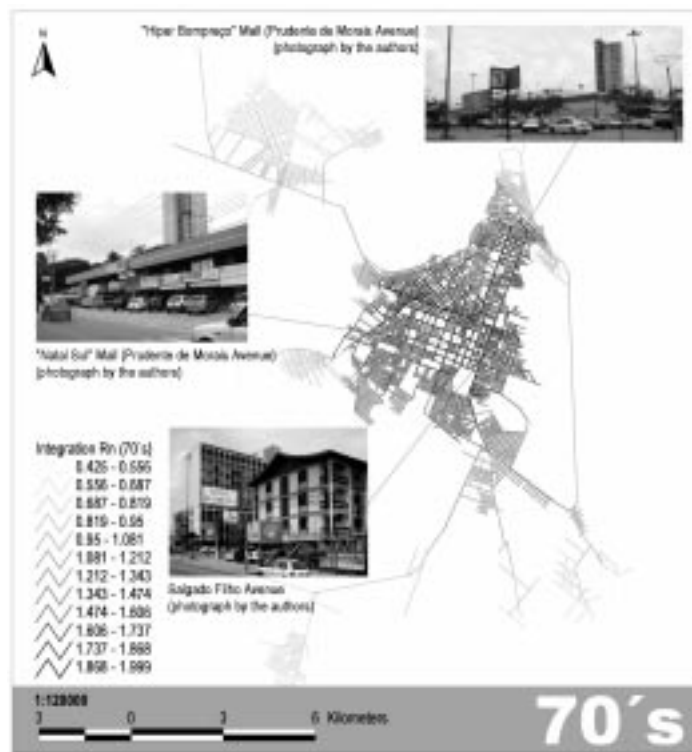
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**Figure 6: Modelling Natal around 1940: the integration core starts to shift towards southeast and over the newly developed regular grid of Cidade Nova (today's neighbourhoods of Petropolis and Tirol)**

When a sprint of urban growth throughout Brazil reached Natal in the 70's and the city's population and occupation area nearly doubled in size, main thoroughfares were extended to reach a collection of housing estates that multiplied in the periphery, south and north of the Potengi. These new long road strips helped configure a new integration core and intensify what is being considered here as the ZEPH's "peripheralization" process. Cidade Alta and Ribeira fell entirely out of the new integration core, the latter more dramatically so and further affected by the diminishing roles played by sea and rail transportation in Brazil and by the disappearance of seaplanes. New building types bearing a completely diverse relationship to ground plots and street blocks emerged in those axes (Figure 7).

**Figure 7: Modelling Natal around 1970: buildings erected in most integrated axes in the 70's**



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By comparing the axial maps of Natal in the late 70' to that of the 90's, two distinct stages of the local-to-global relationship concerning the study area are revealed (Figure 2). As the urban complex expanded further on both sides of the river, the city's global integration core remained roughly in the same position but expanded in size. Whereas in the 70's the ZEPH's street grid lay just outside the integration core, a good part of it (most of Cidade Alta) was swallowed back into the periphery of the core in the 90's. This coincides with what seems to have been a turning point in land-value and land-use terms in the ZEPH, especially in Cidade Alta where commercial activities resume growth, this time acquiring what seems to be a sub-centre character.

Results, therefore, point out to a close association between changes at global and local level at two moments. Firstly, when the global integration core shifted southward, the privileged residential and commercial status of Cidade Alta and mostly of Ribeira began to fade away. The latter was more seriously affected not only due to its longer distance from the new location of the global integration core but also for the loss or shrinking of important movement generators, such as transportation terminals. Secondly, when the global integration core expanded, engulfing parts of Cidade Alta, a small-scale tertiary activity centre displaced the upper-class shopping area and spread over former residential sites.

The above exposition answers the first of the three questions that served to initiate this study - on how Natal's ZEPH has related to the town's expansion. The two successive configuration shifts described above seem to associate strongly with: (a) the decline of the ZEPH as a main active centre; and (b) its change into a peripheral sub-centre.

The second question - on how the transforming integration core related to land-use patterns and architectural conservation was also partially answered.

The first move weakens the role of the area's grid structure as a potential movement generator - especially that of Ribeira, situated further away from the new integration core - and correlates with the progressive occurrence of vacant buildings, closed down retail shops and general decay. The second move, affecting primarily the grid of Cidade Alta that is re-included in the limits of the core, coincides with the gradual fragmentation of its building stock into small retail and service outlets, their original architectural features destroyed or disfigured. Findings indicate that both movements have been damaging to the integrity of the architectural heritage. At first, part of the resident population was replaced by another less capable of coping with the conservation of the buildings physical structures. Next, these were converted into small retail/service facilities alongside chain shops and warehouses (mostly for middle-to-low-income consumers) through makeshift adaptations not to mention demolitions for parking purposes.

The recording and classification of building remains according to heritage conservation and stylistic affiliation carried out "in loco", demonstrated that the latter effect is proving more destructive than the former. Although neglected or vacant, various buildings in the more segregated areas of Ribeira and fringes of Cidade Alta have survived destruction with varying levels of integrity, as shall be revealed next.

Local-to-global aspects of the relation between land-use patterns and architectural conservation were further investigated by reducing the ZEPH's embedment ratio in the larger grid structure. Several levels of inception were attempted as exposed in the item "Describing and representing the ZEPH's spatial configuration". Although most procedures made sense in numerical terms, correlations were better perceived, in graphical form, when the ZEPH's grid structure was embedded within the borders of all adjacent neighbourhoods. The list below summarises the findings:

a - The more integrated a street is the more commercial/service buildings are to be found there and vice-versa; the more segregated a street is the larger the proportion of housing is to be found there (Figure 8);



**Figure 8: Grid integration and land-use patterns in Natal's ZEPH**



**Figure 9: Grid integration and architectural conservation patterns in Natal's ZEPH**

- b - Commercial and service buildings tend to be modified beyond recognition whereas residential buildings are fairly well preserved in their original architectural features;
- c - Public institutions make up the best preserved category (although here it has to be considered that this category possesses the most listed buildings);
- d - An expressive number of “transition cases” (vacant buildings, mostly) are fairly well preserved even when their physical structures are in poor condition (Figure 9).

High integration, therefore, equates positively with architectural dismantling;

Similar correlation procedures taking into account the modelling of ongoing interventions helped answer the third question - on what configuration alterations may be expected to occur in the near future and how they are likely to affect heritage in the ZEPH. Findings were clearly perceived at virtually any level of inception from metropolitan scale downwards (Medeiros, 2002). The figure chosen to illustrate the argument was that in which the ZEPH was embedded in the urban area that includes most of the present expanded integration core for being perhaps the clearer for printing in black and white (Figure 10). Findings are summarised below:

- a - Cidade Alta and Ribeira will become generally more integrated and more firmly established within the limits of Natal's global integration core;
- b - Ribeira will gain substantially more integration than Cidade Alta (Figure 10).

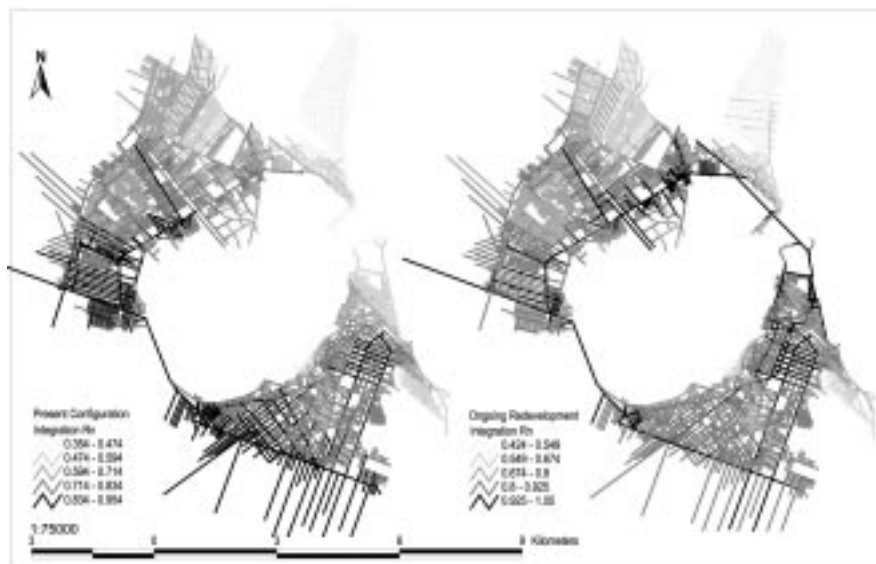


Figure 10: Modelling Natal's global configuration to account for current/planned interventions

## 5. "Marginal integration equals marginal heritage?"

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The study of the effects of change in spatial integration over land use patterns and architectural heritage thus indicates that the ZEPH's most integrated axes, at each successive stage in time, tended to attract, firstly, institutional edifices of a more or less monumental nature, followed by residences of the upper class and then by commercial buildings of varying scales and importance. Every time a change in the grid - be it by "natural" growth or planned interventions - altered the integration core, the picture was reconstructed with formerly well-integrated streets tending to stagnate and new well-integrated ones tending to re-enact an analogous process.

As Natal expanded under the strong urbanisation impetus that affected Brazil in the 70's, the whole old town centre fell out of the new integration core, many residential estates were developed, a new public administration complex was built and commercial centres emerged. In Cidade Alta and Ribeira the resident population shrank in number and social status, buildings fell into disrepair and decay or suffered mutilating conversions to accommodate uses and inhabitants less demanding in terms of space and/or aesthetics. During the last decade of the 20th century, as Natal expanded a great deal further towards metropolitan status, the polygon defined by its global integration core spread out in all directions incorporating the old town centre again, this time as a peripheral area. This re-inception, although marginal, seems to have functioned as a strong stimulant for commercial activities as this period coincides with a new wave of demolitions and conversions to give way to shopping units, small-scale shopping malls and office buildings. This has led to the dismantling of many of whatever was left in terms of the unlisted, unprotected pre-modernist and modernist building stock.

Findings yield an alert for the near future as evidenced by the modelling of planned and ongoing redevelopment in the vicinities of the old town centre. They reveal that the ZEPH - especially the neighbourhood of Ribeira where most of the surviving architectural remains concentrated - will not only become more generally integrated but also more firmly anchored within the margins of the city's integration core. Despite the general assumption that a steady rise in commercial value (and a high mean grid integration has recurrently correlated with this) may bring a desirable turnout for the recovery of decayed areas, commercial expansion is proving lethal to heritage conservation in a socio-economic framework that does not include architectural integrity as an asset.

If results here are to be believed, the strategies for urban renewal and heritage preservation for Natal's ZEPH are about to clash with one another. Such findings emphasise the need for envisaging adequate strategies capable of sorting out the equation "higher commercial value plus building preservation" in a society for which architectural heritage is, in itself, a marginal issue.

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