

FROM SANHAUÁ TO NEW CENTRALITIES. Morphologic changes in the urban development of João Pessoa, state of Paraíba, Brazil

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KEYWORDS: *Spatial Configuration; Land Use; Conservation of Architectural Heritage; Brazilian Old Town Centers; João Pessoa.*

THEME: Urban Structure and Spatial Distribution

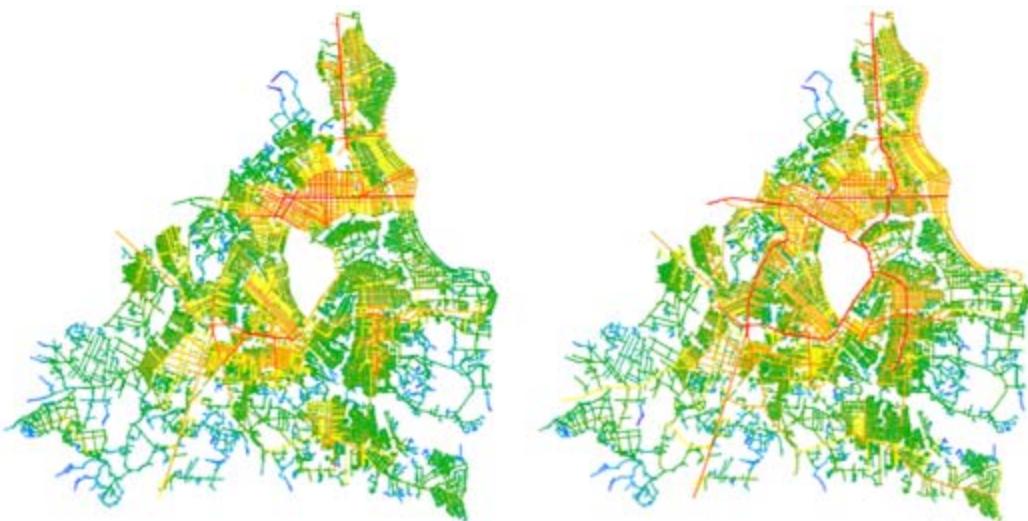
Abstract

This article analyses urban transformations in the city of João Pessoa, State of Paraíba, Brazil, along its history, focusing on the evolution of its spatial configuration. To achieve this purpose diachronic syntactic modelling was performed, from the first graphic reports portraying the urban network at the time – the middle 17th century Dutch maps – to present day records, and variation in integration values were verified in order to understand possible relations between the morphological expansion process of the city, the emergence of new centralities and the reflex of those changes on the present condition of the old town centre – now underutilized – which despite being partially listed as a national heritage site, presents abandoned or dilapidated buildings. By correlating the data generated by the morphological analysis with historical and socio-economical aspects inherent to periods of urban expansion here studied, it was verified that there were periods of time when patterns of land use and the economic dynamics of the city were transformed following changes in the integration hierarchy of the street network. Such results, therefore reinforces the assumption that topologically related movement potentials have acted as a rearranging force over the urban structure. The proposed study also contributes to further knowledge about the morphological nature and transformation tendencies of Brazilian middle sized towns as it adds up to a range of studies focusing other cases in Northeast Brazil, such as Recife (Amorim & Loureiro, 1997 and later works) Natal (Trigueiro & Medeiros, 2001 and later works).

1. INTRODUCTION

This work presents a diachronic analysis of the spatial configuration of João Pessoa, the third oldest city in Brazil. In this study, relations between morphological dynamics and alternations in patterns of land use were examined, with particular focus on the consequences of these changes to its old town. Based on maps of the correspondent periods, ranging from 1640 to the present day, a linear representation of the city is drawn at different stages of development, using Space Syntax analytical techniques to interpret them and formulate hypotheses.

To that aim, it was used a descriptive technique that derives from the axial map, known as *Continuity Lines*. The Continuity Lines, from the axial map, join axial lines which form angles between them smaller than a predetermined limit angle, reading them as just one (FIGUEIREDO, 2004). This method of representation has adapted better to the road system of João Pessoa, since the main avenues and roads that cross the city have marked and constant sinuosities along its route.



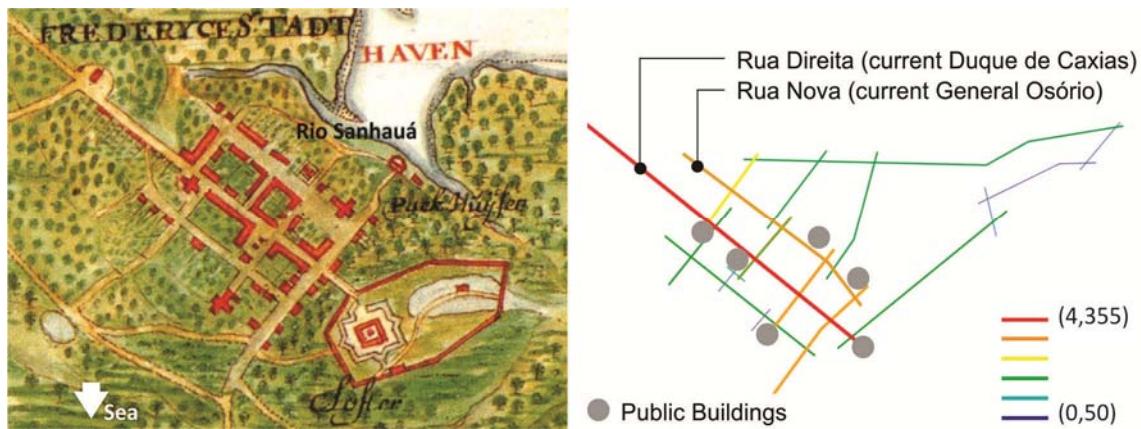
Figures 01 and 02 – Integration maps – RR (R7) of João Pessoa currently. On the left, generated from the Axial Map; It is noticed that the representation by Continuity Lines, some of the major highways of the city are evident, which does not occur in the axial map.

Source: MusA – Laboratório de Morfologia e Usos na Arquitetura, UFRN, with own changes.

Under the perspective of The Social Logic of Space, accompanied as urban planning decisions implemented in the city over the years influenced their spatial configuration. It attempted to show temporal concordances between the displacement of potential flows of movement and development of new centralities. Having always been mainly focused on understanding how the morphological transformation of João Pessoa city acted in its old town, this work have found that the gradual loss of economic importance and interest of the wealthier classes of the area was always accompanied by the gradual loss of topological values of integration. It pointed, this way, the hypothesis that the changes in the spatial structure of the city have influenced the current use and occupancy of the old Center and, consequently, in the process of degradation of their heritage.

2. FIRST CENTURIES: A CITY ON THE RIVER

By the year of 1585, João Pessoa is already born as a city, being part of Iberian attempts to consolidate the ownership of Brazilian areas which were threatened with invasion or occupied by natives (TINEM, 2006). Then, there were strategically chosen the margins of Sanhauá River, where would develop the “Cidade Baixa”, containing commercial establishments and equipments that supported the wharf’s port activities. The top of the hill, or “Cidade Alta”, was chosen as region where the urban core itself would be installed, with its religious complex, administrative buildings and the residences of the wealthier classes (CASTRO, 2006). Date from the mid-seventeenth century, the Dutch’s rule period, the first more accurate visual information about the urban setting of the initial core of the city.



Figures 3 and 4 – On the left, detail of João Pessoa’s city, by the time it was called Frederica, in 1640. On the right, Integration Map (Rn) of João Pessoa by the year of 1640. Source: Left, VIDAL, 2004; Right, self development through seventeenth-century Dutch map.

In the maps, could be seen the strong presence of two axes, both in the “Cidade Alta”. The “Rua Nova” is the first linear public space of the city, unfolding from the “Nossa Senhora das Neves” Church, and where were settled residences of the wealthy landowners (TINEM, 2006). The “Rua Direita” presented itself morphologically as the main axis of spacial integration of the city. Besides the largest number of ecclesiastical buildings, it met the “Largo do Erário”, administrative center of the city. Perhaps influenced by its movement spacial potentiality, the “Rua Direita” behaved as main expansion route of the urban center that was brewing. The clustering called “Cidade Baixa”, at first presented as a lower spatial integration with the core, for a long time behaved heterogeneously in relation of “Cidade Alta”, with its activities strictly related to the Port. With the subsequent densification of the urban fabric, from the 18th and 19th century, this contrast was minimized.

3. NINETEENTH CENTURY: FROM THE STAGNATION TO THE COTTON’S CYCLE

The Eighteenth Century was a period of slow process of urban development in the city. Tinem (2006) explains that from mid seventeenth century until the mid-nineteenth century the lack of records – mostly visual – made it impossible to get better insights about the evolution of the city during this time. However, it is noticeable that this evolution, until the mid-nineteenth century, was limited by the urban condensation

between the “Cidade Alta” and “Cidade Baixa”. The “Cidade Baixa” was consolidating itself as the city’s commercial center, taking over, in the nineteenth century, higher levels of integration with the “Cidade Alta”, making the urban core more homogeneous. In the mid-nineteenth century, the “Rua das Convertidas” – current Maciel Pinheiro – would start to stand out in the city’s morphological structure. This street was connected with almost all the “Cidade Baixa” and was directly linked to “Cidade Alta” though three transversal axes. Therefore, Maciel Pinheiro Street added high levels of local integration, assuming movement’s potential that would be confirmed by the gradual change of the uses in their buildings – that by residential would become increasingly more commercial. The “Rua das Convertidas”, by the end of 19th century, was regarded as “Rua do Comércio”, economic center of the city (TINEM, 2006).

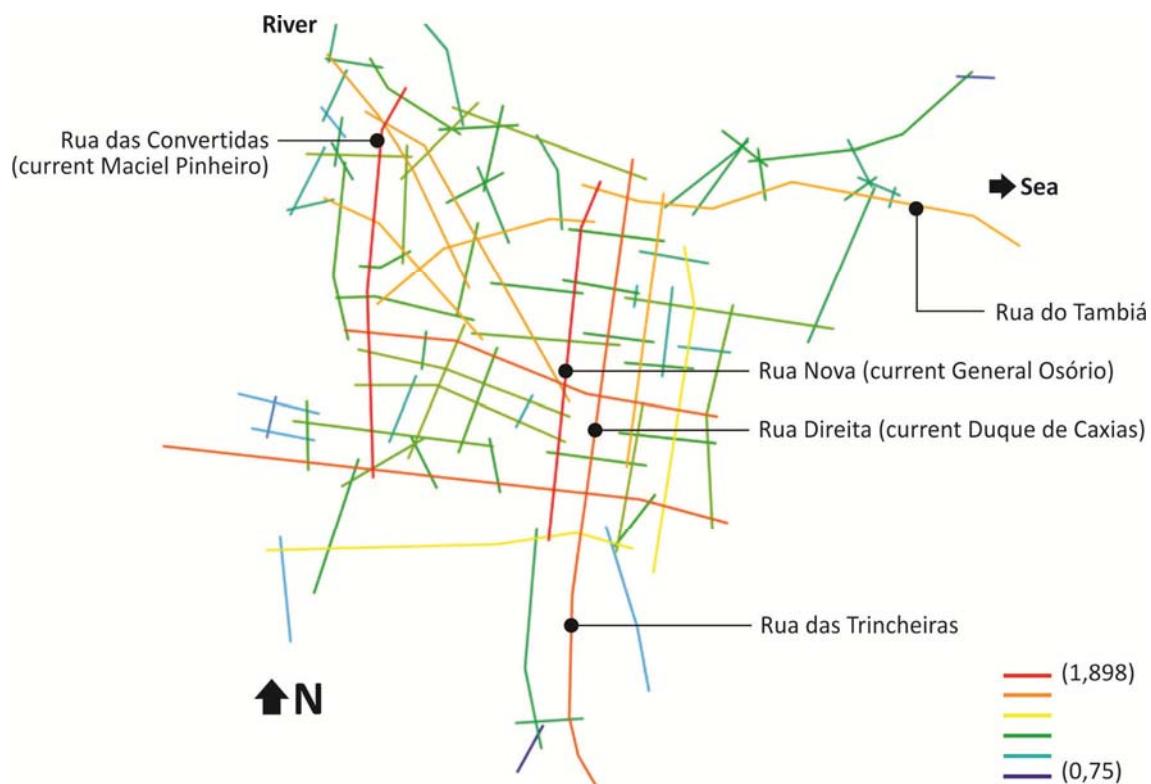


Figure 5 – Integration Map (RR/R2) of João Pessoa in 1858.
 Source: Self development through the Plan of “Cidade da Paraíba” in 1858 (VIDAL, 2004).

In the ways more integrated of the system – “Rua Nova” and “Rua Direita” – were concentrated the major changes in land use and infrastructure. In them, would begin to emerge a variety of services as lawyers, dentists, teachers and barbers (MAIA, 2007). The “Rua Direita” was the first of the “Cidade Alta” to get a sidewalk and a Public Garden, around 1870 (TINEM, 2006). At this time, it could already notice the first sketches of what, in the early of the 20th century, would become the two new housing units of the ruling class, both starting from “Rua Direita”: “Rua das Trincheiras”, southwards, and “Rua do Tambiá”, east axis expansion of the city.

In the last decades of 19th century, the city's economy starts to grow faster, driven by the heating of cotton production. However, its urban expansion was limited, until the end of the century, to the occupation of empty spaces still existing between the "Cidade Alta" and "Cidade Baixa".

4. FIRST DECADES OF THE TWENTIETH CENTURY AND THE MODERNIZATION OF JOÃO PESSOA

The city of Parába in the Republic and in the early twentieth century remained with its network still concentrated around its initial core (VIDAL, 2004) and without the urban development expected of a capital with more than three hundred years. It is asserted that the economic wealth originated from the cotton has only reflected in the urban modernization of the capital from the government of João Machado, from 1908 to 1912, where there were implemented piped water services, lighting and electric traction (VIDAL, 2004). In 1973, Saturnino de Brito devises a plan to install a sewer system, and also presented a plan for urban expansion, partially implemented in the 1920s. One of the most important facts of the proposed intervention by Saturnino was sanitation and order of the old "Lagoa dos Irerês", in the 30s.

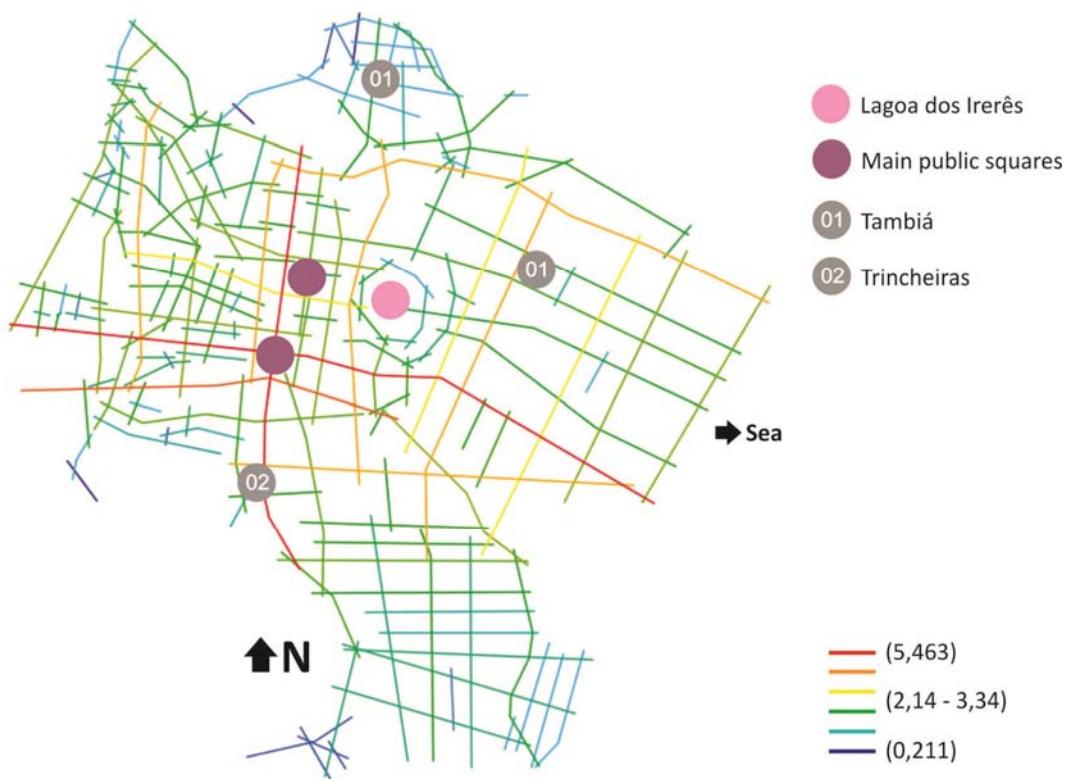


Figure 6 – Integration Map (Rn) of João Pessoa in 1923. Source: Self development though the Urban Reconstruction of the city Map (OLIVEIRA, 2006).

The integration nucleus of the city, which permeated the "Cidade Alta" and "Cidade Baixa", gradually moved to the mediations of the "Lagoa", following the expansion process of the city to the east and south. The "Rua Direita" – more integrated route – that had to be called "Duque de Caxias", kept adding even greater role in

city life and actively participating in the process of modernization, renovating its transportation system and lighting. By it, have been installed the main public spaces of the time: Vidal de Negreiros Square (1924), known as “Ponto dos Cem Réis”, the busiest square in the city – where were found the tram station and the Parahyba Palace Hotel; The Venâncio Neiva Square and João Pessoa Square (1929), in which it was the Government Palace. It is worth pointing that these last two squares were located exactly at the intersection between the more integrated tracks of the system.



Figures 07 and 08 – On the left, “Ponto dos Cem Réis”; On the right, João Pessoa Square. Source: Acervo Humberto Nóbrega e Maia (2007) apud Domingos (1974), respectively.

The intense political and economic activities in the city core, allied to the need for the ideals of modernity represented by the new expanded areas, made the upper class – and the middle class, slowly – migrate from their homes increasingly towards to the axes south and east. To the south, “Rua das Trincheiras” was consolidating itself – route that began immediately after João Pessoa Square, a continuation of “Rua Duque de Caxias” – as the main residential section of bastardizes classes, where arose the famous “mansions of cotton”. To the east, the Tambiá District also became, by that time, the most populous of the city, where the previously existing sites and farms gave way to “rich and elegant homes” (TINEM, 2006). Its spaced and orthogonal morphological structure might announce the most intense expansion of the city from that area. The ones with less purchasing power occupied the most segregated areas of the urban fabric, in the north and south extremes.

Castro (2006) explains that only in the 30s central region of João Pessoa finally turns its urban countenance more similar to the present day, with the implementation of urban interventions planned by architect Nestor de Figueiredo. In addition to the moderate order changes in the existing fabric (VIDAL, 2004), its major contributions encompassed its expansion plan of the city, which had in the creation of the “Parque Solon de Lucena” – old “Lagoa dos Irerêis” – the focal point of connection between the consolidated core and the new urban areas (OLIVEIRA, 2006). Figueiredo draws the outline of what would become the Torre District; attaches to Epitácio Pessoa Avenue – street opened in the 1920s – the title f main axis of connection and expansion of the city towards the sea and sets the Rui Carneiro Avenue as growth facilitating route to the coastal areas.



Figures 09 and 10 – On the left, Nestor de Figueiredo's Plan. On the right, Epitácio Pessoa Avenue, discharging at sea. Source: Vidal, 2004 (09); Acervo Humberto Nóbrega (10).

Driving the fabric expansion into the sea, through Epitácio Pessoa Avenue, the urban layout of Figueiredo culminated in the displacement process of the integration core of the “Cidade Alta” and “Cidade Baixa”, oldest areas of the city. The perimeter of the Lagoa became the steering axis of the expansion of the fabric, where would leave the main connecting roads among the areas that were slowly being urbanized. Topologically, with its dense and orthogonal mesh, the Torre District, farther south, would present high levels of integration in the city; some of the more integrated roads in this District would become the most important arteries in João Pessoa today, as the Beira Rio Avenue and Dom Pedro Avenue (Figure 14). The Epitácio Pessoa Avenue, even in the beginning of its occupation has performed with great integration potential; a wide linear axis, to lose sight of, that ended on the coast – it is still occupied only by its vacation homes.

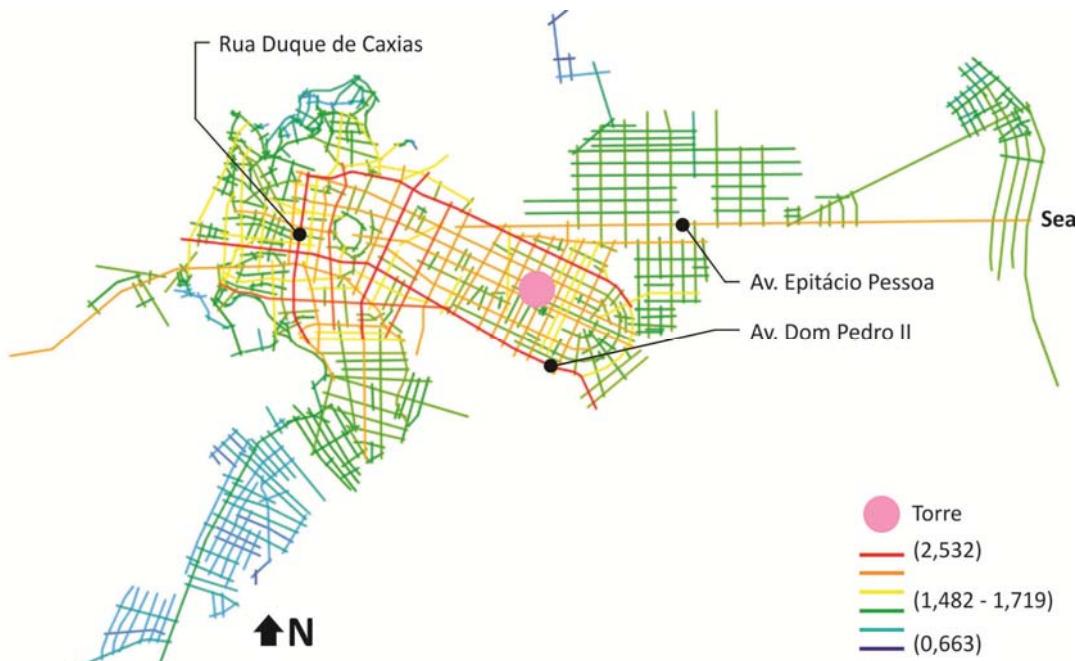


Figure 11 – Integration Map (RR/R3) of João Pessoa in 1946. Source: Self development through the Urban Reconstitution Map of the city (OLIVEIRA, 2006).

At this point, the “Cidade Alta” no longer characterized preferably by residential use, standing out the commercial and service establishments. The Duque de Caxias Street – still the most integrated via of the system – remained been where the social activities were more intense, with the presence of bars, elegant clubs and, later, the city movie (TINEM, 2006). The displacement of the integration nucleus to the east meant that, gradually, the “Cidade Baixa” lost its topological strength and, simultaneously its economic dynamics in relation to other areas of the city. During the mid-thirties, because of the geographical limitations of the “Rio Sanhauá” (CPDCH, 2007), occurred the transferring process of the port activities from João Pessoa to Cabedelo Port. To TINEM (2006), this fact would mark the breakdown of interdependent relationships between the city and its origin place.

5. THE SEA AS THE NEW BACKGROUND

In the early 1950, the Epitácio Pessoa Avenue, after the conclusion of its works of infrastructure soon came to be the leading choice for residential bastardizes classes. Simultaneously with the occupation of Epitácio, the coastal region becomes the pleasant option to settle, developing the districts on the seafront – that would become later the most valued area of the city. These facts were also accompanied by the growth in importance of these areas in the morphological structure of the city. In 1954, Epitácio Pessoa Avenue had already pointed as the way with the greater local integration.

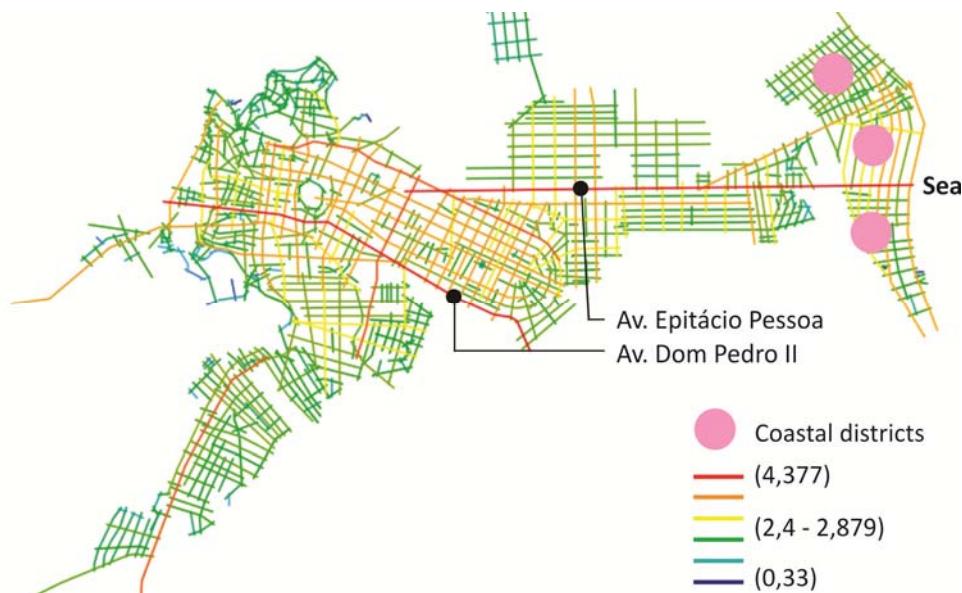


Figure 12 – Integration Map (RR/R3) of João Pessoa in 1954. Source: Self development through the Urban Reconstitution Map of the city (OLIVEIRA, 2006)

During the military regime in Brazil [1964-1985] introduced the BNH – “Banco Nacional de Habitação” – an agency that fostered the implementation of housing sets. Besides consolidating the occupation of the perimeter neighborhoods of Epitácio Pessoa Avenue, BNH’s actions spurred the city urban sprawl over in the following decades, especially in the southern and southeast. Dom Pedro II avenue, the second most

integrated system was the main axis of the city's expansion in this direction. At the same time, financing for the higher classes contributed to the growth of housing density on the coast, which gradually began to show significant levels of local integration.

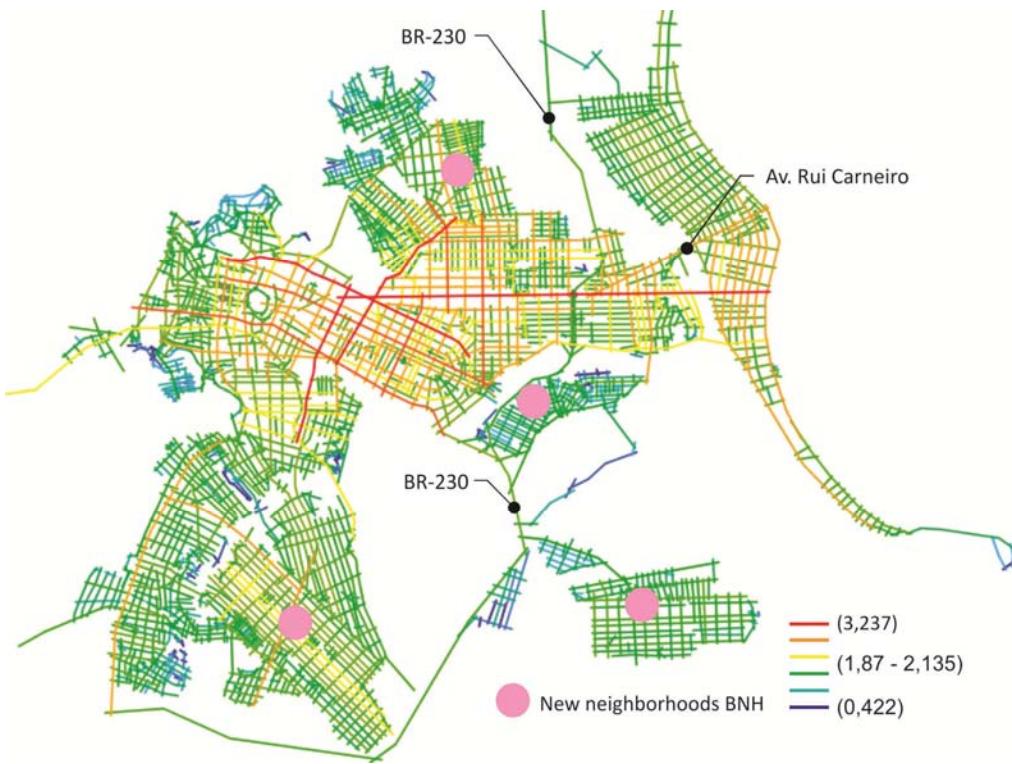


Figure 13 – Integration Map (RR/R5) of João Pessoa in 1978. Source: Self development through the Urban Reconstitution Map of the city (OLIVEIRA, 2006).

Looking at the integration's map of João Pessoa in 1978, it is noticed that this time that the core of the most integrated routes of the system no longer encompassed the areas of the old town, mostly focusing on the interrelated routes of Epitácio Pessoa Avenue. The economic activities in the old center moved further to the mediations of "Parque Solon de Lucena" – while the integration core was shifted to the east. The centralization of intense activity (commercial, of services and administrative) led to a process of vertical growth in its mediations, housing most of the building over five floors of the city (ANDRADE, 2007).

6. LAST DECADES OF THE 19TH CENTURY: THE NEWS CENTRALITIES

The BNH and the new housing policies have directly influenced the spatial dynamic of a city that for centuries followed social Standards in a single cluster. The intense urban sprawl of João Pessoa generated urban voids, demanded an infrastructure which did not follow the expansion rhythm of expansion and valued the still undeveloped lands (CASTRO, 2006).

The largest mirror of housing policies implemented in João Pessoa was the implementation of the “Projeto Habitacional de Mangabeira”, planned and executed by the “Governo Estadual”. Between the 1979 and the 1985, were built more than 9.500 popular housings in southeast area of the city, away from its integration core. With its dense and extensive spatial configuration, the District would assume important topological values in the urban structure of the city. Josefa Taveira Avenue, its major route and its greater integration, would become one of the biggest commercial hubs in the city, becoming a popular and diverse urban center almost autonomous compared to the other areas of João Pessoa.



Figure 14 – Overview of Mangabeira in 1984. Source: SILVA, 2005.

While in the lower classes of the population, driven by government subsidies, would begin to occupy the most segregated areas of the city, basically south and southeast of the capital, higher purchasing power society has warmed the already valued perimeter area of Epitácio Pessoa Avenue and, with greater intensity, the coastal districts. These last would, suffer from the late 1980s, the process of vertical integration of that area, today the highest real state appreciation. The development of these districts resulted in the multiplication of commercial activities, diversified services and leisure aimed at middle and upper classes, especially to the Edson Ramalho Avenue and the “Retão de Manaíra” – both in Manaíra District, where is located the city's largest mall.



Figure 15 – Skyline of Coastal Districts. Source: Cácio Murilo.

Some studies (ANDRADE, 2007, p. 108; ANDRADE, RIBEIRO e SILVEIRA, 2009, p. 01) point out that in the late 1990 the Southeast region – corresponding to Mangabeira District and Bancários District – and the coastal districts presented themselves as two economic dynamic cores independent of the urban city core, may entitle them to new centralities. The potential for movement of these two economic poles could already be observed from the analysis of the integration map of the city in 1994 (Figure 16), where there is the development of two morphological cores of great importance and far between: the littoral nucleus, closer to the other routes integrated to the system – with activities geared to middle and upper classes; and the southeast core, further away from the others integration ways, with activities directed to the popular classes.

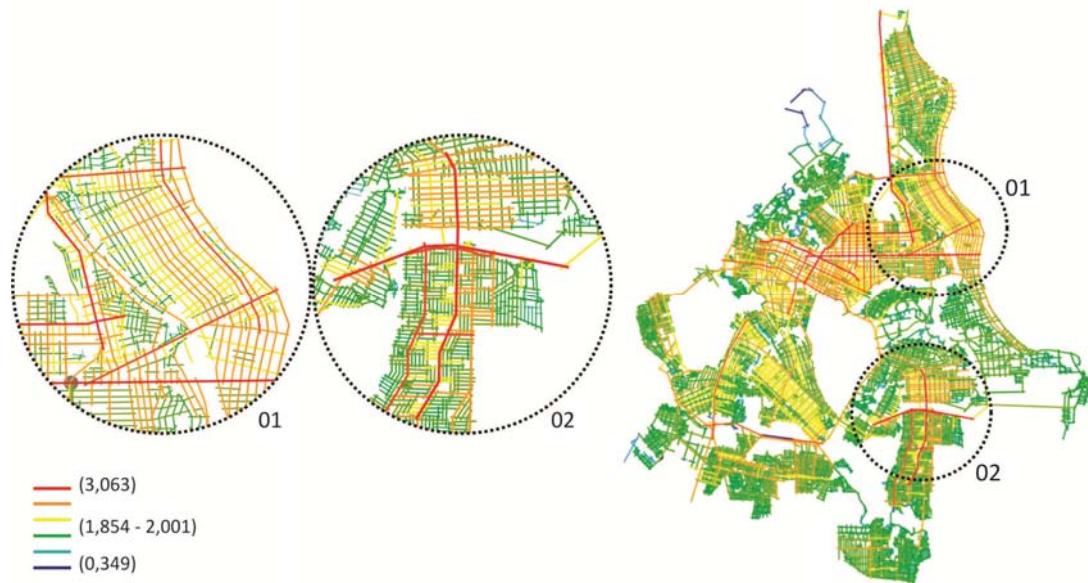


Figure 16 – Integration Map (RR/R5) of João Pessoa in 1994. Highlight for passage of Tambaú and Manaíra (01) and the districts of Bancários and Mangabeira (02). Source: Self development through the Urban Reconstitution Map of the city (OLIVEIRA, 2006).

7. THE OLD TOWN OF JOÃO PESSOA CURRENTLY

The process of urban expansion of the city over the last decades of the 20th century, which culminated in the development of new centralities – topologic and economic –, contributed to the old town gradually lost its economic influence to the rest of the city. Thereby, mainly from the 1980s, society no longer attached to the old city core the activities in which it had been considered the main area. By observing the morphological evolution of João Pessoa from the integration maps set out here, it is noticed that there were agreements between the topological importance degree of the old center and its economic importance to society. As the integration core of the city permeated the old center areas, it kept its relevance as commercial, administrative, leisure and services spot. While the old town was gradually losing its morphological value, these uses began to settle in the most integrated areas of the system. Currently (see figure 17), the integration value of the old center in reference to the city had a supporting role, distancing itself from exercising the motion's potential submitted by the mid-century 20th.

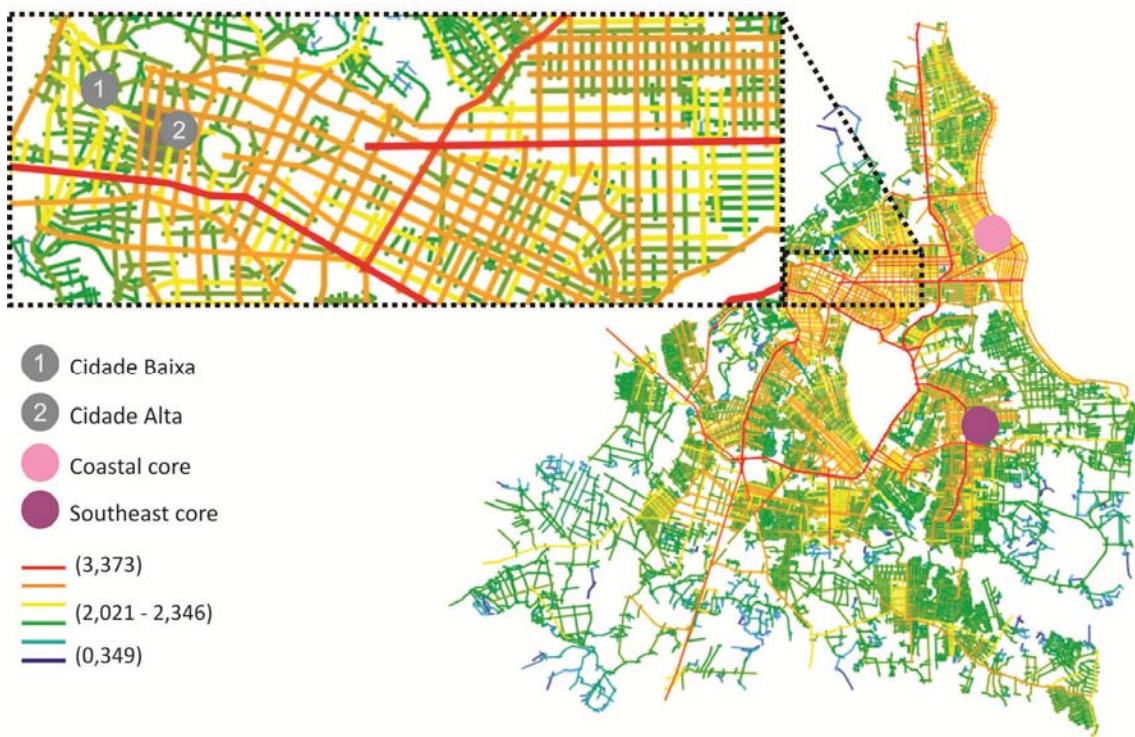


Figure 17 – Integration Map (RR/R7) of João Pessoa currently. Source: MusA – Laboratório de Morfologia e Usos na Arquitetura, UFRN, with own changes.

The residential use has been largely discarded, causing the abandonment of several old houses or underuse of these in the form of tenements. The area correspondent to the “Cidade Alta”, which lies near to the more integrated routes of the system, is the section of the center that still has more intense commercial activities and services, focused mainly to the most popular strata. The uses installed there promoted the distortion of the facades on the buildings they are housed in, aiming mainly the substitution of windows and doors for wide openings. The “Cidade Baixa” began to assume low levels of integration compared to the other areas of the city, being located as an immediately peripheral area to the potential flow of movement. This was the section of the old center which suffered because of devaluation of property, abandonment, uncharacterization and underutilization of its properties, which now houses uses that almost ignore the historical values aggregated there. The diverse trade has given place to uses that only promotes the degradation of heritage, such as machine shops, auto parts stores, building materials, metalwork, etc.



Figures 18, 19, 20 and 21 – Parking lot at Visconde de Pelotas Avenue (18); abandoned house(19); uncharacterized houses for commercial purposes (20 and 21), at Duque de Caxias Street, which for centuries was the most important of the city.

Figures 22, 23 and 24 – Abandoned buildings in the João suassuna Avenue (22) and uncharacterized to trading in automotive parts and services (23 and 24) at Rosario Di Lorenzo Street. Source: Comissão do Centro Histórico de João Pessoa.

Some morphological studies that had as its object of study the city Natal-RN (TRIGUEIRO e CARVALHO, 2007; TRIGUEIRO e MEDEIROS, 2003; MEDEIROS, HOLANDA e TRIGUEIRO, 2003), observed that the similar process: the shifting of the integration core out of the old town and its gradual devaluation, followed by the deterioration of its heritage. Therefore, it becomes clear that the morphological changes experienced by João Pessoa over the centuries have influenced changes in the economic dynamics of the city, contributing to the emergence of new centralities and, consequently, the process of degradation of its old center.

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