

## SERIDÓ'S BUILT HERITAGE: TO WHOM IT MAY CONCERN

Edja Bezerra F. Trigueiro<sup>\*</sup>, Iana Alexandra Alves Rufino<sup>\*</sup>, Gilton Batista Filho<sup>♦</sup> and Nathália Maria Montenegro Diniz<sup>♦</sup>

### Abstract

This article reports combined efforts to disseminate knowledge about architectural heritage through the *Web* as an attempt to help people "see" their built patrimony. It describes aims and procedures used in an inventory of 22 towns in Seridó, a micro-region in the Sertão of Rio Grande do Norte (RN), and how the resulting information was articulated into a database to build a panorama of successive urban formation stages, as delineated by the remains of colonial, eclectic and modernist buildings, still surviving at the turning of the 20<sup>th</sup> to the 21<sup>st</sup> century. The inventory was motivated by the perception that nearly all old town centres in Seridó were suffering a rapid dismantling process following socio-economic changes intensified round the mid-20<sup>th</sup> century.

Though common to other Brazilian towns that process seems particularly perverse in Seridó since this part of the world is a disseminating focus of material and immaterial cultural assets, which are an essential part of RN's identity. The disappearance of the remaining built heritage is also disquieting in a state with poor records of preservation actions, where although architectural integrity has not become a valued asset, architectural mutilation is a factor of urban decay.

By offering simple tools for identifying built vestiges that define age-values through a contemporary media, rather than presenting yet another set of "virtual toy towns", we hope to contribute to enhance visibility and awareness concerning the fading architectural heritage of Seridó, especially among young *Internet* users, and to further reflection about its historical value.

**Key words:** *Inventory, Northeast of Brazil, Seridó, vernacular architecture*

### 1. An attempt to encourage "seeing" architectural heritage in small hinterland towns

This article reports combined efforts to disseminate knowledge about architectural heritage through the *World Wide Web*, as an attempt to help people "see" their built patrimony. It is also an attempt to "translate" architectural information, which in Brazil is normally confined within the academic sphere, to the larger community of *Internet* users. We describe the aims and procedures adopted to develop an extensive inventory of the 22 settlements in Seridó – a micro-region in the Sertão of Rio Grande do Norte – that were constituted as municipalities before the 1960s, and to articulate this information into a database to be displayed on the *Web*. The idea was to build a panorama representative of those towns' successive formation stages, from their earlier occupation to the mid-20<sup>th</sup>

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<sup>\*</sup> UFRN - Universidade Federal do Rio Grande do Norte, Brazil

<sup>♦</sup> UFCG - Universidade Federal de Campina Grande, Brazil.

century, delineated by the remains of colonial, eclectic and modernist buildings, as they stood in the built environment at the turning of the 20<sup>th</sup> to the 21<sup>st</sup> century.

The inventory was motivated by the realisation that the architectural scene in Seridó's older town centres was suffering a rapid dismantling process. Many of those who were born there in the 1950s and had showed sites and buildings of their childhood times to the younger generations in the 1970s were unable to repeat the experience in the 1980s and 1990s.

Morphological studies of these and other town centres have demonstrated that this pace of transformation is related to structural changes in the urban grid of Brazilian towns, following the urbanization boom that swept through the country in the 1970s (Trigueiro and Diniz, 2007; Trigueiro *et al*, 2005). As it is often the case in cities worldwide and in Brazil (Amorim, 1995; Nogueira, 2005; Rigatti, 2005), sites that once accumulated the roles of founding settlements and activity town centres (where most of the diversity of urban functions were concentrated), gradually lost this quality as the urban grid expanded from a compact to a sparse settlement (Medeiros, Holanda, Trigueiro, 2003), and the former town centre developed towards a specialised down-market sub-centre. Space-use relationships resulting from long processes of urban growth were disrupted whereas the sprawl of newly developed neighbourhoods helped to encapsulate the old town centres within a highly accessible inner circle, which tends to be particularly adequate for small-scale businesses that benefits from intense pedestrian and vehicular flows. Such quality coupled to what seems to be an increasing interest in cultural heritage, considering some recent projects<sup>1</sup> and frequent references in the media, could signal a step forward towards the so-called period of "Urban Re-invention" (Vargas and Castilho, 2006), when the economic basis is expected to catalyse environmental conservation and sustainable development, were it not for the fact that architectural antiquity and integrity never quite became a commodity *per se* in Brazil. Although interventions in sites and buildings of Brazilian towns that have multiplied since the 1980s, mostly to foster tourism and increase land value, appear to deny this premise, the oscillating pattern of vitality and abandon haunting many such interventions (i.e. Pelourinho in Salvador, Recife Antigo in Recife, Rua Chile in Natal) supports the argument and exposes the difficulties of aiming at *integrated conservation* actions, as proposed in the Declaration of Amsterdam (1975), in the absence of a historic background in heritage education that underpins those actions in Europe.

The pace of transformation of old town centres outside the restricted circuit of listed sites also highlights the fact that although in conceptual terms the continuously amplified notion of historic heritage identified by Choay (2001) has spread internationally to reach hinterland areas of the "developing world", this notion unfolds into quite distinct praxis amongst central and peripheral societies. While in European countries the chronological and geographical expansion of the notion of heritage is accompanied by an increasing public awareness of the built environment, in Brazil this awareness remains restricted to the technical and academic milieu and systematic information about the built heritage conservation/transformation dynamics is still predominantly contained in academic records.

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<sup>1</sup> Examples are the inventory of "Bens Móveis e Integrados" (mobile and integrated effects), of Rio Grande do Norte, conducted, in 2006, by the Fundação José Augusto (see [http://www.fja.rn.gov.br/fja\\_site/](http://www.fja.rn.gov.br/fja_site/) accessed in 20 October 2007), and the "Mapeamento do Patrimônio Imaterial do Seridó" (recording of the immaterial patrimony of Seridó), conducted, in 2007, by IPHAN (Instituto do Patrimônio Histórico e Artístico Nacional), the country's national heritage agency (see <http://www.cefetrn.br/conteudo/noticias/> accessed in 20 October 2007).

Fonseca (1997:68-70) advocates that the conflict between *age-value* and *historical value* as pointed out by Riegl, is an issue whose discussion, in Brazil, does not go beyond the sphere of highly educated groups, especially those engaged in heritage preservation, while the *newness-value* is perceived by a much ampler social range linking to the notion of development and frequently underpinning public policies. Within this frame and following the purpose of using heritage as a commodity for the tourism trade, conflicts involving use-value (for economic purposes), newness-value (to entice mass appreciation of monuments and sites) and age-value (restricted to the experts) tend to become deepened. Fonseca (1997:71) points out that although Riegl could not see this tension his emphasis on the need to disseminate knowledge about historical value – before larger layers of society are prepared to recognize age-value – as a necessary requisite for heritage preservation, anticipates the understanding of such conflict.

It is argued here that in Brazil, the notion of age-value in architectural heritage escapes even the so-called highly educated milieu since most members of the professional elites fail to identify architectural remains of previous time periods and are easily misled by pastiches and false remakes of “old buildings”. Whereas in Europe, observation and identification of historic architecture is part of curricular activities from early school age, this knowledge in Brazil almost always results from architectural training or self-built erudition although, in recent times, a growing interest in historic architecture is spreading among other university courses.

Authors who have attempted to reconstitute the development of preservation policies in Brazil (Fonseca, 1997; Millet, 1988) agree that a profoundly elitist vision of cultural heritage is accompanied by the permanent exclusion of the population in both the representation and the decision processes. It is here postulated that this state can hardly be changed – at least as regards the formation and transformation of architectural heritage – if the disinterest and ignorance about the built environment is not overcome. It is also argued that this ignorance interferes with the very idea of cultural heritage as a commodity, since neither historical-value nor age-value translate into economic value in the building market. In fact, in Brazil, besides not adding extra value to a building – as opposed to what is usually the case in Europe – architectural integrity is often perceived as a de-valuation factor.

Evidences to support the above argument can be found in studies about neighbourhoods going up-market in land values (Trigueiro *et al*, 2003; 2001), which are being transformed not so much due to the substitution of old buildings by newly-designed ones better fit to respond to emerging requirements, but especially by conversions to adequate existing buildings to new uses that could easily be accommodated in them. Worse still, buildings displaying architectural vestiges that demarcate successive stages of urban growth are mutilated simply to be “updated” to the newest trends.

The overwhelming predomination of “newness-values” at the expense of all other values exposes an attitude that seems to escape the logic of post-modern globalization if “the fervour with which the cult to heritage is celebrated throughout the world”, as advocated by Choay (2001:237-T.A), is to be believed. This postulation leads one to wonder whether most of the Brazilian territory is part of this world. On the other hand, the increasing references to conservation strategies in the academic, politic and mediatic discourses leads to a fearful sensation that Brazil might be diving fast into the post-modern tendency for (re)creating “historic sceneries” for tourism appeal (often referred to as *disneyfication* interventions) without having conquered the level of public knowledge and awareness required to identify how “historic” such scenarios really are.

The recognition of basic formal features that distinguishes architectural tendencies at successive time periods could help to build this knowledge. When considered in a comparative way, as part of a whole set of artefacts dating from distinct epochs, aspects such as the relationship among building, plot and urban block, the spatial distribution into a single or composite built shell, and the arrangement of façades into masses and voids, shapes and textures – to name a few morphological elements that can easily be “read” from the street – can convey an amazing amount of information concerning buildings, neighbourhoods, towns and their potential inhabitants. Thematic maps displaying these data offer an easy-to-view demarcation of the urban formation and transformation dynamics, particularly if articulated to other information, such as state of physical conservation and preservation of original stylistic features. They tell about origins and occupation expansions, economic cycles of prosperity and urban decay, internal migration patterns, gentrification and impoverishment urban processes, change in the functional character of urban areas etc. Databases focusing on exterior formal aspects although resulting from painstaking time-consuming field work are easy to obtain as they do not depend on visiting permission from occupants and are unlike to raise fears about security since what they offer to view is what anyone can verify by passing on the street. Although missing out in the type of socio-cultural insight conveyed by the spatial analysis of plans, the definition of morphological types from an exterior point of view may further knowledge regarding the predominance of certain patterns of interface among inhabitants and between these and outsiders, by allowing for association of types of built shells to types of spatial configuration, as identified in other studies (i.e. Trigueiro, 1994; Amorim, 1999).

Besides being useful as supporting resources for studies concerning a variety of issues relating to the built environment, systemic information about the exterior form of older and newer buildings that make up a townscape at one same period of time may serve as a means to raise awareness about their rapidly disappearing physical presences.

The aim of the work presented here is therefore to contribute towards such understanding by displaying easy-to-read building inventories in the *Web* and by translating academic knowledge into key morphological information in the hope that this may encourage a less inattentive “seeing” of the architectural heritage, which is being lost.

## 2. Why Serido

The emergence of urban settlements in Seridó, occurred relatively late in the process of occupation of the captainship of Rio Grande do Norte. Though the first urban nucleus, Natal, appeared in 1599, two hundred years went by, between the official “discovery of Brazil” by the Portuguese, in 1500, and the arrival of earlier settlers in Seridó.

One of the prevailing theories about the formation of Caicó – first urban settlement to be established in the region – maintains that a hamlet emerged in the area at the end of the 17<sup>th</sup> century, in the context of the Barbarian war, a long enduring Indian revolt against the Portuguese occupation of the hinterland (Teixeira, 2002). A small defence building, the Cuó fortress, developed into an *arraial*, that is, a military post, around 1700. The description historians give of the early settlements is that of a cluster of huts round an open space facing or surrounding a chapel located in the vicinities of water streams. These huts would be inhabited mostly by farmers who dwelled there on market days and religious festivities and in their farmhouses otherwise.

Historically linked to cattle breeding, these towns developed slowly along the 18<sup>th</sup> century and changed significantly in the 19<sup>th</sup> century, accompanying the growth of

commerce and the development of cotton wool plantations in Rio Grande do Norte, thereafter, functioning mainly as supporting centres for farming activities until well into the 1960s. From then on, in the trail of the urban expansion that swept through Brazil, and of the local decline of beef and cotton production, both unable to compete with those of other origins, the towns rapidly turned into local centres for tertiary activities, which tend to concentrate in the highly accessible street grid surrounded by late developments that coincides with the old town centres. These original town cores become devaluated as residential areas, whereas new neighbourhoods attract investors and urban investments. Former domestic buildings, where most 19th and early 20th century formal attributes can be found, are being progressively converted into shops and service outlets.

As it is generally believed in Brazil that the look of domestic buildings is incompatible with commercial use, original façades give way to wide glass-paned doorways and shop windows, topped by huge commercial ads. Remaining residents also feel they must update the look of their houses to meet the day trends, often as an effort to increase the value to their property, by going from mere surface modification (the application of ceramic tiles on the façade), through radical stylistic revamping to complete reconstruction in order to meet requirements of contemporary life, such as the addition of terraces and car shelters. This, added to the presumption that living in flats instead of houses makes property less vulnerable to crime, complete the full picture for a total substitution of all vestiges of architectural heritage in the old town centres of Seridó. In the absence of a national policy to educate youngsters and inform society about the importance of preserving some architectural integrity that can represent successive phases of the historical development, commercial opportunity and novelty is all that seems to stand.

The current transformation pattern reveals a process in which urban settlements whose *raison d'être* was to give support to a rural-based society, lost its centuries-long character without developing mechanisms capable of conciliating their new urban roles and the conservation of their built heritage. In addition to the loss of evidences of these towns' urban trajectories, of their changing functional roles and of a range of socio-cultural practices crystallised in their built forms, this process seems particularly alarming in view of the fact that, in Brazil, although architectural integrity has not yet become a material asset, architectural mutilation is a strong factor for devaluation and urban decay.

### **3. The inventory and the website**

The inventory of 22 towns that constituted the urban network of Seridó in the mid 20<sup>th</sup> century was recorded between 1996 and 2001 through field work trips taken at regular intervals by a varying team of students and supervisors that include the authors of this article. A synchronic panorama of the pre-modernist and modernist architectural ensemble still surviving there at the end of the century was constructed. By pre-modernist we mean buildings that have kept vestiges of colonial and eclectic architecture, including some art-nouveau motifs that appear amalgamated into the romantic repertoire of *alpine chalets* and north-European *castle-like* constructions; modernist buildings are those that retain traces of proto-modernist features affiliated to the geometrical grammars of art-deco as well as those more or less faithful to the formal principles of the Modern Movement.

The procedures applied in the field work – recurrently adopted in extensive inventories – allows for a diachronic reading of the ensembles insofar as the synchronic snapshot results from the amalgamation of layers of distinct occupation phases at successive time periods. At the time of the inventory, the studied towns (figures 1 and 2)

were distributed into “homogeneous zones” as defined in the 1990s by the state administration, according to proximity, geographical similarities and the area of influence of some larger towns, as follows:



IMAGE - 1 - Rio Grande do Norte in Brazil

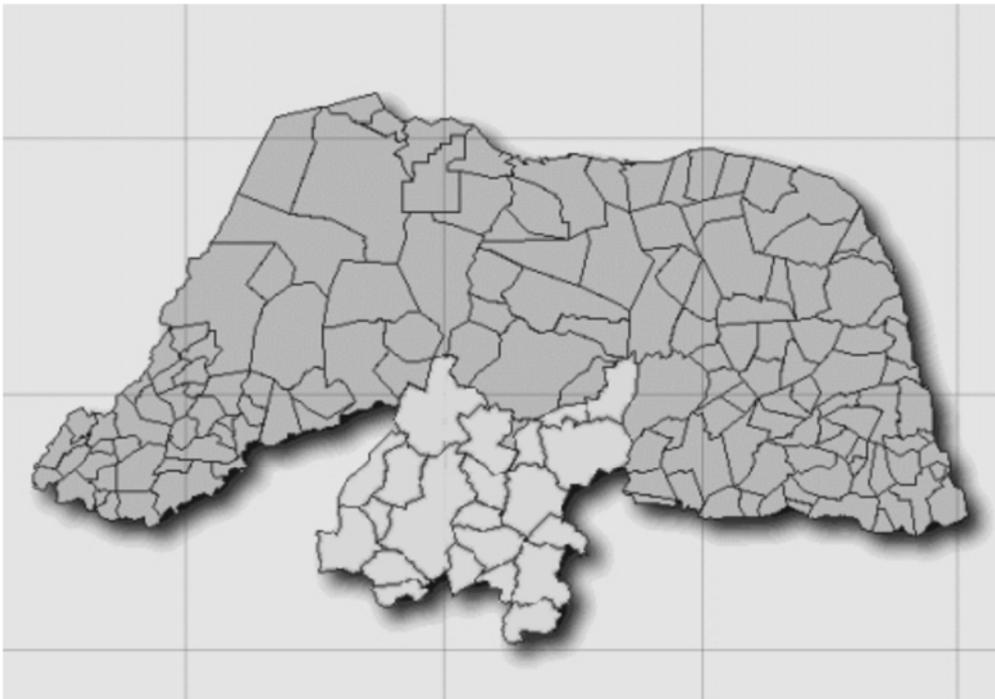


IMAGE - 2 - Seridó (brighter area) in Rio Grande do Norte

The *Zona Homogênea de Caicó* included the municipalities of **Caicó**, Cruzeta, Acari, Ipueira, Jardim de Piranhas, Jardim do Seridó, Ouro Branco, Santana do Seridó, São Fernando, São José do Seridó, São João do Sabugi, Serra Negra and Timbaúba dos Batistas; the *Zona Homogênea de Currais Novos* included **Currais Novos**, Carnaúba dos Dantas, Parelhas and Equador; and the *Zona Homogênea das Serras Centrais (central sierras)* comprised Jucurutu, Florânea, São Vicente, Lagoa Nova and Cerro Corá.

Proceedings applied in the field work went as follows: (1) the identification of each building in maps that displayed the areas occupied until the 1960s in the surveyed towns; (2) photograph recordings of the buildings (individually or grouped in rows) which conserved some or all original formal features visible from the street; and (3) synoptic file records containing address, location sketch, date, number of negative exposure,

photographer, key formal features, state of preservation of original features, the state of conservation of built fabrics, and observation notes.

The data gathered in the field journeys was organised into: (1) a film negative file; (2) a photograph file; (3) a general information paper file catalogue that combines image, identification records and formal features; (4) a map file; and (4) a reference table. The analysis of the data recorded allowed for an estimated identification of the buildings into successive time periods defined as: (1) colonial – when formal features inherited (though not necessarily built) from colonial times predominate; (2) eclectic – when formal elements pertaining to or inspired by any neo-tendencies, from neo-classical to neo-colonial, predominate, sole or combined to one another and to faint art-nouveau and art-deco-inspired elements; and (3) modernist – when either a more or less explicit reference to the art-deco style or to the formal repertoire associated nationally or regionally with the Modern Movement (or *estilo funcional* as referred to at the time) predominate, or, still, the simple geometrical nudity of the *modernist box* defines the formal parti.

The above information is being progressively transferred to digital media created for the purpose so that the data can be easily exported for formats compatible with various softwares that allow for Geographic Information System mapping and *Internet* display. The bank is the basis of the “Inventário de uma herança ameaçada” (Inventory of a heritage at risk), which was finalised and accessible at [www.seol.com.br/bdc](http://www.seol.com.br/bdc) since 2005.

The database is now undergoing re-construction and transference to Webpages that are being created to publicise the work developed by research groups related to the graduation and post-graduation programmes in architecture and urbanism at the Universidade Federal do Rio Grande do Norte, particularly that of MUa – Morfologia e Usos da Arquitetura (morphology and uses of architecture), where this and other similar databases are being constructed.

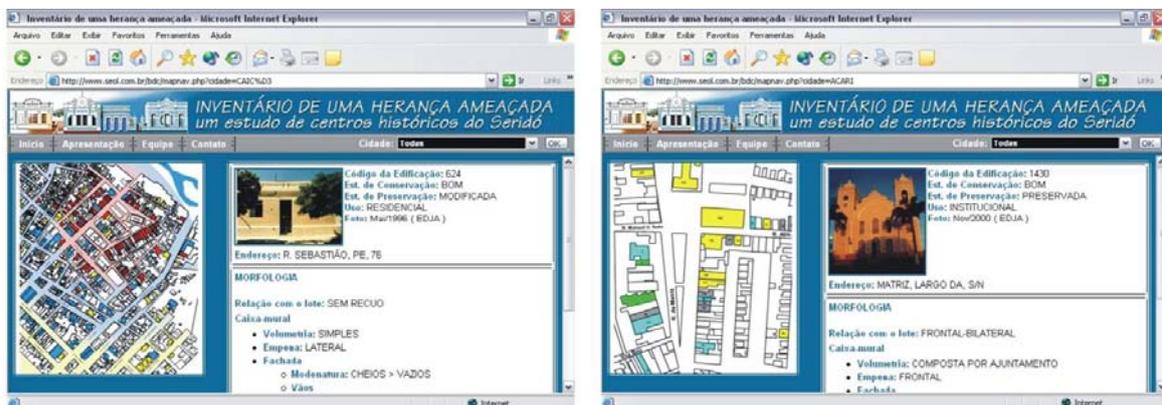


IMAGE - 3 - Caicó (right) and Acari (left). Examples of inventoried towns as displayed on the Web.

Navigation on the site is possible by searching for the building addresses in each town, by selecting the building in the interactive town maps and by entering some key-words, such as stylistic tendency. Town maps display thematic data in which each building is colour codified according to time period, land use, state of preservation of original features, and state of conservation of built fabrics. By clicking on each mapped building, an identification file containing image and information about location, key formal features, stylistic affiliation etc, is displayed.

Printing is also possible. The adopted format supports future updating as well as the addition of new themes and new items, such as other town ensembles. The addition of new records and of alteration to old ones, as well as new “tailor-made” ways of explorations of the data is possible by means of a password, a feature that allows for consultations and up-dating actions among researchers working at a distance.

Although still under construction and presenting images whose quality is gradually being improved, as technical and human resources become available, the site has been frequently used as a data source for studies of diverse environmental-related natures, directly or indirectly associated to the effects that the dynamics of the urban expansion may have over the construction, modification and substitution of the built ensemble. Architecture, History, Geography, Tourism and Law students – at undergraduate and graduate levels – have reported use, or enquired about information (existing or lacking) in the site. A commercial organisation in Caicó commissioned one of the research fellows engaged in the work to design a calendar based on the information presented in the site.

#### 4. An outlook that may be viewed as half empty or half full

The current pace of built heritage erasure was evidenced by a coursework exercise developed by architectural students early this year (march 2007), who assessed the state of preservation of buildings that had been recorded in the 1996-2001 inventory of Caicó. IMAGE - 4 shows a cluster of town blocks that contained 44 recorded buildings. Of these, 13 have either changed from “preserved” and “modified” to “modified” and “disfigured” in a period between 6 to 9 years. Regrettably, the assessment of the other parts of the town core does not show a brighter picture.



IMAGE - 4 - Map of a part of Caicó’s old centre displaying buildings according to the state of preservation of original formal attributes in 1996 (a) and 2007 (b). Source: Coursework for Projeto e Planejamento Urbano e Regional – PPUR, March 2007

The process described here, which is common to most older Brazilian towns, seems all the more perverse in Seridó since this area is generally identified as a disseminating

focus of material and immaterial cultural assets, and concentrates most remaining traces of centuries of territorial occupation and social practices materialised on urban spaces and buildings, which are considered an essential part of the cultural roots of Rio Grande do Norte, one of the states that presents the poorest records as concerns heritage preservation actions, among the ones that experienced compatible patterns of urban occupation.

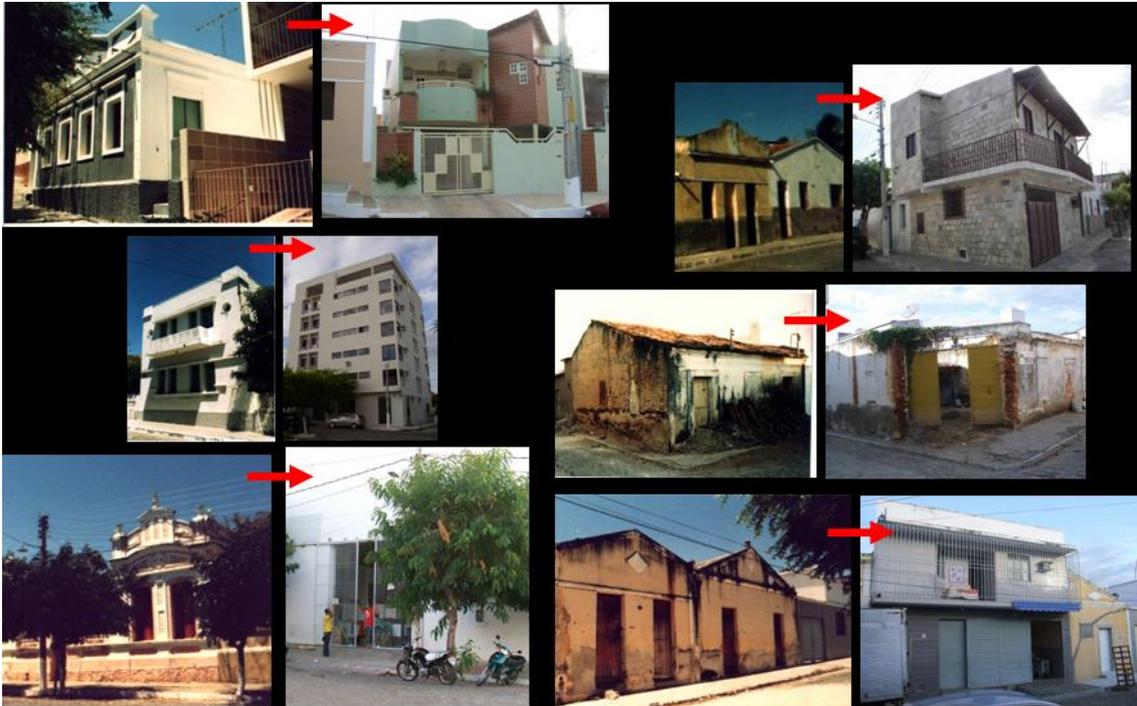


IMAGE - 5. Old buildings of Caicó, whose original formal attributes have been transformed in the last ten to eleven years. Source: MUa database (1996) and coursework (2007) by architectural students attending the course in Projeto e Planejamento Urbano e Regional - PPUR/UFRN.

The repercussion of the site to date – still very much restricted to the academic world of university students – can hardly be said to have helped disseminate knowledge to the point of reducing the risks affecting the fast fading architectural heritage of Seridó. However, such pinpoint attitudes may, within an optimistic outlook, add to an increasing number of courses, events and projects dedicated to discussing various aspects of Seridó's cultural heritage, such as the ones referred earlier on, and help narrow the gap between the scholars/technicians awareness concerning the built environment and that of the general public. It is therefore hoped here that by offering simple tools for identifying architectural vestiges that define age-values through a media that holds a strong novelty appeal in a country of novelty lovers, the visibility of the architectural heritage of Seridó may be enhanced and a reflection about historical value furthered.

## References

Amorim L. 1995. Do Bom Jesus ao Pilar, que caminho tomar?', in S Zanchetti, G Marinho, V Millet, Estratégias de intervenção em áreas históricas, MDU/UFPE, Recife, v1, pp.110-119.

- \_\_\_\_\_. 1999. *The Sectors' Paradigm: a study of the spatial and functional nature of modernist housing in Northeast Brazil*, PhD Thesis in Advanced Architectural Studies (supervised by Bill Hillier, supported by CAPES), London: University of London.
- Choay F. 2001. *A alegoria do patrimônio*, São Paulo: UNESP
- Fonseca M.C.L. 1997. *O patrimônio em processo*, Rio de Janeiro; UFRJ:IPHAN
- Milet V. 1988. *A teimosia das pedras: um estudo sobre a preservação do patrimônio ambiental no Brasil*. Recife: Prefeitura de Olinda
- Medeiros V. 2006. "Urbis Brasilis ou sobre cidades do Brasil: inserindo assentamentos urbanos do país em investigações configuracionais comparativas. Doctoral thesis (supervised by Frederico de Holanda), Brasília: Universidade de Brasília.
- Medeiros V., Holanda F., Trigueiro E. 2003. From compact colonial villages to sparse metropolis, Proceedings from the 1<sup>st</sup> international space syntax symposium, SSL/UCL, London, pp. 12.1-12.16.
- Nogueira A. 2005. Analysis of high sub-centrality of peripheral áreas at the global context, Proceedings from the 5<sup>th</sup> international space syntax symposium, TU Delft, Delft, pp. 245-253.
- Rigatti D. 2005. When the city center is no longer the center of the city. In: Proceedings from the 5<sup>th</sup> international space syntax symposium, TU Delft, Delft, pp. 229-244.
- Ribas O., Bezerra M. 2005. As lógicas que fundamentam o desenvolvimento urbano e a preservação do patrimônio histórico-cultural. In: O Ribas (org), *Visões de Brasília: patrimônio, preservação e desenvolvimento*, Brasília: IAB.
- Teixeira R. B. 2002. *De la Ville de Dieu à la ville des Hommes. La sécularisation de l'espace urbain dans le Rio Grande do Norte - Brésil*. Doctoral Thesis. Paris: EHESS.
- Teixeira R., Trigueiro E. 2007. Fading evidences of an urban trajectory: a morphological study of two settlements in the Northeastern hinterland of Brazil. Proceedings of the International Seminar on Urban Form, Ouro Preto: ISUF-2007.
- Trigueiro E. 1995. "Change (and continuity) in domestic space design: a comparative study of nineteenth and early twentieth century houses in Britain and Recife, Brazil". PhD thesis in Advanced Architectural Studies, London: University of London.
- Trigueiro E., Diniz N. 2007. Fading traces of socio-environmental change in the old town centres of Seridó, Brazil. Proceedings of the International Seminar on Urban Form, 2007, Ouro Preto: ISUF-2007.
- Trigueiro E., Teixeira R., Cavalcanti A. F., Silva E. B. 2005. Fragments of a fading heritage: assessing effects of change in urban function over building conservation in the north eastern hinterland of Brazil. Proceedings of the 5th International Space Syntax Symposium, 2005, Delft: 5th International Space Syntax Symposium,.
- Trigueiro E., Medeiros V. 2003. Marginal heritage: studying effects of change in spatial integration over land-use patterns and architectural conservation in the old town centre of Natal. Proceedings of the 4th International Space Syntax Symposium. London: University College London/Space Syntax Laboratory/The Bartlett School of Graduate Studies, v. 01, p. 20.1-20.16.
- Trigueiro E., Rufino I., Medeiros V., Cavalcanti A., Moura G., Pinheiro M., Sena S., Neves, M. 2001. Disneyfication' now?: assessing spatial correlates for heritage preservation in Natal". Proceedings of the 3rd International Space Syntax Symposium. Atlanta: Georgia

Institute of Technology, Ann Arbor: A.Alfred Taubman College of Architecture and Urban Planning, University of Michigan, v. 01, p. 66.1-66.7.

Trigueiro E. et alli. (1996). "Inventário de uma herança ameaçada: registro e análise de centros históricos do Seridó, RN". Projeto de Extensão (outreach project), Natal: Departamento de Arquitetura, UFRN, Pró-reitoria de Extensão (developed between 1996-2004 with several reports in mimeo).

Vargas H., Castilho A. L. 2006. Intervenções em Centros Urbanos. Barueri, SP: Manole.