

The City, The Forest and the Center: Manaus Configurational Analysis

Graciete Guerra da Costa, Valério Augusto Soares de Medeiros

Universidade de Brasília, Brazil

gdacosta@terra.com.br

Abstract

This paper is an exploratory study presenting a configurational analysis of Manaus - a Brazilian city located in the middle of the Amazon Forest, in the North portion of the country - focusing on its centre. Cultural and architectural issues as well as historical ones are presented.

Introduction

The Brazilian official Amazon rainforest occupies about 63% of the national territory (510 million hectares); it presents a green area equivalent to 22% of the Earth's reserves and holds 25% of the water resources available. According to scientists, the Amazon concentrates more than 20% of known species in the world, what turns the area into the richest natural land in the planet, mostly due to its biodiversity. Unexpectedly for most people, a metropolis with over 2,1 million inhabitants is settled in the middle of this greenish jungle, showing a clear situation of contradiction between built environment and natural landscape. Manaus is one of the Brazilian largest metropolis with a powerful tax-free industrial zone. Nowadays, international tourism is developing and dozens of jungle hotels recently opened are redirecting policies and strategies towards a sustainable point of view. In a historical approach, 335 years separate the foundation of Forte de São José do Rio Negro village - former Manaus denomination - to present time, and in this period people from Manaus - known as manauaras - saw the growth of a rich and special Brazilian cultural and architectural heritage. Hundreds of ancient houses, preserved buildings, original squares and monuments - built in a great variety of styles, defined a peculiar urban scenery. The fact that the city suffered British influence from 1880 to 1913 during the "Rubber Age" also contributed for this condition, when iron bridges, the downtown planning, the customs building, the downtown sewage farm and the complex of the harbour quay were built, which have been so far preserved. Manaus city settlement was defined by two axis: the river and the forest. Portuguese, Spanish, Dutch and English settlers were there and finally, from the end of the 19th century on, migrants from all over Brazil, specially from Northeastern region (arigós) and São Paulo state (paulistas). Taking into account these preliminary information, the following analysis will be conducted considering space syntax theory: this study deals about the nature of social and spatial issues in the city centre and how aspects of urban physical structure may define a peculiar way of life. In other words, it is intended to understand how open spaces in Manaus dialogue and/or influence people movement in the urban grid. The conduction of a deep manauara structure analysis is not the objective of this study, but to explore whether or not public spaces promote social interaction or direct urban growth.

The analysis

Beginning this investigation from Rio Negro riverbank toward West, one observes that the city grid layout points to a city centre much more orthogonal than suburban neighbourhoods, in an evident “vernacular” planned pattern. The more one gets away from downtown, the more sparse and discontinuous is the system.

Blank areas in the map correspond to (1) Manaus International Airport, (2) Federal University of Amazon and (3) Industrial District. In these spaces, pedestrian movement is almost inexistent and, considering the low intelligibility level, the co-presence is expected to be negative.

In the convexity map, it is possible to identify barriers and convex spaces perimeters (physical restriction or allowance to movement), as well as transitions between these and closed/ locked spaces, whose accesses are controlled by doors, gates, railings, or any other element marking the distinction between public or private domain.

Regarding the city centre’s open spaces, selected categories must allow a better comprehension of this interaction between space and society, here understood as a system composed of probable encounters between people. Thus, syntactic theory considers that the human spatial organisation, in urban or building scale, is defined by the co-presence patterns deriving from the dynamism of barriers and permeability placements.

As can be seen from the graphic analysis, the system of open spaces in the centre is clearly continuous, but it is also constituted by elements that can be identified and analysed individually, such as streets, squares and the most important avenues.

These opened spaces may be - or may not be - intensely fed via transitions born in the interior spaces. In an integrated system, like Manaus centre, we have to fold a small number of corners, on average, to go from one place to another, what seems to be positive to co-presence. The inverse situation occurs in suburbs. As an example of segregated areas, we can list cul-de-sacs close to Silva Ramos and Ferreira Pena street.

In the non-intelligible systems, the occupation of pedestrians along lines tends to be random, and the grid does not contribute for a clear differentiation between places in integration terms. The centre of Manaus, due to its vernacular feature, can be considered as intelligible and, consequently, more urban.

Continuing the investigation, alongside Ponta Negra beach, where a leisure project was installed, one observes a sparse amount of entrances in relation to the remaining portion of the city. So, we may suggest that the intense co-presence levels in this area is more related to daily activities than to expected leisure activities in the public spaces.

In the direction East, also accompanying the riverbank, sparse and discontinuous entries are found due to the presence of the Manaus Air Base, the old international airport, current military airport.

Considering the accessibility analysis, the integration map shows a very powerful line, which connects the city centre to the rest of Manaus. It is important to say this line coincides with the main development axis defined by the local government, especially after the transference of the local government hall northward.

In integrated systems, the integration core tends to spread itself over the urban grid structure, but this is not the situation of Manaus, where a clear polarised area concentrates the most integrated lines. Comparatively, amongst South and North regions, we can say North portion is more formal while South one tends to be more urban.

Regarding the land use distribution, big hotels, leisure structure for events, stadiums, bumbódromo and others tend to be located far downtown. Places such as churches, schools,

commerce and retail, public hospitals and other buildings like the Public Library and the Amazon Theatre are located close or inside the centre perimeter. The variety of labels is immense: banks, intense commerce of manufactured products from the tax-free zone, professional and personal services, restaurants, churches, two ports, currency exchange, travel agencies, theatres, cinemas, education institutions, etc. An observation is relevant: the Industrial District creates an intense flow in central Manaus (go-and-return, with great and small trucks), also on Saturdays, Sundays and holidays, increasing movement.

Regarding users and visitors categories, people who deal with commerce in working days, use the built space to develop activities, promoting the social contact. During weekends, the functioning of shops and institutions ceases, giving place to tourism activities, boat strolls, opera in the Amazon Theatre square or simple visits.

In the centre of Manaus, intelligibility, as well as the predictability, is high. The absolute number of pedestrians is elevated, mainly in the area next to the tax-free zone commerce and the floating port. Some areas are non-residential, in others, on the other hand, houses are found just in a small number: close to Staircase of Remédios. There is another port, with regional characteristics and responsible for the flow connecting Manaus to villages only reached by boat.

Conclusions

This essay shows Manaus with the urban predominance in the particular area of the center of the city. The high co-presence rate and the strong visual identity are undeniable, making us conclude based on this analysis that Manaus downtown is a dense and profound area, where the space functions as a mechanism to promote social contacts and interaction.

The intense co-presence levels on the streets are more related to the daily life than to the leisure activities at the public spaces; the great space constitution, a balanced structure, and centered activities at the most integrated areas make Manaus to be considered as a city whose way of life is almost incomparable.

This exploratory research can contribute to a better comprehension of the urban structure and space in Manaus, serving as a basis or support for proposal of future architectural interventions or preservation of the historic center.