

From Public to Private - the Trajectory of the city of Caraíba, designed by
Joaquim Guedes

Introduction

The article seeks to examine the trajectory of Caraíba, a city located in the semi-arid 'sertão' region of the state of Bahia in Brazil. Caraíba was purpose-built by the Brazilian national government between 1976 and 1982 to support the extraction of copper ore. During this period other cities were constructed throughout the country with the same purpose of allowing the exploitation of existing energy and mineral resources. The article examines the characteristics of Caraíba's design, within a geographical, historical and cultural context. The objectives of the article are twofold: firstly, it seeks to analyse the city during two periods (the mid-60s and the present-day), looking for motives to explain how the project carried out by the architect, Joaquim Guedes and his team, was conserved and transformed. Secondly, the article seeks to evaluate the impact of this project through its transition from public to private intervention.

Background

The project for the city of Caraíba (1) was closely connected to the political, economic and social situation in Brazil during the mid 60s and 70s. At that time, Brazil was experiencing a military dictatorship noted for centralizing power providing some measured economic growth but also for increasing social inequality. This was the background to the Brazilian government's exploration of the country's natural wealth and many facilities were put in place to extract mineral and hydroelectric resources. In the 1950s, the architect Oswaldo Bratke conceptualized Vila Amazonas and Vila Serra do Navio, in Amapá, to enable the extraction of manganese. In the 70s, the

architect Joaquim Guedes conceptualized several mining towns. In the state of Pará, the towns of Carajás, New Marabá, and New Barcarena were designed and in the state of Bahia the same architect was assigned to design a project in Caraíba to facilitate the exploitation of copper.

It had been known for a long time that copper was available in the rural semi-arid region, the so-called “sertão”(2), but even though the first initiatives for its exploitation took place in the 50s, effective extraction only began during the 1970s. At that time the Brazilian government was represented by a public company called *Caraíba Metais SA*, which was located on a former farm of the same name in a very arid and unoccupied region. The government considered it appropriate to design a city that would give support to the community devoted to mining activities and to facilitate this *Caraíba Metais* hired the architect Joaquim Guedes and his team (3).

The Caraíba project was undertaken between 1976 and 1982. In 1978, when the copper mine began functioning, the city became populated by people from neighboring areas and other parts of the state of Bahia. At the beginning of the exploitation period, the general understanding was that the mine would not last for long. In fact it was first predicted that the extraction of ore would only last until 1998. In that year, the opencast mine effectively exhausted its reserves but exploitation continued in the underground mine and this was not expected to become exhausted until 2007. However, even today the mine is still in existence and the next forecast for exhaustion is 2011.

It should be noted that the military dictatorship in Brazil came to an end in the mid-80s. After that the country moved toward a period of democracy in which its economy was liberalized and globalized, even though social inequalities persisted. As a result of these changes, the Caraíba mine

was privatized in 1994 and this profoundly affected the characteristics of the city.

Design and implementation

Joaquim Guedes produced many documents in which he described and analysed his architectural design process. These deliberations enable us to understand the creative process of the architect associated with the Caraíba project (4). However, his words alone are not enough to fully comprehend the work which should be addressed on its own merits.

There is no straightforward procedure that drives the work of the architect/urbanist. In reality it is an exhaustive process, punctuated by thoughts and actions. But that does not mean that there is no method. The methodology consists of rationalization and systematization of existing thoughts and actions in the design process (5).

The consideration stage seeks to set up plans for the project and instigate general conditions. However, there are no pre-defined conditions, rather a plan that evolves through a dynamic process of contact with the specifics of each project. The plan presupposes an understanding of real circumstances.

For a plan to take place, it is necessary to establish its basic parameters. It is important to formulate a series of questions, the answers of which will vary depending on the situation of each project. In the case of Caraíba, the essential questions were: For who is the project intended? What are the historical and economic contexts? What other circumstances could interfere?

All this information has to be processed and organized to enable the project to happen. However, the processing of background information is not a

linear process, rather a circular one, where action and reflection occur simultaneously.

Guedes expresses the need to design for real human beings, with their specific needs and desires. In this way his principles are similar to those disseminated by the Modern Movement in respect of social responsibility and architecture. However, if the principles are similar, the methods are different, as Guedes is opposed to the concept of a "generic modern man". Rather, it is the "specific man" that architecture and urbanism should serve. Guedes calls attention to the profound lack of interest of most modern architects to the common man in his specific context and is sharply critical of Brazilian Modern Architecture which was created and supported by a dictatorship. He also decries the creation of Brasilia and its authoritarian architecture that benefits bureaucrats to the detriment of its anonymous citizens. However, it is worth noting that several projects designed by Guedes (including, Caraíba) were also completed under the auspices of a dictatorship that came into being with the military coup of 1964. (GUEDES, 1982: 86-91)

But what do all these procedures and circumstances have to do with the design of Caraíba?

Preliminary field assessments for the project were extensive. Guedes and his team considered that information provided by *Caraíba Metais* was insufficient to initiate the project design which should have included, from the outset, all its buildings including hospitals, schools, clubs, houses etc. All the company provided for the implementation of the urban centre was the following: a plan of the site, information on the points of extraction of the ore, the characteristics of the project and the total number of industrial jobs with their functional categories and salary. In order to build an action plan, Guedes

considered it necessary to recognize the specifics of the place. To enable this, a multidisciplinary team conducted various assessments to examine the area's physical, human and cultural characteristics. These conditions affect not only the city's future but also its urban facility projects.

Guedes believed that the city and the constructions within it also effect the existential dynamics of its users and the context in which they exist. "Sertanejos' (inhabitants of the sertão) love "caatinga" (6), which is harmonious, luminous, majestic and beautiful. But the city, perhaps the city within the caatinga, imposes its own rules ... "(GUEDES, 1981: 114)

However, the establishment of such rules in that city in the caatinga would also be linked to the appropriation of the urban scheme by the owners and workers of the mine. Guedes challenges the traditional solutions applied to the urban design of other mining cities that end up separated into sectors intended for different categories of workers, causing social segregation. Although the architect considered that, in a mining town, social stratification is inevitable, he points out that it is possible to conceive of a proposal that would not intensify it. The city should not, therefore, be divided into sectors for the exclusive use of certain strata of workers within the mine, but should be accessible to everybody.

A city dominated by a government company, situated in a remote region could readily adopt the concept of a 'closed city"', completely controlled. However Guedes and his team considered that, due to local conditions, it would be impossible to conceive of a city completely open, preferring to create a mixed city, controlled by the company, but with the ability to be adapted by its residents. This was seen to be the most appropriate solution, as the prediction was for the mine to soon be exhausted and the

company to then abandon the city. Given this, the city should possess some physical structures both fixed and flexible, so that the residents would be able to adapt more easily to this inevitable change. Guedes maintained that there should be an "invariable system", relating to roads and the general infrastructure, and a "variable system", relating to the architecture and the latter should be appropriated and transformed by the residents.

In respect of the 'invariable system', the architect conformed to an urban framework taking into account not only existing topographical, climatic and cultural conditions, but also his considerations of social relationships as they existed in the city. In this way he defined streets in straight and orthodox lines, running East-West and North-South, thus benefiting from the orientation of the sun and the winds. Various plazas were created throughout the city: six in the suburbs and six in the city centre. Guedes believed that such plazas, in addition to being urban fixtures that already exist in the region, are fundamental for the social interaction of the city's inhabitants. He also conceived of a central square, to become the principal point for social interaction.

Near the central square, there was an area reserved for trade, various services and for some residential housing, though the majority of houses were situated a long way from this central point. To locate them the architect created 36 rectangular blocks within 'lots' of variable dimensions leaving some empty lots to be occupied in the future.. The boundaries of these residential lots are not aligned with each other, but protract and recede in relation to the contours of the streets. In this way, the created sidewalks are of varying size providing a feeling of movement to those walking on them. This type of habitation does not adhere to a conventional structure. It appears to

come not from a contextual point of reality, but rather a search for the composition of the urban framework.

The architect paid particular attention to the invariable or 'flexible' system. He believed that he should provide the city with areas that would promote public life, integrating its entire population. He believed that the health, education and recreation facilities would be important to assist with the adjustment of those arriving to work in the city. In one of his statements he stated that "we must see not only a generous design, but also a strategic vision superior to the interests of a modern company, that is not separate from the interests of its employees." (GUEDES, 1981B: 8) And so a hospital, schools, clubs and other facilities were built in the city. Guedes pointed out that the design of these buildings took into consideration the climate and the needs of the company and of the residents. Regarding the latter, it was essential to guarantee that the buildings could be modified in keeping with the needs of the users.

The households were also part of the 'flexible system' indicated by Guedes: "the inevitable impositions of organization and structure by the city challenge the freedom of the users. For this reason, we looked to protect the freedom and participation of each one in defining their internal and external spaces. In this way, houses originally designed to look identical were allowed extensions and individual decorative features. It was expected that users would extend, paint and complete their own houses, build gates, decorate them in any way they wanted - as was customary in the region." (GUEDES, 1981B: 7).

Let us consider the location of the homes of the mine's employees. The intention of the architect was not to separate the houses of semi-skilled and higher-skilled operators and technicians into different sectors in the city, but to

integrate them with all sectors of the urban nucleus. Guedes proposed various types of residential homes (including houses and apartments) that were spread across practically the whole city. However, there was a clear priority to place smaller houses and lots (of a lower standard, for families on low income) in the city centre, close to most public services, whilst placing the bigger houses and lots (of a higher standard for higher-income families) in the suburbs.

In nearby towns many houses were semi-detached, but there were also buildings positioned in the centre of the lots. The architect opted to design semi-detached houses aiming to decrease the extent to which the buildings would be directly exposed to dry wind and sun, both of which are particularly intense in this region. For this reason semi-detached building designs were effectively adopted for the design of all residential housing.

The number of windows and doors of the house depended on its size and status. The houses of unskilled and semi-skilled workers would have a combination of one, two or four windows arranged in the main facades. The houses of the higher-skilled workers would not have windows at the front, just two access doors for residents and employees. The windows of those houses were to open to internal courtyards. Guedes justifies this isolating of the more expensive houses by saying that "the higher income minority require exclusivity even above the standards they enjoy in their cities of origin. They want separate homes with large gardens, distant from other workers and without any contact with the blue collar neighborhood" (GUEDES, 1981:135)

It was suggested that the appearance of the facades should also relate to local architectural conditions. Indeed, solutions proposed for low and medium income housing corresponded to certain features found in the region, such as the presence of small openings and borders that take the place of eaves in the

roofs. (CAVALCANTI-BRENDLE; VIEIRA, 2004: 321-323) However, we should take note of the abstract nature of these facades: their surfaces seem to be separate from the bulk of the house due to the positioning of the black guttering that surrounds them. Another element that exemplifies this abstract characteristic nature is the presence of small door and window frames. With the higher-income housing, the facades differed from the local parameters by having smooth surfaces and enclosed prismatic volumes the whiteness of which accentuated their abstract nature. This was not entirely obvious because of the narrow elegant structure of the garage made in wood with a clay tile roof. In this way, defining the facades juxtaposed the complex relationship between an architectural language with local characteristics and another language with more "universal" characteristics, which serves to rehabilitate the abstract nature of modern architecture.

Another characteristic element of the facades was the use of colors. A limited amount of combinations of colors was to be used for the walls and windows, and these were to be applied to every house.

The city was expected to have a great number of cars but the architect decided to create parking spaces on the streets, so limiting the amount of parking places for each private residence. This criterion, however, applied only to households on low or medium incomes (with one exception), as the higher income homes were indeed projected to have garages.

The residential design project corresponded to the thoughts and actions implemented over the creative process. After an exhaustive review of data relating to the company requirements and taking into consideration the physical, human and cultural context, a figure of nine emerges as the number of types of architectural solutions for homes, of which 1294 were built. These

nine types served a population whose specific duties, as well as wages, within the company varied greatly.

Use

Since its foundation the city has retained many of its original features and has modified others. Which are the features that remain and which are those that have been modified due to the transition from a public to a private domain? The comments below come from an examination of the current situation of the city, its facilities and houses, as well as from interviews with some of its residents (7).

It is important to point out that following Guedes' ideas the so called 'fixed structures' of the city are being preserved and the 'flexible' ones are being changed. The urban layout remains the same, as does the position of the plazas in the city. However, the central square looks quite different with new paving, some gateways and public facilities that provide it with a contemporary touch.

In respect of the lots there have been some important findings. For many years the city's lots retained their original characteristics. However, the present situation is a different story: the central lots, part commercial and part residential, are growing in size with unplanned and often illegal constructions, that take over public space and create a good deal of confusion. The suburban residential lots are also being expanded and modified, further changing the characteristics of the original project. Although the original solution stated that the boundaries of the lots were not to align with the contours of the streets, the trend has been for the front ends to align to match the size of the sidewalks. So, wherever they are able (physically or economically), users occupy the remaining sidewalks, and extend the area of their houses, building varandas or,

more often, garages. Although there are residents who use the wide sidewalks for public use, many prefer to appropriate them for private use. To give this some context, this type of occupation by lots, as proposed by Guedes, is not commonplace in the "sertão", or even in Brazil as a whole. It was therefore to be expected that the inhabitants of Caraíba would not properly assimilate to a proposal which was alien to their life experience.

The various public facilities in the city have not changed in respect of the original project. As Guedes envisaged, these facilities effectively have changed and expanded to meet new demands although the principal characteristics are still preserved. However, it should be stated that several buildings are currently extremely degraded and some just under-utilized, as is the case with the hospital which had been an important landmark in the region.

Another relevant factor is the utilization of these public facilities. Guedes' intention was to make them accessible to the whole population without discrimination but this did not transpire. At the time of the inauguration of the city the hospital and the schools were shared by all the city's inhabitants, although that was not the case for social clubs, for example. Ever since the city's inception two clubs have been used by different groups of mine employees. This situation of social segregation remains prevalent and has extended to the privatized schools which are now divided to receive students from different social backgrounds. The hospital is still public but it will undoubtedly be privatized soon.

It is possible to observe that houses go through an intense process of transformation. With the privatization of the mine in 1994, the houses that used to belong to the company were sold to those that inhabited them as well as for other people. This transition deeply affected their characteristics. Before

1994, local government used to monitor modifications which were progressively being carried out on the houses and there were virtually no significant changes. After 1994 the situation was reversed. Since there was no effective control to maintain the original characteristics of the houses the new owners felt free to modify their exterior façades and structures however they wanted.

There are a number of reasons for these modifications. One of the most controversial was the amount of openings (windows and doors) of the housings. Many residents made an immediate connection between the number of windows in each home and the social position of its occupants. It was therefore clear that those with one or two windows had a lower income, those with three had an average one and those with no windows at the front had a higher income. Consequently, in spite of the fact that houses of differing income levels were scattered throughout the city, theoretically mixing social classes, in actual fact social segregation manifested itself through the appearance of the house, specifically by the number of windows it possessed.

Recently, the residents of Caraíba are moving away from this kind of standardization. The renovated houses have more doors and windows opening onto the streets and incorporate verandas or garages at the front of the lots. The paradox is that today the economic level of a household depends mainly on whether it has gone through changes and especially whether the front of the house has been extended.

There have also been significant changes concerning the façades of the houses. The original houses were inspired by local architecture, enhanced by an abstract touch. The use of color was varied but in the original project they adhered to a standard that formed a coherent whole. This homogeneous

characterization was indeed prevalent while the city was still controlled by the mining company, but since privatization it has been modified. It is important to remember that the architect himself encouraged the residents to modify their houses and this is exactly what has happened. Each user has modified his residence as he thought fit, extending the property towards the front or the rear. So far the users have not altered the officially prescribed height of the buildings. It should be stated that there has been no consistency in these interventions which have been made without any control. This means that the city will gradually lose its original character and acquire other features with little or no "architectural quality". The question is whether the Guedes' encouragement of the principal of modification by residents allowed for such radical changes, which could ultimately lead to the complete adulteration of his work.

The materials with which the houses were made have also been modified. Those originally proposed for all the houses had quite an austere character and, although today many homes still preserve these original materials, others have adopted materials considered more "noble", both internally and externally.

Final considerations

The transition from public to private intervention has influenced the city of Caraíba in a complex way. Many of the city's characteristics have been greatly transformed while others have been conserved. Why is that?

The method adopted by Guedes for the design of Caraíba sought to rationalize and systematize the intrinsic characteristics of the region. He wanted to recognize the "other" from the perspective of the differences. He therefore established an active relationship between plan and project that

attempted to capture the "otherness" and to make it manifest. However, although he tried hard to follow a rational and systematic approach, it seemed impossible to totally capture the "other" and completing this turned out not to be viable. The "other" proved to be extremely complex and dynamic, and the methodology that used was not capable of recognizing it completely.

This search for communicating with the "other", however, assumes that both parties are interested. It is therefore possible to see, in the design and in the construction of Caraíba, features relating to the local conditions, but also the presence of other, unrelated elements, closer to modern architectural language and which relate to the formal education of the architect. It is not uncommon for residents of Caraíba to be unaware of this "modern" language used by Guedes.

If the regional situation affected the project the same could be said of the national situation. It should be remembered that Caraíba was designed under the auspices of an "other" that was both absent and present and this "other" was installed in Brasília, heading a military dictatorship and promoting a capitalist economy. Guedes expressed his intention to reduce the interference of these circumstances in his project, but he was only partially successful. The architect stated that he aimed to minimize the differences in the social and economic classes in the mining company yet his performance was limited to two measures. The first relates to the proposed use of urban areas by the entire population and the second concerns the distribution of houses of different standards throughout virtually the whole city. However, certain project decisions made by the architect are a manifestation of a hierarchy and social segregation that already existed in Caraíba. By defining the appearance of the houses the architect showed very clearly those who have power in the city,

those who determine and control the social, political and economic situation of its inhabitants. This power was manifested as much in the size of the houses as in the differences in their façades, and also whether neighborhoods were integrated or separated.

It is likely that at the time of its completion the city and its architecture had largely assimilated with its residents. In the 70s, the "sertão" was still remote, and the points of reference for most residents of Caraíba were local ones. It could also be true that at that time people did not accurately understand (or were afraid to understand ...) the precise nature of social hierarchy and social segregation on an urban level. The people of Caraíba did not fully grasp the extent of public control on the urbanization process. However, these days such issues have other implications.

Several factors have influenced the current assimilation of the city by its users. The first one refers to the threat of extinction of Caraíba. For 30 years the people of the city have lived with this eventuality. They reacted by seeming unwilling to maintain and establish strong ties with the city, which could be taken from them at any time. In this way, despite the architecture seeking to establish a connection with the contextual reality, the users have not taken this on board, preferring to change its character.

The second factor that may explain the difficulties of the residents to assimilate and maintain the city and their houses is the influence of external circumstances. At the time of its conception, the city of Caraíba had a centralized public power (represented by the State or by the mining company), to determine the main characteristics of the project and establish ways to move it forward. In recent times, Caraíba has functioned under weaker governmental control and corrupt private interests that do not exercise control of the city, its

urban facilities, its housing or its inhabitants. These "private powers", typical of the globalized era, have invaded the "sertão" and set up in Caraíba.

Under the impact of globalization the "sertão" has lost its unique features which have been replaced by features more characteristic of richer and more influential areas of the country and the world. "Globalization" can also be understood in the sense of the influence of the eponymous "Rede Globo" - the most influential television network in Brazil - which has contributed to the promotion of certain consumer values and a standard of living that pervades local communities, influencing and changing their cultural parameters.

And so the city of Caraíba, which was under public control, is now in private hands and as a result of this transition, the remote "sertão" is becoming increasingly globalized. The project envisaged by Guedes is at risk under these circumstances as it simultaneously seeks to understand, manifest and modify itself. At times the residents of Caraíba assimilate the risks, but at other times transform them as if they no longer respect such risks or want to overcome them.

Today the remote city and the globalized city live together ... In the streets of Caraíba, people still walk between goats and sheep, they are still surrounded by cacti, but their houses now have satellite dishes ... (8).

Notes

1. Caraíba is now called "Núcleo do Pilar"; it is part of the district of Jaguarari in Bahia.
2. The "sertão" is a dry and harsh region located in the interior of the northeastern region in Brazil.
3. See: Mineração Caraíba S/A – uma empresa cidadã
4. To learn more about Caraíba: (GUEDES, 1981)

5. To learn more about the creative process of Guedes: (AMARAL Jr, 2003) and (CAMARGO, 2001)
6. The "caatinga" is a type of vegetation able to survive in the dry areas of the Brazilian northeastern region:
7. I would like to acknowledge the collaboration of Claudete, Eliete, Lucia, Cristina, Fátima and Valério, residents of Caraíba (Pilar). I also thank the attention of architects Joaquim Guedes and Marcos Acayaba.
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