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# Sustainable Urban Planning? Reflections on *Bon Air* and *Trénelle-Citron*

> La ville de Césaire est une ville d'intégration.
> (Philippe Kenjah Yerro: "Variations sur l'en-ville en crise", 2013, 209)

## 1 Introduction

Accounts of the Caribbean reflect that the Caribbean was, during the colonial period, a mostly rural region. This has dramatically changed, as approximately two-thirds of the populations now live in urban areas. Consequently, issues of environment and sustainability in the Caribbean should be regarded as urban issues. According to Martinican urbanist Bruno Carrer, the Caribbean city is currently in crisis (Carrer 2013). Whether this crisis is seen as social, financial, economic, climatic, or environmental, sustainability is presented as the solution.

Fort-de-France (Martinique) presents a good example for studying how multi-faceted and contested (g)local discourses of sustainability are thriving and it is these discourses which re-shape urban spaces in the region. For the last 70 years, urban planning in Fort-de-France has been influenced by its long-time mayor Aimé Césaire and his successors, who, as the quotation above highlights, have pursued a specific urban policy, namely that of integrating the incoming, uprooted rural populations into the *mangrove urbaine* (Césaire 1956 [1939]; Letchimy 1992; Yerro 2013).

The text at hand examines challenges and perspectives for sustainable urban planning in the Caribbean by analyzing two sites in Fort-de-France: the *cité* Bon Air (a public housing ensemble) and the *bidonville* Trénelle-Citron (a former informal settlement). The two main challenges for these sites are housing conditions and public transport. The analysis of both shows that with recourse to spatial planning and sustainability different conceptualizations come into being. Urban planning framed discursively as *sustainable* may not necessarily prove *adequate* for all sites and their respective histories.

Sustainability represents the widely promulgated vision for urban planning, as Wilson summarizes: "Sustainability is typically defined as a neat and tidy mix of nature, entrepreneurial restructuring, strategically built and placed physical infrastructure, enhanced environmental planning and imposing of pollution controls, and ideally situated growth nodes in one small package." (Wilson 2015: 1) As a consequence, the notion of sustainability is not value-free. Hence, in this text, sustainability is understood as an apparatus (*dispositif*) in the Foucauldian sense. That means "[…] a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical, moral and philanthropic propositions […]." (Foucault 1980: 194) The two chosen examples reflect different understandings of sustainability. In the *Bon Air* project, it is a technocratic understanding: sustainability shall be achieved by distinct architectural forms and the usage of specific material(s). In *Trénelle-Citron*, another understanding frames sustainability within identity: sustainability is conceived as a form of living in accordance with inherited forms of living.

## 2 Reflections on Sustainability from a Political Geography Perspective

With regard to the analysis of sustainable urban planning in the Caribbean from a political geography perspective, two main points have to be considered. First, the dynamics evolving around sustainability as a discursive field for international, regional, national, and local politics and policies. Second, the challenge of adequate scalar framing of environmental problems.

As a buzzword and (to some extent) discursive polish for greenwash campaigns, the term sustainability is difficult to grasp and to put in a useful critical context. Nevertheless, there are two ways in which it proves useful. First, sustainability is important for the Caribbean territories in their quest for climate justice, most notably within the political agenda of the SIDS (Small Island Development States). With recourse to discourses of sustainability and linked imaginaries, as well as images, of low-lying islands threatened by sea level rise, SIDS are able to intervene on the discursive field of global and international politics and decision making, predominantly on the scale of United Nations bodies. In this way, discourses of sustainability help to communicate concerns about their threatened position due to climate change.

Second, sustainability has great potential to challenge dominant growth and development paradigms as it reminds one of the interactional character of human-environment relationships. For instance, the shift to sustainable livelihoods puts greater emphasis on people's capacities to cope with challenges and

adapted forms of living which are less oriented to exploitation of the environ-
ment. On the one hand this changes the perception of individuals or societies
as passive and vulnerable, to rather active and thus functions as form of
empowerment. On the other hand, this results in practices which might allow
better living conditions and less environmental degradation (Prudham 2009;
Rhiney 2015).

The adequate scalar framing of environmental problems may be identified
as a major epistemological challenge. For instance, "[p]olitical ecologists have
argued for the need to problematize global environmental discourses and their
tendency to gloss over local difference and localized environmental practices
and values." (Allen 2014: 524) The predominant focus on top-down and/or bot-
tom-up approaches can lead to a biased understanding of scale and thus risks
that some problems are obscured due to the overemphasizing of one particular
scale of analysis. The trend towards technocratic solutions for social and envi-
ronmental problems intensifies this issue. This becomes obvious when looking
at vulnerability maps, as well as global climate models and scenarios. These
work on a spatial resolution that is too wide-meshed to capture small islands
like Martinique on a regional scale; they are even less adequate to elaborate on
the microclimatic conditions on the island itself (ECLAC 2010). However, these
maps, models, and scenarios are the basis for political action and decision mak-
ing. To acknowledge the intertwined and cross-scalar character of a phenom-
enon may help to avoid obscuring its nature by privileging one scale over
another (Dodman/McGregor/Barker 2009).

While social and environmental challenges in the Caribbean result from a
place-specific history and geography, such challenges should be acknowledged
without using spatially deterministic explanatory models. Taking this into con-
sideration may help to understand the importance of local history and identity
for the development of place-based solutions as the following discussion of
examples from Fort-de-France will show.

## 3  Urban Sprawl and Urban Planning in Fort-de-France

Although representations of the Caribbean environment tend to create the
image of islands bathed in shimmering colors like green (lush forests), yellow
(edenic beaches), and blue (clean waters), the majority of Caribbean people live
in a far less colorful reality made up of grey concrete buildings and brown
dusty roads. Estimations of the region's population living in urban areas range
from 65% (Dodman/McGregor/Barker 2009: 366) to 70% (Marc/Saffache 2011:
435). Although the Caribbean has to be understood as mainly urban, there is a
clear lack of urban studies of the region (Jaffe/de Bruijne/Schalkwijk 2008).

Therefore, the re-shaping of urban Caribbean landscapes needs to be examined further, particularly with regard to transportation and living conditions.

After decades of uninhibited urban growth and sprawl and the rise of (to some extent subsequent) social urban problems like violence, segregation, exclusion, and exposure to natural hazards, the search for sustainable urban forms of living has become more prominent. Unlike in other regions of the world, in most parts of the Caribbean it is nearly impossible to draw on indigenous experience and knowledge. At the same time, one should be careful when applying and transferring policies and practices that were adapted for and created in other parts of the world to the local Caribbean situation (Verrest/Moorcroft/Mohammed 2013). Sustainable urban planning is an urgent matter, postulating that a sustainable city has fewer problems. It should not be forgotten that there is an underlying discourse inherent to this understanding of sustainability, namely that the marginalized urban populations are the cause of environmental problems and not the victims of environmental degradation and global change (Jaffe 2016). The key question for the analysis of the two following examples from Fort-de-France is therefore: How is sustainable development framed and which reasons drive the actions taken?

In the colonial period, Fort-de-France was Martinique's secondary city, mainly of military significance. After the capital St. Pierre was destroyed by the volcanic eruption of *Montagne Pelée* in 1902, Fort-de-France became the political and economic center of the island. In the beginning of the 1950s, the population began to grow rapidly, from 60.000 in 1954, to 100.000 in 1969 (Martouzet 2001). Today, there are 87.000 people living in the *commune* of Fort-de-France, and 162.000 in the *arrondissement* of Fort-de-France (INSEE 2014). This population growth may be attributed to the decline of sugar cane production which led to a rural exodus. The migrating rural population settled in the non-urbanized areas surrounding the town center, notably along the coast, along the courses of rivers, and on the steep hills. The town center itself was (and is) located in a drained former mangrove below sea level. In other words, settling in and around Fort-de-France was and continues to be marked by risk and exposure to natural hazards such as flooding or landslides (Mavoungo/Saffache 2005).

Transport is a major issue for Martinican society. The geographical location of its capital Fort-de-France, the small amount of public transport possibilities, and the wide dispersal and use of private cars are key factors in this context (Martouzet 2001). In 2010, Martinique counted 204.400 cars, which corresponds to 515 cars per 1.000 inhabitants. Most trips are made in the Fort-de-France area which leads to up to 118.000 cars per day on the main bypass *la Rocade* and to daily traffic jams. These occur notably in the morning and in the afternoon, because 81 per cent of the employees take their own car to commute

(DEAL de la Martinique 2014; Tailamé 2011). It is clear that the resulting expenditure of energy and pollution creates environment and health issues. In this context, a recent report of the International Development Bank (IDB) states: "Commuting to work not only has clear disadvantages in a country which imports all of its oil, but also results in an increase in greenhouse gas emissions." (McHardy/Donovan 2016: 8) In order to relieve stress from the road system, a new public transport system will be inaugurated in the course of the year 2016. The *Transport Collectif en Site Propre* (TCSP) is a system of buses with exceptional length (24m). Running on a separate lane parallel to the motorway, it connects the airport with downtown Fort-de-France, the section with the highest traffic volume ("Toutes vos questions sur le TCSP!", 2015).

The other major issue for Martinican society is living conditions. Key to the understanding of this issue is the historical integration of the incoming rural population into the city. Two distinct patterns can be discerned regarding Fort-de-France's incoming rural population: They either created informal urban settlements themselves or were put in public housing ensembles by the administration. Indeed, Bon Air and Trénelle-Citron are characteristic for these patterns. Bon Air is a *cité*, a public housing ensemble, and Trénelle-Citron is a *bidonville*, an (originally) informal settlement.

The Bon Air ensemble is located about one kilometer northeast of the town center, halfway to the city bypass *la Rocade*. It was constructed in 1964 and most of the units were sold to the residents in the 1980s. Currently, there are 321 accommodation units in three buildings, 90 per cent of them occupied. Almost 500 people live in the buildings which have fallen into decay since the property company pulled back in 1987. In addition to the buildings' decay and their exposure to especially seismic risks, many of the inhabitants face a difficult social situation: 40 per cent are unemployed and 40 per cent are over 55 years old (Ville de Fort-de-France & GIP-GPV 2009).

In 2006, planning began for the project *Bon Air ÉcoQuartier Caribbéen*, whose aim is to establish the first eco-neighborhood in the Caribbean. The plan is to tear down the buildings and to rebuild them at the same location. In order to achieve the goal of being the first eco-neighborhood in the Caribbean, the planning committee has defined guidelines for the project, the main points being: the use of natural resources (rain water, solar energy), the use of local building material, the integration of the inhabitants into the construction process during all stages, and a construction which benefits from the site's topography (notably, the view and the natural cooling by winds). During the destruction and reconstruction of the buildings, the inhabitants shall be accommodated in a nearby neighborhood. Integration into the city's infrastructure is of crucial importance for the project and the new buildings are planned to be better connected to the surrounding districts and to the new public transport TCSP.

500 units are planned and 320 of them will be council flats. The current inhabitants have priority for buying or renting units in the new buildings. Nevertheless, many of them fear that they will not be able to pay rent or buy in the new eco-neighborhood. They assume prices or rent will be significantly higher ("On dirait qu'on vit dans la poubelle!", 2015). Demolition is about to start and the project is planned to be finished in 2022 (GIP-GPV 2010).

In the context of Bon Air, sustainability is discursively framed as linked to a harmonious lifestyle and local identity. Structural modifications in the new buildings (local building material, use of natural resources) and an architecture adapted to local conditions (earthquake-proof, ventilation, etc.) shall be "[...] in harmony with our lifestyle." (GIP-GPV 2010, Translation J.B.) Through a mix of old and new residents, in terms of age and years lived in Bon Air, the new construction aims to "[...] maintain the Bon Air spirit" (GIP-GPV 2010, Translation J.B.) and make the buildings attractive for new residents. Comparing the official discourses (local lifestyle harmony and *Bon Air spirit*) with the worries of the residents, the new eco-neighborhood Bon Air finds itself in the tension between sustainable development as improvement of living conditions and sustainable use of natural resources, on the one hand, and fear of gentrification and its effects (high living costs, uprooting, segregation), on the other.

The second case presented in this text, the district of Trénelle-Citron, is located north of the town center and separated from downtown Fort-de-France by the city bypass *la Rocade*. It covers the hill between the riverbed of the *Rivière Madame* in the west and the top of the *Morne Garnier* in the east. This corresponds to an area of approximately 44 hectares and a difference in altitude between 110 and 130 meters. It is unknown how many people are currently living in the area. However, realistic estimations suggest around 5000 inhabitants (Gauvin/Carrer 2015). The settlement of the area occurred unstructured and illegally. The settlement's evolution is emblematic for several similar cases in Fort-de-France and may be subdivided in four phases.

At the beginning of the 1940s, in a first phase called *la squattérisation*, rural population occupied the land and established first provisional dwellings, mainly using wood and corrugated iron. The second phase was characterized by the replacement of the first dwellings by single-story houses resembling the typical rural *case créole* grouped around a free space in the middle of several houses, also described as a *lakou*. This *lakou*-structure is widespread in many marginalized Caribbean neighborhoods. It consists of a multi-household arrangement, where several dwellings share a common plot of land and often common access to resources like, for instance, potable water (for a detailed discussion of this and additional meanings of *lakou* see Rey 2001). One important element of this *lakou*-structure is a backyard garden (*jardin créole*) which provides herbs and vegetables. Over time, these houses were reinforced (a phase

called *la durcification*) and then eventually expanded to multi-story buildings. Characteristic for the evolution of the area is the system of mutual help in the community, called *technique du coup de main*. The structural (dwelling around a communal yard) and social (mutual help) organization of the settlement has led to a variety of social practices which regulate access and living together in the area (Chamoiseau 1992; Rey 2001; Saffache 2000).

From the beginning, the population of the area was not just tolerated by the local authorities but actively supported. Rapidly, the area was connected to the urban infrastructure. At the same time, the incoming rural population was discursively portrayed as the basis of a new self-confident black Martinican identity. This discourse was mainly introduced by the mayor and chairman of the *Parti Progressiste Martiniquais*, Aimé Césaire (Césaire 1956 [1939]; Fonkoua 2013). Until today, there is a strong link between the party and the marginalized populations of districts like Trénelle-Citron.

I have argued elsewhere that in Trénelle-Citron, current quarrels about urban planning are dominated by competing discourses of risk, security, identity, development, progress, and heritage (Bohle 2015). While expert and academic discourses emphasize the exposure to natural hazards and the danger of living in the area, political and institutional discourses highlight aspects of local identity, social cohesion, and heritage, and thus favor little intervention. From the governmentality perspective taken here, clientelism, like in other Caribbean urban marginalized communities, seems to be the driving force behind urban planning practices (Bohle 2015).

Today, one can observe a rediscovery, or reappraisal respectively, of the backyard garden which provides the inhabitants with medical plants, fresh fruits, and vegetables (Marc/Saffache 2011). The backyard garden is seen as an economic strategy and as a space of social cohesion and interaction. Its origins go back to practices of the enslaved African people in the plantation system. Hence, it links the heritage of indigenous and enslaved people to today's population of marginalized communities. It thus connects the rural and the urban. In this way, backyard gardens are considered as possible local archetypal practice of sustainable development (Marc/Saffache 2011).

## 4 New Trends and Future Ideas

A recent project which addresses the outlined key challenges for sustainable urban planning in Fort-de-France seeks to build a cable car (*téléphérique*) which connects downtown with the settlements on the surrounding hills. In this regard, cable cars in Medellín (Colombia) serve as an example. The main idea is to better connect marginalized areas like Trénelle-Citron to the city center and

to improve the interconnectivity of the different infrastructure options (for instance, the TCSP, the network of local buses, the ferry system, the airport, etc.). The project's other main aspect is to guarantee the mobility of an increasingly aging population. Due to the described evolution of Trénelle-Citron, there is not much space for traffic, just a few very narrow streets and limited points of entry. Many buildings are only accessible via stairs or by passing through backyards. Trénelle-Citron is indeed enclosed and separated from downtown. There is a need to use special vehicles to assure services; small buses, for instance, are used for the existing transport route and quad bikes for mail delivery. A cable car might be the way to support a connection between downtown and the area, especially for people with limited mobility. In this way, it may be able to bridge the gap between the enclosed area and the city. The advantage of a cable car lies in its rather facile implementation. A cable car would not require significant changes in the urban structure and could be easily adapted to the area's topography. The main challenges are the high costs and the needed system's adaptation to risks like earthquakes and hurricanes (Gauvin/Carrer 2015). The project is still at a very early stage, but it nevertheless illustrates an adaptive approach to improve urban integration in Fort-de-France without demolishing buildings and/or changing the character of the area.

## 5 Conclusion

Sustainability is never neutral. The text at hand shows how sustainability might be understood as an apparatus that shapes urban planning. The two presented sites in Fort-de-France reflect two different outcomes of this apparatus: the one is characterized by technocratic approaches that reflect European ideas of sustainability as a development paradigm to some extent; the other by locally adapted and inherited popular practices based on solidarity and mutual help.

Taking a normative standpoint, one might advocate an integrative approach to urban planning in the Caribbean, favoring place-based solutions. That means bringing together popular local practices and technical measures adapted to social and environmental circumstances. The above presented sites in Fort-de-France contain useful elements for such an endeavor. Priority should be given to improve people's living conditions and reduce environmental degradation. Both are inseparably entangled, as Aimé Césaire underlines: "Avant de parler du logement, il faudrait [...] parler de l'habitat." (Césaire 1992: 7)

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