Bridging the urban divide between the informal and the planned city.

The African microstate of São Tomé and Príncipe as case-study.

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ABSTRACT. The worldwide acceleration of the urbanisation process in the last decades has induced great pressure in the urban built environment, especially in developing countries, where this growth could not be met by similar provision of support structures, thus creating extensive disparities and informal settlements. This has happened in megacities, but also in their smaller counterparts. Focusing on the case-study of São Tomé and using the data collected during research and fieldwork, this paper will present an analysis of the urbanisation process, its heterogeneity and its spatial repercussions of unbalanced distribution of public space and dwelling conditions. These will contribute to the discussion of options for challenging these disparities within the urban built environment, their misconceptions and disarticulations, namely the role of planning, design and stakeholders as catalysts for development.

KEYWORDS: informal settlements, social inclusion, developing countries, Africa, São Tomé and Príncipe

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1. Introduction

More than four decades after the *ecumenopolis* - the worldwide continuous urban mass that Doxiadis (1968: 377) predicted to be growing towards the end of the twenty-first century - the discussion over the intense process of urbanization and the loss of the city’s limits has become transversal to the analysis of the global built environment.

The urban areas of the developing countries are left to absorb a substantial amount of the rural exodus, with the aggravating circumstance that their intense growth cannot be met by similar provision of income generation, infrastructures or services, thus creating extensive areas of informal settlements that often lack even minimum living conditions. Thus, as the gap between formal and informal increases, the urban environment faces the struggle to overcome disparities, injustice and poverty. "Bridging the urban divide" is the motto of the latest UN-Habitat report on the State of the World’s Cities (UN-HABITAT, 2008b) representing therefore inclusion as the ultimate challenge to the urban built environment: the “right to the city” is retaken from the words of Henri Lefebvre (1968) to become the forefront of the international agenda.

This struggle stretches beyond metropolises: in Africa, smaller cities achieve higher growth rates than their bigger counterparts (Fig.1), representing a silent but significant phenomenon, frequently unattended and unplanned, where disparities spread. This shows that small scale doesn’t necessarily mean an advantage towards development nor simpler urbanisation processes, thus presenting small cities as suffering from infrastructural gaps that have similar characteristics to those taking place in bigger urban areas. Urban disparities mean severe differences between socioeconomic groups, reflected upon the use of the urban space, namely concerning the access to the most basic support networks and social assistance services, with parts of the population reaching profound levels of deprivation.

**Fig.1.** Annual urban growth rate, 1990-2000.

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<td>Intermediate cities</td>
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Note: UN-HABITAT calculations based on UN Statistics Division, Demographic Year Books (1995 - 2005), various years, and UN Population Division, World Urbanization Prospects, 2006 revision.
Analysis based on a sample of 2,500 cities with populations of more than 100,000.
2. The formal and the informal city

The notion of informal settlement encompasses a broad set of conditions of human occupation of the territory that often includes a concentration of socially and economically-deprived groups, substandard housing, little access to infrastructures/services and/or irregular land tenure and construction. To integrate this group, the criteria may thus be of socioeconomic, physical, spatial or legal background, varying widely to include the settlements known as slums, but also situations that, even though not lacking on basic living conditions, may be considered irregular concerning land or construction regulations. These also vary according to geographic location, cultural issues and specific urban setting, forming therefore a very wide and ambiguous set of situations.

Even within this designation of slum, its definition is so broad and includes such a multiplicity of circumstances, that the United Nations (2003: 8-9) even claimed two large subdivisions: the "slums of hope" and the "slums of despair", hence aiming to distinguish between supposedly "progressing" and "declining" neighbourhoods.

Nevertheless, and regardless of the difficulties to define this wide set of circumstances, the core issues that are to be discussed here concern deprivation and disparities in these urban areas, which contribute to unfair distribution of resources, access to welfare services and use of space. It is stated by the United Nations Organisation that "A divided city is one that fails to accommodate its poorer residents, regardless of the social and cultural riches they might contribute" (UN-HABITAT, 2008b: xii). This definition stresses that these urban disparities represent not only the failure towards ensuring human rights and welfare, but also the loss of the chance to fully develop the potential of these inhabitants, thus representing a wide and outreaching loss for the society. Hence the spatial divide is not just the reflection of socioeconomic differences, but especially the materialization of obstructions in the struggle for the improvement of the human condition.

2.1. Urbanity, informality and spatial justice – challenging the urban divide

In order to fight deprivation and disparity, urban aspirations rely on acting towards inclusion and urbanity to bridge the gap amid consolidated and informal areas.

This idea of inclusion does not mean the absorption by a single homogeneous system, but rather the articulation amongst multiplicity, providing a comprehensive support that allows, on the one hand, the provision of a framework to fulfil needs but, on the other hand, recognizing diversity and the capacities to fully develop one's special skills.

The notion of urbanity refers to the set of characteristics and qualities that provide livelihood to the urban environment, which François Ascher considers a "multifaceted power" (2010[2001]: 21). Nevertheless, where parts of the city present severe shortcomings in the basic living conditions and deprivations of their inhabitants, a piece of urban fabric waits to become urbane.

This process of challenging the urban divide implies not only the recognition of the spatial repercussions of socioeconomic disparities, but mainly the understanding of this issue as belonging to the intervention scope of the planner: firstly by understanding the complexity of the informal urban areas and their relation with the consolidated city, secondly by acting for their improvement and articulation.

Concerning the analysis of informality, several standpoints (PEET, HARTWICK, 2009) have been used to explain underdevelopment. These have also been
transposed to the study of urban growth in developing countries; the analysis of postcolonialism and its specificity or the idea of a dependent city, amongst other approaches, have attempted at understanding the origins, causes and patterns of emergence of informal areas within the trend of urban expansion.

The policies and actions for bridging the gap between the formal and the informal city have also assumed different approaches: after overcoming the strategy of exclusion undertaken through slum eradication during the early 1960s, the awareness of the needs and the potentials of informal dwellers - raised by contributions of authors such as John Turner, Colin Ward, Charles Abrahams, Hassan Fathy or William Mangin - has dictated a shift towards more inclusive policies. This turn has been based on the widespread discussion of ideas such as the "right to the city" (LEFEBVRE, 1968), "spatial justice" and the geography of social groups (HARVEY, 1973) and empowerment, self-help and the development of people's skills (TURNER, 1977).

However, and even though most intervention principles remain unaltered, some aspects have changed from the time of these first writings on urban growth and projects on the improvement of the dwellings in the developing world.

Firstly, if the urbanisation process throughout the mid-twentieth century was fed by the rural exodus and the growing urban areas still retained some of the characteristics and behaviour patterns of that origin - the idea of "peasants in cities" (MANGIN, 1970) - nowadays this profile has changed, as new generations are already born within urban background, and overlaying diversified populations shape an hypermodern heterogeneous city.

Furthermore, and secondly, as these areas increase, the methods for rural subsistence (as small-scale animal breeding or vegetable growing), even if desired, are progressively no longer viable. This induces an increased pressure on urban income-generators, which means that in the face of the inability for the regular system to absorb newcomers at a similar rate and to provide them with employment, informal economy sprawls.

Thirdly, these informal areas, besides spreading, are also in the process of densification, as new generations emerge and newcomers continuously arrive. The difficulties in the access to land and the opportunity to generate income, promote the development of rental and sub-rental schemes, as former and successful inhabitants move out or take their chance to climb up the social ladder. These areas suffer therefore a continuous process of subdivision, repeating its structure into increasingly smaller scales, as a "fractalization".

A fourth issue concerns the relation between inhabitants and dwellings: as the first generation of rural exodus took the role of providing their new urban accommodation - often through self-construction or joint initiatives - following generations inherited these structures and newcomers often sub-rented land or rooms within another’s property. This probably means that nowadays and within informal settlements, the connection between most inhabitants and their houses may be different from the one established previously during the mid-20th century.

And lastly, if the intervention capacities of public administration have formerly been already quite constrained, especially in developing countries, nowadays the panorama may be even more disturbing, as global economic crisis is indeed reducing investment and funding in all areas. Therefore, rethinking planning strategies for intervention is utterly urgent.

These issues will be discussed through their materialisation in the case-study of ongoing research, the Democratic Republic of São Tomé and Príncipe.
3. The African archipelago of São Tomé and Príncipe and the growth of its capital city

Located by the Western African coast, in the Gulf of Guinea and over the equator line, the archipelago of São Tomé and Principe was a former Portuguese colony for five centuries, becoming an independent Nation in 1975.

During the colonial period, its economy relied mostly in the trade within the Atlantic commercial routes and as a plantation territory, used for the cultivation of extensive crops, such as sugar-cane, coffee and cocoa, the last of which placed this territory in an hegemonic position in the worldwide exportation market at the outbreak of the 20th century. Nevertheless, this successful period soon came to an end as production declined and the price of this raw product devaluated in international markets. The modernization process undertaken throughout the mid-20th century introduced improvements in the agricultural methods and in the living conditions within the estates, but failed to retake former levels of economic outcome.

The independency brought wide socioeconomic changes, with the departure of most of the settlers, leaving many of the management positions vacant, to be newly occupied (OLIVEIRA, 1993: 10). Alongside, territorial changes also took place: the nationalisation of great part of the land, followed by an agrarian reform twelve years afterwards in which the land was distributed by former employees of the agricultural enterprises through small plots, introduced a radical mutation not only in the land division, but also in its role and function.

Nowadays, the Democratic Republic of São Tomé and Príncipe is part of the group of Least Developed Countries and Small Islands Developing States, gathering extensive fragilities in the struggle for development. Many of these are connected to small scale and insularity, representing additional challenges in the development process, namely the size of its domestic market, the high costs of infrastructures and transports or the dependency on the exterior (UN-OHRLLS, 2011: 2-3).

The city of São Tomé, its capital, is paradigmatic of this challenge to overcome urban disparities. With roughly one hundred thousand people - and though its small scale in comparison to the Central Africa context -, it presents already some disturbing signs (Fig.2): its urban population in 2007 was 58.9%, at an annual growth rate of 3% from 2005 to 2010 (UN-DESA, 2009: 37), presenting therefore a growth trend that is similar to its bigger African counterparts. Regardless of the difference in scales, some of the constraints faced towards development are shared amongst these urban areas.

Fig.2. Urbanisation trends in Central Africa: 1950-2030, in percentage.
The city of São Tomé has grown from an initial core by the seaside to stretch along the coast and inwards along the road network, forming nowadays a dispersed urban area without clear limits. The Fig. 3 (though being just a diagram) aims at transmitting the perception on the evolution of the urban environment.

Throughout history, the city has taken the role of interface between the exterior and the inner part of the territory, responding to the main demands of, on the one hand, providing the logistic support for stops of maritime commercial routes (thus the importance of its first implantation on a sheltered bay) and, on the other, to allow the penetration to the territory for its exploration and the outflow of raw products. It was only from the mid-20th century that major efforts of modernization implemented new expansion axis, along with public buildings to materialize the idea of a progressive city, allowing the city to expand beyond the initial bay. This urban configuration remains the same in the present day, with a consolidated core and a few expansion axes, maintaining a radial structure that supports all the other fragments that have grown on it (Fig. 4).

**Fig. 3.** Diagram of the evolution of the city of São Tomé along five hundred years.

**Fig. 4.** City of São Tomé: constructions in the late 1950s (a) and in 2010 (b).
The urbanisation process intensified greatly during the last fifty years, following not only the modernization of the city and its plan of the early 1960s, but especially in response to the independency process, the employment opportunities created, and mostly due to the shrinkage of the agricultural production and the rural exodus. Nowadays the urban area (Fig. 4b) reflects this legacy, where the older core (C) is still noticeable as an area whose scale and configuration differs from the areas around it. The several axes that irradiate from the core are also recognizable, to which new constructions are anchored, driven by the attractiveness of accessibility. Amidst them, the interstitial areas suffer occupation and densification.

3.1. The urban divide in São Tomé

From the late colonial city to the present-day urban environment, most of the infrastructures or public facilities remain basically the same, even though the city has expanded to more than ten times its size, meaning a growth for which its infrastructures were not prepared (NASCIMENTO, CARDOSO, 2008) and a severe loss of the conditions of its inhabitants. Additionally, as these amenities concentrate in the older parts of the city, most of the post-independency expansion areas lack in their provision, contributing to an unbalanced distribution of public space and services, thus of physical disparities between a consolidated core and surrounding deprived areas. This distribution is especially disturbing considering the disproportion of these groups, condition that is reflected upon the housing panorama: the census of 2001 considered that above 70% of the urban dwellings were precarious (INE, 2003), numbers that are being updated. The urban built environment gathers now a wide diversity of strategies of settlement (Fig. 5).

Fig. 5. City of S. Tomé: core (a), urban development (b) and informal area (c).
This multiplicity represents therefore a heterogeneous fabric with different patterns, logics and rhythms, glued together into a patchwork. Nevertheless, these features are not enclosed into easily recognizable and delimited areas, but form juxtaposed fragments, which reflect simultaneous but rather clashing socioeconomic dynamics: the emergence of underprivileged areas (Fig.5c), private investments that represent the insertion of clusters into the built environment (Fig.5b), or services related to a highly rotating touristic population.

The fragmented space reflects thus the fragmented society that derives from the combination of the colonial legacy, the outcome of post-independent socioeconomic restructuring and the impact of contemporary liberal mechanisms. The urban divide is thus fed upon the disparities on the access to several features, such as land, services, welfare and income (UNDP, 2002), being a multidimensional gap.

3.2. Challenges, misconceptions and setbacks

Throughout the interviews and conversations with inhabitants in the urban area of Ribóque/Ponte-Graça, as well as with agents involved in the decision-making process concerning the built environment, several constraints and ambiguities were pointed out, which included:

- the fragility of the social network and of the notion of common good - it was stressed that individualism and disrespect for the public asset were usual, and with repercussions not only at economic levels (meaning some examples of individual abuse of common property, such as public money or natural resources) but also in the built environment (in which public space suffered from neglect and bad use);

- the role of participation - from a vision of panacea to a disappointment, participation was often recognised as being wield by stronger citizens and not by those in need (as in SIEVERTS, 2003. 158), meaning that neither informality was exclusively connected to the deprived, nor the interests of this last group might always be assured;

- the family structure - the frequently large or single-parent family structures were mentioned as factors of socioeconomic vulnerability of the household, often having to rely on the extended family as a safety network;

- land micro-division - it was mentioned that the land subdivision throughout generations, especially in large households, was often undertaken down to a scale that even hindered subsistence, as well as attempts of articulation or joint exploration;

- access to land - both the touristic sector and the expectations on oil revenue have induced impact on land prices, contributing to enlarging the gap between the privileged and the deprived;

- rural exodus and urban livelihood - the struggle for subsistence was also raised: on the one hand, the difficulty in finding employment in the formal system, and on the other hand, the demographic pressure in urban area and its impact in the reduction of rural subsistence strategies, such as animal breeding or small-scale agriculture (inhabitants mentioned the lack of space and the theft from neighbours or passers-by), inducing the dependency on informal economy;

- savings and planning - the difficulties of poor families in performing savings and longer-term planning was another issue to be discussed, along with the lack of mechanisms to support these initiatives;
- between tradition and informality - when asked to describe the wooden houses of the urban expansion areas (Fig.5c), most of the interviewed agents pointed them out as traditional rather than informal, thus showing the ambiguity of these definitions as well as of the dwelling panorama\(^9\).

- policies and their discriminating impact – as for intervention initiatives, it was referred by inhabitants that certain development actions ended up benefiting only a part of the deprived population, and were turned into both an income source and a tool for improving one’s social position at the expense of others;

- need and action – and finally, it was also mentioned that even though much was spent in assessment, policies often relied on factors that were different from the needs, such as funding and targeting of the donors, subverting the priorities of urgent necessities.

4. Final remarks

This paper aimed at discussing the urban divide not only as a result of socioeconomic disparities, but also as being perpetuated by disarticulation, misunderstandings and misconceptions within the processes of intervention.

Realizing the past legacies and their causal relationships is imperative for debating need and action, and so is identifying these setbacks, in order to operationalize adequate planning tools and regulatory frameworks (ROY, 2005).

The intervention in the built environment cannot solve, by itself, socioeconomic problems nor disparities. Neither can it predict an uncertain future. However, it might contribute to improving living conditions and to raising awareness and articulation between citizens, and therefore, act as social catalyst for inclusion, materializing this timeless need to “going political” in the planning process, establishing the support network, above which complexity and multiplicity can take place.

Notes

1 Mike Davis (2007) also stresses that "If megacities are the brightest stars in the urban firmament, three-quarters of the burden of population growth will be borne by faintly visible second-tier cities and smaller urban areas”.

2 Ananya Roy, in the Conference on Arts, Humanities and Social Sciences 2012, referred that "before asking why the informal system exists, we should also ask why formal systems exist", mentioning postcolonial legacy. This issue is also debated in FERNANDES, SÁ, PÓVOAS, 2012b.

3 It means the spatial effect of the dependency theory, which points out the persistence of core-periphery geographies (CASTELLS, 1983, in ROY, 2009. 822).

4 This notion of “hypermodern” is based on François Ascher’s explanation of its use within the mathematical meaning of "hyperspace": “with \(n\) dimensions” (2010[2001]: 47).

5 The cuts in supporting developing nations has been a discussion topic in the last G20 meetings, with requests in 2011 not to proceed with this measure, and their little impact being pointed out in 2012 (in www.firstpost.com).
6 This paper is part of an ongoing PhD research of the first author within the Doctoral Programme of the Faculty of Architecture, University of Porto, Portugal, having the supervision of the second and third authors.

7 The nationalization of the estates owned by colonial settlers was roughly 86% of the total surface of the country (UNDP, 2008: 54).

8 These refer to the questionnaires and interviews held to Cesaltino Fernandes (Department of Regional Planning and Urban Development), Alexandre D’Alva (National Institute on Housing), Alexandre Barros (Department of Public Works and Urbanism), António Lima Viegas (United Nations Development Programme) and Reginaldo D’Alva (Department of Culture).

9 This issue is discussed in FERNANDES, SÁ, PÓVOAS, 2012a.

**Legends**

**Fig.1.** Annual urban growth rate, divided into regions and urban size, 1990-2000 (UN-HABITAT, 2008a: 16, slightly reconfigured to be legible in this format).

**Fig.2.** Urbanisation trends in Central Africa: 1950-2030, in percentage of the total number of inhabitants (UN-HABITAT, UNEP, 2010: 174).

**Fig.3.** Diagram of the evolution of the city of São Tomé along five hundred years: (a) discovery and settling, 15th century (b) sugar and slave cycle, 16th century (c) slave cycle, 17th-beg.18th (d) coffee and cocoa cycle, 19th-beg.20th, (e) from modernisation to independence, mid-20th century, and (f) from independence onwards, 1975-2010 (ASF, based on the Plan of 1646, Leote (1788-1796), IGC-JIU-MU (1958) and GoogleEarth (2010)).

**Fig.4.** City of São Tomé: (a) constructions in the late 1950s (ASF, based on IGC-JIU-MU, 1958), (b) constructions in 2010 (ASF, based on GoogleEarth imagery).

**Fig.5.** Areas of the city of São Tomé at similar scale: (a) city centre, (b) urban development of Vila Manã (c) an area of informal urban settlement, Riboque (GoogleEarth2012 and Téla Non).

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