

Research Article

URBAN REGENERATION IN CULTURAL QUARTERS: EXAMPLE OF PORTO-NOVO (BENIN)^{*}

Kouessi William AHOKPE 1^{**}, Neslihan SERDAROĞLU SAĞ 2^{***}

Abstract

Many cities in sub-Saharan Africa have a strong heritage that traces their pre-colonial, colonial and postcolonial past as well. These heritages, which largely deserve to be recognized, can be found today in countries that rarely have inventories for efficient management and where policies for the conservation and improvement of urban heritage are insufficient. Besides, the need to modernize cities has been associated with the risk of degradation or destruction of cultural heritage in insufficient processes of urban regeneration. These challenges raise the question of the role cultural heritage can play in the regeneration of historic urban areas in Africa. The purpose of this article is to discuss the success conditions of the urban regeneration process for the development and reintegration of cultural quarters in the city of Porto-Novo. The regeneration capacity of the city's historic center has been evaluated within the framework of the indicators to create attractive cultural quarters. As a result, suggestions were developed for the regeneration of Porto-Novo cultural quarters by identifying the current positive and negative characteristics.

Keywords: *Urban regeneration; cultural quarter; Porto-Novo; West Africa.*

* This article was prepared within the scope of the PhD. Program in Konya Technical University, Institute of Graduate Studies, Department of City and Regional Planning, in the fall semester of academic year 2020-2021 for the course unit "Urban Regeneration Models and Applications" offered by Assist. Prof. Dr. Neslihan Serdaroglu Sağ.

** Konya Technical University, Faculty of Architecture and Design, e198131001002@ktun.edu.tr. ORCID: 0000-0003-1107-6812

*** Konya Technical University, Faculty of Architecture and Design, Department of City and Regional Planning, nssag@ktun.edu.tr. ORCID: 0000-0001-8002-4499

Araştırma Makalesi

KÜLTÜREL MAHALLELERDE KENTSEL DÖNÜŞÜM: PORTO-NOVO (BENIN) ÖRNEĞİ *

Kouessi William AHOKPE 1**, Neslihan SERDAROĞLU SAĞ 2***

Öz

Afrika'daki birçok şehir, daha geniş çapta tanınması gereken sömürge öncesi, sömürge ve sömürge sonrası geçmişlerinin izini taşıyan güclü bir fiziksel ve soyut mirasa sahiptir. Bu ülkelerin, kentsel mirasın yönetimi, korunması ve iyileştirilmesi için genellikle yeterli politikalara veya envanterlere sahip olmadığı ileri sürülmüştür. Buna ek olarak, birçok Afrika kentindeki yüksek kentleşme oranı ve baskısı, kültürel mirasın korunması için de bir zorluktur. Nitelikim, şehirleri daha modern hale getirme ihtiyacı, yetersiz kentsel dönüşüm süreçlerinde kültürel mirasın bozulması veya yok edilmesi riskiyle ilişkilendirilmiştir. Bu zorluklar, kültürel mirasın Afrika'daki tarihi kentsel alanların dönüşüm sürecinde üstleneceği rol sorusunu gündeme getiriyor. Bu makalenin amacı, Porto-Novo kentinde kültürel mahallelerin geliştirmesi ve yeniden kentle bütünlüğe yol açma konusunda kentsel dönüşüm sürecinin başarı koşullarının tartışılmamasıdır. Şehrin tarihi merkezinin dönüşüm kapasitesi çekici kültürel mahallelerin oluşturulması için gerekli göstergeler çerçevesinde değerlendirilmiştir. Sonuç olarak, Porto-Novo kültürel mahallelerin dönüşümüne yönelik mevcut durumda olumlu ve olumsuz nitelikler belirlenerek öneriler geliştirilmiştir.

Anahtar Sözcükler: *Kentsel dönüşüm; kültürel mahalle; Porto-Novo; Batı Afrika.*

* Bu makale, Konya Teknik Üniversitesi Lisansüstü Eğitim Enstitüsü, Şehir ve Bölge Planlama Anabilim Dalı doktora programında 2020-2021 Öğretim yılı güz döneminde Dr. Öğr. Üyesi Neslihan Serdaroglu Sağ tarafından yürütülen "Kentsel Dönüşüm Modelleri ve Uygulamaları" dersi kapsamında hazırlanmıştır.

** Konya Teknik Üniversitesi, Mimarlık ve Tasarım Fakültesi, Şehir ve Bölge Planlama Bölümü, e198131001002@ktun.edu.tr. ORCID: 0000-0003-1107-6812

*** Konya Teknik Üniversitesi, Mimarlık ve Tasarım Fakültesi, Şehir ve Bölge Planlama Bölümü, nssag@ktun.edu.tr. ORCID: 0000-0001-8002-4499

INTRODUCTION

Historical centers of small and medium-sized settlements in Sub-Saharan Africa in general and West Africa, in particular, are one of the most important elements of African cultural heritage. However, today, most of these settlements that have remained in the background for a long time are facing urban changes due to globalization related climatic and socio-economic reasons. These often poorly controlled urban changes lead to the degradation or destruction of their cultural heritage (UNESCO, 2013). This brings them dangerously close to the mismanagement of the cultural heritage of major African metropolises, which due to their development and their apparent attraction to modernity, obscure their historical cultural heritage for reasons of inability to use it (Bafana, 2016; Ighobor, 2016).

Indeed, culture both as an operating sector and as a resource is an important part of the United Nations Sustainable Development Goals that "aim to humanize cities and settlements". The protection of the world's cultural and natural heritage requires the adoption of inclusive, safe, flexible, and sustainable approaches (Sifolo, 2020). The cultural potential is often the main motivation for tourists to visit a destination. But having a cultural heritage is no longer sufficient for a city to attract tourists. Many studies on this issue focus on the different internal relations between cultural heritage and tourism, as well as the emphasis on the regeneration of cultural quarters (De León, Babere and Swai 2020; Sifolo, 2020; Wise and Jimura, 2020).

As a matter of fact, urban regeneration enhances or preserves the cultural heritage in its surroundings, while making it possible to bring in some charm. The future of the cultural heritage mainly depends on its integration into the context of people's lives and the weight given to it in urban planning (Doratlı, 2005).

According to Degen (2018), the "Rambla del Raval" regeneration project in Barcelona has adopted an approach based on the development of cultural activities with lively street life in an attractive urban environment was adopted. In this project, streets are considered as strategic temporal tools to attract new cultural and public activities. Cohen (1999) stated that if cultural elements are not properly integrated into daily life, conservation and development efforts will fail and therefore the regeneration of these old city centers will be endangered. Case studies conducted by Montgomery (2004) in the famous cultural areas of Temple Bar, Manchester, or Adelaide emphasized the recycling of immovable cultural heritage to accommodate various cultural activities, especially artistic production. The main argument put forward by Montgomery (2003) in another study is that cultural quarters that succeed beyond sharing the attributes of good urban places offering useful and public combinations of activity, form, and meaning, will be places of dynamism, work, and where culture is produced and/or consumed. The local culture option as a local development strategy is part of a wider discussion on the new urban policy and its shift towards culture (Klein and Tremblay, 2020).

The approach of linking arts and culture through their well-integrated everyday urban dynamics which guarantees better visibility and contemporary use of cultural heritage in European, Asian, or American contexts can promote the success of urban regeneration operations (Degen, 2018; Montgomery, 2004).

The evaluation of the studies on the regeneration of cultural quarters in the literature shows that it is an important value for the development of cities. Cities will be insufficient to achieve sustainable development without producing projects that will support the development of cultural quarters. It is important to characterize each location, to identify what is unique, and to review an existing cultural area to discuss whether new projects can be applied to these regions in the light of the information learned. However, it has been mentioned that the incorporation of urban cultural heritage into urban regeneration processes in sub-Saharan African cities is still limited (UNESCO, 2016). The place of cultural heritage in urban regeneration operations is all the more important in the West African context, where there are few regeneration projects of ancient cultural sites.

In the context of urban regeneration, West African historical cities deserve special attention, especially in this period of growing craze for cultural tourism. The city of Porto-Novo will be the framework of the discussion in this article, where an evaluation of the indicators of successful cultural regions in urban regeneration will be conducted. Historical city Porto-Novo is known for its key cultural presence on the African continent, an ancient pre-colonial city, a more or less well-preserved historical center that preserves

the main features of past years. Indeed, Porto-Novo, synthesis of various civilizations and true city cradle of vodoun (Sinou and Oloudé, 1988): "Vodoun" is a religion from the ancient Dahomey kingdom and present-day Benin), has managed to preserve a cultural, natural, abstract, and built heritage on the fringes of the coastal development of the Cotonou and Lagos metropolitan areas. However, the long-neglected cultural heritage in Porto-Novo constitutes a largely neglected element of the tourist potential and therefore the sustainable economic development of the city.

The article aims to discuss the success conditions of the urban regeneration process for the development and reintegration of Porto-Novo cultural quarters. In this context, the main question is what are the main features of Porto-Novo cultural quarters and how can these characteristics be evaluated in the ongoing regeneration process? In terms of objective and fundamental question, the capacity of the city of Porto-Novo to develop performing cultural regions was assessed on the basis of the basic indicators determined by Montgomery (2003, 2004) as part of the approach of urban regeneration. In this context, after the literature researches on cultural quarters and urban regeneration, findings and discussions were evaluated through the field study examining Porto-Novo cultural quarters and urban regeneration.

CONCEPTUAL RESEARCH-CULTURAL QUARTERS and URBAN REGENERATION

The cultural quarters of cities contain, tangible goods such as architecture and monuments, and intangible elements such as celebrations, festivals, language, and other everyday practices (De León et al., 2020). These concrete or intangible elements are evidence of the existence of an experience, a story in an urban area where adherence to religious, social, or cultural practices leads to a local identity (Taylor, 2015). However, the need to adapt to the new technologies of this modern world and to meet the new contemporary needs of the population requires various interventions to transform these historic urban areas (Özus and Dokmeci, 2005).

In urban planning, there have been varieties of light and heavy approaches to fight against the degradation of cities or to manage their regeneration (De León et al., 2020). Between the 1960s and 1980s, the most used approach for intervening in the declining and degraded quarters of cities was urban revitalization which involved intense physical interventions, including demolitions, redevelopments, and major urban changes both in form and in the actual use of these areas. But in the 1990s, with the emergence of new paradigms of sustainable development, urban regeneration emerged with a transversal, integrated and comprehensive approach taking into account social, economic, and environmental factors (Roberts, 2004). More recently, cultural identity has been added to the first three other aspects that must be taken into account in the urban regeneration operation because it improves the quality of life of local populations (Barosio, Eynard, Marieta, Marra, Melis and, Tabasso, 2016).

Actual urban regeneration, in its implementation approaches, emphasizes the use of culture as a real engine for the success of the said urban operation (Leary and McCarthy, 2013). Various experiences have proven the particular potential of arts and culture to foster the development of different urban areas in decline (Klein and Tremblay, 2020). The culture-based urban approach refers to the use of culture as a driver of urban regeneration. This approach often associated with artistic manifestations, creative cities, tourism, events, and festivals (De León et al., 2020; Leary and McCarthy, 2013; Torres, 2016), can lead to the displacement of local communities and can also be linked to the promotion of economic interests at the expense of cultural sustainability (Morris, 2012).

At this point, tourism and economic activities to be developed in historical cities require a more integrated approach compared to other fields. This also takes into account the social, spatial, economic, and psychological conditions of the region which requires a systematic planning approach (Gündüz and Erdem, 2011). Rodrigues-Malta (2001) identified the actions to be taken to create a cultural zone in an urban regeneration that no longer happens by itself. This supported the emergence of policies based on the implementation of "urban projects" in the regeneration efforts. Thus, the "urban project" has today become the preferred tool for decision-makers to act on the city and the old historic centers which have lost their vitality (Rodrigues-Malta, 2001).

It is also possible to determine the conditions and success factors required in the creation of cultural quarters, largely derived from various urban literature. Successful and good urban places and cultural quarters should represent meaning and identity for users (Montgomery, 2003). Identity of a place involves a unique character and continuity of the place. Place identity is a complex concept that defines the relationship between people and built environment. However, as a geographer Relph (1976) asserts that identity is a broadly accepted and an objective term since people are taught to experience objects and places more or less the same. Individuals prefer to identify themselves with places they are from instead of what they do for a living (Norberg-Schulz, 1984). Relph (1976) defines identity of place with the meaning, activity and form components. Canter (1977) as a psychologist, defines good place consists of activities, form and meaning. Often in place definitions the importance of form is exaggerated, while the activities and meaning often have more important effect in creating the sense of place. Punter (1991), as well, focuses on sense of place and names activity, form and image for the emergence of sense of place. Montgomery (2003) and Carmona, Tiesdell, Heath and, Oc (2010) states that meaning, activity and form of a place create the sense of place. Almost all studies assert that the essence of components of place occurs in a physical form with activities and generates meaning and psychological outcomes for its users.

According to Canter's (1977) Metaphor for Place, all successful urban spaces consist of three elements. i) Activity- economic, cultural, social activities; ii) form- the relationship between buildings and spaces; iii) meaning-sense of place, historical and cultural. Montgomery (2003 and 2004) created a set of indicators that can be used from the three elements identified by Canter (1977) to assess the relative success of cultural quarters. Regarding activity, a variety of primary and secondary uses should be found in cultural quarters (Jacobs, 1961; Montgomery, 2003). In terms of form, a good city in which activity and built form are mutually compatible must provide the buildings, spaces and networks necessary for the survival of its inhabitants (Lynch, 1981). Jacobs (1961) defined four principles that help promote urban diversity: a mixture of primary uses, density of built form, permeability, and the types, ages, sizes and construction conditions of buildings. Regarding meaning, successful cultural quarters must have a sense of identity, meaning and place, as well as maintain a balance between old and new, and have gathering spaces for locals (Montgomery, 2003). This work has been prepared by adopting the indicators set by Montgomery (2003), as they are comprehensive enough to allow the evaluation of cultural quarters from many different aspects. These indicators, which contain the characteristics of a cultural quarter as a strong urban area, are detailed in table 1 of the methodology section.

Montgomery (2004) describes events as they are and in different countries, it relied heavily on case studies to make comparisons between cultural quarters created in different cultural and political contexts. By examining the creation of cultural zones as an urban regeneration mechanism in a variety of American, European, and Asian contexts, it both developed a motivation for decision-makers and produced evaluations based on the indicators it deemed necessary for a cultural quarter to be successful. He made this examination of the urban regeneration application on the samples taken in Iceland, England, and Australia. These four projects are the Temple Bar project in Dublin, Sheffield Cultural Industries Quarter project, Manchester North Quarter project, and Hindley Street project in Adelaide respectively. In the light of Montgomery (2004) case studies, we wanted to highlight some common points.

These areas can be old urban cores, abandoned industrial areas, or areas that have been marginalized for some reason. What they have in common is that they lose their dynamism and appeal, like the current example of Porto-Novo's historic center. The historic center of Porto-Novo finds many points in common with these different projects, notably the cultural potential inherent in the Temple Bar project, the problem of devitalization in the Sheffield brownfields project and the character of the reconquest of abandoned residences in the Manchester North Quarter project. Socio-cultural and climatic contexts remain different, but the excess of some characters is quite normal because there is always a difference in the historical fabric of the city.

It is particularly urgent to understand how the regenerations of historical sites took place in historic African cities and what role heritage plays here because the current urban dynamics in Africa are so fast, their understanding is even more complex. Therefore, case studies in historic African cities such as Porto-Novo are

needed to understand how these urban regenerations of historic sites are managed today. First of all, if we understand how we can lead them, these cities can be integrated into global debates on culture and tourism issues.

METHODOLOGY

The methodology is mainly based on an in-depth review of the literature on urban regeneration issues, particularly Montgomery's (2003, 2004) work on cultural zones. The study of the historical center of Porto-Novo is based on a detailed morphological analysis of its area highlighting the changes that have occurred in the region in recent years. The sources of our data are on one hand the review of existing documents on the urban regenerations of Porto-Novo and on the other hand, the experience acquired on the field during a different time of our inspections in the cultural quarters of the city between 2017 and 2019. Other data used here was collected from the municipality of Porto-Novo and the African Heritage School (EPA). The photographs presented to explain our analysis were mostly taken between the same period or come from different sources that we have taken care to mention.

This study initially focuses on highlighting the cultural contextual qualities of Porto-Novo's historic center, which require physical and economic regeneration, the aging of the historic urban fabric, and the current development dynamics. Secondly, the importance of determining the most appropriate strategic approach for the long-term regeneration of historical centers and cultural sites in African contexts and particularly in the current case of Porto-Novo will be discussed. To this end, the study for the regeneration of the old urban fabrics of Porto-Novo, as a mechanism in the approach of the creation of the cultural quarters of Montgomery (2003), aims to be based on various indicators of successful urban spaces.

Table 1. Indicators used in evaluating the cultural quarter in the fieldwork (**Source:** Montgomery, 2003)

Activity	Diversity of primary and secondary land uses
	Extent and variety of cultural venues*
	Presence of an evening economy, including cafe' culture
	Strength of small-firm economy, including creative businesses
	Access to education providers
	Presence of festivals and events
	Availability of workspaces for artists and low-cost cultural producers
	Small-firm economic development in the cultural sectors*
	Managed workspaces for office and studio users
	Location of arts development agencies and companies
	Arts and media training and education*
	Complementary daytime and evening use
	Fine-grain urban morphology
	Variety and adaptability of building stock
	Permeability of streetscape
Built form	Legibility
	Amount and quality of public space
	Active street frontages
	People attractors
	Important meeting and gathering spaces
	Sense of history and progress
	Area identity and imagery
Meaning	Knowledgeability*
	Environmental signifiers*

*Indicators marked with * are not evaluated within the scope of this article because they are not included in the data or they are considered under other headings.*

URBAN DYNAMICS OF PORTO-NOVO

The city of Porto-Novo is the political and historical capital of the Republic of Benin. Still on a human scale, the city is the second most important in the country, behind Cotonou, with a population of 264,320 in the last census (Cabinet GOLF Expertises, 2015). The city is located in the southeast part of the country, in the department of Ouémé (Figure 1). The city of 3 names Hogbonou, Adjatchê, and Porto-Novo (Les ateliers (2010): The name "Hogbonou" goes to the Adja, that of "Adjatchê" to the Yoruba, and that of "Porto-Novo" to the explorers and colonizers, mainly attributed to the Portuguese sailboat by the name of EUCARISTUS DE CAMPOS) has a double urban configuration, the first is the old town, the second is more modern. Apparently, an old town is undergoing rehabilitation, the city of Porto-Novo hides fast urban and land dynamics. Today, beyond its old center, in its extension, Porto-Novo is already crossing its borders by invading neighboring countryside (Agossou, 2011). Therefore, the socio-cultural and urban regeneration of the city both in the old city and in its modern fabric is observable.

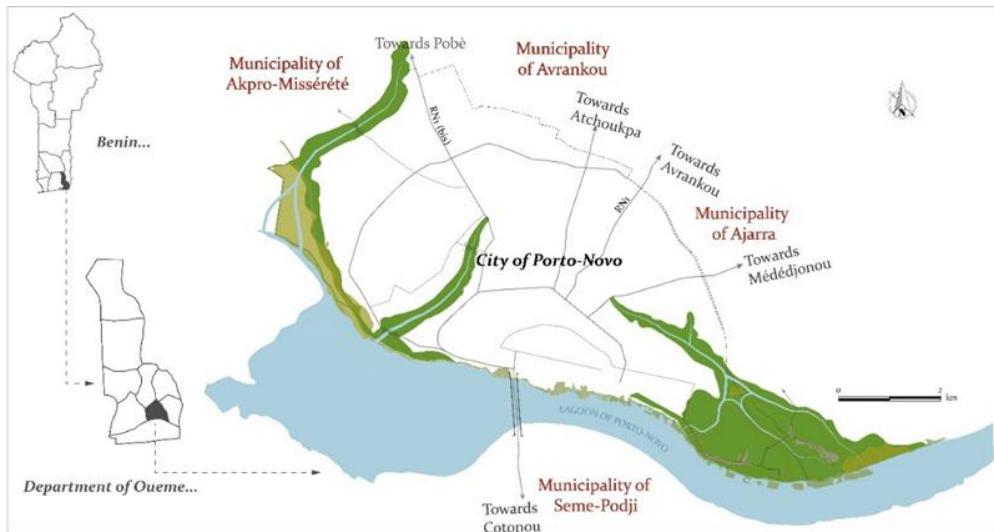


Figure 1. Location of Porto-Novo (Source: By authors, 2020)

The Urban Master Plan (PDU) of the city of Porto-Novo expired in 2009, after covering the 1999-2009 decade. This planning document is a guide that allows the level of public intervention to be adapted according to projects (Figure 2).

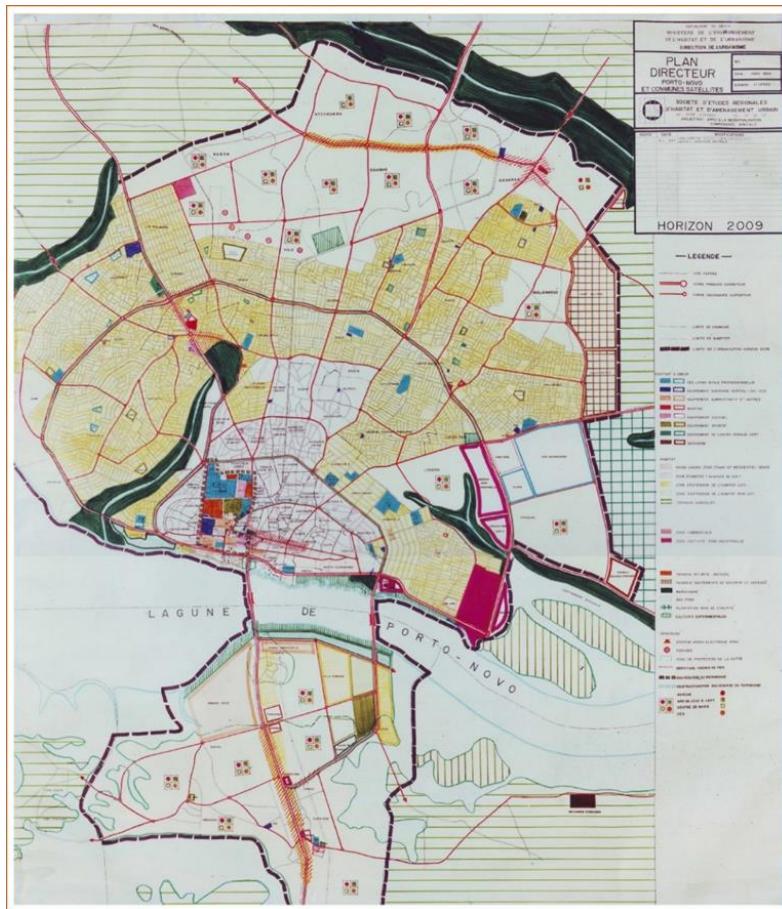


Figure 2. Porto-Novo PDU (**Source:** Porto-Novo Municipality, 2019)

This PDU truly integrates the heritage dimension and normally provides reconstruction-revitalization of historical sites. Between 2001 and 2003, an inventory study was conducted to list the cultural heritage of Porto-Novo. The inventory made is outdated today and it is still difficult to know the current state of the city's heritage. This is particularly evident in the destruction of heritage assets in Porto-Novo.

The city has been left to an autonomous urban regeneration process that takes place without much control of political and technical decision-makers. Urban operations that attract more attention are various projects such as the development of new regions that cause the city to expand (Agossou, 2011) and the paving and renewal of main roads (Dorier-Apprill, Tafuri, Agossou, 2013).

On a cultural level, the royal city of Porto-Novo has the richest urban heritage in Benin, considered the cradle of vodoun, according to an inventory study by the African Heritage School (EPA) and the African School of Architecture and Urbanization (EAMAU) in 2001. EPA has identified more than 500 heritage items in the city's historic center (Figure 3) (EPA-EAMAU, 2001).

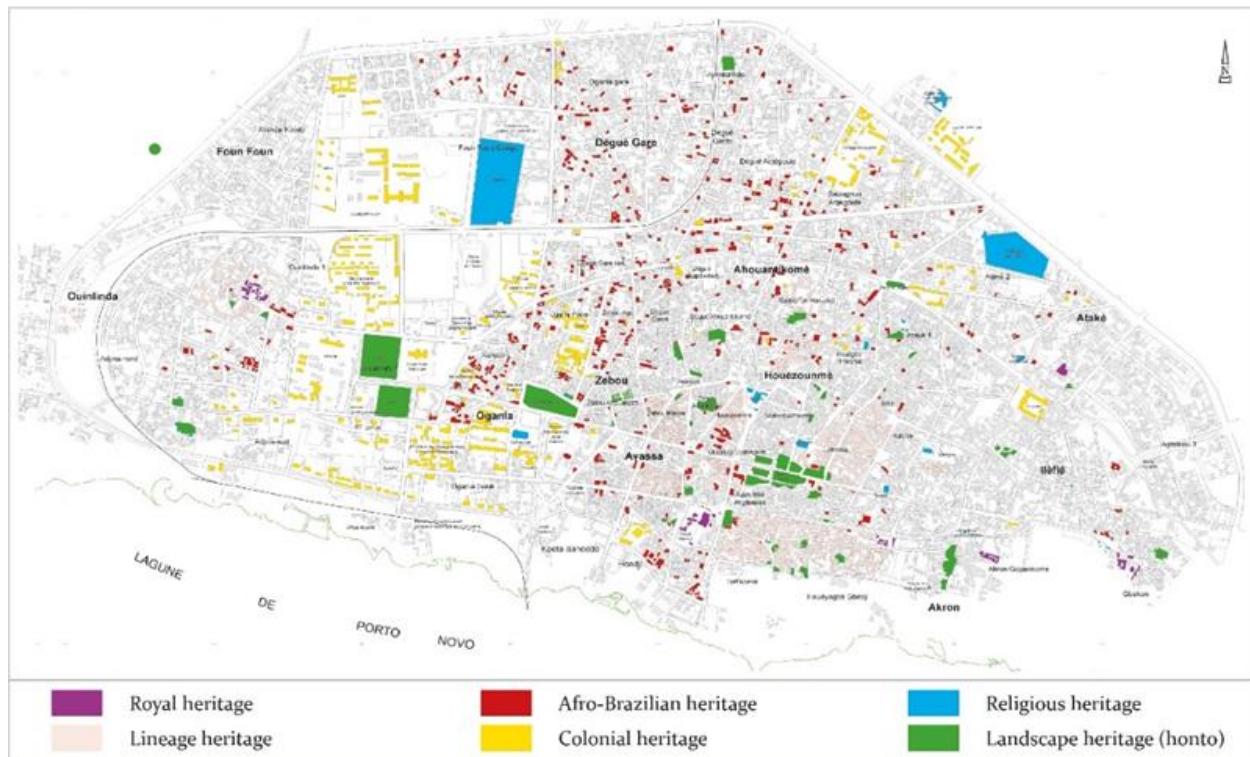


Figure 3. The cultural heritage of Porto-Novo's historic center (**Source:** EPA, 2001)

Its historic center, which has an important cultural heritage, is a powerful tourist attraction with its ancient regions linked to royal, ancestry, Afro-Brazilian, colonial and religious heritage (Figure 4, 5).

Urban morphology of Porto-Novo's historic center

The urban fabric of the city of Porto-Novo is relatively easy to read in terms of time, especially thanks to the succession of concentric axes that define the main areas of urban growth. Indeed, according to the EPA and the EAMAU in 2001, the historic center is delimited by the Porto-Novo lagoon in the south and the Outer Boulevard in the North (ESPACE, 2010). Representing the old fabric of Porto-Novo, the historic center is an area of distinctive urban heritage consisting of several neighborhoods built at different times. Three main entities are distinguished in the area, namely the vernacular core, Afro-Brazilian area, and colonial fabric, so there are many areas defined as cultural regions (Figure 7).



Figure 4. Avessan temple (**Source:** By Ahokpe, 2019)



Figure 5. Porto-Novo's great mosque (**Source:** By Darios Adome, 2020)



Figure 6. A heritage building (**Source:** By Darios Adome, 2020)

- Vernacular core

The old core of Porto-Novo is located in the southeastern part of this city. Housing the royal palaces and the central market, this venue reveals a vernacular character marked by pre-colonial architecture. In this traditional fabric, we discover the privileged habitats of family communities, Vodoun places often associated with a temple, monuments associated with Christian or Muslim religions.

- Afro-Brazilian sector

This area is built with Afro-Brazilian heritage (Figure 6) and is located to the northwest of the vernacular core. Typical buildings of this area are characterized by two-story houses built in bar clay or terracotta. The fame of this architecture also lies in the various decorative patterns made on doors and Windows. Here, the urban fabric is much easier to read, albeit uneven. Like the old local area, this place is experiencing its evolution with the introduction of modern constructions added, this lack of regulation poses a threat to the preservation of the heritage.

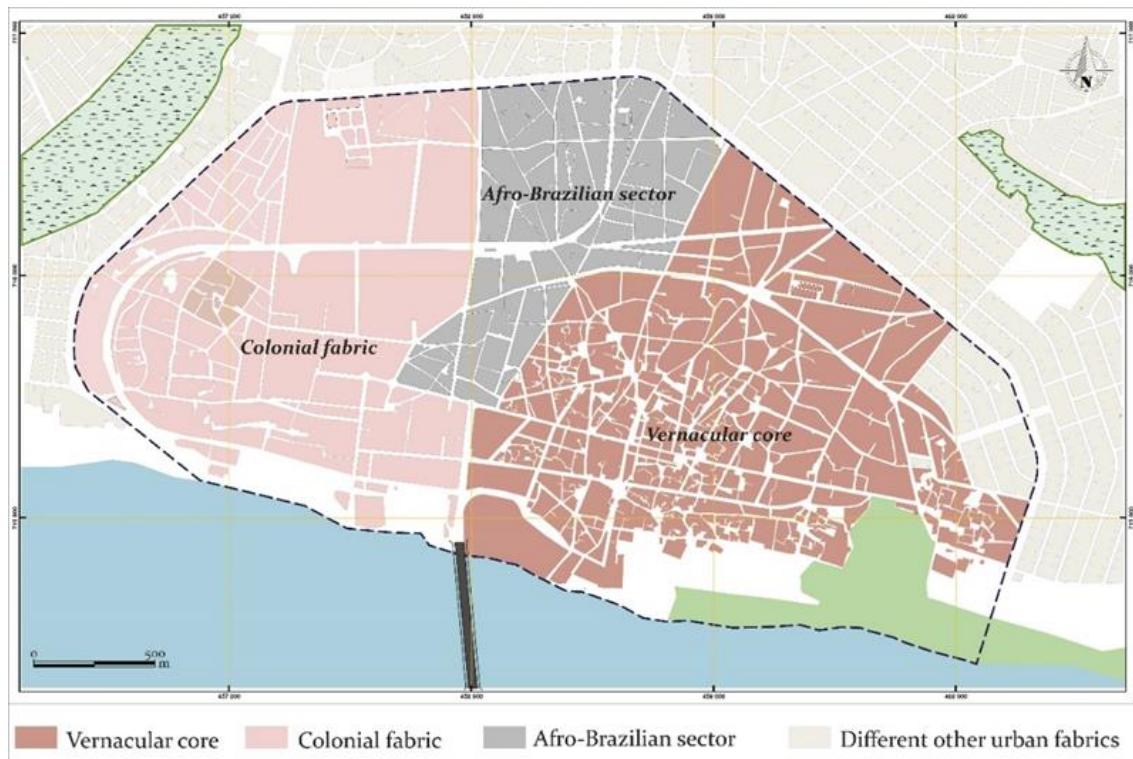


Figure 7. Historical center of Porto-Novo (**Source:** By Authors, 2020)

- Colonial fabric

This area housed French colonial rule from 1890 until independence in 1960. Also, this colonial area embodies French authority in the city of Porto-Novo. Colonial buildings in this area can be recognized from the sun-drenched window galleries for the main rooms (Les Ateliers, 2010). Most of these colonial structures have been rehabilitated over the years. Some are home to national institutions such as the Supreme Court of Justice and specifically the EPA.

The colonial fabric of Porto-Novo has always received special positive attention compared to other vernacular and Afro-Brazilian fabric in the historic center. This is justified by the fact that the city is home to several public and administrative facilities including the "Charles de Gaulle" stadium, the current seat of the National Assembly, or the "Jardin des Plantes et de la Nature" etc. Thanks to a well-organized colonial framework characterized by the presence of different landscape elements such as a road open to automobile traffic and colonial trees, the colonial fabric has always had an advantage over others.

These three urban fabrics have different characteristics, but they have a highly authentic cultural space diversity in common. The traditional habitat of the ancient core represents a remarkable architectural singularity alongside Afro-Brazilian. But at the social level, the population of the old city is getting poorer with a significant deterioration in the old quarters (Figure 8) (Cabinet Golf Expertises, 2015). Its experience, its cultural dynamism, its human wealth is now spreading in the outskirts made up of new neighborhoods, to the detriment of the dying city center.

It is necessary to understand that the city, with the advanced age of its old decaying fabrics, its social problems, and its poor appearance, is a reflection of the political capital of Benin and is therefore of international importance. In this sense, the emphasis should be on the development of studies for the successful management of cultural regions in urban regeneration studies.



Figure 8. Deterioration in the local tissue (**Source:** By Ahokpe, 2019)

EVALUATION OF SUCCESS CONDITIONS IN THE REGENERATION PROCESS OF PORTO-NOVO CULTURAL QUARTERS

The findings of the article include the evaluation of the success conditions of the urban regeneration process for the development and reintegration of Porto-Novo cultural regions in the framework of activity, form, and meaning with Montgomery's (2003) indicators.

Evaluation of Activities

- *Diversity of primary and secondary land uses*

The historic center offers a variety of fabrics, some of which are dense, some slightly less intense. This variety of fabric offers large empty spaces that will allow cultural facilities to be created in specific areas. The historic center area consists of mixed urban functions, both residential, commercial, and administrative. The uses of the buildings are highly complex (Figure 9). It will therefore be necessary to continue in this direction by further diversifying the activities aimed at visitors in this case by including those focused on art, basketry, and the making of objects.

- *Presence of an evening economy, including cafe culture*

Unlike the luxury cafes-restaurants known in developed countries, the evening economy in the historical areas of the city is generally provided by unregistered businesses. These are snack bars or "refreshments" in common parlance in Benin. First-class, luxurious, more qualified restaurants serving local cuisine can be added to this economy and its development can be supported.

- *Strength of small-firm economy, including creative businesses*

The economy of Porto-Novo, as well as the historic center, is largely geared towards the informal sector (Social Dashboard, INSÉ, 2012). This informal sector represents more than 70% of economic activities. Few creative companies are supported, especially in the field of culture. However, some special projects, art galleries, private museums are being carried out with little success. The first creative cultural venture was the "Jardin des Plantes et de la Nature", which hosted a variety of events and performances, such as the park and food court and visual arts learning cycles. The second creative cultural initiative is the private "Ethnography" museum, which is the first museum established in Benin (1922). The third creative cultural initiative is the "Da Silva Art and Culture Museum", another private museum (Figure 10). We can see that there are very few cultural initiatives for a city like Porto-Novo which want to be included on the UNESCO World Heritage List. The creative cultural business sector, therefore, needs to be developed.

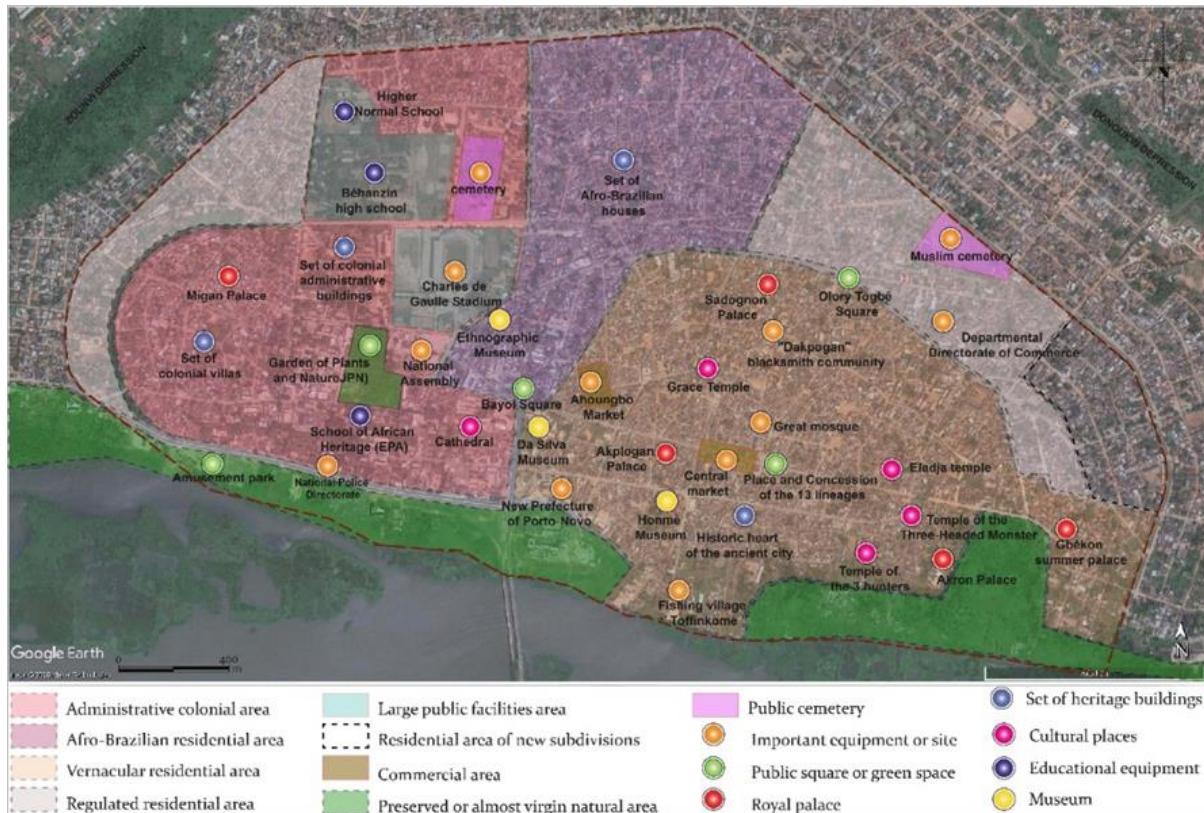


Figure 9. Diversity of land uses in Porto-Novo's historical center (Source: By authors via Google Earth, 2020)



Figure 10. Da Silva Art and Culture Museum (Source: www.monnuage.fr/point-d-interet/musee-da-silva-a127163, 2020)



Figure 11. Porto-Novo Festival (Source: <https://ortb.bj/archives/index.php/info/culture/item/9162-festival-international-de-porto-novo-la-troisieme-edition-s-est-ouverte-dans-la-capitale>, 2019)

- *Access to education providers*

Two institutions in the field of culture and heritage generally represent education. One is a graduate university called EPA. The second institution is an artist association called "OUADADA" from Porto-Novo. We can also note the presence in the historical center of various primary schools, secondary schools, and high schools that provide students with painting and plastic arts courses during their education. However, access to these training areas on foot is difficult and not sufficient in number. In this sense, Porto-Novo should develop arts and education organizations that can be accessed by all age groups, especially young people who want to learn about plastic arts.

- *Presence of festivals and events*

Porto-Novo, through its historic center, is a city that hosts cultural events every week. There is always an activity either of traditional dances in open public spaces accessible to all or art exhibitions and various private cocktails to present a Beninese fashion creation in upscale evenings (generally on weekends).

Besides, the city annually celebrates the Porto-Novo International Festival (FIP), a festival of Vodoun arts and culture warmly welcomed by historic quarters (Figure 11). During a period of one week in January of each year, the city welcomes nearly one million visitors according to its House of Heritage and Tourism (MPT, 2019). The infrastructure that will become an icon in the international promotion of festivals and events and pioneering projects should be brought to the fore.

- *Availability of workspaces for artists and low-cost cultural producers*

The availability of workspaces in the historical areas of the city is a real problem, especially for artists in the historical center. They can usually hold their exhibitions outside the historic center in a few municipal buildings. In other cases, they have to rent special exhibition halls that are often insufficient to expand exhibits or provide better visibility. The House of Heritage and Tourism (MPT) will play the role of a true living center in the organization of local artistic life. For this purpose, it will be beneficial to provide economic support such as arrangements to meet the needs of the current system such as workshops, showcases, documentation, and the creation of art centers.

- *Managed workspaces for office and studio users*

Among the myriad of renovated buildings, there are some allocated to administrative functions. Others have been made available to the private sector for office uses. For the revitalization of this historic site, the policy of reusing buildings and new functions that can be assumed by the resident population must be proposed. For example, they could be used as a university building, to rent dormitories to students and university staff, or to develop tourism-related trade areas such as restaurants, hostels, handicraft production, and souvenir sales.

- *Location of arts development agencies and companies*

The structures and agencies for promoting the arts are insufficient (ESPACE-2020, 2010). The few that do exist are either outside the historic quarters or have a temporary location depending on the event to be organized. This makes it imperative to increase the availability of cultural facilities for arts.

- *Complementary daytime and evening usages*

Complementary daytime and evening uses are often made of the renovated historic buildings particularly in the Afro-Brazilian fabric which combines a mixed residential and commercial function. However, many inadequate and insufficient provisions for a night economy, such as the absence of public lighting or properly serviced roads hamper the harmonious development of such uses and the economic benefits that could result from them.

Evaluation of The Built Form of The Historical Center

- *Fine-grain urban morphology*

In terms of road morphology, the urban fabric of the historic center is characterized by a large number of pedestrian paths within large islets delimited by concessionary dwellings in bar land, and their interweaving is largely dependent on the family ties of the residents. Neighborhood-level structures are organized around a space. The neighborhoods are therefore organized around semi-closed public places (Honto). Moreover, this is where social ceremonies take place (for example baptisms or funerals) and Vodoun rituals which punctuate the time of Hogbonou (Figure 12-Detail 1).

Typically, the residential block is occupied by large plots that represent the area of the family housing group. Family housing groups are dwellings whose interdependence is largely linked to the family ties of the residents. Also, we pay attention to the presence of a few trees on the sides of the streets or in the large lots of family housing groups with an average surface area of 2,000 m² (Figure 12-Detail 2).

Representative elements of family housing groups are a specific form of spatial organization. Then there are residences and inner courtyards of houses. The structures (houses and temples) in these plots are arranged around an empty area. At home, the courtyard is a living space with temporary and changeable actions. It is also a place for socializing (Figure 12-Detail 3).

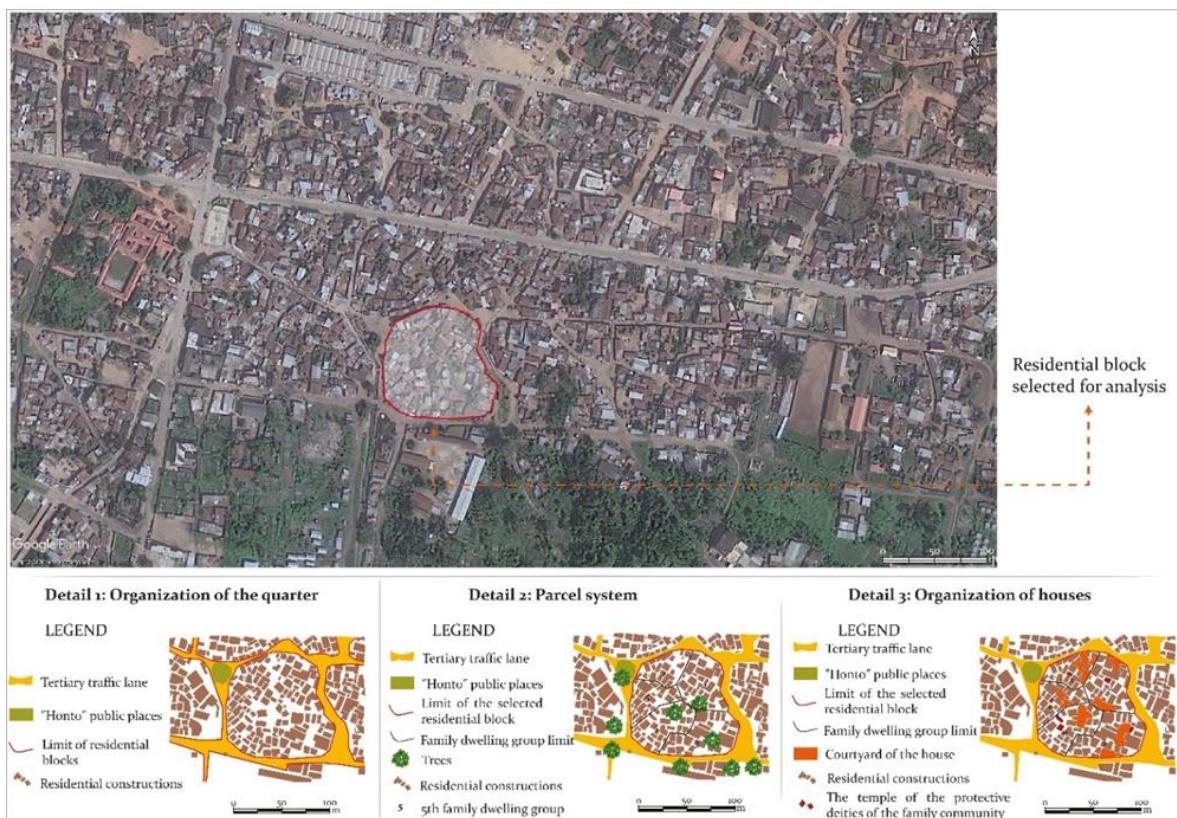


Figure 12. Analysis of the residential block (Source: Google Earth and by authors, 2020)

- *Building typology*

Historic quarters today consist of predominantly residential areas where local commercial activities are intertwined with shops built on the facades of individual properties around the sidewalks. The existence of shopping areas with hangars and shops around the central market area (the oldest market in the city) is also noticed. While talking about the building types in the old core, the traditional type, mixed type, and modern type houses are dominant without forgetting the monumental structures that attract much attention.

- *Traditional architectures:* these are buildings that have been built since pre-colonial times, most of them are in ruins and still inhabited. Most of the houses are built using local methods (without beams or pillars) and sometimes painted red, thus contributing to the title of 'Red City' given to Porto-Novo. To this,

we can add the Afro-Brazilian or colonial type architectures, which we mentioned earlier in this work (Figure 13, 14).

Modern housing: these are buildings built after independence and whose architectural relevance in the context of the historical center has not been proven (Figure 15). The ground floor is used by shops or boutiques.



Figure 13. Traditional living space (**Source:** By Ahokpe, 2019)



Figure 14. Colonial architecture (**Source:** Les Ateliers, 2010)



Figure 15. Modern housing (**Source:** By Ahokpe, 2019)

Mixed type housing: it is a composite building form incorporating the features of both modern and traditional buildings (Figure 16, 17).

Monumental buildings: these are structures often associated with religious traditions that develop typical original features.



Figure 16. Mixed-type housing (**Source:** By Ahokpe, 2019)



Figure 17. Afro-Brazilian building (**Source:** By Ahokpe, 2019)

- *Permeability of streetscape*

The texture of the streets of the historic quarters of Porto-Novo is quite dense and marked by empty spaces that serve as public places. The historic quarters contain a dense network of tertiary streets, with roadways and pedestrian paths, sometimes very winding and narrow. These tertiary street networks are often dirt roads ranging in width from 1 to 7 m. The widths of the primary and secondary roads vary between 12 and 40 m (Figure 18, 19).



Figure 18. View of a side street in the historical center (**Source:** By Ahokpe, 2019)

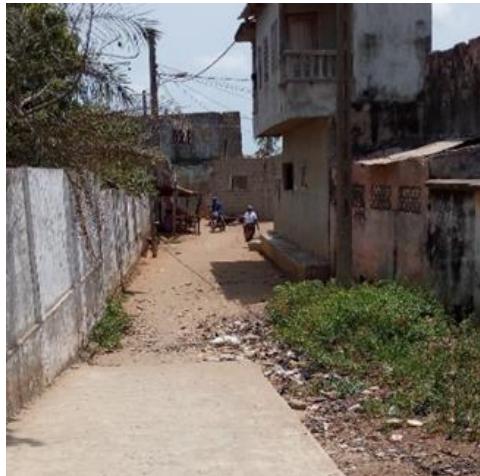


Figure 19. Small pedestrian crossing (**Source:** By Ahokpe, 2019)

- *Legibility*

The legibility of the morphological fabric of historic quarters is a little complex. The fabric is characterized by a fairly irregular network of small and large winding pathways. Legibility becomes evident through housing blocks containing family communities (Figure 20).

The fabric reveals a form of traditional urbanity through a socio-spatial organization that was established according to the royal palaces and the royal families who settled around the royal court.



Figure 20. View of a residential block (**Source:** Aux sources de l'humanité, 2019)



Figure 21. Honto public space (**Source:** By Ahokpe, 2019)

- *Amount and quality of public space*

The historic center has a fairly rich network of semi-public places that are often more or less wide (Figure 21). They host family and street events in the old quarters. They are also play areas for children from these neighborhoods. However, these spaces lack esthetic arrangements. Most public spaces also lack vegetation.

- *Active street frontages*

In the Afro-Brazilian neighborhoods, the alignment and harmony in the streets with two-storey buildings gives quite interesting and attractive atmospheric perspectives. This charm is thanks to the various drawing and ornamental galleries on the facades of houses with unique architectural styles imported from Brazil.

- *People attractors*

The aging urban fabric of the vernacular core in the grip of an emerging insalubrity no longer attracts either visitors or residents of these neighborhoods who no longer want to live there themselves. Efforts need to be made to increase the attractiveness of these quarters, especially in terms of street network planning and landscape design of their public spaces.

Evaluation of Meaning

- *Important meeting and gathering spaces*

The historic center does not have public spaces for important meetings and gatherings. Such meetings are held in the multi-purpose rooms of various hotels in the square.

- *Sense of history and progress*

The historic sites still represent the remnants of this pre-colonial pride and the return of slaves freed from Brazil. For this reason, the sense of belonging in the city is very strong. One can recognize a kinship relationship with a royal family or the ancestry of a family of former slaves. This situation should be marked as important perceptual data for urban regeneration.

- *Area identity and imagery*

The city of Porto-Novo has been part of a positive global historical network connected with this human history since the liberated slaves returned to the abolition of the slave trade in the 19th century (Les Ateliers, 2010). But his most extraordinary contribution to the wealth of this return of former liberated slaves was the addition of Afro-Brazilian architecture as a legacy to be preserved for the next generation, which became a strong identity of the city of Porto-Novo and even wrote it in architectural journals.

This cultural wealth which makes the identity of Porto-Novo an authentic city and still religiously mysterious in its religious practices is not only found in the museums which contain enormous collections of art or cultural objects. But this wealth is found above all in its singular urbanity, a morphological fabric dating from another era and which has spanned centuries, remaining almost intact. This rather rich fabric confers on the city of Porto-Novo besides the name of "red city" that of the "museum city" of West Africa.

Nowadays, the city enhances all its wealth by reflecting a fairly positive image of the vodoun religion and at the same time tries to enhance its cultural heritage through its International Festival. Thus, the exhibition of sacred masks or the celebration through "Egungun" or "Zangbéto" dances became a symbol of the city of Porto-Novo.

DISCUSSION

After evaluating the cultural quarters of Porto-Novo according to the criteria of success (Table 2), the most important potentials for the activity are, the variety of buildings and uses in the historic center, the night economy, the existence of festival. There are also strong potentials for form, the existence of an authentic

local morphology, the originality of the street and building typology. The potentials for meaning are to have strong identity and image elements, full of local culture with a strong sense of belonging.

The main problems related to the success criteria of activity are the existence of the informal sector; insufficient support for cultural, and artistic development initiatives. This is in addition to the fundamental problems of form are the destruction of neglected historic and cultural buildings, or the neglect and pollution of the environment and the streets which boil down to a lack of aesthetic arrangements. The problems of meaning are the insufficiency of meeting areas but above all the insufficiency of projects aimed at revealing the elements of identity and image.

Therefore, in regeneration, a developing and flexible urban program that allows the quarter to continue to shine by adapting to different activities such as cultural, touristic, recreational, or housing should be implemented. Formal cultural activities should replace informal activities to create a night economy and allow the area to live day and night. Doing this in Porto-Novo remains a major challenge, given that the population of the city, in particular that of the historic center, is still deeply rooted in tradition and may oppose the prospect of a city bubbling with this night economy.

In view of this evaluation of the historic center of Porto-Novo, there is no doubt that the city has the potential to hold the most successful cultural quarters on the continent if the operation of urban regeneration of its old districts is well oriented. In the almost total absence of such a successful operation in a West African city that could serve as a direct example, the discussions and orientations can only go in the direction of the criteria set out in the literature review for that such urban regeneration is a success even if the African urban context seems a little different.

The historic center of Porto-Novo already has a picturesque urban grid made up of alleys, small narrow and winding streets. Redevelopment and traffic regulation of these streets is required to accommodate these conditions described as necessary or "a good fit" by Montgomery (2003). Beyond the street, which is an important element in the operation of regenerating historic urban centers, the place of cultural immovable heritage in daily life must be properly defined in Porto-Novo. It was recognized that if cultural elements are not properly integrated into daily life, protection and enhancement efforts will fail and therefore jeopardize urban regeneration (Özus and Dokmeci, 2005; Doratlı, 2005) of these old urban centers like the current Porto-Novo case. It would therefore be essential to imagine at the root of such an operation the association of local populations whose acceptance of the project, which also influences their direct living environment, is a guarantee of success (Barosio et al., 2016).

Table 2. Summary of Porto-Novo analysis according to Montgomery criteria (**Source:** By authors, 2020)

Characteristics	Porto-Novo	
	Strengths	Problem
Activity	Existence of large building stock and a variety of uses in the historic center (At least 500 have been identified)	-
	Presence of a diversified evening economy (restaurant, nightclub, cafe, clothing store...)	The economy remains in the informal sector (70%) with the need to develop international standards (Social Dashboard, INSAE, 2012)
	Presence of companies operating in the field of arts and culture, including various private museums (at least 6, MPT, 2019)	Insufficient and limited state aid for artistic enterprises
	Existence of internationally renowned schools and institutions dealing with arts, culture, and heritage management	Difficult and limited access to educational institutions with very high admission criteria
	An annual celebration of the Porto-Novo International Festival	-
	-	Difficulty in accessing workspaces for artistic production

	Existence of a large number of renovated buildings, some of which have already been allocated to administrative functions (around fifty)	No mixed uses for artists; Almost less than 10% of heritage buildings are renovated
	-	Lack of organization and structuring of companies involved in artistic creation
	Porto-Novo is a city that lives day and night	Lack of suitable lighting and road networks to support uses
Form	Singular and authentic urban morphology	-
	Diversity of the building stock, including buildings of great heritage value (At least 500 have been identified)	Heritage items deteriorating or damaged by time, bad weather and poor heritage management
	Diverse urban framework with many pedestrian paths	Degraded roads and irregular traffic to improve
	-	The complexity of readability of urban texture characterized by curvy and narrow roads
	Presence of a diverse public network of small and large public spaces	Unattractive landscaping and aesthetic arrangements of these places
	Authentic African street and active facades in the Afro-Brazilian quarter	-
Meaning	-	Degraded historical quarters with serious cleaning problems
	-	Inadequate facilities
	Historic town full of local culture with a strong sense of place	-
	The identity and positive image of the freed slaves returning to Porto-Novo. Authentic Afro-Brazilian architectural heritage.	Insufficient efforts to promote Porto-Novo's strong identity as a cultural city at the international level.

Another condition that can promote the success of such an operation of urban regeneration in Porto-Novo is the aesthetic quality of the urban framework which will also be a guarantee of the export of a positive cultural image (Rodrigues-Malta, 2001) of Porto-Novo internationally. This is what must make the cultural quarters according to Montgomery (2003), a quarter apart in the city and make the city itself a unique city. Beyond the cultural activity which must be interesting, the urban composition must give pleasure and facilitate the visit of the historic center of Porto-Novo. Many perspectives are offered with the presence of an undeveloped quasi-virgin lagoon bank in the historic center, but also the presence of traditional spaces (Honto) devoid of any aesthetic landscaping for the moment. In this case, the development of these traditional urban public spaces must show imagination and originality to symbolize a unique urbanity of Porto-Novo and guarantee the sustainability of the traditional but also economic uses that are currently made of them.

An already allusion to welcoming visitors may tend the project towards a strictly tourist goal, highlighting possible economic benefits at the expense of cultural or social sustainability (Morris, 2012). So in this case, we must ask fundamental questions that must identify who owns the cultural quarters and for whom this kind of urban regeneration project is intended while considering extreme cases of pandemic (Covid-19 for example) where international cultural tourism can take a break and be limited only to local tourism. This would make it possible to dissuade any political ambitions from transforming an urban regeneration project which should promote the return to their historic center of local populations into a gentrification project which will have the effect of evicting the populations still living on the site.

CONCLUSION

In the regeneration process of Porto-Novo, our concrete suggestions are to strengthen the vitality and visibility of the inherited culture to revive the created culture and to place Porto-Novo at the heart of world cultural exchanges. To achieve this, a strategic approach must be based on the complementary combination

of the morphological, economic, and legal aspects of the restoration of the Porto-Novo heritage and the enhancement of Porto-Novo's cultural capacities.

First, the morphological orientation will be to support the urban singularity of the historic center through its development. This is to reveal the uniqueness of the urban structure of Porto-Novo's historic center and adapt it to modern life. For this, it is necessary to adapt the functional and esthetic layout of the streets of the historical center to modern life. Secondly, the economic orientation will be to integrate culture and art into the economic dynamics of Porto-Novo. To do this, it is necessary to reallocate historic buildings to new specific functions that they can assume. Then it is necessary to promote art in the city of Porto-Novo through various contemporary cultural and artistic activities. Finally, it is also necessary to promote through social activities the rather rich intangible cultural heritage of Porto-Novo, of which the religious manifestations of the vodoun religion are the guarantors. Thirdly, the legal orientation will be to save and preserve the city's cultural heritage and bring it into tourism in a tangible way.

A new attraction should be provided by creating the revitalization-reconstruction dynamic of the historical center. However, this should be done throughout the city to have a more global urban project to be built initially and an urban sectoral policy. Even if the operation is only related to the historical center, it should be able to instill the rehabilitation dynamic of the whole city and initiate a new modernization process while respecting socio-cultural habits. The regeneration of the historic center of Porto-Novo should therefore be an opportunity to offer the city's residents a healthy, egalitarian, and traditional living environment, thus strengthening the status of Porto-Novo as a city of the arts of Benin.

REFERENCES

- Agossou N. (2011). Paradoxes of urban sprawl in Porto-Novo land dynamics versus demographic and economic dynamics. *Les Cahiers d'Outre-Mer* (N 256) Presses universitaire de Bordeaux, 467-484.
- Aux sources de l'humanité, Ouadada, 2019.
- Bafana B. (2016). Kigali sparkles on the hills. *African Renewal*, 30(1), 6-7.
- Barosio M., Eynard E., Marieta C., Marra G., Melis G., Tabasso M. (2016). From urban renewal to urban regeneration: Classification criteria for urban interventions. Turin 1995–2015: evolution of planning tools and approaches. *Journal of Urban Regeneration and Renewal*, 9(4), 367-380.
- Cabinet Golf Expertises. (2015). Porto-Novo 2015-2019 Municipal Development Plan. *Cabinet Golf Expertises*, 254.
- Canter, D. (1977) The Psychology of Place (London, Architectural Press).
- Carmona, M., Tiesdell, S., Heath, T., Oc, T. (2010). *Public places, urban spaces: the dimensions of urban design*, Architectural Press, Elsevier Ltd.
- Cohen, N. (1999). *Urban Conservation*, MIT Press, Cambridge, Mass.
- Degen M. (2018) Timescapes of urban changes: The temporalities of regenerated streets. *The sociological review*, 1(19), London.
- Darios Adome, 2020, personal archive.
- De León R. M. F., Babere N. J., Swai O. (2020). Implications of cultural heritage in urban regeneration: The CBD of Dar es Salaam. *Revue Interventions économiques* [Online] 63, 2020.
- Doratli N. (2005). Revitalizing historic urban quarters: A model for determining the most relevant strategic approach. *European Planning Studies*, 13(5), 749-772.
- Dorier-Apprill E., Tafuri C., Agossou N. (2013). Porto-Novo in the coastal metropolitan area of South Benin: what urban dynamics? in Mengin C., Godonou A. (Eds.): *Porto-Novo: legacy and development*, Sorbonne and African Heritage School Publications, Porto-Novo, 109-136.
- ESPACE-2020 SCP. (2010). Detailed City Plan tentative report of the Eastern sub-sector of the historic center of Porto-Novo: diagnostics-analysis, Cotonou, 52.
- EPA-EAMAU. (2001). Final report on the rehabilitation of the historical heritage of the city of Porto-Novo, Porto-Novo, 127.

- Gündüz, E., Erdem, R. (2011). Obstacles to heritage tourism planning: socio-spatial planning problems in Mardin, http://www-sre.wu.ac.at/ersa/ersaconfs/ersa11/e110830a_Final00213.pdf.
- <https://ortb.bj/archives/index.php/info/culture/item/9162-festival-international-de-porto-novo-la-troisieme-edition-s-est-ouverte-dans-la-capitale>, 12.11.2019.
- Ighobor K. (2016). Lagos now wears a new look, *African Renewal*, 30(1), 8-9.
- Jacobs, J. (1961). *The Death and Life of Great American Cities*, London, Jonathan Cape.
- Klein J., Tremblay D-G. (2020). Cultural activities and local development: Introduction. *Revue interventions économiques*, 63 | 2020.
- Leary, M., McCarthy J. (2013). *The Routledge Companion to Urban Regeneration*, Routledge, London and New York.
- Les Ateliers, (2010). Presentation of the 1st session of the West African urban planning workshops in Porto-Novo: Sustainable development of lagoon banks in urban areas, *Les Ateliers*, Porto-Novo, 8.
- Lynch, K. (1981). *A Theory of Good City Form*, Cambridge, MA, MIT Press.
- Montgomery, J. (2003). Cultural quarters as mechanisms for urban regeneration, part 1: conceptualising cultural quarters. *Planning, Practice & Research*, 18(4), 293-306.
- Montgomery, J. (2004). Cultural quarters as mechanisms for urban regeneration, part 2: a review of four cultural quarters in the UK, Ireland and Australia. *Planning, Practice & Research*, 19(1), 3-31.
- Morris, D. (2012). The changing context of urban heritage management. in Bandarin F., Oers R. V. (Ed.s.), *Reconnecting the city the historic urban landscape: managing heritage in an urban century*, Wiley Blackwell, 75-112.
- Norberg-Schulz, C. (1984). *Genius Loci: towards a phenomenology of architecture*, Rizzoli International Publications, Inc., USA.
- Ozus E., Dokmeci V. (2005). Effects of revitalization in historical city center of Istanbul. *International Real Estate Review*, 8(1), 144 – 159.
- Porto-Novo Municipality, 2019
- Punter, J.V. (1991). Participation in the design of urban space. *Landscape Design*, 200 (1991), 24-27.
- Roberts, P. (2004). The evolution, definition and purpose of urban regeneration. in Roberts P. and Sykes H. (Eds.), *Urban Regeneration, A Handbook*, Sage, London, 9-36.
- Rodrigues-Malta, R. (2001). Urban regeneration: southern European variations. *L'information géographique*, 65(4).
- Ralph, E. (1976). *Place and placelessness*, Pion Limited, Great Britain.
- Sifolo, P. P. S. (2020). Cultural heritage and tourism stimulus: regional regeneration in Southern Africa. in Wise N.
- Sinou, A., Ouloude B. (1988). Porto-Novo, city of black Africa. *Collection architectures traditionnelles*, Parenthèses-Orstom-Pub, Marseille.
- Taylor, K. (2015). Cities as cultural landscapes. in Bandarin F., Oers R. V. (Ed.s.), *Reconnecting the city the historic urban landscape: managing heritage in an urban century*, Wiley Blackwell, West Sussex, 179-202.
- Torres, J. (2016). New urbanism, tourism and urban regeneration in Eastern Lisbon, Portugal. *Journal of Urban Regeneration and Renewal*, 9(3), 283-294.
- UNESCO (2013). New life for historic cities the historic urban landscape approach explained. UNESCO, Paris, 22.
- UNESCO (2016). Culture urban future global report on culture for sustainable urban development. UNESCO, Paris, 303.
- Wise, N., Jimura, T. (2020). Tourism, cultural heritage and urban regeneration. in Wise N. Jimura T. (Ed.s), *Cultural, heritage and urban regeneration, changing spaces in historical places*, The Urban Book Series, Springer Nature, Switzerland.
- www.monnuage.fr/point-d-interet/musee-da-silva-a127163, 10.11.2020.