

REVIEW ESSAY

Urban growth and cultural identity; fractures and imbalances in heritage values: A case study of the island of Saint-Louis, Senegal.

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ABSTRACT: The island of Saint-Louis of Senegal was awarded the status of world heritage site by UNESCO in 2000 as an “outstanding example” of urban heritage. This island city comes with a unique heritage: development planning that combines a strong historical French influence with a gridiron urban morphology and building typology. The island must be interpreted within its total territorial context that includes both the island of Sor (on the mainland) and La Langue de la Barberie, a sandy barrier that separates the mouth of the river from the sea. The city of Saint-Louis itself has grown enormously and haphazardly from the latter part of the 20th century: it is now the fourth most populous city in Senegal. At present, the city is undergoing a serious period of decline and recession due, in part, to the overriding influence of the capital, Dakar, and the centralized political forces in the country. This article looks at the key morphological and functional reasons behind the development and evolution of the island of Saint-Louis and that persist in the present context, with justifications for the deep-rooted heritage values that maintain its prestige as a World Heritage Site.

Keywords: architectural development, heritage, islands, Saint-Louis Senegal, UNESCO World Heritage Site, urban landscape

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Introduction

This article condenses some of the thoughts and philosophy that evolved in the framework of the European inter-University project of cooperation on sustainable tourism planning between entities from Cape Verde, Mauritania, Senegal and the Canary Islands (Spain) called SEMACA, designed to consolidate cooperative higher education projects between the Canary Islands and Africa (2007-2013).

To illustrate lessons learnt, we refer to the island city of Saint-Louis, built on the island of Saint-Louis at the mouth of the Senegal river. The initial settlement combines a

historic past with strong French influence and a gridiron urban plan with matching building typology that secured it World Heritage status by UNESCO in 2000.

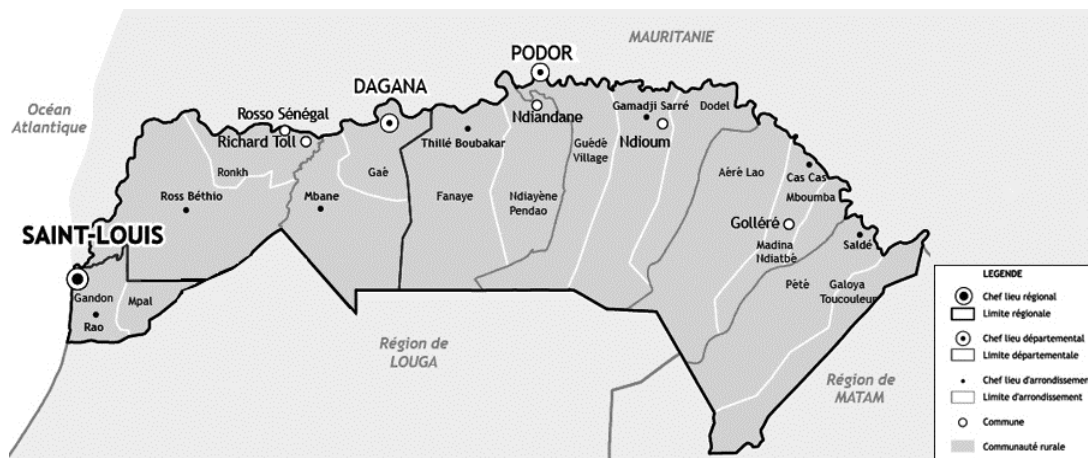
The reasons given by UNESCO for the award were that “The historical city of Saint-Louis exhibits significant cross-fertilization of values and influences in the development of education and culture, architecture, handicraft and services in a large part of Western Africa” (criterion II) and because “The island of Saint-Louis, the former capital of Western Africa is an excellent example of a colonial city characterised by its specific natural environment and how colonial government developed in this region” (criterion IV). With this declaration, an agreement was established between the Lille Métropole Communauté Urbaine and the Commune de Saint-Louis to carry out a project of heritage appreciation and protection. This work was carried out between 2002 and 2004 by the School of Architecture in Lille. A detailed inventory of all of the buildings and urban structures, together with a systematic archive of all the relevant historical documents, was completed. The work carried out was of a high quality and much of what is reported here is informed by that project.

To understand in full the development of the city, some background information on the country itself is necessary. Senegal is 196,722 km² in area, in West Africa in the depression known as the Basin of Senegal-Mauritania, between 12°30' and 16°40'N and 11°30' and 17°30'W. It borders to the North with Mauritania, to the South with Guinea and Guinea Bissau and to the East with Malí. Its coastline on the Atlantic Ocean is 706 km long. It is also crossed from east to west by the State of Gambia and the river of the same name.

Senegal inherited a state territorial organization model based on the French system, organized around regions that are sub-divided into departments and further still into districts (if they are urban) and communes (if rural). In spite of this, and thanks to the Decentralisation Law of 1996, political administration has been made more flexible.

The region of Saint-Louis (Figure 1) is one of eleven administrative regions that at present make up Senegal. It is in the north of the country, sharing a border with Mauritania, and is divided into 3 Departments, 7 Districts, 20 Communes and 18 rural communities.

Figure 1: Territorial administration of the region of Saint Louis of Senegal.



Source: Retrieved from <http://www.au-senegal.com/cartes.htm>

The three departments in the region of Saint-Louis of Senegal are Saint-Louis, Dagana and Podor (see Figure 1). Saint-Louis is the most densely populated of the three, with an

estimated 310 people/km², as opposed to the average regional density of 44/km². The city of Saint-Louis is in the department of Saint-Louis. It is the fourth largest city in terms of resident population in Senegal, with 172,000 inhabitants according to the 2013 census, and behind Dakar (2,682,000), Thiès (282,000) and Kaolack (182,000).

The city of Saint-Louis de Senegal lies on the mouth of the Senegal river that cuts through the city from north to south. There is coastal plain to the west bordering on the Atlantic that rises gradually to the east and inland toward the mainland. Although these strategic characteristics made Saint-Louis de Senegal into a port and river transport hub, they have also limited urban growth and made it subject to inveterate flooding.

The city can be described as fragmented ([Figure 2](#)) since the river divides it into three different parts: 1) *la Langue de Barbarie* to the west, a tongue of sand 300 metres wide that separates the River from the Atlantic, connecting to the ocean 25 km further south.; 2) *the island of N'Dar* in the centre is the original site of Saint-Louis, the heart of the old Colonial town and UNESCO World Heritage Site, a narrow island 2 km long by 400 metres wide shaped that way naturally by sedimentation and 3) *the island of Sor* to the east which, although on the mainland, is called 'island' because it is surrounded by tidal swamps when the River Senegal runs full.

The island of Sor is home to most of the population in Saint-Louis (the quarters of Sor Nord, Darou, Balacoss, Diamaguère, Léona-HLM, Eaux Claires/Diaminar, Ndioloffene Sud and Pikine) and where the city grows almost spontaneously and haphazardly, with no planning intervention. In recent years, new marginal quarters (Khor, Bango, Ngalléle) have appeared on the mainland, far from the possibility of flooding as the result of the river rising.

Figure 2: The City of Saint-Louis fragmented into three parts by the River Senegal.



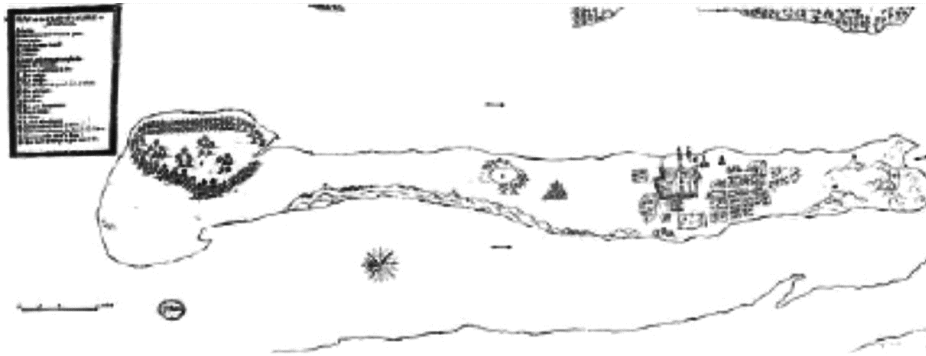
Source: Fonds Guerrer. Saint Louis.

The role of the city as a ‘place’

A geographical analysis of the city of Saint-Louis together with the social and demographic developments that have provoked urban expansion allows for analysis of the evolution of the island city across various historical periods.

Its strategic location was of great interest to Europe as a stop-over on the slave trade route with Cape Verde. It was occupied first by the Portuguese and then by the French although, during this period, it was occasionally in British hands. But the island ended up being a French colony and it was the French who built the first fort of Saint-Louis in 1659, the date that is taken as the foundational date for the city (Figure 3).

Figure 3: Plan of Island of Saint-Louis, 1728.



Source: Bibliothèque National de France, Paris.

From the mid-17th century up to the early 18th century (Figure 4), the city grew around the military buildings, the solid nucleus of the city, producing rows of houses organized north and south on a regular grid system built primarily of straw and cane, with only a few homes built of masonry. To the east and west of the military buildings, the space was free of buildings, with the square, *Plaza de Armas*, to the west (the present Plaza Faidherbe). In the mid-18th century, the city of Saint-Louis consisted of a cluster of houses where some 5,000 people lived.

Figure 4: Plan of the Island of Saint-Louis, 1745.



Source: Bibliothèque National de France, Paris.

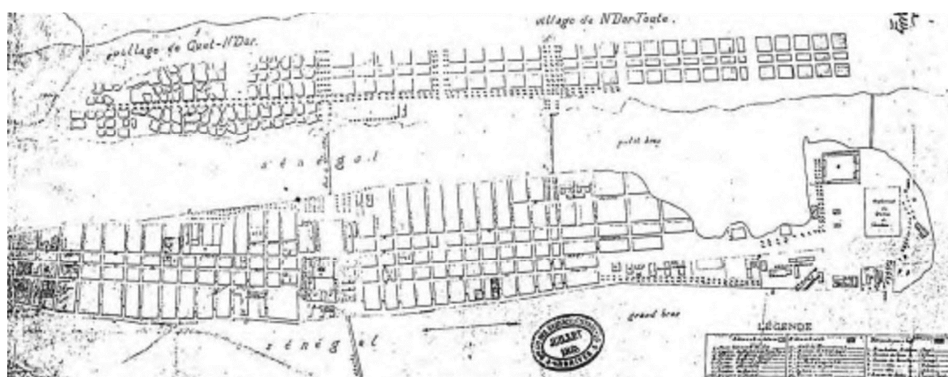
The city of Saint-Louis began to be seen as strategic in the context of colonial administration in the 18th century, when it eventually became French. It gradually became built up with military buildings and public and religious institutions, such as hospitals, schools and the cathedral, gradually spreading over the consolidated territory of the island of Saint-Louis. The built area of the time was mostly to the south while, in the north, where the territory was not consolidated, building occurred later.

With the first abolition of the slave trade in 1815, the island of Saint-Louis changed its initial slaving activity for trading acacia gum that was to be of immense importance, more so even than the trade of leather, wax and ivory from the Ivory Coast and gold from Galam. The River Senegal made it into an important port for Atlantic trade and a natural trading outlet for the country. Generally speaking, the River Senegal can be navigated in all seasons 175 km upriver from where it meets the ocean through to the small city of Podor and, at times of high running water, some three months of the year, to Kayes, 975 km from the mouth. The new trading activity produced a growth of the local population although this occurred slowly and irregularly. From 5,000 inhabitants in 1790, it rose to 12,000 in 1848, an increase of only 7,000 inhabitants in 58 years. The slow demographic growth was due to the yellow fever epidemics that frequently decimated the population. In 1829 the administration thought it necessary to regulate the growth of the city and drew up the first Alignment Plan for the island of Saint-Louis, although it was only partially applied. This produced a spurt of urban development as a result of the need to build utilities and trace out the roads and areas for dock unloading. The buildings were increasingly built of stone rather than straw.

The shaping of the island-city

The first complete reference to the plan of the island of Saint-Louis was given in the alignment plans in 1880 (Figure 5). As can be appreciated, the homogeneous outline corresponds to the model of an islet as coded by the Haussman Baroque Town Planning tradition, based on the principle of strict linear delimitation between public space and private land open to building.

Figure 5: Alignment plan of Saint-Louis de Senegal (1880).

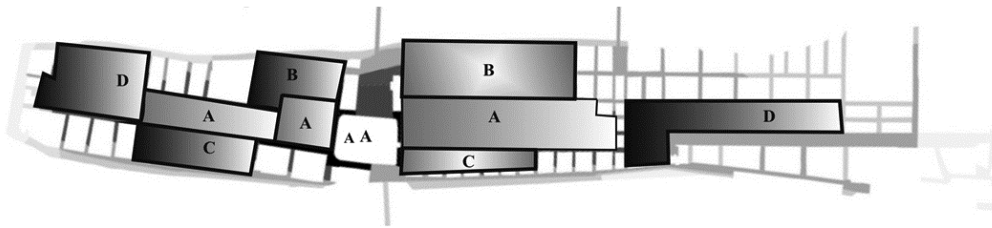


Source: Bibliothèque National France, Paris.

However, the temporary construction of buildings on the island was neither homogeneous nor regular. Using the following outlined framework (Figure 6), an analysis of plots and buildings can be made by date to describe the shaping process.

First, the square, Plaza Faidherbe (sector AA) was transformed, once the fort no longer existed, to house the most important administrative buildings, such as the Governor's Palace, The General Colony Counsel, the Captaincy and Port Management, the Post Office and the Cathedral, all of which were buildings that themselves underwent transformations as their uses changed and reshaped the space of the square. In 1887, the Servatius Bridge (also called the Moustapha Malick Gaye) was built from the centre of the square to communicate the island with the Langue de la Barberie.

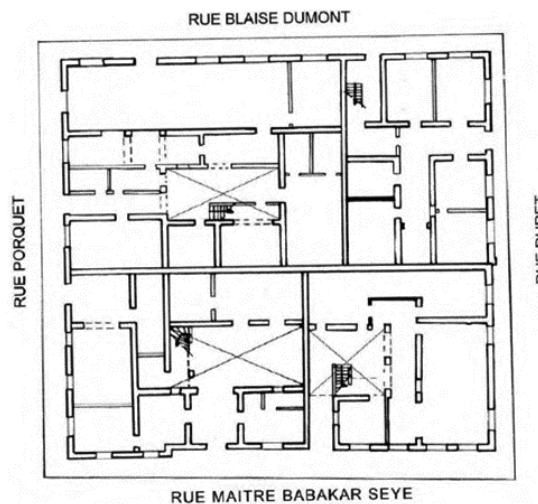
Figure 6: Urban structure of the island with different building types.



Source: Adapted from inventory from the School of Architecture at Lille.

Aligned north and south of the square, a series of sectors, labelled A, developed. These sectors are made up of quadrangular islets, more or less 30 x 30 metres, made up of four plots some 200 square metres each, with a house on each corner (Figure 7).

Figure 7: Quadrangular islet in sector A.



Source: Inventory of the School of Architecture in Lille.

Solid proportionate buildings some 7 and 8 metres in height were built conforming to two typologies: houses with open balconies or house with portico galleries, in line with the French Colonial model (Figure 8).

Figure 8: House with balconies ('Bourdeaux') and with portico gallery.



Source: Pictures by authors.

Figure 9: Long, narrow islet perpendicular to the sea in sector B, aligned with the central grid. Source: Inventory of the School of Architecture, Lille.



These houses and these sectors, built between 1720 and 1820, show the period of military domination being replaced by a civil society concerned primarily with trading.

The houses with balconies, known under the generic name of 'Bourdeaux' are considered to be the Colonial model par excellence, with the name probably deriving from the archetype to which a roof and balcony have been added. Those houses with portico galleries typical of Saint Louis were built by ship merchants and traders and represent the nobler style of building although the modest façade gives no hint of the nobility. The houses were usually built perpendicular to the road meaning that the main façade looked onto the patio.

Later building took place along the east and west coasts of the island. The blocks were larger, 30 x 130 metres approximately, and built perpendicular to the river in a more haphazard fashion and often bringing together domestic and trading purposes (Figure 9). Sectors B and C from Figure 6, with their strong links to the breakwaters and maritime activity, became overrun in the 19th century.

The last stage of building corresponds to the population explosion and people of all classes with less consumer power giving rise to sectors D in Figure 6, at both ends of the island and occurring in the mid-20th century (Figure 10). The plots in these cases are highly fragmented and the building often consisted of precarious one-floor shanty-town shacks.



Figure 10: Islets at the northern and southern ends of the island haphazardly built and highly fragmented (D sectors from [Figure 6](#)). *Source:* Inventory of the School of Architecture, Lille.

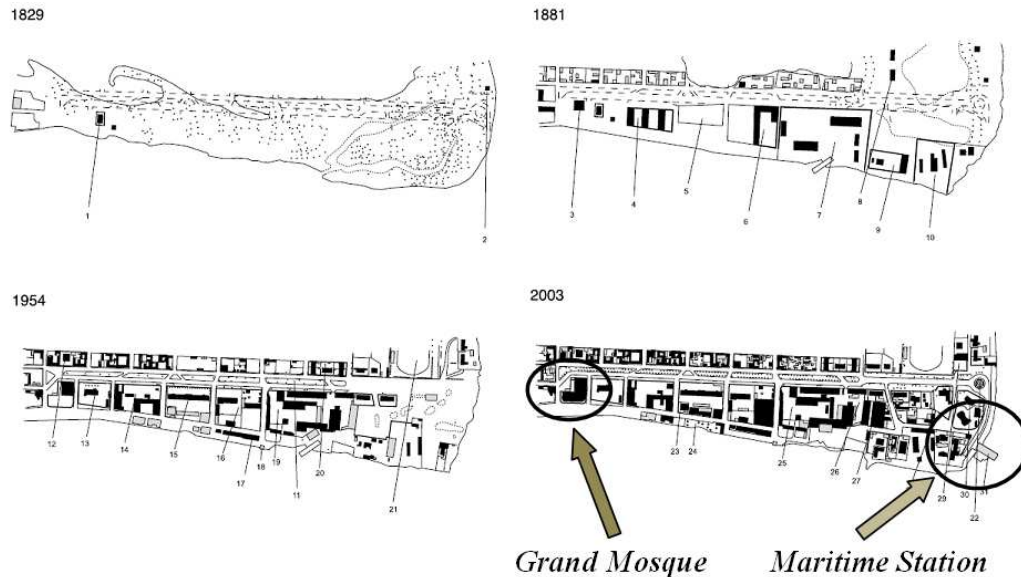
Figure 11: Shack-type building (in wood). *Source:* Picture by authors.

These urban compositions did not reflect homogeneous or exclusive social conditions. Even so, however, two types of building can be distinguished: the wooden house and the terraced house ([Figure 11](#)). The terraced houses were 4 metres high and were known as 'Portuguese'. These usually belonged to white-collar workers such as clerks and local traders. This type of construction can be traced back to the time of free lease at the beginning of the 19th century. The buildings were rectangular and 4 metres deep; with the length varying between 6 and 20 metres. Usually referred to as shacks, these wooden houses are the most basic of the original buildings. They were put together with wooden planks that could be easily disassembled, shifted and reassembled in the event of flooding.



This analysis allows for the formulation of the working hypothesis that urban growth radiating from the city centre (lengthwise, north to south) deforming the original grid-structure along the coast and at each end of the island. These areas were also the first to deteriorate. To a certain extent, the urban landscape experienced a period of stagnation as the result of loss of economic resources. Likewise, the north end of the island suffered irregular growth in the shape of military buildings, schools and other public utilities, with only the north-west housing largely residences in need of serious repair. The urban void that existed gave rise to the Avenida Jean Mermoz (the former Route des Conducteurs) running to the edge of the river where there was a maritime station of which some pillars remain. The Grand Mosque was built in 1881, when the country was still basically Muslim ([Figure 12](#)).

Figure 12: Evolutionary framework in the north of the Island of Saint-Louis.



Source: Adapted from inventory at the School of Architecture, Lille.

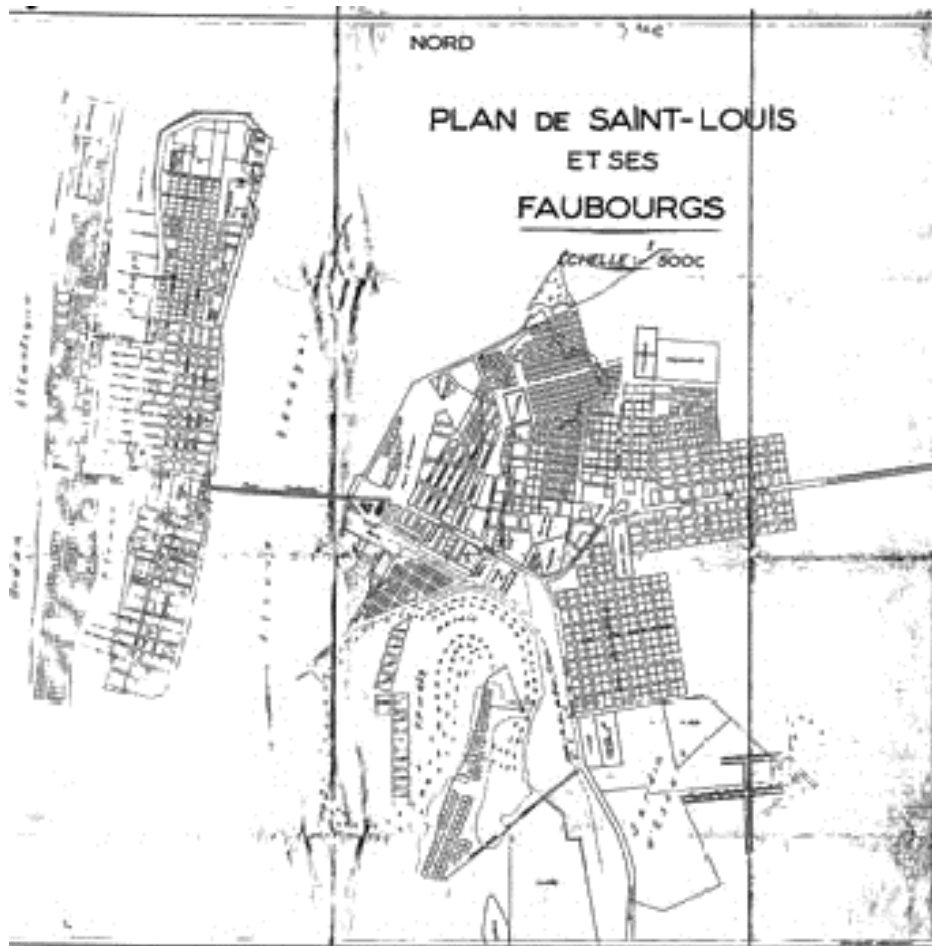
Rise and fall of the Island of Saint-Louis

The city of Saint-Louis has boasted great facilities and communications since the mid-18th century, gradually becoming the political, economic, military and intellectual capital of Senegal and Mauritania, and was seen as the capital of the French West Africa Company in 1895.

In the early 20th century, the city gained people and modernised. Medical progress resulted in lower child death rates and in improved hygiene and food conditions. By 1940 the population had increased to 36,000 and kept rising despite the significant number of men sent to the front in the Second World War. In 1942, the “Plan de Saint-Louis et ses Faubourgs” (Figure 13) was introduced projecting the broad lines along which the major areas of the continental platform should be developed.

However, after 1957, when the country became independent and the island of Saint-Louis lost its privileged capital position to Dakar, it went lost population and the capacity to maintain the historic buildings. In stark contrast, by 1970 the perimeter of the city had tripled, above all in the continental area where there was still land available albeit of a poor quality.

Figure 13: Plan of Saint-Louis and districts. 1942.



Source: National Archives of Senegal.

Saint-Louis is a city that now has 81,200 residents. This growth was due to migratory flows and in particular to the marked rural exodus in the 1960s brought on by the drought. This growth made the outskirts grow haphazardly and unplanned. In spite of this, in 1975, the Master Plan of Territorial Organization (Le Schéma Directeur d'Aménagement et d'Urbanisme [SDAU]) was completed to handle the development of the city. The Master Plan proposed that the common perimeter be increased in size by 12,800 hectares and that the city be extended towards Ngallèle, (6 km to the east of Saint-Louis); however this plan met little public support. Town planning and public utilities could not keep up with the population growth and, therefore, the outskirts evolved with no public utilities. In an analysis of the urban services in Saint-Louis, the majority (52%) are located on the Island of Saint-Louis while only 13% are on the Langue de Barberie and 35% are in the continental area of Sor (Table 1). This creates a significant mismatch with the population living in each of these areas (Table 2).

Table 1: Share of equipment and urban facilities in the Saint-Louis region (2000).

Zones	Equipment and urban facilities
Island of Saint-Louis	52 %
<u>Langue de Barberie</u>	13 %
<u>Continental zone (Sor)</u>	35 %

Source: Master Town Planning Plan of Saint-Louis 2000-2025 (PDU).

Table 2. Share of population in the Saint-Louis region (2000).

Zones	Population in 2000: Inhabitant	%
Island of Saint-Louis	14,022	9 %
<u>Langue de Barberie</u>	36,652	25 %
<u>Continental zone (Sor)</u>	98,806	66 %

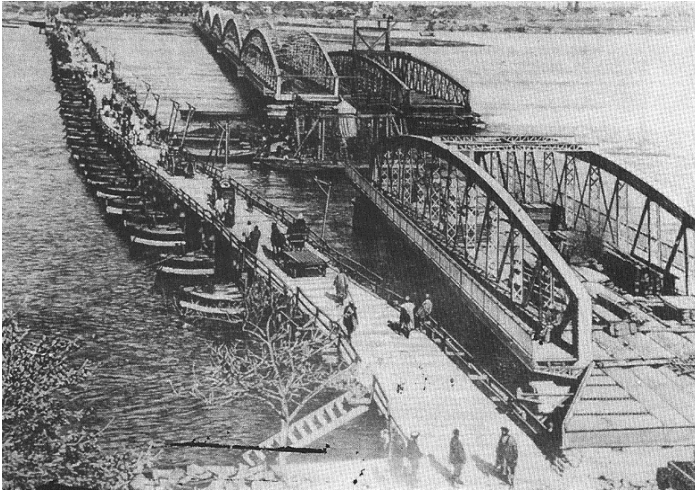
Source: Department of Public Safety (DPS) of Saint-Louis.

The limited population on the island (only 9%) and the concentration of the utilities there can be explained by the fact that many residential properties have been abandoned because they are in serious need of repair; and most of the remaining buildings are administrative, trade-related or the better preserved second residences of executives who normally live in Dakar.

Communication and trade as determining factors

In the context of the physical and socio-economic evolution of the island (and the extension of the city) of Saint-Louis, consider the role played by trade infrastructure. In the late 19th century, the reduced dimensions of the island, at 2 km long by 400 metres wide, forced the population to occupy the banks of the River Senegal. In doing so, they established the first outskirts of the city. The suburbs of N'Dar Toute and Guet N'Dar in the Langue de Barberie were the locations preferred by the fishing population together with the suburbs of Sor Norte and Balacoss on the island of Sor, on the mainland area. All of these were linked to Saint-Louis by a series of three bridges built between 1856 and 1865. First, the Moustapha Malick Gaye and the Geôle bridges (represented only by struts today) connected the island of Saint-Louis with the tongue of sand known as the Langue de Barberie. Then, in 1897, construction of the Faidherbe steel bridge (replacing the pontoon bridge shown in [Figure 14](#)) allowed the city to extend toward the mainland area. This steel bridge is included as part of the World Heritage status.

Figure 14: Construction of Faidherbe steel bridge (1897). *Source:* Bibliography in the collection of the School of Architecture, Lille.



The Langue de Barberie was taken over by the fishing community due to its location on the border between the Atlantic and the river making it a convenient place for the most important economic activity of the city, the artisanal fishing fleet. This sector and the market that was established nearby provided significant job opportunities to both men and women (Figure 15).

Figure 15: Women on shore waiting for fishermen at Guet N'Nadar. *Source:* Pictures by authors.



Figure 16: The railway station. *Source:* Collection DAVID Paris. Postcard (1909, 1928).



In Figure 18 these three central hubs of this urban layout are identified as A, B and C, where A is the railway station, B corresponds to the 'Guet N'Dar' fishing quarter and C is the 'Quai de Roume' breakwater on the north-east coast of the island of Saint-Louis.

Another important event in the economic life of the city of Saint-Louis was the building of the railway in 1885 that linked Saint-Louis to Dakar and later Dakar to Niger. The railway shifted trade and passenger transport away from the river as a mode of transportation. The train station (Figure 16) was located immediately behind the entrance to the Faidherbe Bridge, serving as a strategic supply and delivery point for merchandise arriving and leaving the island of Saint-Louis.

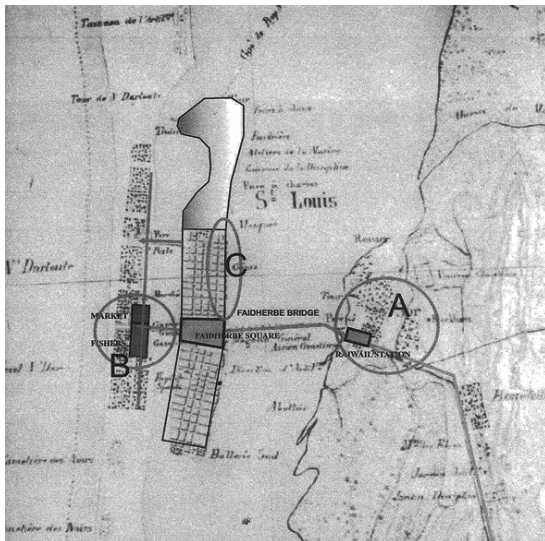
This, in effect then, is how the main infrastructure of the city that was to define its shape was put in place up to the 20th century.

The bridges allowed for the three territorial areas to be connected and also facilitated the settlement of the fishing quarter at Guet N'Dar (Figure 15). The breakwater (Quai de Roume) shown in the postcard in Figure 17, was the maritime station and still continues to be important to trade and the train station was the terminus to move goods and people across to the island of Saint-Louis.

Figure 17: The breakwater, or Quai de Roume. Source: Tacher Collection. Postcard (1910-1920).



Figure 18: Layout of the strategic points of the Saint-Louis urban structure, 1872. Source: Centre des Archives d'Outre Mer. Aix en Provence (Authors' adaptation).



Except for the area around the breakwater, the rest of the places correspond to sites where the predominant economic mode is informal. As the urban population grew, the informal economy prospered. This was critical for the city's economic viability and its surrounding countryside.

The island of Saint-Louis gradually lost its economic heft and became an institutional zone, with administrative and military functions centred there, along with such public utilities as schools, hospitals and religious centres. Transport links promoted economic activity outside the island and limited residential uses in this area to wealthier families. Architectural heritage was reduced to the inner grid and became progressively dilapidated as users vacated the city.

Conclusion: Decadence and deterioration

The decline of the island of Saint-Louis is often attributed to the economic and financial crisis of the State; yet, it is just as attributable to a decline in the socio-economic status of its population. The quality of life of its residents have deteriorated substantially in a country where decision making within the city is driven by the predominance of the Captaincy (military) and State (federal government) over local authorities. Senegal is acknowledged as one of the most successful and deeply rooted democratic cultures in Africa. At the same time, local authorities are appointed by and responsible to the President and the representatives of the federal State continue to exert control at all levels of the territorial administration. Thus, there is a high degree of administrative centralization in the management of public finances, such as in the administration of taxes and the regulation of businesses.

The economy of Saint-Louis is still based on coastal fishing, animal husbandry and agriculture, despite all efforts to modernize, and the primary sector is still extremely under-productive. Therefore, by way of a first preliminary analysis, we could conclude that the basic premise for deterioration in Saint Louis is socio-economic. However, we have tried to show where and how this physical and functional deterioration has occurred and to understand its endogenous and external causes.

The first and most alarming symptom of the situation is the progressive isolation of the island as a result of the obsolescence and deterioration of the communications and transportation infrastructure. For example, it is now virtually impossible to travel up river. All access is blocked by the Faidherbe Bridge that no longer opens as the result of lack of maintenance. Likewise, the dams built along the river to facilitate irrigation of the nearby fields block all river traffic. Last but not least, an operation at the mouth of the river in 2003 created a breach in the Langue de la Barberie peninsula (some 5 km from the island of Sor), which has gradually widened, allowing tides to move inland and choking the delta with flotsam and jetsam thrown into the river. In any case, maritime transport is at an all-time low. The Quai de Roume has lost its former prominence and is only used once a week by passenger vessels. Access by air is practically inexistent. There are no scheduled or charter flights due to the length of the runway and lack of demand.

Railway links are also a thing of the past and the stretch of railway line on the island of Sor has been overrun by urban sprawl. Overland traffic has been rerouted around the outskirts to find an alternative route to the Faidherbe Bridge and the island of Saint Louis. Of the two bridges that joined the island with the Langue de la Barberie, the one further north (Pont de la Géole) has been completely destroyed and river crossings are now handled with barges. As a result, the island is completely stranded. The deterioration of the heritage on the island of Saint-Louis is not the result of an inadequate state policy of provision of utilities but rather a lack of significant economic activity on the island. The upscale area of Saint-Louis contains only administrative buildings and half a dozen hotels (including La Poste, Siki Hotel, La

Residence, Mesón Rose), all in rehabilitated buildings based on a 'central patio'. Such shops as exist are unimportant and all lie close to Plaza Faidherbe, with few artisan stalls on view.

With respect to human capital, there is a lack of educational provision at all levels, both basic and professional, with insufficient training and sparse marketing of activities such as tourism that might make a crucial difference to the population and community. What scarce resources exist in Saint Louis are made up of income from local taxes which have progressively decreased and diminished as the population has become ever poorer. This is compounded by the total absence of a tax register that would allow for an assessment of the benefits to be gained from municipal taxes and adjacent activities, leaving many taxpayers free of all tax burdens.

With respect to decentralization, over the last few years there has been a major upswing in citizen awareness and participation with the creation of a Coordination, Information and Local Development Promotion Cell (CCIADL), which has morphed into an Agency for Community Development (ADC). This has led to a program for Consolidation and Support to the Development of Neighbourhoods (PRADEQ) and, along with the Social Urban Animation Programme (PASU), is designed to eradicate poverty by improving quality of life, supporting promotional initiatives at work and in the city, and involving competent partners and associations in community management. In this situation, in spite of UNESCO heritage status and rich local natural resources, attempts at regenerating the island of Saint Louis appear doomed.

Regeneration of the historical heritage of the island of Saint-Louis would seem to be impossible in the current negative economic and social context. This is partly due to exogenous factors, typical of the political organization and the economics of Senegal, and partly due to the progressive degradation of the built urban heritage in a situation of scarce economic activity, little investment in public utilities, a population without resources, and scant investment in rehabilitation of buildings that are currently in ruins.

Thus, the question of what policies can be applied and who should be responsible for implementing them remains. How does one put in place economic, health and educational actions necessary to save a city and a world heritage site that has been relegated to complete neglect? Solutions are few and difficult to envisage; and they all rest on resources being allocated, either by the country itself or by international cooperation programs.

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