



Urban upgrades concept and its occurrences in Abeokuta, Southwest Nigeria (2009-2018)

Folahan Anthony Adenaike

Department of Architecture, Lagos State University of Science and Technology, Ikorodu, Nigeria

Correspondence Author: Folahan Anthony Adenaike

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Abstract

When parts of urban settings become dysfunctional, they require upgrading to revive their extrinsic functions. The obvious reasons for upgrading should be to address infrastructural collapse and functional depreciation. There are however more far-reaching effects of the upgrade actions on the environment which may not be envisaged by the stakeholders at inception. This study was designed to carry out a review of the concept of urban upgrades from a world view and focus on Abeokuta city core which had gone through series of upgrade programs with a view to determining how much the upgrades have been true to their intentions. The study was carried out by executing a literature review of the concept of urban upgrades which was followed by a field study that included visits, interviews and inspection of government documents of upgrade programs in Abeokuta. The information gathered from the field studies and data from previous studies were analyzed against the backdrop of what upgrades should achieve. The study found out that the upgrades executed have exhumed other socio-spatial problems like change in building use and congestion. It recommends more detailed planning and execution of future programs to avoid the pitfalls that followed the previous programs.

Keywords: architectural styles, building use, development control, infrastructure, socio-spatial dysfunctionality, urban systems

1. Introduction

According to Nitti and Dahiya (2004) ^[43], urban upgrading is the collectively undertaken improvement of physical, social, economic, organizational, and environmental aspects of a city. In systems engineering, urban upgrades are planned enhancements to one or more urban systems in a setting to boost efficiency and foster a better urban environment. Urban upgrading refers to the statutory enhancement of the urban environment by executive programs, which includes urban renewal, state-led gentrification, downtown regeneration, neighborhood revival, and many more phrases.

Urban renovations are a common occurrence in the world's biggest cities, and Nigeria's state capitals are no exception, regularly undergoing urban improvements. Additionally, it must be recognized that older structures with heritage value are more likely to be found in the inner city, where urban development first began (Licciardi, G., & Amirtahmasebi, 2012) ^[37]. It's also expected that the older and more indigenous inhabitants will live in or have connections to the city center. By addressing the urban systems, it is the goal of city upgrades to address social issues that have materialized in the urban form (Francis, 2018) ^[19]. Only when blighted places have potential economic worth are improvements made to the constructed forms (Francis, 2018) ^[19]. In these situations, public/private partnerships and state-led gentrification processes are typically used to encourage the regeneration of the neighborhood (Shmaryahu-Yeshurun & Ben-Porat, 2021) ^[52]. This alteration to the architecture results in a developmental gap with the native forms (Jayantha & Yung, 2018) ^[28]. There is a propensity for the area to draw in more funding and patronage when these urban systems are enhanced or newly implemented (Korkmaz & Balaban, 2020) ^[34]. The local community begins

to react to changes in socioeconomic indicators through the caliber and make-up of the forms they create and maintain (Garcia, 2016) ^[8]. As a result, the architecture begins to reach a level that the urban upgrades never anticipated. In the study of urban architecture, renovation and city upgrades have become some of the greater causal factors in urban morphology.

Existing urban upgrade research assesses the consequences of upgrades on the sociopolitical environment and urban systems (Wang, Shen, Tang, Sin, Lu, Peng, and Tang, 2014) ^[58]. The printed material that focuses on historic city centers romanticizes the preservation of heritage value and rarely mentions the effects on building form. Corporate or state interventions in the organic development of a city are referred to as urban improvement programs. According to Coskon and Kagan (2011), governmental power and laws are always essential for successful renovations. It involves acts and intentions to remove, replace, alter, or adjust physical components, systems, and processes inside a city in accordance with desired technological, civilizational, and urbanized objectives. The majority of improvement projects are referred to as 'urban renewal'. Other forms of upgrades are neighborhood revitalization, land reallocation, gentrification, urban regeneration, housing renewal and urban transformation. Gordon (2004) ^[23] defines urban renewal as the removal of dilapidated neighborhoods in order to bring in better infrastructure. Tallon (2020) ^[55] defines urban regeneration as the inherent addition of value to urban populations in order to stimulate general development. Inner city and downtown redevelopments aim to reorganize the physical environment in preparation for future social welfare development (Berglund, 2019) ^[9]. State-led gentrification is the final displacement of

residents through executive action in order to improve the physical appearance of the area (Shmaryahu-Yeshurun & Ben-Porat, 2021) ^[52]. Aside from the ones stated, numerous nomenclatures that vary by location are frequently employed to explain urban improvements.

The study investigates the series and scope of urban upgrade programs that occurred in the study region throughout a ten-year period (January 2009-December 2018). There are two sections to the upgrade programs. Those that occurred prior to 2011, when the government changed, and those that occurred under the new government. The delimitation is required since the two administrations addressed urban upgrading from opposing perspectives. In many cases, the incoming administration implemented improvements in areas where the previous administration had acted. In some cases, this technique totally erased the traces of the previous administration's work. In such cases, only the most recent upgrades will be considered in the examination of upgrade effects.

All the four different aspects of urban systems, namely the infrastructure, the built environment, the administration and the services witnessed marked improvements during the period under scrutiny. Some were more evident and more likely to influence building morphology, such as infrastructure upgrades. This is due to the fact that infrastructure upgrades have a direct impact on the spatial organization of the urban context. Other urban systems whose enhancements are similarly labeled as urban upgrades are not well-known entities in the realm of urban development. The built environment is directly related to specific buildings that are constructed as a type of urban upgrading. Unless municipal authorities or business groups construct massive clusters of buildings or very large monumental structures, the consequences of such efforts will not be felt across a substantial portion of the neighborhood. In the studied region, just one such structure exists, The Adire Mall, which is still under development. There are no purpose-made housing estates or newly constructed modern marketplaces in the area that can serve as built environmental urban systems. The governance of the area is directly under the jurisdiction of the local government. In an unusual and unintentional circumstance, the local government has transferred most of its functions to the state government. The state government distributes monthly local government subventions from the national treasury. Since the turn of the century, state administrations across the country have withheld portions of such contributions in order to release just enough for local governments to cover their recurring expenditures. The state government manages all capital projects that fall within the responsibility of local governments. This situation persists in the study area. Upgrading the administration of the area is as good as upgrading the state government. Its impact is not felt in metropolitan areas. Most services, such as garbage collection and utilities, have continually improved. Sanitation has improved throughout time, but it has had no direct impact on the types of structures that are being built in the neighborhood. The most noticeable urban system enhancement in the area has been infrastructural development, particularly

accesses. Some of the upgrades would have been difficult to implement in the researched neighborhoods without encroaching severely on property rights. Later on, the state government was forced to clear and take huge tracts of property from individuals in order to carry out major urban enhancements in several areas of the neighborhoods. Urban improvement programs are an attempt to overcome dysfunctionality in urban systems. Some of the existing research addressed concerns of socio-spatial dysfunctionality, such as slum and squatter proliferation and "blight" episodes (Blessett, 2020 ^[11]). The more recent literature appears to be more focused with developing sustainable urban upgrading processes (Trop, 2017) in order to make upgrades more acceptable to all parties involved and true to the program (Gbadegesin, 2015; Opoku & Akotia, 2020) ^[21, 47].

More articles on the effects of urban upgrading have recently emerged from Southeast Asia, particularly China. According to (Fu and Zhang, 2017) ^[20], the eco-dysfunctionalism in Chinese cities has resulted in a clarion call for more eco-friendly cities. Environmental dangers in Chinese cities may be mitigated by implementing sustainable and smart city principles (Dong Shi, Zhang, and Zhou, 2020; Lai, Chau, Alvin, & Cheung, 2017) ^[15, 35]. This could explain why China produces so much upgrade literature. There have been numerous upgrading programs in Turkey, which have been well described in the literature (Jayantha & Yung, 2018; Gunay, 2018) ^[28, 24]. The economic boom of past years due to massive industrialization in Turkey may have provided more funds within the polity that was used to sponsor urban upgrades around the country (Gunay, 2018) ^[24] while the boom lasted.

Physical planning policies can be used to implement lower-cost upgrade programs. Upgrade programs refer to legislation on spatial restrictions and distensions to transform the cityscape. Buildings with fewer than ten floors are not permitted in several areas of Abuja, Nigeria, according to local authorities. This is done to increase the visibility of the cityscape. On the other hand, authorities may impose eminent domain. When private ownership of property is prominent in areas to be renovated, Arch (2014) argues that "eminent domain" is the ideal way to big municipal renovations. Such drastic measures are easy to put in place in cases where "blight" has been identified. The concept of blight has always been questioned, as authorities are seen to change it to prepare enough grounds to take over private property (Gordon, 2004; Blessett, 2020) ^[23, 11]. Most improvement programs want a public-private partnership to address the issue of funding. The scheme's private arm would eventually gain a lot of benefits for their investments. Protecting the investment of private institutions diminishes the odds of ownership retention and acceptability by the original property owners at the end of the programs. Many studies have attempted to design more inclusive improvement programs in order to improve acceptability (Zinzani & Curzi, 2020; Maculan & Dal Moro, 2020; Bianchi, 2019; Holtslag-Broekhof, 2018; Mehan & Soflaei, 2017) ^[62, 38, 10, 25, 39]. Upgrade programs can be confined to discreet rehabilitation projects such as road, walkway, and drainage reconstruction or increasing municipal services. State-assisted

gentrification can also be used to improve urban areas (Ezema, Opoko, & Oluwatayo, 2016) ^[17].

Gentrification, defined as the gradual displacement of residents of an area by persons from a higher economic level, has a significant impact on the urban built form. In general, urban constructed forms occur as stable clusters with varying architectural styles from one location to the next (Jayantha & Yung, 2018) ^[28]. Urban improvements in the city may develop without major effects until they reach the point of gentrification, which may be purposeful or unintentional over time. When gentrification begins, market forces will accelerate the natural evolution of the entire community. There is a risk-averse population that will be the losers in the ensuing procedures (Forouhar & Hasankhani, 2018) ^[18]. The rent gap theory (Wachsmuth & Weisler, 2018) ^[56] is a corollary that exists wherever urban improvements lead to gentrification. The change in the community's viewpoint is reflected in the built form's outlook. The diverse origins of the newcomers to the community, as well as their ability to pursue individual interests, will eventually result in building forms with no discernable pattern. In gentrified places, an urban ensemble is difficult to achieve (Williams, Omankuttan, Devika, & Aasen, 2018) ^[59]. Rather, the cityscape is dominated by a mix of individual choices in rapid flux. When urban upgrades do not result in the stimulation of the gentrification process, building forms typically keep their previous appearance. This is only possible with officially legislated restrictions to ensure preservation.

In general, urban upgrading programs are founded on the need to solve socio-spatial dysfunctionality, but they end up being more focused on economic gains for the government in the form of greater taxes and private investors in the form of high returns on investment. (Jayantha and Yung, 2018; Ng, 2002; Colsaet, Laurans, and Levrel, 2018; Mosciaro and Pereira, 2019; Xu, Shen, Liu, and Martek, 2019) ^[28, 42, 14, 40, 60]. Consideration for urban form and preservation of the area's legacy is thoroughly investigated in Chinese and Western European articles. While undergoing repairs, the core areas of Catania in Sicily were preserved (Cascone & Sciuto, 2018) ^[12]. In Turkey, the suitability of land readjustment in urban redevelopment has been questioned in light of current societal values (Holtslag-Broekhof, 2018) ^[25]. In Hong Kong, the influence of gentrification on the uniformity of the urban fabric, particularly in the city center, has been reported (Jayantha & Yung, 2018) ^[28]. The heritage value and urban layout of Cagliari's ancient city center were studied in order to educate the government in the event of downtown redevelopment (Chahardowli, Sajadzadeh, Aram, & Mosavi, 2020) ^[13]. In the urban redevelopment of the city center, eco-sustainability is promoted (Naldini, 2021) ^[41]. The repair and conservation of Shanghai's old city core is important to the city's updated urban planning (Shi, Min, Si, Tang, and Miao, 2019) ^[51]. The economic benefits of preserving while doing urban upgrades have been studied in China (Xu, Shen, Liu, & Martek, 2019) ^[60], where the protection of the socio-spatial character of entire districts has been urged (B. Wang, Luo, and Wang, 2020) ^[57].

The land redevelopment intricacies in China operate as restricting factors in the preservation of inner cities while upgrading the areas (Arkaraprasertkul, 2019) ^[7]. A paradigm for the preservation of Chinese cultural cities has been presented (Song, Cheong, Wang, and Li, 2020) ^[53]. Each city is an individual, and it is difficult to categorize cities based on obstacles by placing them on a scale. Addressing the question of form and space in each city is a one-time exercise because each urban context is a distinct entity with distinct issues (Sallis, Bull, Burdett, Frank, Griffiths, Giles-corti, & Stevenson, 2016) ^[50]. Aside from Chinese publications that attempt to prevent upgrades in historic city centers, many other publications are customized to the specific configurations and cultural inclinations of the cities under consideration.

2. Urban upgrades in Southwest Nigeria

Each city is unique, therefore categorizing cities based on hurdles by placing them on a scale is tough. Because each urban context is a separate entity with specific difficulties, addressing the subject of form and space in each city is a one-time exercise (Sallis, Bull, Burdett, Frank, Griffiths, Giles-corti, & Stevenson, 2016) ^[50]. Aside from Chinese publications attempting to avoid upgrades in old city cores, numerous other publications are tailored to the specific configurations and cultural preferences of the cities in question.

Forced gentrification was used to repair "blighted" sections of the island in the 1960s and 1970s. Indigenous homesteads and family complexes along key roadways, as well as prospective monumental sites, have been relocated to the mainland. This lasted until the 1990s, when the Lagos Urban Renewal Board identified "42 blighted areas" since 1981, which were demolished and redeveloped (Jimoh, 2014) ^[31]. Even when other grounds were stated for such acts, forced eviction was a fairly simple option to implement urban upgrading. The 1976 Land Use Decree made forcible evictions cheap for any government in Nigeria. Land reallocation and public-private partnerships in home development were used to improve the cleared areas by the 1990s. The majority of the literature on upgrades during this time period focused on the socio-political ramifications of state authorities' conduct in these exercises (Adekola, Azuh, Ademoye, & Amoo 2019; Godswill & Ukachukwu, 2018; Agbola & Jinadu, 1997) ^[1, 22, 5]. Such publications have continued to track urban upgrade initiatives to the present day (Paulla-Dewi, 2018; Obabi, 2013) ^[48, 44]. Some research on urban upgrades in Southwest Nigeria has examined the possibility of public/private engagement and funding for urban upgrades (Roelofs, 2021; Ezema *et al.*, 2016; Jegede, Adewale, & Olaniyan, 2019) ^[49, 17, 29]. Other articles concentrate on the potential of urban renewal as a strategy for sustainable urban development. (Enoma and Idehen, 2018; Oyeboode, 2018; Ilemobayo, 2020; Ibem, Uwakonye, and Aduwo, 2013) ^[16, 27, 26]. These papers addressed a wide range of themes, including urban greening (Oyeboode, 2018) and urban resilience to natural catastrophes such as floods (Enoma & Idehen, 2018; Olawepo R. A., 2010) ^[16, 45], as well as urban systems such as transportation (Olawepo R. A., 2010) ^[45]. Other literature includes viability studies of target urban

upgrade programs in South-West Nigeria (Adewale, Ibem, Amole, and Adeboye, 2019; Jimoh, 2014) ^[3, 31]. The ambition for expansion and prosperity after independence fueled urban development in Southwest Nigeria. The period's metropolitan centers were not congested at first, and the necessity to modernize did not become pressing until the late 1960s. Before that, Lagos had passive upgrading programs in 1906 and 1951 (Olawepo, 2010) ^[45]. The purpose was to clear out squatter settlements and create better access in a few areas. It was regarded as a "facelift" in areas like Broad Street, Nnamdi Azikwe Street and Church Street.

The slum dwellers were transferred to different districts of Lagos. All of the urban improvement programs were "clearance and resettlement" activities. By the mid-1970s, the rapid urbanization and population boom of the Southwest's major cities had put a strain on the infrastructural facilities and services. Cities such as Lagos, Ibadan, and Abeokuta were growing overcrowded in the centers while rapidly expanding on the outskirts. Individual and commercial districts in the centers required improved access from the outskirts. The upgrade programs that dominated metropolitan centers during this period included fly-overs, bridges, dual carriageways, and ever-increasing road networks. The pattern continues to this day. Forced evictions and gentrification in places like Maroko and Lagos Island (Ajayi, Soyinka, and Samuel, 2019; Amakihe, 2017) ^[6] and urban regeneration to convert residential areas in city centers to commercial uses (Oluwasegun, Otun, & Samuel, 2019; Adekola *et al.*, 2019) ^[46] are other forms of urban upgrades that have occurred in the area.

In Southwest Nigeria, urban enhancements are the responsibility of the government, and private engagement is uncommon. This is due to the fact that relatively few private firms are interested in infrastructure development until their business is harmed by deteriorating infrastructure. The evolution and gradual modifications that occur in city centers cannot be referred to as improvement programs. City cores are typically gentrified and taken over by commercial initiatives to capitalize on their importance. This jockeying for positions within the same location fosters a highly dysfunctional land tenure system. Overcrowding and infrastructural deficiencies result in a decrease in land value and attraction (Jiang, Mohabir, Ma, Wu, & Chen, 2020) ^[30]. Except in areas where forced eviction and gentrification are instituted, most urban upgrade programmes in Southwest Nigeria created value only to lose it over time (Adewale *et al.*, 2019) ^[3]. The socio-spatial dysfunctionality that generated the need for urban upgrades eventually takes over the area again (Oyebode, 2018). Urban upgrading will eventually have to be carried out again.

Information regarding Abeokuta urban upgrading is more widespread in newspaper publications and social media platforms. Ogun State is seeing a significant amount of urban regeneration. The government is investing heavily in infrastructure development in Ijebu-Ode, Sagamu, and Abeokuta, particularly in road building, overhead bridges, road dualisation, and access road projects, in order to modernize the state. Tunde Kelani of Mainframe Productions, a social critic,

has made statements about the consequences of urban upgrading in Abeokuta on the socio-spatial environment. The few academic studies on Abeokuta's infrastructure developments are primarily documentary (Sunday and Olutide, 2017) ^[54]. They identify the changes that have occurred in some areas of social development (Yoade, 2018) ^[61]. The remaining articles are mainly focused with the societal difficulties that have arisen as a result of the government project. Adekola, Allen, and Tinuola (2017) provided detailed coverage of the topic of internal displacement of citizens in locations where infrastructure upgrades have occurred. However, Abeokuta is highlighted in similar articles that attempt to draw attention to the deterioration of Yoruba traditional architecture (Jolaoso and Bello, 2019) ^[32]. Scholars are concerned about the indiscriminate demolition of buildings and neighborhoods of heritage value in order to develop roadways, as well as the looming changes that would result from these programs (Adekola, 2017). There are many buildings in Abeokuta that illustrate the various epochs in the growth of Yoruba traditional architecture and vernacular variants (Jolaoso and Bello, 2019) ^[32]. The current government proposal makes no provision for their maintenance. Newspaper articles and media reports take stances on current events, sometimes with political and socioeconomic overtones. Scholarly research and inquiries on Abeokuta's approach to urban upgrading are still missing.

In Abeokuta, Adam Smith International conducted a situation survey for UN-HABITAT. In April 2021, the report was presented to the United Nations Human Settlements Programme. Due to the quick changes in the city outlook with the huge upgrades that are still taking place in the area, the paper advocated the construction of (i) a Public Transport Policy and (ii) an Urban Master Plan and Guidelines for Urban Renewal for the city. The document classified Abeokuta's development as "uncoordinated" due to the lack of an up-to-date urban planning framework. It proposed Urban Renewal Guidelines, which are intended to give input for regeneration and enhancement of sedentary regions, including the city core. This is expected to improve the living environment in Abeokuta while also preserving historic structures and cultural treasures (Adam Smith International, 2020). The Ogun State government, on the other hand, commissioned a 50-year development plan in January 2019.

3. Urban upgrades in Abeokuta city core

The study period is divided into two parts (2009-2011 and 2011-2018) to demonstrate how two distinct administrations with jurisdiction over the area tackled the issue of urban upgrading. Interviews and tangible evidence on the ground confirmed the urban renovations carried out over the era. The Sapon image, obtained from the Ministry of Works, depicts the city centre in 2014, during the redevelopment of the area. The flyover had just recently been finished, and the surrounding surroundings were still being improved.

3.1 Upgrades executed from 2009 to 2011

Since the 1980s, there have been visible urban renovations in Abeokuta. The improvements made between 2009 and 2011

were concentrated on the city's periphery. The ones that took place in the city center were largely road rehabilitations, drain construction, the creation of public buildings, and the provision of amenities such as power and improved sanitation. Among all the identified changes in urban systems, infrastructure, primarily access roads and drainage, stood out as being updated in the research region. Because of the traditional setting and land tenure arrangement, infrastructure improvements were confined to road resurfacing and drainage development. Municipal services such as sanitation and garbage collection, on the other hand, have seen significant improvements. Interviews conducted in the areas revealed that the urban context was more organized spatially, although the organization alluded to efforts that had been built up over time and were not restricted to the improvements of 2009 to 2011. During the study period, no major road construction occurred in the study area. The municipal authorities stated that the only activities taking place at the time were road and drain maintenance. Between 2004 and 2006, all significant road resurfacing and drain construction in the city core was completed. The explanations provided for the low level of urban system improvement over the research period include political and administrative in nature. After improving the city core districts a few years ago, the government decided to relocate urban upgrading to other localities. Previous efforts had yet to demonstrate enough deterioration to merit serious consideration. Because a new government was due in 2011, the administration was hesitant to commission new projects; also, the districts under consideration are low-income parts of the city with low tax returns for the government. The major access routes and markets were upgraded, while the back streets and outlying districts were largely abandoned.

The visible urban upgrades in the city core during the period were road maintenance exercises carried out in Ake, Itoko and Saje. It should be noted that the area's principal roadways were resurfaced and drains were restored around 2005. The evidence of the upgrading programs is no longer present in the locations. New enhancements in the core areas have overlapping prior work. The time period under consideration fell in the waning days of a particular state government's tenure. At the time, urban improvement programs were limited because the administration was preoccupied with the political complexities of electing party members to follow them in power. The administration's urban upgrade programs were not concentrated in the city center. The programs in Abeokuta focused primarily on the new layouts and the city periphery. Buildings, public infrastructure, municipal services and administrative stream lining were carried outside the city core during the period.

3.2 Upgrades executed from 2011 to 2019

A new government took over the administration of the state in 2011. The approach taken by the new administration was more obtrusive. The government attempted to modernize the infrastructure of the state's cities. The Abeokuta city core, which had seen limited infrastructural development due to the organic urban form within the districts, was severely impacted.

Despite prior improvements, the city had traffic congestion due to very small streets, a shortage of parking places in business districts, and overcrowding. Due to rising urbanization and the resulting congestion, most government offices and parastatals have been relocated to the city limits and new neighborhoods such as Mosan and Ibara. Prior to 2011, the city core was crisscrossed by single carriage roads, with the bulk of the inner roads lacking any type of pavement. In 2012, the new administration embarked on massive infrastructural overhaul of the city. All the major access roads like Adekunle Fajuyi Road and Ijemo Road were expanded to minimum of four lanes with flyovers at the major intersections.



Fig 1: Sapon, Abeokuta in 2014

Prior to 2011, there were no overhead bridges or flyovers in the city core. The road width is more than 30m around the flyovers. Drains and other services such as power lines are also subject to setbacks. By law, contiguous building lines must be set back at least 6.0m from the property line along the road. As of the time of the field investigations, the building setbacks had yet to be imposed. The majority of the building lines are far shorter than the statutory 6.0m. To enforce the setbacks, elements of the buildings within the setbacks would have to be demolished. There is evidence, however, that entire buildings, and occasionally entire landed holdings, were consumed in road extension exercises. Many buildings were partially demolished to make place for the road expansion. This is evident in numerous building frontage renovations and reconstructions. Sapon, Abeokuta is a city center crossroads in Itoku that was once a heavily commercialized centre of urban activities. It housed a market, a motor park, and a residential urban sprawl in the city core. Previously, a roundabout had been built to control traffic in the region. The new urban upgrade initiative destroyed the automobile park, market, and roundabout. There are no remains of the ancient houses or prior urban improvement projects.



Fig 2: Sapon, Abeokuta in 2019

Other components of urban systems that supplement road infrastructure were also heavily upgraded during this time period. Drains, utility services such as electricity supply lines and municipal water reticulation, and civil works such as soil retaining walls are examples. During this time, city infrastructure upgrades were more concerned with supporting future aspects of urban expansion. The government took seized parcels of land near main roadways in order to expand them. This entailed paying compensation to property owners. In certain cases, eminent domain was used to get access to the properties and avoid litigation. Officials from the state government ascribed this extraordinary action to the administration's intention to avoid the pitfalls of urban upgrading in other parts of the country. For example, despite the sums poured, upgrading several portions of Lagos State has not solved the city's traffic problem. Previous urban improvements in Abeokuta met the same fate. While roads and other infrastructure were enhanced in terms of quality, their scope was not expanded to suit the ever-increasing volume of customers. Congestion and overpopulation persisted even in regions that had undergone urban renewal. Interviews with officials from the Ministries of Works and Transport and Urban Planning highlighted the administration's goal to set a precedent for future upgrading projects. Future urban upgrading activities are expected to constantly consider and accommodate expected growth indices for the city rather than repairing and increasing the quality of existing urban systems. The Lagos State experience was mentioned by officials as a learning experience for the administration. The limitations created by property boundaries along the roads in the city core made it very difficult to expand roads in the area. Apart from the major roads where properties were demolished to create right of way, the properties still crowd the roads in the other areas. During the research time, the roads were asphalted and some drains were built. In the surrounding areas, there were less demolitions and road expansions. These key areas' urban layout was organic. They formed concentric circles around a central point (Asomani-Boateng, 2011). For the convenience of services and urban systems, modern cities are built out more in a gridded form (Marshall, 2004). Many places in the city center have no vehicular access. Roads were built over walkways and lanes, causing them to wind through neighborhoods. In many cases, historic structures hinder and dictate the path of newly constructed highways.



Source: Oguntimehin and Bamidele, 2017

Fig 3: Building abutting the reconstructed road in Oke-Itoku

The areas beyond the roadways are still sedentary, with organic
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patterns and structures built in close proximity to one another. There are fewer roadways, and those that have been improved to make them bigger are almost touching the structures that border them. The renovated road in the Saje neighborhood picture may be seen taking off from the lower right-hand frame of the picture towards the middle of the picture. The structures crowd it out, while the old city form takes up the rest of the space. The roadways are not uniform in design and take up as much land as possible. Property owners in the locations receive very little compensation because the roadways often skirt the existing buildings. There are no drains in certain regions, particularly steep areas. This provides greater room for road building. This consistent approach, however, is conditional because traffic is light and the requirement for parking is minimal. The neighborhood is occupied by lower-income households, hence such public infrastructure is in short supply.

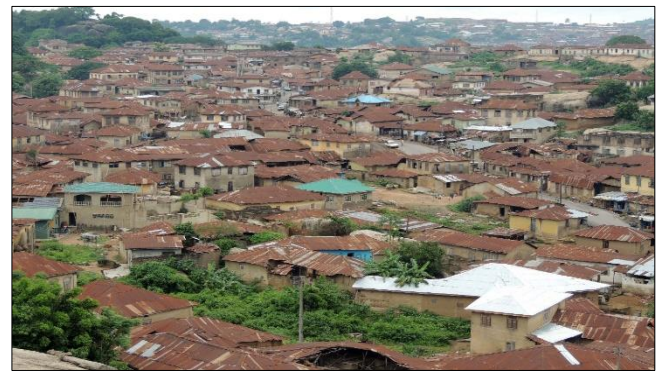


Fig 4: Saje neighbourhood of Abeokuta

Massive demolition of buildings that fall within setbacks and the course of the highways exposes the original city layout in areas where development is ongoing. The street elevations provide little indication of the structures' orientation. The majority of them were introverted, with their backs to the communal center or the central courtyard for the extended family. After the buildings that lined the new roadways were demolished, the majority of the remaining structures either back up to the road or provide a side view from the road. The road in the photo is being built. The drains and kerbs that surround the road surface and the median are being built. All the setbacks required for the roads and the other urban services have been acquired and cleared leaving a wide tract of setbacks from the limits of the present boundary of construction to the buildings still standing.



Fig 5: Ikija Road expansion in progress

3.3 General overview of city core urban upgrades in Abeokuta from 2009 to 2019

The urban enhancements that took place in Abeokuta's city core during the period were intended to improve the urban setting's lifestyle and modernize the city in a very short period of time. Municipal services and urban infrastructure were mostly upgraded. The urban landscape has changed significantly in the portions of the city core where the renovations were completed. There are few modifications in the urban setting in other locations where the programs are less noticeable. When compared to other regions of the city, the city core appears to have fallen behind in time. This is in stark contrast to some of the city's more modern areas, such as Kuto.



Source: Personal collections of Kemi Jinadu (2019)

Fig 6: Kuto, Abeokuta in 2008



Fig 7: Kuto Abeokuta in 2019

Kuto was a rallying point and road stretch for visitors to the city from Lagos and Ibadan. There has always been a busy market in the region, as well as many bus and taxi parking lots. It currently has a dual carriageway with all of the accompanying services to replace the single carriageway, which was extremely congested and crowded by market activities. The image of Shokenu Road depicts the less crowded end of the road as well as the huge development that has occurred during a ten-year period. Along the new infrastructure, modern structures have sprouted up Kuto is not located in the city's historic city center districts, where the requisite capital to develop and supplement upgrade activities may be more readily available. Urban enhancements in city core locations are steadily altering the outlook of the areas as

well. The buildings that are going up are mostly renovations and minor upgrades to previous styles.

The entire city has a high degree of sanitation and order, with traffic lights at all key crossroads. From 2009 to 2019, urban enhancements significantly improved the city's outlook.



Fig 8: Shokenu Road, Erunbe, Abeokuta

4. Discussion

Southwest Nigeria's low level of economic growth, combined with the desire to construct a more vibrant economy, causes a significant need for infrastructure. Roads, drinkable water, power, and rail transportation are all in great demand throughout the region to create access and support industry. During the inquiry period, the state government focused heavily on road construction. The table below summarizes the key urban upgrading programs of the time, the city core areas affected by the upgrades, and the overall nature of the renovations.

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The improved areas are clean and orderly, with traffic lights at all major intersections. From 2009 to 2018, urban renovations changed the appearance of the city core. The visible urban upgrading programs primarily concern infrastructure. Nigeria's low level of economic development, combined with the desire to construct a more vibrant economy, causes a significant need for infrastructure. Roads, drinkable water, power, and rail transportation are all in great demand throughout the region to create access and support industry. During the investigation, the state administration focused heavily on road construction. The table lists the major urban upgrade programmes of the period, the city core areas that were affected by the upgrades and the general nature of the upgrades.

Table 1: Upgrade programs in Abeokuta core and the affected neighbourhoods

S/N	Urban Upgrade Programmes	Affected Neighbourhoods	Nature of Programme
1	Shokenu Road reconstruction (completed in 2017)	Erunbe, Oke-Olumo, Itoku, Oke-Bode, Ikeredu-Idan	Expansion to a dual carriage road, construction of 2 flyovers, construction of drains and erection of new electricity lines
2	Ikija Road construction (still under construction)	Ikoku, Ijeun, Itoko, Ikereku, Ijaye, Kukudi	Expansion to a dual carriage road and construction of drains
3	Itoko Road construction (still under construction)	Ake, Itoko, Ikereku, Ijaye, Kukudi	Expansion to dual carriage and construction of drains
4	Sapon/Centenary Hall link road reconstruction (Completed in 2015)	Ake, Erunbe, Oke-Ijemo	Single carriage road expansion with drains and sidewalk.
5	Abeokuta-Ibadan road reconstruction (Section completed in 2016)	Ake, Aregba	Resurfacing of existing road and erection of median

The aftermath of urban improvement programs has resulted in significant changes in land use, the adoption of new architectural styles, and congestion in upgraded regions (Adenaike, 2023) [2]. When comparing portions of the city that

did not receive modifications and appear sedentary to enhanced regions, significant changes in the percentage occurrences of land use and architectural types were discovered.

Change in land and building uses

Table 2: Percentage change in building typologies in upgraded and sedentary areas

Categories	Percentage (sedentary)	Percentage (upgraded)	Percentage change
Residential	70.03	38.26	-31.77
Commercial	8.08	34.56	26.48
Mixed use	20.37	14.09	-6.28
Others	1.52	13.09	11.57

Source: (Adenaike, 2023) [2]

The general outlook along the major roads is to have all buildings facing the roads having commercialized frontages. While urban upgrading has been a tool for effecting land-use change (Lai, Chen, Zhang, and Liu, 2020) [36], extreme changes in land and building use after urban upgrades needs to be well researched in the environment.

Adoption of postmodern styles

The postmodern architectural styles appear to gain more prominence in the aftermath of upgrading in the area. From the table, the postmodern and adapted postmodern architectural styles have the highest percentage increase in occurrence.

Table 3: Changes in percentage occurrence of different architectural building styles in the sedentary and upgraded areas of the city core

Categories	Percentage (Sedentary area)	Percentage (Upgraded area)	Percentage change
Traditional	8.75	2.29	-6.46
Vernacular	40.15	9.01	-30.67
Late vernacular/Brazilian	46.62	16.88	-29.74
International style	0.29	1.14	+0.85
Adapted international	1.24	16.56	+15.32
Postmodern style	0.67	1.80	+1.13
Adapted postmodern	0.19	29.01	+28.82
Contemporary	0.29	2.95	+2.66
Adapted contemporary	0.1	9.02	+8.92
Others	1.81	11.31	+9.5

Source: (Adenaike, 2023) [2]

While changes are expected after upgrades, the changes observed in the architectural styles have amounted to loss in the patrimonial building stock and indigenous architecture leading to a loss of legacy.

Urban upgrading often resolves to decongest city centres in ideal situations (Gbadegesin, 2015; Mehan and Soflaei, 2017) [21,39], the situation in the study area reveals that urban upgrades have stimulated along the major roads that have been upgraded.

Congestion along major roads

While the sedentary sections of the study area have buildings that are given setbacks from each other, the upgraded areas show the use of continuous urban infill between the buildings.

5. Conclusion

The concomitants of urban upgrades in the Abeokuta city core have shown that the concept of urban upgrading does not easily transcend to the desired goals after execution. The situation in

advanced economies where more resources and legislative controls are available can protect the urban environment better from the undesirable consequences of implementation. In developing economies, a like the case of the study area, the upgrades improved the infrastructure but led to unforeseen socio-spatial consequences. With this study, the likely consequences of urban upgrade efforts in similar socio-cultural environments are now foreseeable. The undesirable responses of the social culture to upgrade efforts must be envisaged, properly profiled and prevented. Urban upgrading is primarily concerned with providing solutions. While this is being achieved, strong development controls, heritage preservation and environmental protection should be exercised in the affected areas to realize the full benefits of the urban upgrade efforts.

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