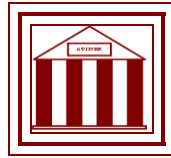


**Athens Institute for Education and Research
ATINER**



**ATINER's Conference Paper Series
PLA2015-1703**

**North African Cities
From Colonisation to Globalisation
The Case of Blida, Algeria**

**Mustapha Ben-Hamouche
Associate Professor
University of Blida
Algeria**

An Introduction to
ATINER's Conference Paper Series

ATINER started to publish this conference papers series in 2012. It includes only the papers submitted for publication after they were presented at one of the conferences organized by our Institute every year. This paper has been peer reviewed by at least two academic members of ATINER.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

This paper should be cited as follows:

Ben-Hamouche, M. (2015). "North African Cities From Colonisation to Globalisation The Case of Blida, Algeria", Athens: ATINER'S Conference Paper Series, No: PLA2015-1703.

Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209 Email: info@atiner.gr URL:
www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm
Printed in Athens, Greece by the Athens Institute for Education and Research. All rights reserved. Reproduction is allowed for non-commercial purposes if the source is fully acknowledged.
ISSN: 2241-2891
17/11/2015

**North African Cities
From Colonisation to Globalisation
The Case of Blida, Algeria**

Mustapha Ben-Hamouche

Abstract

Blida city is a medieval town that has been deeply affected by French **colonialism**. After independence, in 1962, it was appropriated by the native population who rehabilitated it to their own lifestyle and needs. The national **oil-based economy** coupled with **globalisation** shifted its vocation from an agricultural town to a regional store for consumable goods that are mostly imported from abroad. Its urban perimeter is expanding at the expense of Mitidja, the most fertile plain of central Algeria, and thus is threatening its **sustainability**. Its local authorities show undisputed signs of laxness and mismanagement. The paper shows how colonisation and globalisation share many commonalities for being exogenous to the local community, clash with its socio-cultural values and modes of living and impact its physical environment. It thus presents mechanisms for **good governance** and a **sustainable development** through the different scenarios of its future.

Keywords: Globalisation, Governance, Identity, Post-colonialism, Sustainability, Urban Heritage

Introduction

The paper aims at highlighting the effects of colonisation and globalisation on old Muslim cities. The two key-terms are often found in urban literature but rarely united (King, 1989; Watson, 2009; James-Chakraborty, 2014; Mishra and Hodge, 2005, 381). Regarding the first term, many scholars consider that contemporary urban hierarchies and patterns of urbanization in the developing countries have mostly originated from colonial ruling (See: King, 1989). As such, urban forms in colonial cities are an outcome of the shift from the orthogenetic type (that is based on moral order, cultural values) to the heterogenetic one (that is of technical, material order) (Redfield and Singer, 1954). The second term has become a paradigm for numerous urban studies.

The hypothesis of the study is that despite the difference of time and taxonomy, the two terms have a lot of similarities in their exogenous impacts on the built environment (Ben-Hamouche, 2004). The urban history of these cities shows that what was left by colonialism is being continued by globalisation. In the absence of endogenous forces that once shaped the Medinas, the urban growth is turning into an outcome of inefficient governance and un-sustainable development. The continuous environmental degradation, the social break down and the economic parasitism that was inherited from the colonial period are rejuvenating after 50 years of independence, despite the abundant oil resources.

As an approach, the effects of both colonisation and globalisation are highlighted through the physical aspects of urbanism. The pre-colonial presence presents a point of reference, elucidates the major moments of rupture, and provides the means for measuring both colonization and globalisation effects on local urban entities.

Urban History

The Pre-Colonial City

Blida is an outcome of a natural process and a conjugation of geographic conditions and historic events. Its site, at the foot of the mountain, is the point where the small channels stemming from the versants gather and form the main spring water, like fingers of an open hand, and stream over the plain of Mittija. Oral sources state that Andalusian refugees, first arrived in 1535, undertook heavy works of hydraulics to deviate the large streams to the west, a fact that gave birth to the Sidi El Kebir river, and permitted the control of its flow for irrigation (Trumelet, 1887, V1, p167, 172; Franc, 1928) (Figure 1).

Figure 1. *Blida in 1842*



Source: Based on Cadastral Plan, Genie Militaire.

At the regional level, the location of Blida within a day's ride from Algiers city, (that is around 32 km/day), assigned it political and a military roles in its territory. Besides its agricultural vocation and recreational character, it served as a transition point to both military troops and travelers towards the West countryside, that extends up to the Oran city, as well as the Tittery territory, the southern region starting from the Atlas mountainous chain up to the Great Sahara,. This may also fit with its name, *Blida*; i.e. the small city, and complies with its secondary presence at the vicinity of the capital.

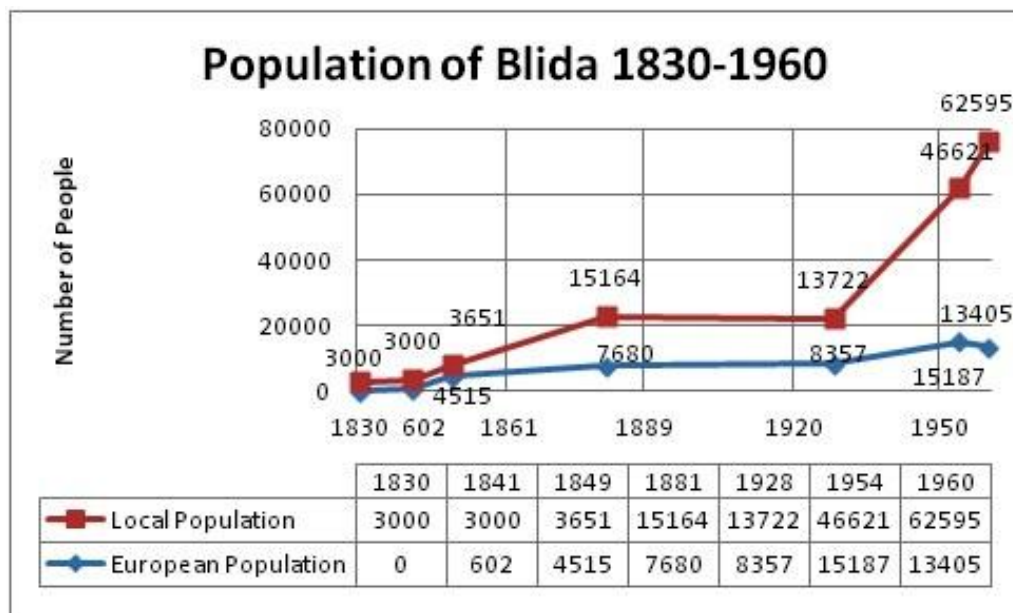
Inside the city, its Moresque architecture with narrow streets and compact urban fabric mostly formed of inward looking courtyard houses reflects the typical Muslim town of the medieval period. It also represents the orthogenetic order in which moral and religious norms and social-based institutions reigned (Redfield and Singer, 1954, 59). Similar norms and regulations were found in

many other cities at various regions of the Muslim world (Bianca, 2000; Besim, 2001; Ben-Hamouche, 2009).

Blida, the Colonial City

When the city was officially seized by the French army in 1838, it was still suffering from the earthquake of 1825 that demolished most of it and reduced its population to half. The large left-over spaces that presented nearly three quarters of the city (Frank, 1928, 458) presented an opportunity to both the army and the European civilians to settle in the city (Figure 2). The large military areas that surround the old city, estimated to 1,000 ha, owe their presence to the early role of the city -as a gate to the south- and a corner stone of the French military strategy to conquer and control the hinterland, whereas the demographic change during the colonial period reflects the stages of colonisation. The extermination plan initially adopted by the French army was gradually substituted with a forced co-existence of Europeans and Muslims side-by-side within the idiom of "mission civilisatrice" (Frank, 1928, 290). The three parties forming the town have consequently irreversibly marked the urban morphology of the town, marked the city to nowadays.

Figure 2. *The Population Growth 1830-1960 Sources: Frank. 1928, Tableau, De-Planhol 1960*



Source: Author based on Frank, 1928 and De-Planhol, 1961b.

Besides the confiscation of land, that was often justified by Public utility and security measures, real estate witnessed a dramatic shift from the traditional system (waqf, Ana, beylik, A'rch, mulk-khass) to a western mode that stressed dualities between private and public, government and individuals, Europeans and Muslims (see Frank, 1928, 65, 657).

Outside the city, the collective ownership of land that reflected the strong kinship and the subsistence economy that characterized the local way of life, were gradually replaced with an individual, capital-based system and a profit-making system that relied on feudalism and human exploitation first, then on machinery and industrialization at the end of the colonial period. In the landscape, new crops such as vines, cotton and tobacco that were destined to be exported marked the countryside that was once dominated by orange groves and cereals (Department of Overseas Trade, 1922 18-21; Frank, 1928, 660-667).

Blida: From Colonialism to Globalisation

Just after, and as a result of the independence, most European citizens fled the city and left thousands of vacant homes to the natives. In an incongruous way, the local residents, on reshaping the inherited European city and adapting it to their way of life and own values, have paradoxically been deeply affected by the inherited context. Many cultural signs of European settlers starting from the dressing and language, to homes and civic conducts were considered as symbols of progress, whereas old traditions turned into signs of backwardness. And while the official discourse denigrates colonialism, many colonial traditions, regulations and institutions were paradoxically re-conducted.

After 50 years of independence, effects of colonization rather than being substituted with local norms, economic autonomy and political independence have seemingly been prolonged, if not amplified. The search for progress and modernity, conjugated with the reliance on oil-economy and imports, and the geographic closeness to the ex-colonising state has irreversibly reinforced these effects. Such a state that was known for decades as post-colonialism (King, 1989; James-Chakraborty, 2014) is now considered as globalisation impacts.

Within the universal discourse, globalisation has two "scapes" (Newman and Thornley, 2011, 16; Oduwaye, 2006) depending on being losers or winners. To some cities, it is a blessing wave, but to others it is a malediction. For some, it stands behind the increase in connectivity, social mobility, flows of goods and economic prosperity and technology appropriation. But for others, it is mostly related to social disparities, mismanagement and sick governance, economic dependence, and environmental degradation, that is the case of North African cities and thus, Blida.

Globalisation as a contemporary form of exogeneity shares many effects with colonialism and provides instruments for understanding urban patterns and anomalies in the physical environment. Our aim is thus, to identify the overlapping impacts of both post-colonialism and globalisation on the urbanism of the North African cities through the spatial analysis of this city.

Diagnostics and Symptoms of Urban Disfunctions

Contemporary Land-Use and Challenges

Due to the topographic constraints that are the mountains at south-east and south, and the al-Kebir river at south west, urban development is directed to

North giving the city a conic shape. At present, the total territory of the Great Blida covers an area of 16,332 ha within which 4,312 ha is urban, 3,991 ha is agricultural and 6,811 ha is protected forest and leisure areas (U.R.B.A.B., 2010). Sections below will present major activities and urban areas that cover the territory of the present Blida.

The historical core that is well defined within the boulevards belt that were formerly city-walls, occupies 55 ha. It presents a very compact urban fabric and a mixed land-use. With the exception of some banks and social services, most of its buildings are residential with commercial ground floors. As most public institutions were shifted to the outskirts, the centre witnesses continuous degradation and marginalization.

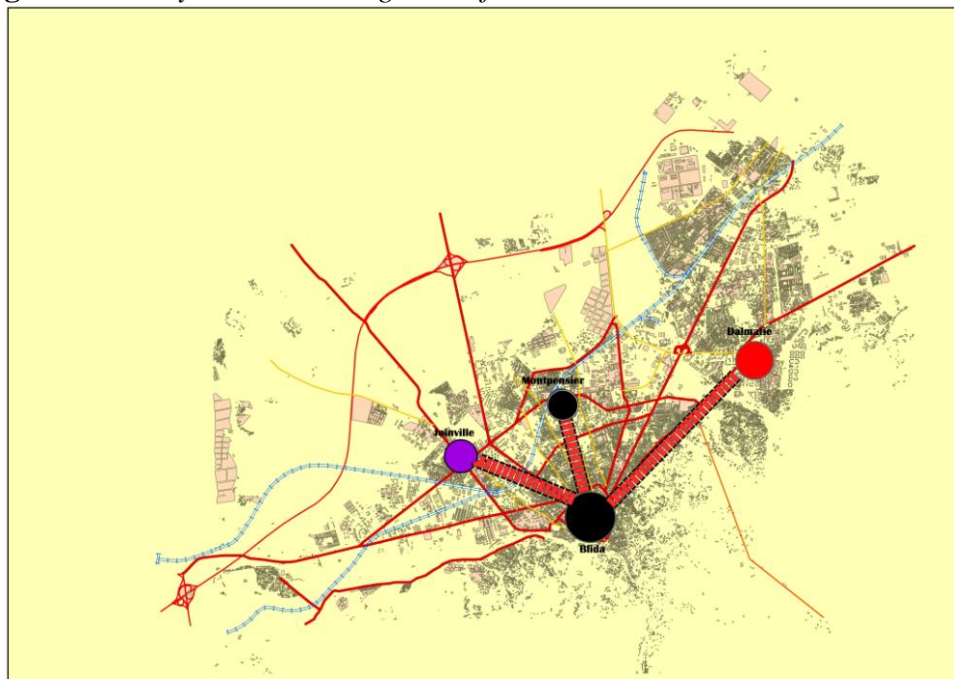
Military zones, mostly inherited from colonial era cover a large part of the urban periphery and totalize altogether an area of 850 ha. Besides the two military airports, the large campuses areas poses major barriers to future urban development that is following the only thin gap of agricultural land along the highway leading to the capital.

The two Industrial zones that occupy a total area of 191 ha in Blida are together another major challenge. Created in 1977 on public land at the periphery of the city, the two zones are at present entirely engulfed by urbanization and are surrounded with private houses and public amenities.

Regardless of its striking heterogeneity, housing is the major sector that covers 2,025 ha of urban land. Multi-storey residential areas initiated since 1977 dominate the landscape of the city outskirts and cover an area of 287 ha (U.R.B.A.B., 2010, V.1, p14). However, individual units, both formal and informal types significantly outnumber public housing. And while informal housing counts 1,288 units, allotment housing forms only 450 units.

The polycentric development poses another challenge to the urban management and development of Blida. Besides the historic centre that is continuously "hollowing out" and losing its centrality, its urban growth follows a pattern of successive rings of satellite settlements that are initially an outcome of colonial urbanism, then uncontrolled conurbations. Besides the early closer satellite colonies, Joinville, Monpensier and Dalmatie, a new ring of older colonial villages which are located within a radius of 10-15 km from Old Blida are being engulfed in the new urban perimeter of the city. Under the demographic pressure and the rural migration, the old villages; Soumaa, Boufarik, Oued-El-Alleug, Beni-Mered, and Chiffa, have gradually grown since the independence into undeclared small towns and new urban poles of Great Blida (Figures 3a and 3b).

Figure 3a. *Early Colonies being Part of Great Blida*



Source: The author based on historical maps and using ARCGIS 10.0.

Figure 3b. *Initial Plan of Joinville in 1843*



Source: Département d'Alger, commune de Blidah C.A.O.M.

A part from the Ouled-Yaich settlement that has become a new administrative city to which most public institutions are migrating and Zabana

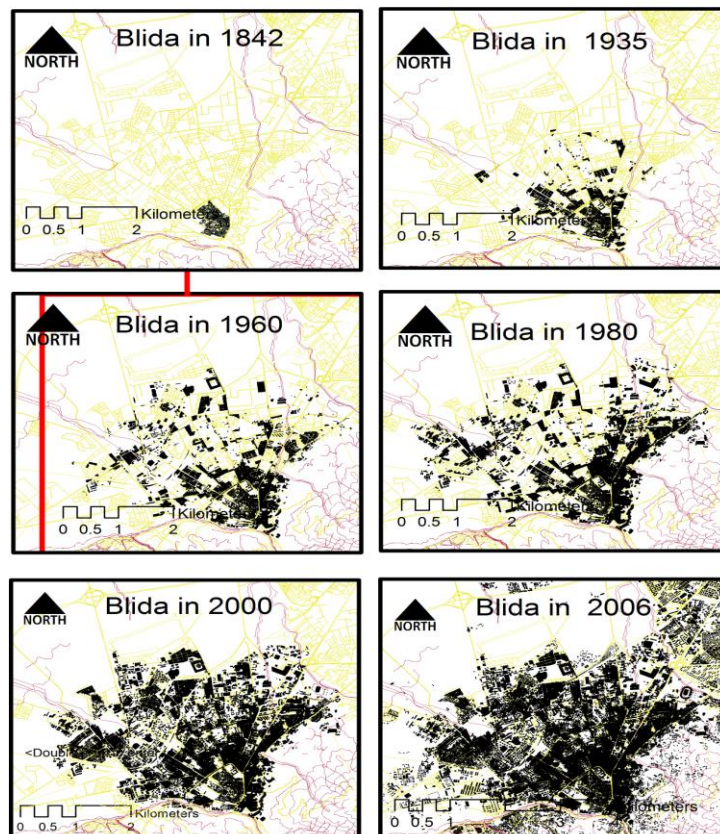
(ex-Joinville) that accommodates the national hospital of psychiatry, most other poles are simple parasitic entities and large residential quarters.

The Urbanization of Mitidja and the Peri-Urban Areas

In its regional context, Blida is located at the proximity of Algiers, the capital. As a satellite city, it offers many people a convenient place for accommodation while working in the capital that suffers from housing shortage and high rents. Blida is also a recipient of the capital urban over-spilling where many industrial and commercial activities are shifted to it for its accessibility and spaciousness.

Despite the regulation measures and the official discourse (J.O.R.A., 2010; M.A.T.E., 2011 p.44-48), most urban development of the city is done at the expense of the agricultural land. Its location at the south edge of the fertile plain of Mitidja, estimated at 130,000 ha (Franc, 1928, 4), offers local authorities, in the absence of non-government reactions and the laxness of the present regime, simplistic alternatives to manage the urban sprawl. Accordingly, the city is dramatically growing. It passed from 16ha in 1842, to 73ha in 1935 during the colonial period. It then jumped from 173 ha during the 1960's, i.e. the independence year, to 450 ha in 1980 and 605 ha in 2006, (Figures 4a and 4b).

Figure 4a. *Stages and Urban Growth Rates of Blida*



Source: The author, based on historical maps using ARCGIS 10.0.

Figure 4b. *Growth Stages of Blida. Growth Rate Calculation $Gr = (Vpr - Vpa) * 100 / Vpa$. Where Gr = Percent Rate, Vpr = Present Value, Vpa = Past Value*



Source: the author, based on various historical statistics.

Simultaneously, its demography witnessed an unprecedented growth. The total population of its region reached 1,146,883 people in 2013. It passed from a dominantly rural community during the independence years to an urban with a ratio of 2/3. With the exception of the large pockets of land reserved to military campuses and bases, and the mountain chain at south, the periphery of the city poses no physical constraints to expansion. The major arteries are thus structuring the urban development and growth. Important industrial complexes that are located on the highway to Algiers such as Bellat Complex and Sharif compound for Beverage and Gendarmerie barracks that were recently established and represent urban precedents towards new conurbations with Algiers.

In response to the national rural preservation policy, two so-called "new Towns", *Sidi Abdalla* and *Bouinan*, were launched (M.A.T.E., 2011, 192-193). However, being at the mid-distance between Blida and the capital, they become new generators of urban sprawl. Besides the decrease of the natural space in Mittija and its direct impact on the ecology, the local economy of the region is witnessing a degradation of its agricultural sector and a shift to the Bazaar economy. The old villages and towns such as Oued El Alleug, Beni-Mered, Chiffa that were once self-sustained colonies have turned into mere parasitic entities and large scale dormitories.

The Dilapidation of the Historical Centre

Away from any preservation strategy, the urban fabric of the historical centre is witnessing a radical metamorphosis and a desperate degradation. Both pre-colonial and colonial constructions witness overuse, dilapidation and risk of collapse. Like most old Muslim cities that stand at the margin of the modern development, the historical centre suffers from the inability to cope with the new requirements for private car, wiring and other modern amenities. Its compact building blocks, mostly formed of courtyard houses, pitched red roofs and winding narrow streets are gradually becoming subject to demolitions and replacement with vertical glazed buildings that go up to 6 and 8 floors (Figure 5).

Figure 5. *The "Would-Be" Civic Centre, Complex of Roses, at the Edge of Old Blida*



Source: Medina Foundation, Blida.

In the absence of land readjustment operations, the irregular geometry of the parcels that resulted from the composite property system and the long process of succession subdivisions (Ben-Hamouche, 2011), often constrain the shape and architecture of the new buildings (Figure 6). Too often, empty pockets that result from the collapsed buildings, due to dispute of heirs, over use or lack of maintenance, become parking places and points for garbage collection in the old neighborhoods.

Figure 6. *The Old Boulevard Altebessy Surrounding the Old City*



Source: Medina Foundation, Blida.

Ironically, the old Blida that was once called, *La Ville des Roses*, the city of roses, is now witnessing a gradual disappearance of green spaces, trees and open spaces in favour of parking places, informal markets, domes of garbage and squatting tents. With the exception of some public spaces that were planted by the colonial authorities, such as Jardin Bizou, Jardin Ben-Boulaid, Al-Manar place, most urban spaces are invaded by cars and informal activities.

Mobility, Mismanagement and Hotspots

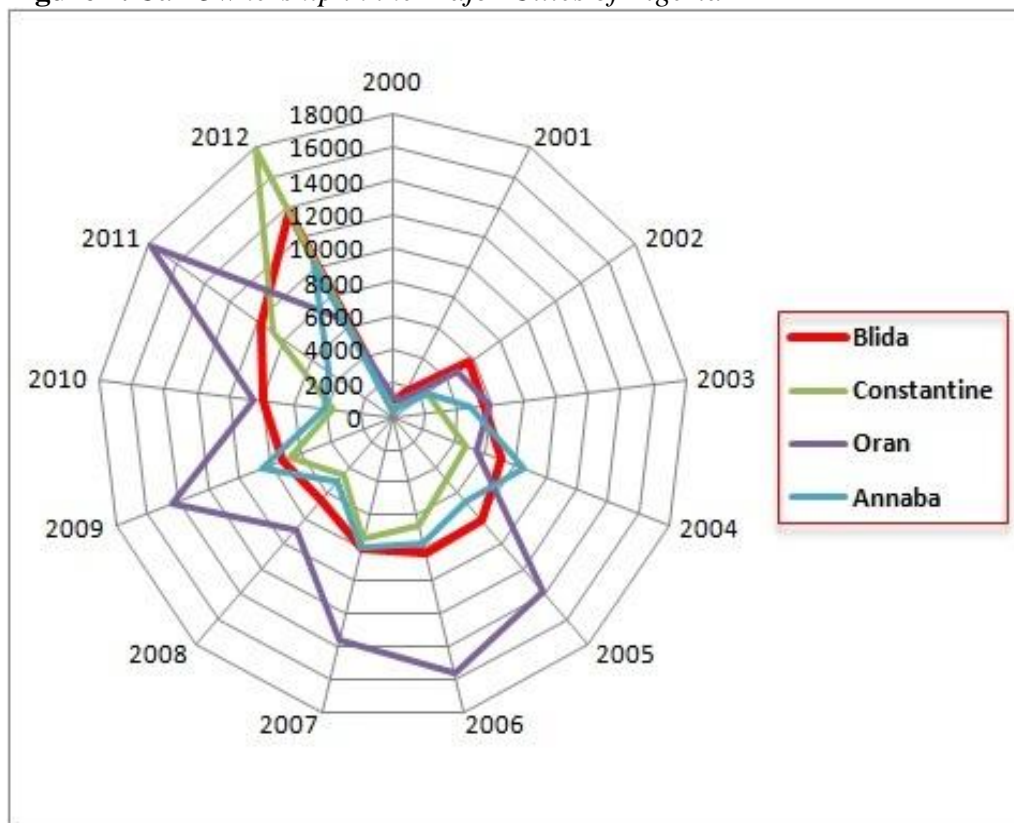
In the absence of mass-transportation systems such as tramways, underground trains and Bus Rapid Transit System, transport in the city depends mainly on buses, micro-buses and taxis. The sector is marked with the strong presence of the informal sector, a phenomenon that characterizes most cities in the developing countries (G.T.Z., 2010). Despite the presence of 3 intra-urban stations; a regional bus station and a railway station, there are many indications of mismanagement in the transport services (ANAT, 2012, Doc. 5, P18). Regardless of the official statistics showing that the city comprises in a total 634 conveyance means for a total population of 167,733 people, giving an index of 3.78 means of transport per 1,000 inhabitants synchronization and planning of trips are left to the own agreement of drivers and bus owners. Little is known about the digital signage transportation and scheduling.

In the old centre, despite the compact character of urban fabric, there are no measures for limiting the invasion of private cars. Too often, sidewalks

overspills with pedestrian flux as they are invaded with stationed cars and goods of shops. Ironically, a lot of busy areas in the historical centre were pedestrianized not by authorities but as a result of gradual squatting and encroachment from informal traders as well as shop-keepers.

The transportation system inefficiency, coupled with the conspicuous consumption culture (Veblen, 1899), seem to fuel the increase of cars in the city and reflect the effects of the global economy. Thanks to the oil incomes, the living standards in Algeria had significantly increased. The annual GDP per capita witnessed a sharp increase during the last five years as it climbed from 3,771 US\$ in 2009 to 5,361 US\$ 2013. Consequently, cars imports reached 554,269 vehicles only in one year (Douanes Algériennes, 2013). At the local level, the State of Blida, i.e. *Wilaya*, witnessed an unprecedented annual increase rate of 5.78%, a fact that ranked it second in terms of the growth rate ownership, and third in in the number of private cars ownership at a national level. With a total of 278 359 vehicles, it comes immediately after the two largest cities, Algiers and Oran (O.N.S., 2012) (Figure 7).

Figure 7. Car Ownership in the Major Cities of Algeria



Source: The author: based on Algerian National Statistics, 2012, available on <http://www.ons.dz/>.

Slums and Informal Housing

Socio-economic disparity between the city and the rural areas and within the city itself is historically an outcome of the French colonial policy (De-

Planhol, 1961a; 1961b). However, its persistence after 50 years of independence reflects a clear failure of social policy and effects of global economy (Harvey, 2003; Oduwaye, 2006; Watson, 2009).

During the 1990's, the country witnessed a deep socio-political discord, consequently to political despotism of the unique party and the silent shift from the socialist regime to free the market economy. A civil war took place and lasted for a decade. One of the direct results on urbanism was the degradation of life conditions and security in rural and inland areas and hence, the massive exodus to the cities.

In the case of Blida, many squatter settlements emerged on the periphery of the city and in the outskirts. Informal housing boomed on the private properties and no man's land in the absence of public authorities. The official statistics show that the city in 2007 comprised a number of 8,637 unlicensed buildings that occupy about 415 hectares of land, most of which were located on servitudes sites and buffer zones of gas pipelines, high voltage power lines, and railways (Boudiaf, 2010).

Informal housing also extends to the planned areas, a fact that makes it a norm rather than an exception. Most buildings, although licensed, are disrespectful to official regulations that are too often alien to local culture and socio-economic reality. Regulations reflecting the "ideal city" are often in clash with the daily practices and social norms of the Algerian society and thus rarely respected (Code de l'Urbanisme, 2012).

Bureaucratic oppression of the postcolonial State may be a chief generator of informal development. Its heavy process, building permits lasting up to 2 years, contrasts with the dynamic nature of urban development. A sizeable number of applications are rejected. Among the 1966 requests for permit deposited at Blida municipalities in 2009, only 1,158 applications obtained the approval from the D.U.C.H, (*Direction d'Urbanisme, de Construction et d'Habitat*). The other 808 applications, that represent 41% of the applications, were discarded (Boudiaf, 2010).

Squatting actions extended to the inner-city areas. Urban scenes in the streets and open spaces in the city are highly marked with events of encroachment and on-streets tables of young unemployed vendors. Shy actions of authorities take place intermittently to re-establish order, insure traffic fluidity and re-open blocked streets and spaces, with the heavy presence of police forces.

Vulnerability to Natural Disasters

Location on risky sites has been a direct consequence of colonial urban planning. Indigenous people had a limited access to decent urban areas. Presently, it is an outcome of mismanagement and sick governance. Despite the evidence from official study reports and precedents showing that Blida is exposed to earthquakes and landslides, little attention is made to this aspect in the present planning.

During the last disaster that goes back to 1825, the city population, 7,000 people, was halved (Franc, 1928, 60). As protective measures, public

authorities established an Algerian Seismic Code to which professionals and agencies in various building fields should refer, (Ministère de l'Habitat, 2003). However, the enforcement of this seismic code and its follow-up as a preventive measure is tentative due to the social unconsciousness on one side, and the laxness of the authorities on the other. Applying such measures require the demolition of large areas in the urban fabric. The same observations apply to other required anti-seismic considerations such as the soil softness, the building materials and the structural systems, especially in the case of old buildings, and the water supply network (Halfaya et al., 2014, p.4; Ministère de l'Habitat, 2003, p35).

Architectural Deformation and Loss of Identity

One of the major consequences of both colonialism and globalisation is the conflict of identity and cultural belonging among which are Architecture and urbanism (Redfield and Singer, 1954; James-Chakraborty, 2014). The physical anomalies are symptoms of change in taste, consumption habits (King, 1989, 11) and loss of identity. Blida, with its heterogeneous styles and urban sediments is a case in point. With the exception of the old city, its urban fabric is an outcome of the dualities between colonial Vs original, modern Vs traditional, formal Vs informal and public Vs private. Many types of "architecture" such as the local, the colonial, the modern and the informal co-exist.

Regarding the local style, the two old residential quarters *Douiret*, also called *Uled Soltane* and *l-Djoun*, preserve to a certain extent their original character that goes back to the Ottoman period. Its Andalusian character consists of low-rise, compact building blocks that are dominated by courtyard houses with pitched roofs (Figures 8a and 8b). The early colonial style surrounds the two previous quarters. In contrast to the old urban pattern of the streets, a mixture of the Parisian style of the XVIII century with pre-Haussmanian military traits dominates the streets and buildings of this area. Built to accommodate the European settlers that were mostly farmers and landlords, villas with Mediterranean details such as verandas, balconies outlet pitched roofs have large gardens and low fences that dominate these areas. Another layer of colonial architecture consists of the late 50's modern style. It comprises the latest housing schemes that were part of the 1958 General DE Gaulle *Constantine plan* that aimed at tackling the housing crisis that emerged during the two world wars and afterwards (Deluz, 1988)¹. Multistory buildings for European low and middle classes were constructed at the outskirts of the cities thanks to the new systems of building technology and materials. This so-called modern style, with much less quality, has however continued to be even after 1962, i.e. the independence. Most of the public buildings and housing since the 1970's relied on the heavy industrialization systems that were brought by the foreign construction companies. This alien model dominates the present

¹ Deluz, J. J. - L'urbanisme et l'architecture d'Alger. Aperçu critique. - Alger / Liège, OPU/ P. Mardaga, 1988.

delivery system and characterizes the latest residential areas located at the recent Blida outskirts. A schedule of 3,700 housing units has been allotted to Blida for the year 2013.

Figure 8a. *A Top View on the Old Urban Fabric of Blida*



Source: www.ruelamy.com.

Figure 8b. *An Aerial View of Blida, Late 1950's, Showing its Urban Fabric*



Source: www.ruelamy.com.

The informal "style" constitutes the major ingredient of the built environment in Blida. Clusters of houses with unfinished constructions express the residents' daily anxiety for extension and the wild use of building materials away from any concern to urban aesthetics. Masses of interlocked houses with uncovered brick walls, apparent concrete beams and columns and terraces full of laundry and TV dishes characterize these new settlements.

The Future of the City

Urbanism is irreversible by nature. Any vision to the future of Blida should inevitably pass through the colonial precedent as well as the present effects of globalisation. However, the geographic context of the city presents many incentives for the urban development and growth of Blida. The city is simultaneously located at the proximity of the capital that is the midpoint between east and west of the country, and a gateway to the Sahara. It is also at the edge of Mitidja, the richest and largest plain in the country. Its extension to the north faces no physical constraints and presents easy alternatives to urban development.

Its demographic growth is 2.53 % (Statistics 1998-2008) and exceeds the national average denotes the momentum of such a growth. Besides the rural migration from the inland, Blida is becoming a recipient of the capital overspill, consequently to the primacy of this latter and the spatial misbalance at national and regional levels. The accelerated demographic growth rate of its population that reached 1,002,937 people in 2008, places it among the seven Algerian cities that exceed 1 million people. The urban population of its county that passed from 50% to 76% of the total population during the last 30 years reflects the urbanization trend that would reach its peak by 2030. Its original vocation as an agricultural town is consequently witnessing a deep shift towards other economic sectors.

The laxness of the government that is due to the legitimacy crisis, the geopolitics of the region and the "Arab spring" effect is another major factor of the urban sprawl and the growing primacy of the capital. The sections below will discuss the scenarios of development within the sustainability perspective.

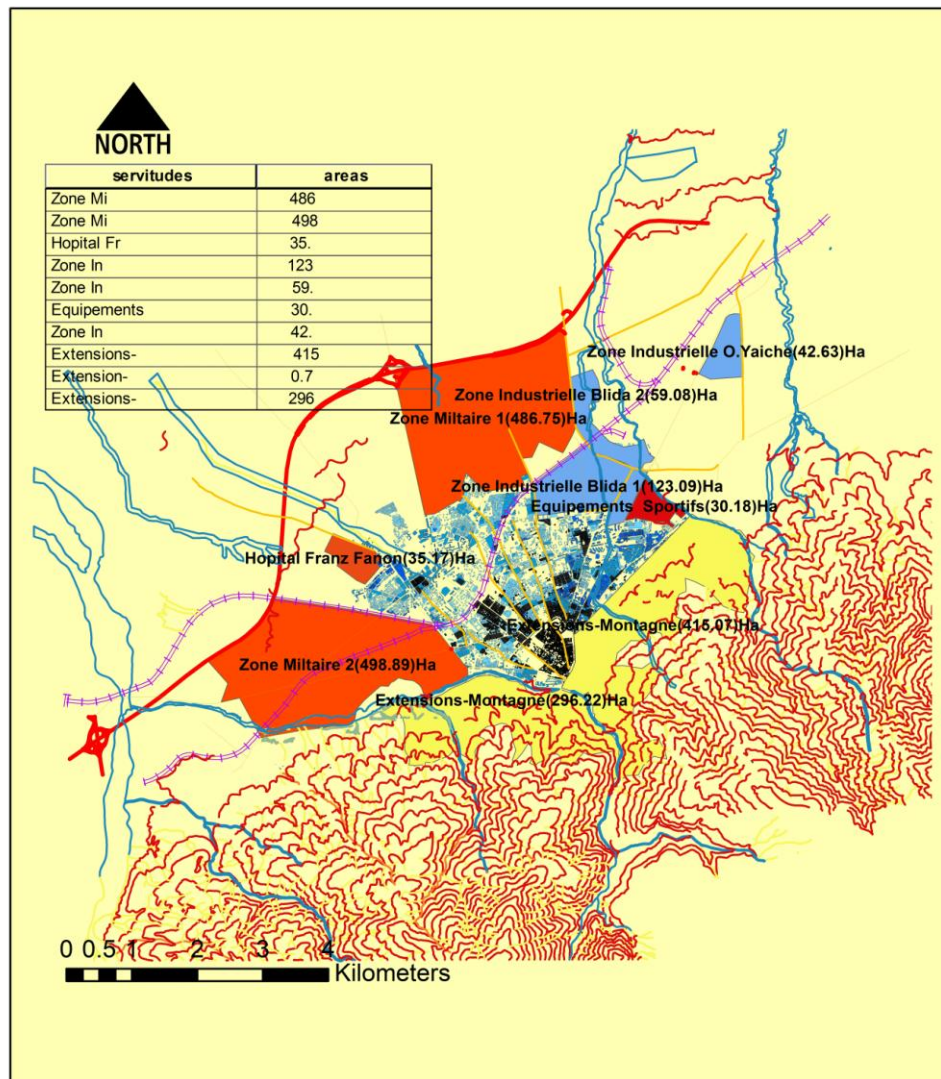
The Big Decisions Delayed

If a sustainable development of Blida is to be achieved, major decisions with a strategic vision have to be made. Its urban sprawl is taking place in a hasty pace consequently to human and natural factors. Saving the Mitidja plain is a vital issue that would have direct impacts on economy and ecology. Opposite to the easy but unsustainable present practices, a hard alternative would be to drive urban development to the less fertile land. The mountainous belt that provides around 416 ha of land with a slight slope of (5 to 10%) is at present entirely left to speculation due to its ownership status and physical character. Only a firm political decision can overweigh its costly development

that requires heavy public works such as leveling, cladding, roads paving and provision of infrastructure.

To the north, the inefficient land-use that is inherited from the colonial period, then from the cumulating injudicious practices may serve to an infill urban policy and land recovery. The two large military zones that occupy 499 ha and 487 ha consecutively are becoming barriers surrounded by newly planned areas for civilians. In addition to their hampering effect, and the heavy traffic they generate, areal images show that their land-use is inefficient as they contain a lot of left-over spaces. Their shift to outer areas is also a security necessity. However, retrieving such land for civil purposes would necessitate long political negotiations with the military authorities and large restructuring actions within the city (Figure 9).

Figure 9. *Physical Constraints to Urban Development*



Source: The author: based on an AUTOCAD basemap provided by U.R.B.A.B, Blida, and using the ARCGIS 10.0.

Similarly, industrial areas that were, decades ago, located outside the city occupy presently, two zones of 123 ha and 60 ha consecutively within the urban perimeter. Due to the growing risks, i.e. their presence adjacent to residential areas as well as the traffic flow they generate, their shift to outer areas would also free their ground to the new inner urban development of the city, a tradition that was long practiced in old Muslim cities (Raymond, 1990). Such a shift is however, not an easy task since most occupants are privileged people.

Scenarios of Development

This section focuses on the future of the city within the 30 years to come. Predicting the future development is a double uncertainty that stands on the actual political instability and the absence of reliable data, a common feature of most "developing countries" (Watson, 2009, 158).

Scenario I

Precedents in urban history show that Blida is exposed to multiple natural hazards owing to its geophysical structure, complex geology, steep slopes and active tectonic processes (Sebaï and Bernard, 2008). At a national level, Blida and its department, together with the three other bordering ones; i.e. Algiers, Tipaza and Boumerdes are located in an active seismic zone that has a potential magnitude ranging between 3 and 5 degrees. Periodicity and probable occurrence of such phenomenon push us to predict such a scenario (Ministère d'Aménagement du Territoire et de l'Environnement, 2013).

Despite the absence of reliable statistics, the state of most of buildings in Blida, estimated to be 5,663 constructions, aggravates the risks (Bensaïbi et al., 2007). Old ones that go back to the pre-colonial and colonial periods are constructed of mud and stones, and are thus very vulnerable. As is the case of most Algerian cities, colonial buildings that were left by the Europeans after independence need to be retrofitted. They have never been maintained and are overused due to the housing crisis, demographic pressure, and the ambiguous state of their tenancy. Recent buildings rarely respect technical measures.

Planning for the disasters should elucidate evacuating routes, safety zones, basic infrastructure, open fields for sheltering and gathering, locations of hospitals and other facilities. The updating of the existing data in conformity with the ground reality such as building densities, land-uses and networks is however an obligation (Kristoffer et al., 2011). Broadcasting earthquake vigilance among local community members through mass-media programmes, emergency training, public gatherings, awareness courses and pamphlets would undoubtedly reduces damages and helps recovering in the aftermath.

Scenario II

One of the realistic perspectives consists of projecting the present trend of urban sprawl, the growing primacy of the capital and the lasting of the inactive planning authorities. In the light of the oil-based, import economy, market forces and absence of any strategic alternative, the parasitic urban development

will lead to a further degradation of the fertile lands and agricultural sector. The agricultural vocation of Blida will gradually become a simple backyard territory of the capital. The new highway network coupled with the relative proximity to the national port (35 km away) and the availability of space will further fragment the new urban territory of the Grand Blida. New storing premises and industrial zones will extend along the main arteries.

The weakness of the local authorities will lead to the triumph of informal urbanization. Thanks to the oil incomes, further short-sighted actions in urban planning will prevail. The public, military and industrial premises that are located along the main corridors, Algiers-Oran and the resort of municipality to easy sites for new housing schemes in response to the crisis pressure will push to further urban sprawl. The conurbation of Blida with the other satellite towns will occur within the next decade. A new urban morphology in the emerging urban areas will take place. The new land-use pattern will reflect an emerging hierarchy of financial accessibility, *clientelism* and lead to a new socio-spatial exclusion (Watson, 2009, 163).

Consequently to the "Arab Spring effects" and the opportune oil resources, the undertaken draconian high-rise housing projects will be carried out in order to face the social crises. The housing delivery system, mostly based on standardisation and mass-production will increase the consumption rate of land to 100 hectares per annum.

In the absence of a preservation policy, the historical centre will be witnessing slow but radical changes that will irreversibly affect its identity and memory. Its low-rise character will gradually leave place to vertical blocks consequently to the market forces and real-estate speculation.

The momentum of the informal sector will keep the pace of urban sprawl up. Under the bright-lights effects of the coastal cities, rural migration from inland will continue. Their struggle for the "right to the city" in all senses given by (Lefebvre, 1968; Jabareen' 2014; Harvey, 2003) will inevitably lead to the populating of the surrounding mountains. The protected forests and mountains will witness further erosion and savage urbanisation will surround the city.

Scenario III

An optimistic option, that requires heavy involvement of the authorities but with a minimal bureaucracy (Watson, 2009, 189), would entail a radical reform in the administrative apparatus and a long term planning vision that fits the comprehensive national plan (Schéma National d'Aménagement du Territoire, SNAT 2030). The preservation of the fertile plain as a national priority both in economic and ecological terms will dictate immediate legal and planning measures.

The inevitable urban development will be diverted to the mountainous areas and the infill policy. Raising land-use efficiency will require the old town as well as the satellite settlements to witness restructuring and land-readjustment actions. Such a policy will however rely on a regional plan that diverts the migration flow to new towns and hinterlands.

The preservation policy that is already taking place in other towns will protect the old Blida from further dilapidation. Its compactness, horizontality and organic urban fabric will inspire professionals for soft alternatives. Feeding the historical centre with new activities and facilities that are compatible with its community sense, mixed-use and residential character will be among these alternatives.

Walkability, as a recommended alternative that helps maintain and improve old towns (Gilderbloom et al., 2015) will apply. The historical core of the town that is already "pedestrianised", due to its narrow streets, but also due to squatting by informal sellers and advancement of shops will be a good point to start from. Thresholds will be traced to limit accessibility of private cars. Series of ring roads and parking will divert traffic from the city centre accordingly. Alternative mass-transportation systems will serve to decrease traffic jams. The provision of cycle lanes and large sidewalks will constrain traffic and motivate people to use motors and bicycles, a social practice that is deeply rooted in the Mediterranean culture and consolidated by the heavy "China imports" effect of motor cycles.

In economics, despite the shy experience of *Sidi-Abdallah* IT new town, the industrial zones on the outskirts and the closeness of the country to Europe will offer opportunities to investments in after-oil smart technology, while the natural resources and the geographic diversity of the city and its region will provide policy-makers means to promote environmental awareness and encourage eco-tourism.

Conclusions

Blida is an old Muslim city that reflects an exemplary case of North African cities that underwent colonial as a first exogenous change during the colonial period and that are now exposed to a second wave of exogeneity under the pressure of globalization and the global market. Its present urban development that is analysed in the light of its urban morphology, land-use and urban dynamics reflects many symptoms of urban dysfunctions and mismanagement that threatens its sustainability. Its future is subject to political decisions that should preserve its historical core, redirect its urban development and preserve its agricultural plain.

Bibliography

- ANAT (Agence Nationale d'Aménagement du Territoire) (2012) *Plan d'Aménagement du Territoire de la Wilaya de Blida* [Regional Development Plan of Blida department territory], Vol.5, Algiers: Unpublished Document (5 Volumes).
- Ben-Hamouche M. (2004) *The changing morphology of the gulf cities in the age of globalisation: the case of Bahrain* Habitat International 4 (28) 521–540.

- Ben-Hamouche M. (2009) *Complexity of urban fabric in traditional Muslim cities: Importing old wisdom to present cities* Urban Design International: 14 (1); 22-35.
- Ben-Hamouche M. (2011) Fractal Geometry in Muslim Cities: How Succession Law Shaped Urban morphology Nexus Network Journal for Architecture and Mathematics, 13(1); 235-251.
- Bensaibi M. et al. (2007) Scénario catastrophe de la ville de Blida, [The catastrophic scenario of Blida] 7ème Colloque National, Proceedings, AFPS 2007 – Ecole Centrale Paris.
- Besim S. (2001) Reviving the Rule System: An approach for revitalizing traditional towns in Maghrib Cities Cities, 18-(2); 87–92.
- Bianca S. (2000) Urban Form in the Arab World: Past and Present: Thames and Hudson, London and New York.
- Boudiaf S. (2010) L'évolution du Parc immobilier en débat [Debate on the evolution of the real estate], Midi Libre Newspaper, posted on 25 - 02 - 2010.
- Code de l'Urbanisme [Urban Regulation] (2012), Edition Berti : Algiers.
- De-Planhol X. (1961a) Les nouveaux villages de l'Atlas Blideen du Chenoua et de la Mitidja Occidentale [The new villages of the Chenoua Atlas Blidian Monts and Western Mitidja] Revue Africaine No 105/1961, pp5-44, No 104/1961, 230-282.
- De-Planhol X. (1961b) La formation de la population Musulmane à Blida [The formation of the Muslim population in Blida] Revue de Géographie de Lyon Vol. 39, No 3, pp 219-229.
- Department of Overseas (1922) Trade Survey of the Economic and Commercial Conditions in Algeria, Tunisia and Tripolitania 1922-1923, London, H.M. Stationery Office.
- Douanes Algériennes (2013) Statistiques Des Importations De Véhicules Période: Années 2012 -2013 [Statistics on cars imports during the period 2012-2013] available online Douane.gov.dz, Accessed on Dec. 6th, 2013.
- Franc J. (1928) La colonisation de la Mitidja [The colonisation of Mitidja plain] Paris: Librairie Ancienne Honore Champion.
- Gilderbloom J. I., Riggsb W. W., Mearesc W. L. Does walkability matter? An examination of walkability's impact on housing values, foreclosures and crime Cities Volume 42, Part A, February 2015, Pages 13–24. <http://dx.doi.org/10.1016/j.cities.2014.08.001>
- GTZ (June 2010) Informal Public Transport Recommended Reading and Links Available online (<http://bit.ly/1N6CSv4>).
- Halfaya F. Z., Bensaibi M. & Davenne L. Seismic Safety Assessment of Existing Buried Pipelines Proceedings of the Intl. Conf. on Advances in Civil, Structural, Environmental & Bio-Technology, CSEB 2014, Institute of Research Engineers and Doctors. doi: 10.15224/ 978-1-63248-001-9-01.
- Harvey D. (2003) The right to the city, International Journal of Urban and Regional Research 27(4); 939–941.
- Jabareen Y. (2014) 'The right to the city' revisited: Assessing urban rights – The case of Arab Cities in Israel Habitat International Volume 41, January 2014, Pages 135–141.
- James-Chakraborty K. (2014) Beyond post-colonialism: New directions for the history of non-western architecture Frontiers of Architectural Research, 3, 1–9.
- J.O.R.A. (Journal Officiel de la République Algérienne) 2010 Schema National de l'Aménagement du Territoire S.N.A.T. 2030 [National scheme of management and planning: 2030], October 21.

- King A. D. (1989) *Colonialism, urbanism and the capitalist world economy* International Journal of Urban and Regional Research Volume 13, Issue 1, pages 1–18.
- Kristoffer B. Bersea, Fouad Bendimeradb, Yasushi Asamic (2011) Beyond geo-spatial technologies: promoting spatial thinking through local disaster risk management planning International Conference: Spatial Thinking and Geographic Information Sciences 2011 Procedia Social and Behavioral Sciences (21) p, 73–82.
- Lefebvre, H. (1968) *Le Droit à la ville* [The right to the city], Paris: Ed. du Seuil.
- M.A.T.E. (Ministère de l'Aménagement du Territoire et de l'Environnement) (2011) Schéma Directeur d'Aménagement de l'Aire Métropolitaine et Programme d'Actions [Master Plan of the metropolitan area and actions programme] S.D.A.A.M. 2030, Mission 3, CNERU – IAU-IDF.
- Ministère d'Aménagement du Territoire et de l'Environnement (M.A.T.E.) (2013) Etude sur la vulnérabilité et l'adaptation de la Wilaya d'Alger au changement climatique et aux risques naturels, [Study on the vulnerability and the readiness of Algiers department to climatic changes and the natural hazards] April 9, 2013, Algiers: Unpublished Document.
- Ministère de l'Habitat (2003) Règles Parasismiques Algériennes [Algerian seismic regulations], R.P.A. 99, Unpublished Document.
- Mishra V. and Hodge B. (2005) What Was Postcolonialism? *New Literary History* Vol. 36, No. 3, pp. 375-402.
- Newman P. and Thornley A. (2011) *Planning World Cities Globalisation and Urban Politics* London, Palgrave-Macmillan.
- Oduwaye L. (2006) Effects of Globalization on Cities in Developing Countries *Journal of Social Sciences*, Kamla-Raj Publishers, Delhi, India, 12(3) 199-205.12(3): 199-205.
- O.N.S. (Office Nationale des Statistiques) (2012) Répartition Du Parc National Automobile Selon La Wilaya & L'année De Mise En Circulation au 31/12/2012 [Distribution of National Automobiles stock According to Departments and year of use starting from 31/12/2012]. Available online <http://www.ons.dz/-Au-31-12-2012-.html>, accessed on Dec. 6, 2014.
- Raymond A. (1990) A. Le déplacement des tanneries à Alep, au Caire et à Tunis à l'époque ottomane : un "indicateur" de croissance urbaine [The shift of tanneries in Aleppo, CAiro and Tunis during the Ottoman period : an indicator of urban growth], *Revue du monde musulman et de la Méditerranée*, N°55-56, 1990. Villes au Levant. 34-43.
- Redfield, R. and Singer M.S. (1954) The cultural role of cities. *Economic Development and Cultural Change* Vol. 3, 53-73.
- Sebaï A. & Bernard P. (2008) Contribution à la connaissance de la sismicité d'Alger et de ses alentours au XVIIIe siècle, extraite des archives françaises. [Contribution to the knowledge of seismicity in Algiers and its surrounding during the XVIII century, Extracted from French Archives] *C. R. Geo-science* 340, 495–512.
- Trumelet C. Le Colonel (1887) *Blida Récits Selon La légende, La tradition & L'histoire*, [Blida: According to legends, traditions and history] Vol. I & II, Algiers: Jourdan.
- U.R.B.A.B. (Centre D'Etudes & De Réalisations En Urbanisme De Blida), (2010) Plan d'Urbanisme Directeur de Blida [Master Plan for Urban Development of Blida], unpublished report.

- Veblen T. (1899) *The Theory Of The Leisure Class, An Economic Study of Institutions* edited by Matha Bant (2007), Oxford University Press. Volume 18, Issue 2, Pages 87–92.
- Watson V. (2009) ‘The planned city sweeps the poor away. . .’: Urban planning and 21st century urbanisation *Progress in Planning* 72, 151–193.