

The Impact of Political Urban Planning on the Urban Form in Algeria

The Case of the City of Tiaret

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Abstract: The study of urban morphology in Algeria is limited to a few disciplines such as architecture, urban planning and geography. The main focus in the approaches of the theme is the historical urban fabric and the analysis of building structure. However, the urban form in Algeria is distinctive, multiple factors interfering with the formation of a mixed urban tissue between an ancient and a modern more complex urban form. The authors aim to address the significant contribution of the political planning on the urban form. For over half a century the adaptation of multiple politics of urban planning which largely was marked by circumstantial intervention in the cities in order to respond to the increasing needs of the population had massive impacts on the urban morphology. Between conducting studies and the application of urban regulations by different actors there is an entire process of producing specific structural forms.

Based on a diachronic approach and the principles of the Conzen methodology, this contribution attempts to explain the mechanisms of evolution and transformation of urban forms through different periods in a city in the interior of Algeria, Tiaret. Direct observation, interviews and investigation of urban plans constitute the materials for analyzing.

1. Introduction

Primary, an examination at some noteworthy contributions to the study of urban form in Algeria which was particularly conducted by architects geographers and urban planners, to have an overview of the approach Methodology followed in the studies of the theme and also put in perspective for readers different contributions in the background of studies from other countries. The tendency of the urban morphology in Algeria started from the second half of the twentieth century, most of the significant architectural research studies were concerned more about the modern urban fabric and produced urban forms in the periphery and the new extensions of the big cities and the capital by adapting the typomorphological normative of the Italian and French traditions approach that had large influence on architectural researches, and synchronic and diachronic analysis as a main approach methods.

However, noticeable studies of urban form directed by urban geographers concentrating on the urban growth with consideration of the historical fabric of cities by adapting the of Conzen's method of town-plan analysis, The first studies was all about the historical approach

of the urban fabric followed by a recent period which appears to be an increasingly strong focus on the environmental perspective, the association with the environmental approach and the use of experimental methods. The study of the urban form has become an multidisciplinary, variable field in the Algerian universities.

2. Methodology

While Addressing this theme the authors attempt exhausting many of the most fundamental methodological perspectives in the study of the urban form, rather than being constrained by just one methodological perspective, each and every method cover certain aspect so the collaboration of many method can help obtain a broad results, one of the main methods used Conzenian plan analysis Going through the plan histories analysis, also relying in the preceding of historical evolution of the urban fabric on GIS approaches. Based on a diachronic approach to explain the mechanisms of evolution and transformation of urban forms through different periods, with the concentration on the impact of the urban planning politic in the process as an important factor in changing the urban form, to cover this aspect the direct observation and the investigation of the urban planning plans, instruments and documentation is undisputable.

3. Analysis/Results

Northern Africa carries with it multiple civilizations, ancient cities that had witnessed different cultures over the centuries. Algeria one of the countries that had significant installation of notable cities. The origins of Algerians cities go way back from precolonial: roman, Islamic, ottoman, colonial, postcolonial and contemporary, each and every station left behind a legacy contributes to form the cities of today, Each period of its history is characterized by a distinguished landscape and a particular urban form by the contribution to its previous. Establishing significant cities by roman in Algeria are among the most astonishing antiquities extant. Also Algerian cities had the privilege of being the capital of one of these states headed by dynasties: in Antiquity, Siga (near Beni-Saf) in the Masaesytle kingdom; Cirta (Constantine) in the kingdom Massyle and Cæsarea (Cherchell) in the Numidian kingdom. In the middle Ages, Tâhart (Tiaret) in the Kharedjite kingdom of Rostemides, Tiaret is distinguished by an outstanding history, which is going to be the case in this contribution as an example of Algerian city's morphological transformation by the impact of political urban planning on the urban form.

The study area established in the western region of Algeria precisely in the city of Tiaret located at 300 km south-west of the capital Alger. Tiaret is the capital of one of the most important places in African history, where the number and variety of remains are like the immensity and power of the landscape.

Each historical phase left behind an individual urban landscape with its distinguished parameters of fabric production and its specific morphological characteristics, the present city under trend of a mosaic urban form this form assembled by sedimentation and superposition of different fragments over the centuries.

Identifying the characteristics and the basic features of the urban landscape and morphology with an emphasis on the impact of political planning and its role in the orientation of the urban form is the main objective of the research.

3.1. The precolonial city: The Foundation of the city "TINGARTIA" the Roman and the emergence of the original nucleus

In the region of Tiaret, man made his appearance from the highest antiquity. He left very abundant vestige from the lower Paleolithic until the Neolithic and even until the time of copper and bronze. The process of analyzing the emergence of the city in this period is of interest to put in perspective the first nucleus that started to form the city that constructed by the Roman at the beginning of the third century. On the mountain of Guezzoul, in 211 the Romans were the first that inserted their urban print on the region, their construction characterized by a fortress they call it Tingartia which was implanted on a higher, defensive site and its exceptional geographic situation used in the colonial period by the French to create a military base for strategic reasons. The most vigorous inscription collected in the city was created in a form of a rectangular fort of 80m long and about 50 m wide, flank of square bastions at the corners and doors. A military base was created on these Roman ruins still functional till today.

The current center of the town of Tiaret built on the remains of an ancient Roman city: Tingartia. That certainly played an important role in the history of North Africa.

3.2. The Kharijite Rustamid state Tihert

In 716, Persian missionary, Abed al-Rahman Ibn Rustam established Tahert/Tihert located 10 km further west of Tingartia the roman the present city of Tiaret which was called at that period Tihert the old, Tihert become the capital of the most important kingdom of the Maghreb, influencing the western and southern part of Algeria, the south of Tunisia and the north of the Tripolitania, representing the politico-religious ideal of the moderate Kharidjites.

In the medieval period much of its organization and the urban form of the city were influenced by religion Islam, The general form adopted in that period developed around the classical of Arab Medina form: with her irregular tortuous streets, converging towards the central square where are the mosques and shopping stalls Followed by a series of residential neighborhoods: the poor neighborhood, the inviolable which is a citadel that dominates the city market, middle neighborhood and The Church neighborhood, this reflects a general structure of the city determined a radio-concentric distribution of economic activities as well as residential areas, The staggering of trades, from the center to the periphery, according to a classification of activities (the richest, the most specialized in the center, the poorest near the city limits).

3.3. An old consistent structure marked by a colonial presence (French urban fabric 1841-1962)

The urban logic during the French colonization constitute a major configuration of the majority of cities in Algeria, the Haussmann fabric today is the oldest nucleus and the Reference center of the city of Tiaret, this epoch left its particular stratum certainly acknowledged in the landscape, refers to it as The European city.

Colonial urbanization manifested by three important phases that marked the unfolding of the creation of the colonial city that contributes to it's the future urbanization: the reconstruction of the city on itself on the ancient site chosen by the Romans, the crossing of the limits and the spatial extension of the city.



Figure 1.

3.4. *The reconstruction of the city on the ancient site chosen by the Romans 1841-1870*

The establishment of the colonial fabric was made either, by superimposing it on the old fabric (Medina or Ksar) (case of Constantine, Algiers or Touggourt), by juxtaposing it (case of Oran and Annaba), or separating it (duplication) (case of Mila and Ouargla). While that of Tiaret is completely razed in 1841¹.

The military Urbanism was first interventions on the urban fabrics which characterized by a destructive conception, started with the creation of an advanced military base refers as today as “La Redoute” which turned little by little into a small center of population as a first act of urbanization in the city choosing the ancient site and superimposing the old vestige of the Roman city Tingartia. The colonial intervention in the city based on military engineers of the French army that took the initiative in establishing plans for colonial cities as a process of urban planning. At the architectural aspect this era distinguished by “Neoclassical” architecture, the official architecture of the French Empire. Essentially Characterized by giving a monumental aspect to public buildings (Figure N 01), with the development of urban comfort for the colonials, based on aesthetics and hygiene, while maintaining racial segregation between natives and the European.

3.5. *The crossing of the limits 1870-1943*

The growth of regular urban form structured by the Haussmanian building characterizing with its continuous constructions, organized along streets and squares, interposed by monumental public

1. Chaouche Salah (2013), L'impact de l'urbanisme colonial sur la fabrique de la ville algérienne, in Sciences & Technologie D – N°37, pp. 39-50.

buildings, with facade reflecting a clear stratification and a volumetric coherence due to the imposition of a regulation managing overlays floors and decorations according to the social stratification (Figure N 01). The regularity, symmetry and orthogonality roads, and the importance given to the development of public space like the famous “place des Carnot. La place Gambetta, la place Loubet”.

During this period the main instrument in urban planning was the alignment plan, which was aimed at determining the different stages of the city’s expansion, it also provided guidance on the anchoring of alignments, the widths of streets, public spaces, and a trend in the future planning of the city by land reserves for public buildings and monuments of the city and easements. The urban planning logic followed by this instrument was based mainly on the form of allotments that characterized the French and European cities.

One of the vital logics of urban planning in the colonial fabric; the creation of mechanical lanes (Peripheral Boulevard), conditioned by the strategic roads of the new channels of communication contributed practically to the systematic opening of the city. The opening of these roads was necessary to ensure economic exchanges. In 1875 the first strategic route was created on the East side: relate Tiaret – Mascara (route 54), The second road relates Relizane – Tiaret (Route 53) was paved, allowing access from the Tell (Figure N 02), then the path that connects Teniet El Had to Tiaret was rectified. Another link Tiaret – Mostaganem by a narrow gauge railway of 197 km length was studied since 1875, it was completed in 1889.

This infrastructure had a remarkable contribution in the orientation of the urban form of the city in all directions north, east, west, they open the space to building materials for the construc-

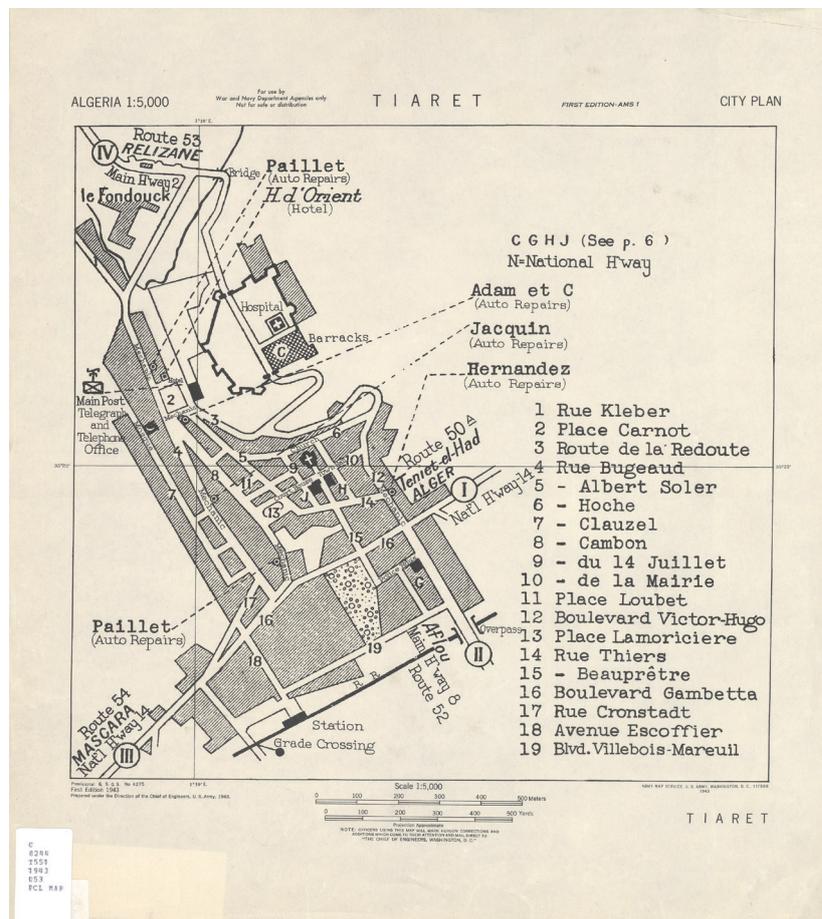


Figure 2.

tion of the city, the urban fabric extension of the city was generated along these hubs. This major urban operation marks the beginning of a new economic era in the region.

the city designed to fulfill the purpose of administrative and commercial functions that lead to an urban fabric dominated by public buildings and administrative equipment with a monumental aspect, This intervention has given rise to a fabric of public amenities administrative, financial, cultural, commercial and residential like the church, the cinema, the post office, the court, the town hall (Figure 02). The construction of this city played a role as an administrative functional center of the city today. Many public buildings built between 1900 and 1930 reflected in their construction an architecture combined of Arab-Muslim style and European style, that displays a careful trend towards the forms and decor of local Arab architecture that participates in the codification of some elements of the local architecture in a new form (cupolas, arcades) are composed rigorously to display the style of the protector (Arabisance), also called the Neo-Moorish style that protects and respects the identity of original habitants, like the building of "Medersa". It was not until 1924 that the law mandated the production of the Master Urban Plan for any city with a population of more than 10,000 inhabitants. Different plans therefore allowed the transition between 19th century (military) alignment planning and twentieth century town planning, thus beginning the era of bureaucratic Urbanism (politico-economic).

3.6. *The spatial extension of the city 1943-1961*

The urban expansion of the city continued directing to the south considering the natural obstacles on the north and east. Even with the hard topographies nature of the site the development of a territory using topography to highlight a distinguished architectural landscape.

This phase high profiled with an extension and densification of the urban fabric in the south, crossing the railroad and directed to the west along the strategic hubs: national H-way number 14 relating the city to the north west of the country.

The structure of the city became more modern with social architecture and principles of organization plans based on the system of corridors and cells with the tendency of combining modern form and traditional elements, a large part of this change in the urban form accomplished by the appearance of new urban planning instruments In 1958; the Master Urban Plan (MUP); to meet the requirements of urban reconstruction and the needs of massive production of urban spaces. These instruments marked the end of the colonial period in Algeria and continued to have an important influence on urban planning instruments in Algeria after independence (M. Saidouni, 2000, pp. 201-205).

3.7. *The Postcolonial urban fabrics 1962-2019*

The city of Tiaret had undergone radical transformations in its morphology not only regarding the spatial expansion that essentially related to growth and demographic movements which dominates the structure in relation to the old center, but also regarding the layout and the composition of the modern urban fabric witch was controlled with an important factors mostly the Urban planning that had and still have the largest mass Intervention of the organization of space and orientation of the urban form.

Many factors interfering in the metamorphosis of the urban form, the city was implanted at the base of a radio-concentric frame dictated by the morphology of the site as an important factor; however the urban planning politics has profoundly changed the structure of the modern city and determined important part of the urban fabric composition and its organization.

These whole processes created fully new form of fabric. The city undertaken profound transformation from compressed, monocentric, compact, continuous traditional structure to become more, loose and discontinuous with a polycentric structure (Figure 3).

3.8. Transition period: the period of large collective units 1962-1977

Since the independence the city characterized by the horizontal urbanization without an effective town plan until 1972. the urban planning was evolved around the promulgation of the law of 31 December 1962 which renews the regulation French urban planning published in 1958, notably the Master Urban Plan which the study was launched until 1974, The first planning instrument oriented towards architectural studies and marked the directions of spatial growth to the southern with high consumption of space a significant part of which is of agricultural value.

The spatial expansion to the south engendered the juxtaposition of two distinct "urban systems" (Figure 4), with totally differential logics; the first consists mainly of collective housing programs (Z.H.U.N) as a respond to an urban planning with an operational dimension. The ministerial circular of 19 February 1975 defines the criteria of the creation of this urban frame that exists through the majority of Algerian cities, creating segmented and disarticulated urban fabric, reflecting the abandonment of traditional urban composition elements and charactering by low density, the absence of the notion of place and animated streets, under equipped, And the excessive architectural standardization.

The second system generally located in the West and East periphery of the city and concerns fragmentary subdivision individual housing and co-operative operations, this part of the city represents an operational planning procedure started at the late 80's, which allows the creation of an urban fabric within a framework regulated by the laws of land reserves and legal texts establishing real estate cooperatives, with The purpose to use and make profitable the individual private initiative which helps to alleviate the housing shortage while gaining ownership of the housing .Subdivisions developed as technique of planning, and production of building plots that created a different from compared to the old one with very low densities, 561 hectares of land were consumed by subdivision operations in Tiaret until 1993 for the creation of 5438 lots, resulting in an average gross density of 9.69 dwellings per hectare. This fragment appears with a random form, unstructured, incomplete with the deficiency of services and equipment, servitudes and alignment of roads not respected, as a result this subdivision appears in an anarchic aspect, difficult to access, which created a rupture in the urban landscape and the artistic, architectural and the organizational aspect considering its location in the limits of the downtown center.

This first phase in Algerian urban planning appeared to mark the periphery of cities by distinguished system of fabric production, characterized by rupture with the precedent as a result of the conjunction of several constraints: the lack of human resources in charge of studies and the limited funding to cover the studies, the large scale and imprecision of studies, the great interval between conducting studies and putting them into application.

3.9. Economic planning, urban planning! 1978 – 1987

The instillation of a large industrial area with the superficies of 314 hectares, and activity area in the south of the city was the highlight of planning procedures in this period. The zone of activity largely incompatible with the agro-pastoral vocation of the region, as a result the city became rapidly attractive and uncontrolled by the large influx of population from the under-equipped

rural areas, this spurs proceeding in the same Urbanism planning with more projects of co-operatives and subdivisions and the creation of another ZHUN programmer Aligned with the precedent to meet the increasing requirement of the population. The implantation of the industrial zone as an economic composition served at the first place economical dimension instead of urban but not without implication on the urban form as a result of its location last than five kilometers to the center, this structure created a technical obstacle for the urban expansion in the southwest, however it aggravates a punctually development in this part of the city.

3.10. *The period of the institution of planning and urban development laws 1988-1998*

Densified urban extension compared to other periods realized largely by individual subdivisions and co-operatives and larger collective housing owed to the displacement of populations from various regions, primarily for security reasons. Extensions intensified in random ways that were not included in the urban planning instruments.

Since 1989, after the expiration of the only instrument of urban planning widely applied to manage the urbanization of all Algerian cities during the years 1970-1980, a massive development in the urban planning politic oriented by the law 90-29 of 01 December 1990 on urban planning has filled a gap in the legislative framework by two fundamental instruments the (Master plan for development and urban planning) and the (Land occupation plan) inspired from the European Urbanism, defining the rules for dividing the territory in regulated sectors and provides for the control prerequisite for the production and transformation of buildings. According to the Master plan for development and planning orientations: the city has marked linear urban growth structured headed to the east and the southeast along two inter-regional exchange roads (National road N 14 and 23) (Figure 4). However the southwest part surrounded the siding track used as an argument to halt the urbanization of a concern to preserve agricultural land, that planning logic failed after the saturation of the urban fabrics, the city expanded beyond the siding track.

The studies of the first Master plan conducted in critical circumstances during the period of insecurity that the country witnessed as a result, non-profound summary studies with a large focus on circumstantial solutions for the increasing housing needs by the redeployment of populations and activities to secondary urban areas rather than focusing on urban planning dimension, that illustrated clearly by the patching operations (densification and restructuring) and the negligence of the rehabilitation of the historic center and the absence of global vision of urban development in the city by elaborating the Master plan independently from the national development plan.

3.11. *Morphological recompositions and emergence of new polarities 1999-2019*

After the failure of the Master plan scenario of strengthening the three secondary urban areas (Karman, Ain Mesbah and Senia) as satellite cities, its revision was necessary in (2005) to find solutions after the consumption of all land reserves and the conurbation of the urban fabric with secondary agglomerations (Seina) and therefore as a substitute was the creation of an animation pol (Selssoul) animated by structural equipment in the southern region promoted by the passage of the National road N 90 This animation led to the emerging of secondary centrality south of the city.

However the urban expansion was also oriented toward the north by densification operations of the urban fabrics, especially in the north which creates back a compact urban form,

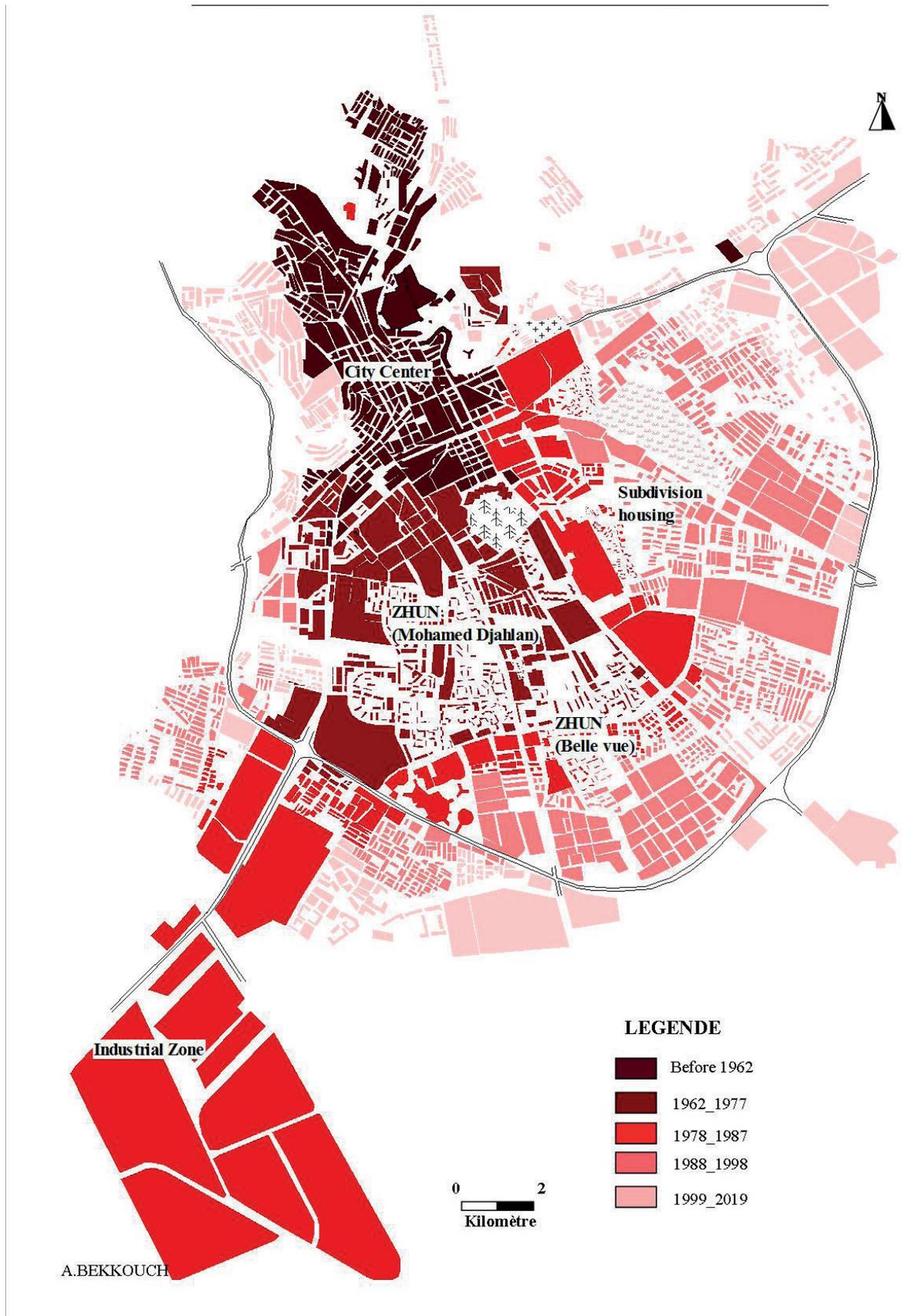


Figure 3. Tiaret growth of built-up area.

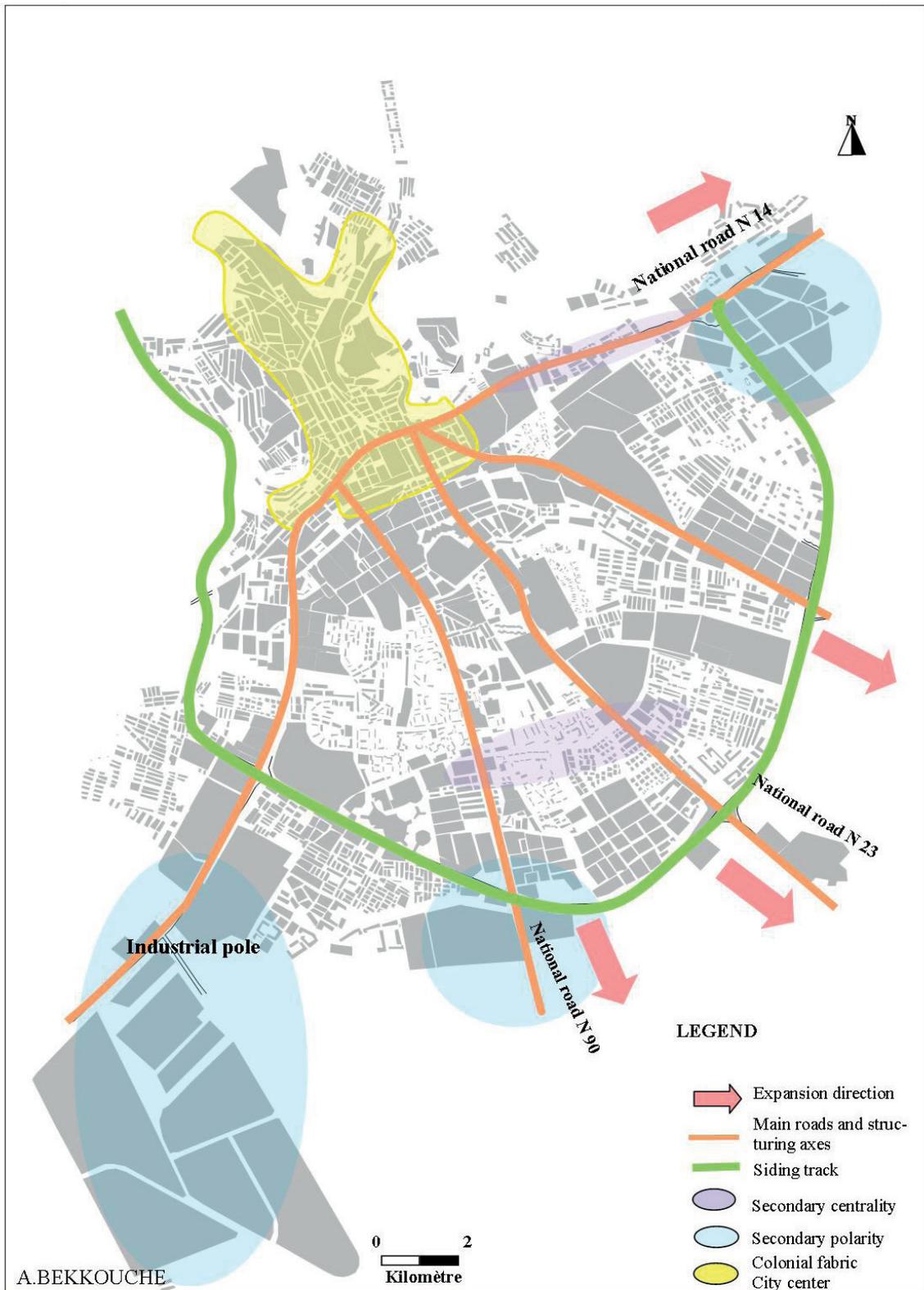


Figure 4. Morphological recompositions and emergence of new polarities.

and the east side by structuring the area along the national road by vertical constructions and the integration of services and commercial activity into structures with concentration of public facilities these factors multiply in the emergence of new form of linear centrality emerging along the national road N 14.

The transformation in the urban form was not exclusive to the fabric expansion, but also appears clearly through the spatial and functional recomposition of the existing fabric that was limited to this period, compared to other periods, especially at the downtown center where modification of the urban façade and function of old buildings with high concentration of restoration operation, even with the Attempt of preservation of the old colonial fabric by the state, private public action took the lead in a modernization of building's structure. The urban form transferred from one nuclear structure dominated by the downtown center to multiple nuclear structures located in the periphery Which resulted from the orientation of the second Master plan to decentralize the city center through a logic of organization and structuring of the city through the development of roads and the installation of facilities that constitute primary elements of urban expansion and the changing of the urban form by the training effect a certain dynamic by the fragmentation of facilities in the periphery (administrative, socio-cultural, commercial, health and education), it was voluntary to create multi-polarity or secondary centers that morphologically completely different from the original center, created discontinuous heterogeneous fragmented urban form often the result of adjacent zoning projects having been created one by one, each with a different plan.

4. Discussion/Conclusion

Various factors make the appearance and the emergence of multiple forms and mutations in the urban fabric of the city of Tiaret, the increase in the size of cities being a corollary of this evolutionary process and urban growth on the periphery has redefined the relationship experienced with the city center and developed new forms. The city of Tiaret witnessed so many historic stations each one had a tangible impact on the creation and constitution of urban fabrics, the elements of cultural and social history appear in the characteristics of street buildings and in the land use model, any new period is likely to be represented exclusively by its own new buildings.

Urban planning in Algeria challenged the adaptation of different urban planning logics that produced specific urban forms but what about the other forms? at which point can the political planning control the urban form?

The modern form of the city was largely the production of a sequence of events in urban planning policy that was marked by circumstantial interventions and situational solutions to meet the growing needs with abandonment of the architectural aspect and the upgrading of the urban landscape.

Planning policies carried out on several scales and by multiple actors with a lack of coordination that has made the strategies very vague and ambiguous have applied and often paralyzed in the appearance of the decisions and speculations of those primarily responsible that results a gap between the urban form defined in the urban planning instruments and the structure achieved.

Planification instruments made scenario for the urbanization in peripheral extensions, but the result is often a simple summary planning in a zoning system. Instead of defining an idea and a real project for the city, the case is often outdated plans that can hinder initiatives to improve the built environment, the instruments presented lack of morphological urban dimension.

The lack of a clear vision is ultimately the result of the inconsistent multifaceted structures explained by the patch operations that have been carried out in recent years in the city, as well as the neglect of the notion of public space and green space and the unfinished nature of some operations. The modern form of the city was the result of “Planning by consequences”.

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