The urban brownfields of Algiers;
between representations, temporary uses and new places of culture

Rafik Boudjadja (Author)
Architect-Urban planner, Lecturer in Architectural design
AVMF laboratory , Faculty of architecture and town planning, University of Salah Boubnider , Constantine 3, University of Larbi Ben Mhidi of Oum el Bouaghi, Algeria. Guest researcher at the CMS center for metropolitan studies, Technical university of Berlin, Germany. Email : rafik.boudjadja@hotmail.fr

Souad Sassi-Boudemegh (Co-author)
Professor, Director of the AVMF laboratory , University of Salah Boubnider , Constantine 3. Algeria
Email : souad44@hotmail.com

Abstract

The city of Algiers has, since the beginning of the 21st century, undergone significant changes to its urban landscape, a consequence of large-scale urban works. These transformations are particularly and, indeed, spectacularly visible in the eastern districts of: (Belcourt, El Hamma, Ruisseau/-Abattoirs, Hussein Dey, and El Harrach.); they are mixed industrial neighborhoods containing many urban brownfields. These neglected spaces, often well located, constitute an affirmed stake by the public authorities, in particular through legislative changes. Indeed, reinvesting urban brownfields in Algiers means working to control its sprawl, but these spaces are also bringing environmental, urban, economic and social challenges.

This article aims to demonstrate the interest of public authorities (decision-makers), land managers, inhabitants and users of these neighborhoods in addressing the subject of brownfields through the evaluation of their representations, this helps to provide a local and multivariate definition of the brownfield concept. First, it strives to provide answers to the main questions that insist and persist at the decision-making level: is it a sustainable response to densify the city of Algiers by regenerating its brownfields? Are the representations on brownfield sites by decision-makers, managers, inhabitants and users, unified or varied? Are the temporary uses of urban brownfields during their standby time indicative of social needs that should be included in redevelopment projects?

This research, based mainly on questionnaires, highlights the disparities in the representations, in the use and the practice of urban brownfields. The results show that depending on the actor's nature, the manner of apprehending brownfields is often articulated around interest and need. This article therefore raises the question of urban brownfields in the eastern pericentral neighborhoods of Algiers, considered to be places of high social demand in terms of culture.

Keywords: urban brownfields, representations, environmental potentials, temporary uses, standby time.

1 - Introduction

The city of Algiers has, since the beginning of the 21st century, undergone significant changes to its urban landscape, a consequence of large-scale urban works. These alterations are particularly and, indeed, spectacularly visible in the eastern districts of: (Belcourt, El Hamma, Ruisseau/-Abattoirs, Hussein Dey, and El Harrach.); These are mixed industrial neighborhoods containing many urban brownfields and suffering from a host of operational problems with social, economic, and environmental consequences (Chabou-Othmani, 2015). The changes experienced by these neighborhoods are nowadays mainly characterized by the complete demolition of entire blocks and the partial reconstruction of public and tertiary buildings.

In fact, given the peri-central situation of these neighborhoods, their accessibility and other landscape assets, they have strong stakes in the benefits of sustainable urban regenration, exceeding their local characteristics (Delachaux, 2010). They embody the strategic spaces where in the future of the Algerian capital is at stake.

However, the transformation of these neighborhoods, initiated piecemeal from the 1980s (Bennai, 2007), has been exclusively a response to the global challenges of modernizing the city through the implementation of major projects in existing urban tissues, after the destruction of living urban districts. Since the end of the 1990s, the process of metropolization has been the spearhead of urban policies in Algiers and the redevelopment of eastern neighborhoods is at the heart of this issue, intensifying the changes in these territories (arrival of new transport modes, multiplication of demolitions, reconstruction and restructuring) (Berbar, 2009). Meanwhile, the presence of many brownfields represents an actual undervaluation of space, which contradicts the image of dynamism that the capital wishes to project.

This observation is significant because the built environment is simultaneously characterized by a strong propensity for urban sprawl. The growing awareness of the need to save land resources and reduce environmental impacts of urbanization, supported more intensely since the emergence of the concept of sustainable development in the Algerian public arena, underline the need to ask questions about the future of these abandoned areas (Boudjadja, 2014). These concerns have revealed a certain interest in densifying the city with the recovery of its urban brownfields.

The current debate around the brownfields in Algiers is articulated around three questions: the first concerns the link between brownfields redevelopment and sustainable development; the decision makers of the city share the opinions between pro-densifiers, and anti-densifiers. In this perspective: is densifying the city by redeveloping its brownfields a sustainable response? The second question concerns the different representations of actors around brownfields: decision-makers, managers, inhabitants and users, do they all have the same representations ? And the third question concerns the uses and practices of brownfields during their standby time, do they reveal specific social needs, and that decision-makers should take into account?

2 - Theoretical framework and context

In terms of the evolution and development of Algiers, current trends tend to focus on promoting re-urbanization, densification, and return to the city, while it seems unarguable that urban regeneration has, and will have, a key role in the development of cities and societies. In addition, as we will see below, brownfields regeneration is an opportunity to achieve sustainable and resilient development, energy efficiency, rational land use, and the revitalization of traditional city centers (Winston, 2009). Furthermore, translating sustainable development into practical dimensions will necessarily imply the development of strategies at the urban level (Schenkel, 2015).

Given the high percentage of Algiers population[1] living in urban areas, the peripheral areas of the city are experiencing increasing growth, which is predicted to lead to the appearance of a "suburbanization" phenomenon. The growth prospects of the city only prefigure a worsening of already worrying current problems: excessive land consumption (soil artificialization, irreversible loss of arable land); an increasing degradation of the built heritage; pollution of groundwater; ineffective waste management; and the cumulative effects of all these factors on the environment and on population health (Plan Bleu, 2012). Accelerated urbanization is already accompanied by massive demand for housing and infrastructure, while urban management problems are recurrent; and the situation is likely to become even more complicated in the future.

In response to these problems, and within the framework of the strategic development plan of Algiers PSDA planned for 2030, the French firm Arte-Charpentier, having won a competition launched by the city of Algiers in 2007, sketches the outlines of the ecological modernization project of the city. The reflection then focused on the redefinition of a territory with high potential, allowing regenerating the port and the industrial brownfields, structuring the urban

---

1 - According to the website of the National Office of Statistics (O.N.S.), on January 1, 2018, the total resident population in Algeria reached 42.2 million inhabitants, including 8million in Algiers, and more than 70% of this population is urban, while this rate is expected to reach 85% by 2050.

fabric and reorganizing the transport networks. Modern concepts are mobilized for the integration of sustainability and environmental protection advocated by legal texts promulgated since 2001 by the Algerian Ministry of Regional Planning and the Environment.

This growing recognition of the importance of brownfields regeneration and its relation to sustainable development has been attested by several policies, laws and instruments at international level: the Leipzig Charter (European Union, 2007); the Toledo Declaration (European Union, 2010; the Europe 2020 strategy (European Commission, 2010). The Amsterdam Pact (European Commission, 2016),); the Paris Agreement (Streck et al, 2016); and the 2030 Sustainable Development Goals (United Nations, 2017). Moreover, nationally by renewing the legal and urban arsenal.

However, some brownfields whose standby time has come to an end, have received planned assignments, to house major emblematic projects proposed by the PSDA, like the slaughterhouse site which is supposed to welcome the new heart of the Algerian policy life (the Senate and the Parliament), and whose demolition work has started. On the other hand, the third largest mosque in the world whose reception was delayed following the Covid-19 health crisis. Other brownfields nearby are still awaiting public intervention! Delaying to materialize, and thus allowing temporary uses to take shape in a regulatory or illegal manner.

2.1 - El Medreb el khawi
Literally the empty place, expression of the derja (Algerian dialect) to describe urban brownfields, the hollow teeth, the black pastilles, the voids or the pockets, so many names, it is not finished! Abandonment, caesura, crisis, abandonment, or even *ezzoubiya* or waste, so many offensive epithets attributed to urban brownfields.

Nowadays, with urban planners and architects viewing abandoned urban sites as a resource, their regeneration has become popular. Algiers is under pressure to accommodate more and more residents, ideally without extending beyond its already built perimeter. Poorly connected built-up areas squander space and spoil the landscape. Studies have shown that they lead to higher per capita energy consumption, increased dependence on cars, and infrastructure costs

much higher than those of denser conglomerations (Dupras et al, 2015; Wilson, 2013; Bosch, 2019; Wang et al, 2019).

The urban brownfields of Algiers are at the center of conflicts around socio-cultural, economic, and historical arguments, policies and approaches, which today are being increasingly viewed through an environmental prism (Boudjadja and Sassi-Boudemegh, 2020). The common notion remains that brownfields have no value until they are developed. However, they play a unique and valuable role in the future of Algiers dwellers (Srir, 2017), as people increasingly reassess traditional notions of progress and seek more sustainable patterns of life. Brownfields support the biodiversity of the city center and its peri-central districts, provide carbon sink (Pragya et al, 2017), improve hydrological mitigation (Shot, 2013), offer open spaces and represent the freedom of the controlled built environment. Like metaphors, the issue of brownfields characterizes the cause and effect of our constant and continuing (re)-development.

2.2 - Brownfields of Algiers and domination of nature
From a point of view linked to nature in the city, the abandoned urban areas of Algiers are marked by the presence of dense vegetation encouraged by a humid and Mediterranean microclimate *"It is also in the 'brownfield' that we find the plants with the greatest ecological range"* (Génot and Schnitzler, 2013). To the point where certain brownfields become inaccessible, and constitute a sort of urban Amazonia testifying to the power of nature over man, *"brownfields land has always existed. History denounces the as a "loss of human power over nature" "what if we looked at them differently?"* (Gilles, 2017 : 92). The vegetal character of the wastelands has separated urban opinion in two, some consider that the spontaneous work of nature contributes to the greening of the city and brings an appreciated landscape touch, others consider that it is a form of advanced degradation, because it is nature that takes over.

2.3 - Brownfields of Algiers; between use values and exchange values
The beautiful, the ugly and the value; expressions associated with the description of the aesthetic symbolism of the abandoned lands of Algiers and their values. This aesthetic notion is well established, for example, with regard to the notion of 'abandoned' land. As Barr (1969) states, "for most
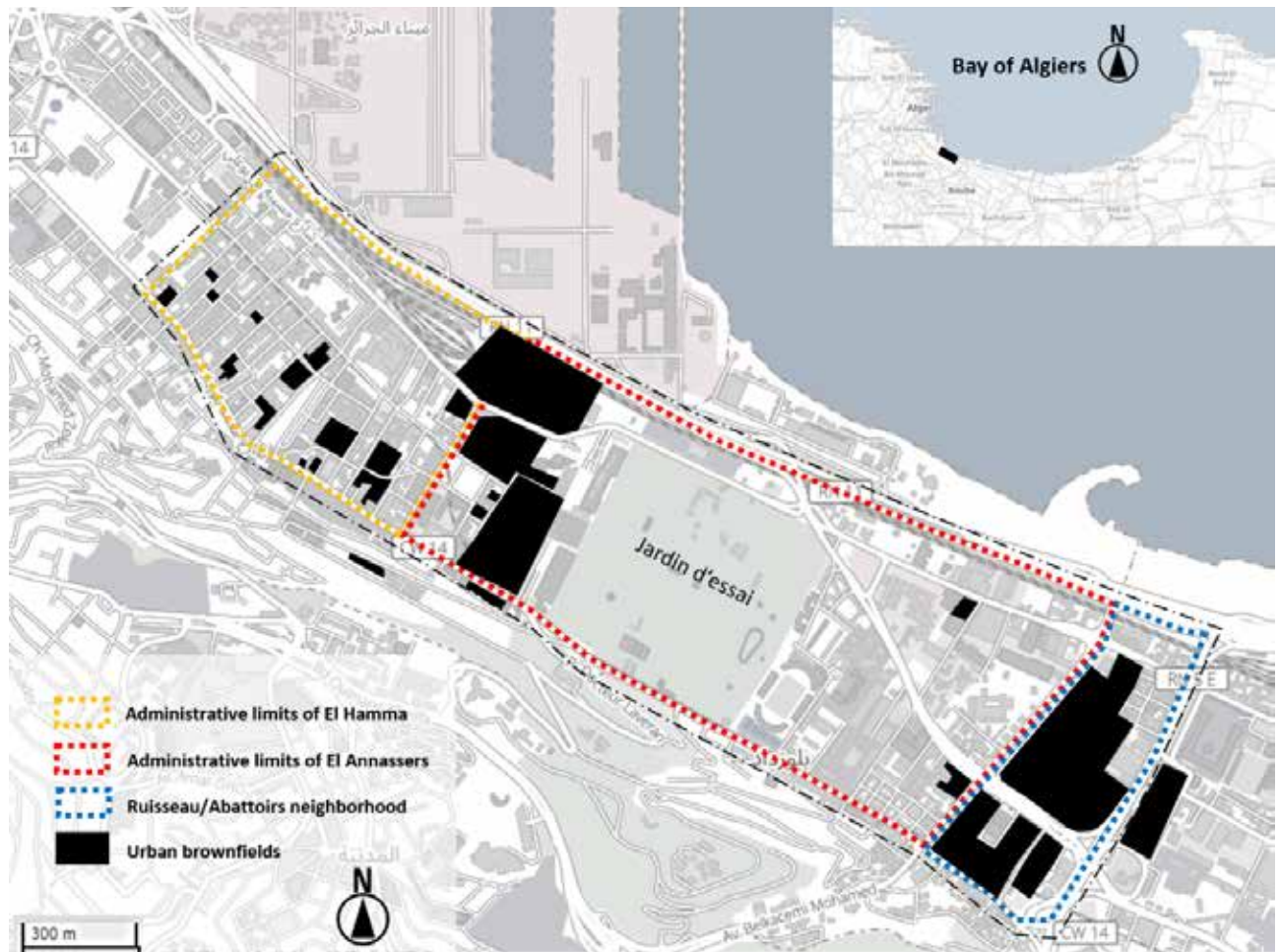
Figure 1 Location of brownfields in the neighborhoods of El Hamma, El Annasser and Ruisseau/Abattoirs in Algiers

of us…'abandoned land' means virtually any land that looks ugly or unattractive." Lynch (1990) also suggested that waste can be useful, but what it lacks is not necessarily its use value, but rather its exchange value on the capitalist market. 'Dereliction', says Lynch, is still related to the market. "If it pays, it is not abandoned. If it does not pay, because of some human wickedness, then it is abandoned" (Lynch, 1990). "These wonderful empty areas", as Doron (2008) calls them, are therefore not wonderful enough to be appreciated for their ecological values but rather for their market exchange value.

This richness of symbolism on the brownfields of Algiers attracted our attention for three years, spread between 2016 and 2019, and which gave fruit to research which focused on the analysis of the different representations, uses and practices on these spaces. , and for several levels of

actors: decision-makers, land managers, residents or users. The interpretation of the questionnaires and the analysis of uses have helped us to identify and discover new elements of definition about urban brownfields and especially to know the hidden secrets of their standby time which is revealing of their potential for change.

3 - El hamma /el annassers /ruisseau: a brownfield territory
We determined the boundaries of the perimeter of our research as shown in Figure 1 (territory El Hamma, El Annassers, Ruisseau), this choice is based mainly on the presence of a large number of brownfields and abandoned industrial buildings2, but also in relation to urban planning and medium-term programmed projects in this zone.

─────────────

2 - We have identified more than 50 hectares of fallow land in this territory, equivalent to 500000m2

The transformation chronicle of this territory has shown that it has a strong potential for mutability, a search of the archives has enlightened us that it carried the agricultural character during the pre-colonial phase (before 1830), this status was maintained by the French colonial authorities until 1846, to subsequently embody the heart of Algiers industry until 1962.

From 1962, the territory was considered as the receptacle of the rural exodus that Algiers experienced during the postcolonial period, accompanied by the proliferation of slums. Since then it has gradually lost its industrial character (Figure 2). Today, and with the disproportionate sprawl of the city , this territory is at the heart of the priority actions planned by the PSDA, it even embodies a strategic place where the future of the city is played out through the programming of large facilities and neighborhoods, called to modernize its image. However, and according to our observation, the uses and practices that have taken place in this territory have come to oppose and impose themselves to express social needs, and ensure the sustainability of the mutable character of this territory, to become " a new territory of art and culture "(Grésillon, 2010: 50)

The interest and the need are the two parameters that reinforce the status of urban brownfields of this territory as real actors of the urban factory, between the political decision, the local urban management, the use and the social practice; they are found at the center of the representations of the city's actors.

4 - Method

To answer the question we asked at the beginning, we conducted an in situ survey based on three methods: As a first step, we conducted semi-directive interviews with the "decision-makers and managers" category because we wanted to have in-depth discussions with stakeholders as they are experts in their field.

Target decision makers: we approached three ministries with prerogatives allowing them to intervene on urban brownfields namely: the Ministry of Housing, Urban Planning and the City (N°= 5/ 2 urban planners, 3 architects), the Ministry of Environment and Renewable Energies (N°= 4/ 2 architects, 2 geographers). The ministry of Regional Planning of Tourism and Crafts (N° = 5/ 3 geographers, 2 urban planners), in addition to the urban planning sector of the city of Algiers N°=6 (3 urban planners) and 3 local elected officials, for a total of 20 interviewed decisions makers.

Target managers: (APC departments: Belouizded N°= 4 and Hussein Dey N°= 3 , urban planning agency CNERU

Figure 2 Photos of abandoned infrastructure (the Liminana distillery on the left, El Hamma district), (Ruisseau municipal slaughterhouses on the right, Ruisseau district) (authors)

	Decisions-makers	managers	inhabitants	users
Number of interviewees	20	22	75	40
Survey's nature	Semi-directive	Semi-directive	directive	directive

Table 1 Summary of the sampling distribution for the evaluation of social representation on brownfield

N° = 5 , ANURB N°= 5 , OFARES N°= 5)3, with a total of interviewees equal to 22 , the profiles of these people are varied: 8 Architects, 5 Urban planners , 3 geographers, 3 engineers, 2 planners, and 1 economist.

Secondly, unlike decision-makers and managers, we conducted direct interviews with residents and users, sampling based on the systematic survey method was used, we interviewed one individual every ten passages. The interviews were directed to gather as much information as possible in a short time (8 to 12 minutes) as explained by Fenneteau (2015: 9) "When the interviewer uses a directive technical, he [or she] questions the individuals by asking them questions related to the problematic of the survey. This strongly guides the speech of the interviewees; these must indeed be placed within the framework defined by the questions and refer to the concepts involved in their formulation. By doing so we can obtain precise information

on well identified subjects." 75 people among the inhabitants were interviewed; we had to face 15 refusals. For users the number of respondents was 40. (Table 1).

Finally, observations were made. They accompanied the entire process, before and during the investigation, and allowed us to identify uses and practices in urban brownfields and to analyze the felt needs.

4.1 - Guide question and evaluation criteria

The questions asked during the interviews were targeted on the different practices observed in the field, uses, regeneration projects already planned, and on the current and future value (positive or negative) of the brownfield. We asked the interviewees to assign values to criteria selected in advance to guide the interview; Table 2 summarizes the list of criteria adopted for this evaluation. The major question that allowed us to collect information linked and grouped by theme was; what do urban brownfields represent for you?

---

3 - APC : communal people's assembly/ CNERU: National Centre for Urban Planning Studies and Research/ ANURB: National Planning Agency/ OFARES : restructuring office

Criteria (negative)	-2	-1	0	1	2	Antonym criteria (positive)
not important						important
repulsive						attractive
dirty						clean
degraded						maintained
insecure						secure
ugly						beautiful
artificial						natural
weakness						strength
threat						opportunity

Table 2 List of predefined evaluation criteria for the survey

An additional question was asked for the "decision-makers" category regarding the relationship between urban brownfield redevelopment and sustainability: "do you think that the densification of the city of Algiers through the regeneration of its urban brownfields contributes to sustainable development?"

5 - Results: disparities in the representations of the brownfields

5.1 - Decisions-makers' representations about brownfields

Among 20 respondents in the "decision-makers" category, 62% link urban brownfields to strategic locations, the "strategic" designation was associated with their important situation and their immediate proximity to the hyper-center of Algiers on the one hand, on the other side with their surface potential to host large-scale projects programmed by the PSDA. 16% linked the urban brownfields to the pending; our interlocutors insisted that it is not in any case abandoned spaces, but rather waiting for an intervention. 11% consider brownfields as an opportunity, 6% consider that brownfields marks the end of the life of a building, an industry, or a function following a litigation, bankruptcy or a business relocation. 5% of them consider that brownfields are very much related to the notion of renewal. (Figure 3)
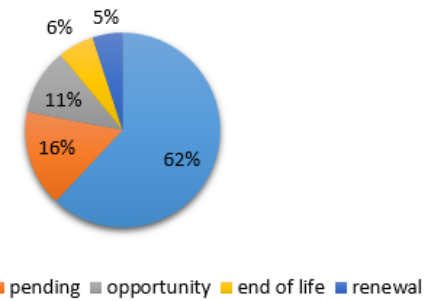

Figure 3 Decisions-makers' representations about brownfields

Concerning the representation of brownfields by decision-makers with the attribution of values (negative, positive, neutral) (Figure 4), we can see that the positive assessment of brownfields is linked in particular to their representation as an opportunity, as elements of strength, their presence is important for the development of the city, and they are considered attractive.
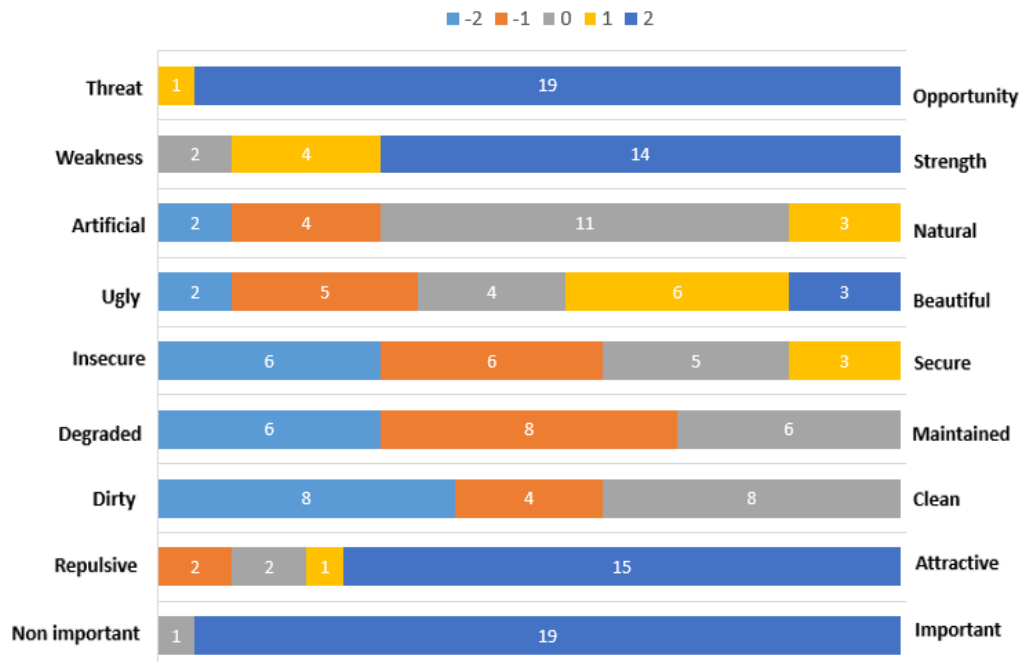

Figure 4 Evaluation of the proposed criteria by decisons-makers

5.2 - Densifying the city of Algiers by regenerating its brownfields; sustainable/ unsustainable?

It was an important question for us to know what brownfields really mean in terms of sustainability. Not all decision-makers agreed that the city's densification by reclaiming its brownfields automatically contributes to sustainable development (Figure 5), some even reverted to the definition of a compact city, specifying that it is the perfect antonym of the sprawled out city. Is one that favors high density, which must develop within the limits of the agglomeration while ensuring its urban continuity, these factors being the two main characteristics of the urban model described as "historic", and "surpassed" by technology (Andres and Bochet, 2010). On the other hand, sustainable development presents compactnes as a trend and, a blueprint for the future, a model where distances tend to be shorter (Fouchier, 1995) and which, costs considerably less than that proposed by the sprawling city (Da Cunha et al, 2005; Bochet, 2006).
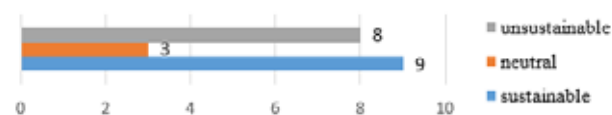

Figure 5 decision-makers' representations about the link between urban brownfield/sustainability

According to our interviewees, this model presents a wide range of objectives: to; limit urban sprawl, to make neighborhoods attractive (improving the neighborhood's image and, reclaiming brownfields), to enhance the efficiency of urban transport (by means of improved public transport and, cycle paths, for example). In addition, to halt or at least limit the economic decline of the city center by providing new extensions to enhance its heritage, rather than merely museum-ifying and gentrifying it.

Some interviewees questioned the benefits of the compact city model, for the simple reason that there is not enough evidence to justify its effectiveness. "No decisive study has really clarified the problem of its direct and indirect costs, the absence of indications on the degree of compactness, on the specific sustainable density probably aggravating the feeling of uncertainty" (Bochet, 2006: 132). This means that the compact city model cannot be considered as a standardized example, to be placed everywhere in cities, and that each city has its own structural personality.

5.3 - Managers' representations about brownfields

Managers were aware of the opportunities offered by brownfield sites, especially for the availability of land and the possibility of developing new projects. At the same time, the abandonment character was pronounced, with many interlocutors linking brownfields to abandonment (in 25% of responses where the word "abandoned" had been reported).

For interviews carried out at the level of the CPA APC (communal people's assembly), interlocutors stressed that brownfield sites were a source of many management problems, especially for waste collection, and that they received a lot of complaints from residents regarding smell and proliferation of garbage. While these places are not programmed into nor considered in the city's waste collection plan (18%), for these respondents the concept of wasteland is automatically linked to waste.

13% of the interlocutors linked the fact that these spaces contain a lot of vegetation and that they deserve to be considered and invested in as green spaces or public gardens (Figure 6).

We also noted that all of the interviewed managers are aware of brownfields as a resource for nature and visits (while 12% consider further that these places are squatted), 6% of the interlocutors think that brownfields provide a refuge for a large number of associations and artists, and are considered as places for strolling and relaxation for 4% of respondents.
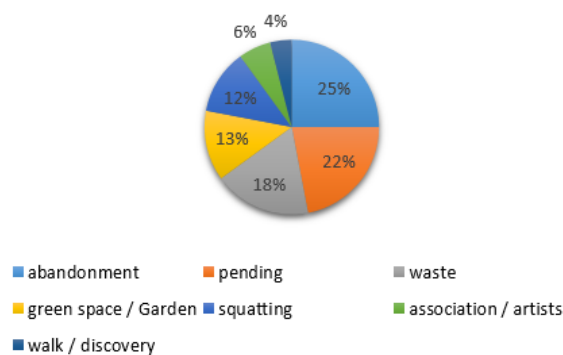

Figure 6 Managers' representations about brownfields

Regarding the evaluation of predefined criteria, managers think that brownfields represent a huge opportunity for the

city, especially for the availability of land, which is becoming increasingly scarce in the capital and all along the bay of Algiers. It is also an opportunity according to the latter to do things better (build quality projects and improve citizens' living conditions (17 out of 22 replies).

Half of the interlocutors think that the presence of brownfields constitutes a point of strength in the city (11 of 22). They justified this view by observing that a city, which has no brownfields, is "frozen and inflexible, with no chance to renew", and where their presence is even important for a city (18 of 22) (Figure 7).

Brownfields were seen as places of great natural potential by 12 out of 22 interviewees: for instance, "it is very easy to transform them into gardens or even for urban agriculture and to design community gardens".

Figure 7 Evaluation of the proposed criteria by managers

5.4 - Inhabitants' representations about brownfields
Of the 75 interviewees 60 agreed to respond, we note that the majority of the inhabitants (49%) think that the brownfields embody abandonment in the urban environment. This judgment is made mainly because of their important waking time; according to the inhabitants neither the private owners nor the state are interested or able to take care of these sites. Two other representations concern insecurity (18%) and bad attendance (13%). Whereby, according to some inhabitants, these places have become the illegal property of people who do not live in these neighborhoods, and come from afar. 11% of residents consider that brownfields are landfills, or linked to waste disposal, and very few think they are places of nature in the city, with only 6% considering them as green spaces

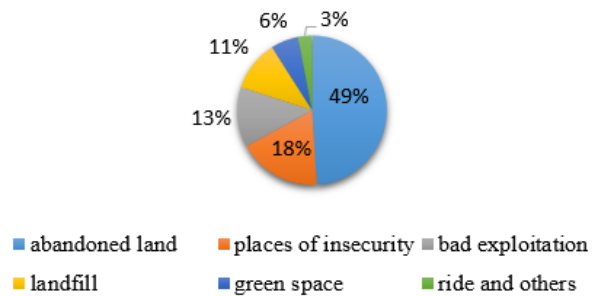or substitutes for green spaces, and 3% viewing them as places for strolling and discovery (Figure 8).

Figure 8 Inhabitants' representations about brownfield sites

The evaluation of inhabitants' representations, with values attributed as negative, neutral or positive, is presented in Figure 9. The majority of these evaluations are based on a negative judgment regarding the brownfields, with a value of (-2): most inhabitants have a negative opinion of the security aspect of these places (52 of 60). The degradation aspect also had the majority of ratings (50 of 60), with a significant number of inhabitants having a negative image of UB and considering them to be wild dumps. The empty or abandoned space in the urban environment seems to be viewed by a large number of inhabitants as a receptacle for garbage; given its immediate proximity to the neighborhood, it constitutes the place par excellence to dump waste. This proximity saves the inhabitants from journeying the long distances that separate them from statutory collection places stipulated by the city authorities. This lack of a favorable image linked to insecurity on the one hand and, degradation and poor hygiene on the other means that these places have been judged as "repellent" (by 40 out of 60 respondents) and "unimportant" (31 of 60).

For the other evaluation criteria, we received balanced representations, in particular with regard to the criterion linking urban brownfields to nature in the city (artificial-natural), where 31 out of 60 inhabitants thought there was a real potential for the presence of nature in these places. Some even viewed them as wild green spaces, where several plant species coexist, in particular in terms of urban comfort; inhabitants viewed them as airy, oxygenated spaces, even during summer heatwaves.
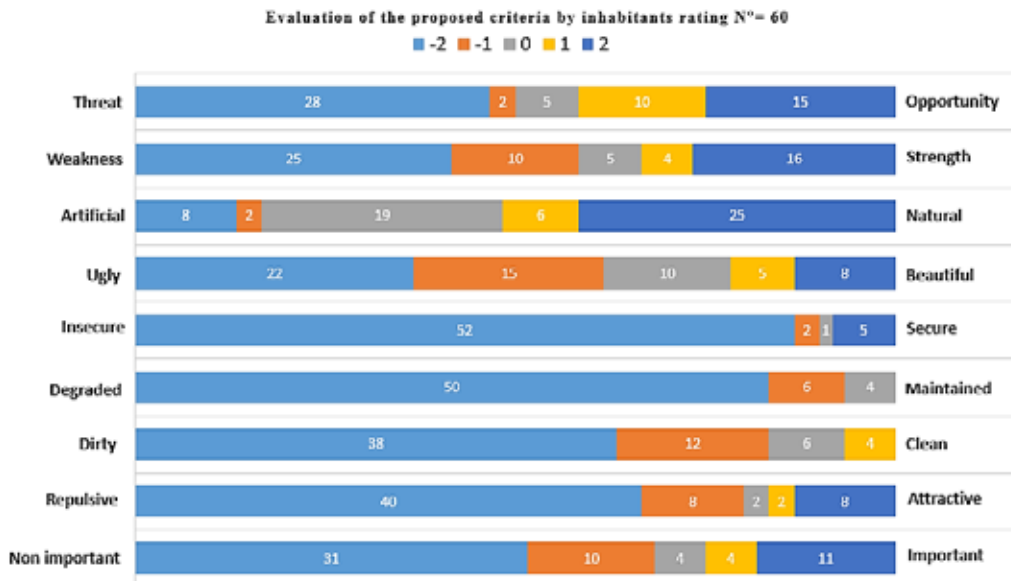
Figure 9 Evaluation of the proposed criteria by inhabitants' rating

A balanced assessment is also found at the level of the first criterion , where a large number of inhabitants consider the brownfields as opportunities for the future of their neighborhood, in particular compared to other urban projects already planned or at the planning stage.

5.4 - Users' representations about brownfields
According to our in-site observations, Respondents in the "users" category, regularly frequented brownfields. They are street artists, photographers, architects, urban planners, neighborhood associations, fine arts students and artists, squatters, and cleaning and maintenance volunteers.

Of the 40 respondents, 45% consider brownfields as places of freedom with all that the word means, referring to "neighborhoods of freedom where you can do whatever you want". 23% of users consider brownfields as places of peace, which is associated more particularly with the absence of state control. 12% consider them as shelters especially for squatters, «essakarjia», «el Hachaichia», referring to alcohol users and Hachich/marijuana smokers.

10% of users consider brownfields as places of rebellion and revolt, of disobedience and insubordination. Some even said it was their "mini-state", and they even invited us to watch Algerian censored films in one of the hangars that was transformed into a cinema. 7% think that brownfields are places of collective memory, especially that they are

part of popular neighborhoods and whose past is far from being ignored. 3% consider brownfields as a chance. "A chance to express oneself, to be free, to have large flexible spaces to host any kind of event". (Figure 10).
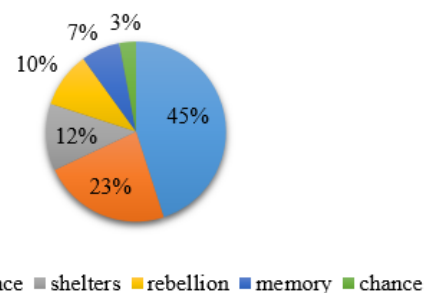

Figure 10 Users' representations about brownfields

Concerning the attribution of values to the proposed criteria (Figure 11), users had a different view on brownfields, the attribution of positive values revealed that brownfields are considered as an opportunity, they are places of strength, where nature is dominant, places where beauty is present, insecure and maintained, they are attractive and important.
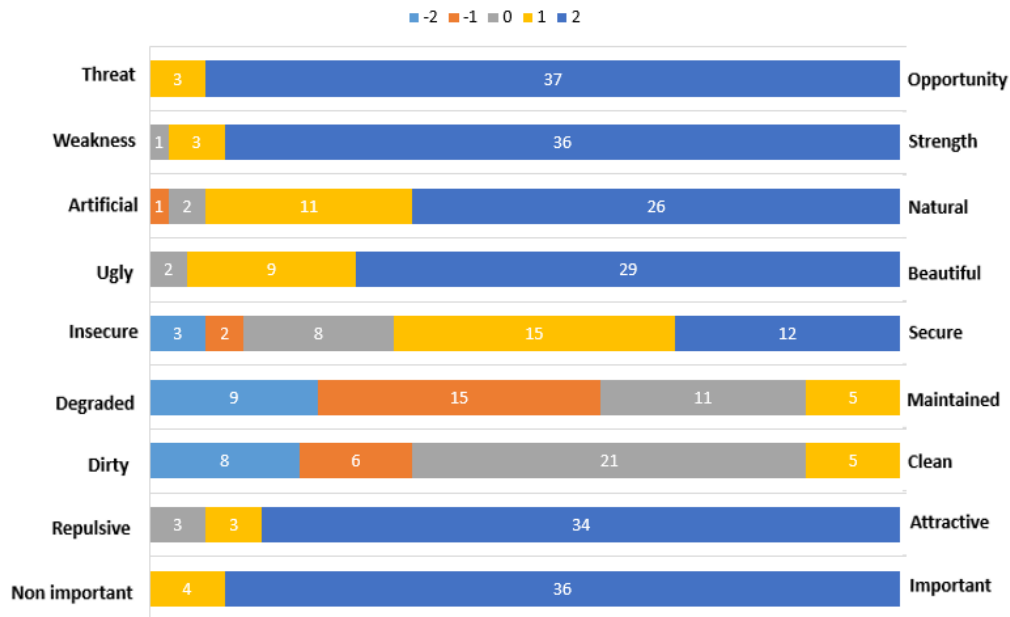
Figure 11 Evaluation of the proposed criteria by users' rating

6 - Algiers urban brownfields, thesaurus and lexicon elements

In the corpus of respondents' responses, we found the use of several epithets to represent the brownfields, sometimes insulting, sometimes praiseworthy. These representations are disparate according to the nature of the actor. Decision-makers, managers, inhabitants and users do not all have the same definition and representations about the brownfields. From a decision-making point of view, urban brownfields embody «strategic places» for the future of Algiers, thus allowing the projects included in the strategic plan of Algiers to take place on brownfields, and ensuring the duality: strategic brownfields /strategic plan. However, decision-makers were not aware of the current uses of brownfields, as they are far from the local scale and brownfields' everyday reality ,"brownfield is obviously a delicate political idea, because is it a symbol of the withdrawal of public authorities - withdrawal, not abandonment." (Gilles, 2017: 85).

Unlike decision makers, managers are confronted with the everyday reality of brownfields and their uses, they represent a great "land opportunity", which is often accompanied by a long "pending" for lack of financial means and investment, or as a result of disputes in relation to expropriation processes. The image of «waste» is also linked to brownfields because of the problems encountered in relation to their collection. Other representations of

managers who work in the field have enlightened us on the natural character of brownfields by calling them "green spaces".

From a residential point of view, the inhabitants had another part to bring to the general representation of urban brownfields; the lexicon used from the Algerian dialect was a perfect indicator of the sociology of the places. They are «mataychine» or abandoned, «yrouholhom ghir roujala» or they are frequented only by men to refer to sexual use of spaces. "zetla, bira, sex", to express that these are places where people consume cannabis, alcohol, and for sex. "Zoubiya" to describe the proliferation of garbage. Like the managers, the inhabitants think that the brownfields refer to "djenan" or green spaces.

For users and from a practice-related point of view, brownfields of Algiers are the refuge of rebellious, marginal and illegal people. Forests and marshes were the hiding places of southern slaves and a refuge for the Cajuns in America, whereas mountains were home to Cuban guerrillas and displaced Chinese intellectuals, while the cold and humid margins of northern European Russia were populated by old believers, fleeing the Tatars and what they saws as religious heresy (Hall, 2013). Brownfields are places of despair, but they also protect relics and the first delicate sprouts of something novel, a new social religion, and an innovative politics. They are places of dreams, of

Figure 12 Artistic transformation of hangars and brownfields walls (authors)

social and anti-social acts, of exploration and growth. They are places of dream, social and antisocial acts, exploration and growth. "Freedom", "rebellion", and "peace" were the main expressions used by users.

We wanted to get even closer to the users, to be able to analyze the motivations that fed their representations. In-site observations since 2016 have helped us to understand the practices of urban brownfields and their relationship with the high social needs and demand in terms of cultural

7 - Brownfields brings Algiers into the era of legal cultural-artistic squats

The standby time of the brownfields of Algiers is marked by a social and cultural permissiveness. With the absence of the owner and the state, a multiple actors coming from different horizons, and with various objectives control the place, generally belonging to civil society, their actions are characterized as «initiatives emanating from below», expressing an «opposition with major urban planning operations, public or private» (Gravaris, 2004: 281). They can be of two types: on the one hand, in the form of squats, artistic or not, they can be tolerated - through the signing of a precarious occupation agreement - or refused - by an expulsion procedure - by the owner.

According to the users, the occupation of these in escheat places is a response to the absence of other places available (lack of cultural facilities, or grouping for the artists). Brownfields are sources of inspiration for users: street art, urban dance, outdoor art workshop ... etc. Faced with this permissiveness, the population most often remains in retreat. The artistic forms proposed do not necessarily correspond to the expectations of a population often bruised by the closure of an activity site. Only incentive actions lead to the creation of relations between the users of the brownfields and the local population.

These processes of artistic and cultural reconquest «from the bottom» (bottom-up) can lead to a temporary revaluation of these abandoned places. In the territory of El Hamma/El Anassers/Ruisseau, the abandoned hangars and other empty spaces, come to life since 2016, as part of an unprecedented collaboration between artists and residents. It took place to explore the collective memory of these neighborhoods, by organizing street art performances,

film screenings, and workshops debate with the direct involvement of the inhabitants in the activities. An initiative organized by the collective "Trans-Cultural Dialogues"[4] and entitled "El Medreb"[5].

Brownfields as a remedy for the city's cultural supply deficit
The first space, a former hangar of a public transport company, called to host the future headquarters of the APC (Communal People's Assembly) of the Belouizdad district, was thus cleaned to allow many artists to make wall frescoes (Figure 12 and Figure 13), inspired by "urban stories" collected by the organisers, particularly from the local population.

The organizers of this exclusive initiative have even proposed a brownfields circuits map in this territory (Figure 14), as soon as one accesses these abandoned places, playful descriptive cards are offered at the entrance.

Other hangars were used as movie theatres (Figure 15), where several films were screened, like the second space of el Medreb, another hangar, owned by the OGEBC (National Office for the Management and Exploitation of Protected Cultural Property). So many cinematic moments reviving the memory of the cinemas of this territory (the Roxy, the Musset, etc.), now closed! In addition to film screenings, several concerts of music and workshops of urban dance, exhibition of photos, took place, thus allowing the local populations to exploit these abandoned in a purely cultural and artistic way.

This action also allowed artists and professionals to debate the place of collective memory in future urban planning projects in Algiers. They argued on this occasion for the redevelopment of brownfields and the conservation of the old built in this district; "rich in places of memory" and which has undergone many changes since the independence. These discussions took place in a hangar designed to allow meetings between civil associations, residents, and experts (Figure 16), around the different

---

4 - Trans-Cultural Dialogues is a platform that aims to promote reflection on different social issues through a multi-cultural approach and to provide sustainable and flexible mobility solutions and exchange between cultural actors, artists and researchers in the Mediterranean region.

5 - El medreb is an expression of the Algerian slang which, depending on the context and the interlocutor, is used to define both an unknown and very precise place.

Figure 13 various activities on urban brownfields; photo exhibition, music concert, and urban dance performance (authors)
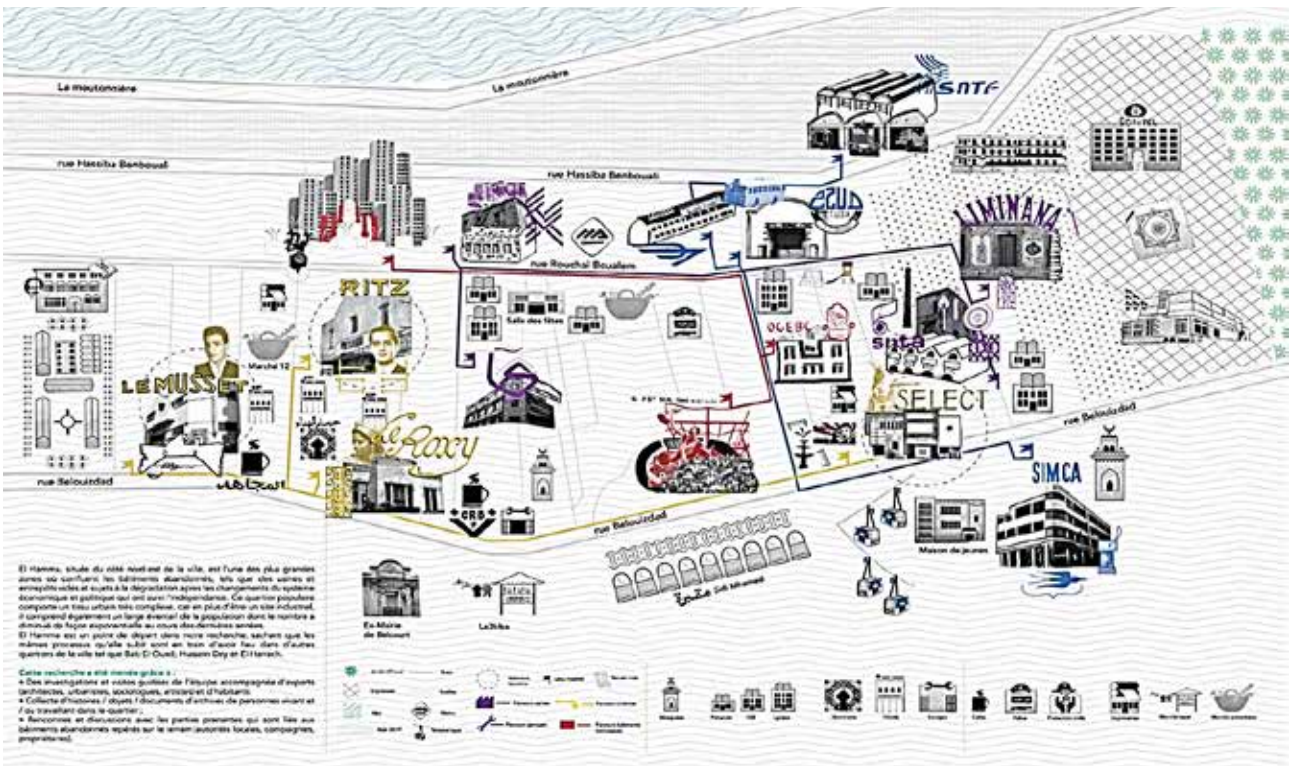

Figure 14 Orientation map, circuits and routes around urban brownfields in the territory El Hamma, El Anassers, Ruisseau (trans-cultural dialogues, 2016).

themes, and especially on the future of their neighborhood. Experts (architects, urban planners, engineers, teachers and researchers) who attended the debates felt, that local authorities should pay more attention to "sustainable development issues" and "social and human impact" in neighborhood development projects. These two dimensions, driven by the involvement of the inhabitants and the work on collective memory, were, in their opinion, neglected in relation to «the financial impact», in the previous redevelopment plans of these neighborhoods. In addition, there is a need to respond to the strong social demand for culture.

8 - Conclusion

"Identifying urban brownfields transformation requires looking at their standby time" (Andres, 2006). The temporary phase between abandonment, the voluntary or spontaneous creation of brownfields, and the redevelopment project, can help to better define the characteristics of the latter. It is also an opportunity to achieve a closer insight into the temporary uses of these places, to understand their nature and to be able to analyze and study the multiple representations of their users.

The interest of the brownfields of Algiers lies in the fact that they are by no means empty spaces. Multiple temporalities characterize them according to three successive phases. The appearance of the brownfield, a phenomenon linked to its economic, social and urban contexts, places 'available' land at the heart of the concerns of two actors: the municipality and the owner. A standby period ensues, which is a privileged phase for events by players from civil society: artists, cultural actors, small traders, whose interests are predominant in the final mutation phase. This last phase reveals the respective strategies of actors and, their exchanges over time, in order to reach a consensus and to concretize it spatially.

The analysis of the representations around urban brownfields of Algiers revealed that the latter are disparate. With regard to the definition of brownfield, we can note that the representation of abandoned lands by the inhabitants is relatively close to the characteristics stated by the managers, with the existence of contrasting points of view. They are mostly represented as unmanned, vegetated and associated with waste. The characters "temporary and abandoned " also make consensus in the description of

brownfields, for both managers and residents.

However, these brownfields are at the heart of the conflict of interest/need, between the interest of decision-makers to impose large tertiary facilities as part of the strategy to modernize the city of Algiers by 2030. Considering brownfields as room for manoeuvre for a compact city and represent a strong potential for densification and construction of the city on itself in the dynamics of modernization, excluding any local participatory initiative. This exclusion generated a feeling of revolt and rebellion among the users who conquered brownfields and found in them protective shelters, and theatres of freedom of expression to communicate the strong demand and need for culture and art.

The study of the artistic investment of brownfields of Algiers revealed that these places are dominated by use, They remain largely afunctional economically and, therefore, offer a wide range of uses. The many informal experiences we have observed show different temporalities. The result is a wide variety of degrees of acceptance and recognition. Admittedly, some informal actors manage to maintain their presence. Consequently, the ability of these alternative places to take control and manifest is intimately linked to the turbulence caused by the standby time necessary for their appearance and which they must overcome.

References

▪   Andres, L., 2006. Temps de veille de la friche urbaine et diversité des processus d'appropriation : la Belle de Mai (Marseille) et le Flon (Lausanne) , Géocarrefour. doi: 10.4000/geocarrefour.1905.

▪   Andres, L., Bochet, B., 2010. Ville durable, ville mutable : quelle convergence en France et en Suisse ? , Revue d'Économie Régionale & Urbaine. doi: 10.3917/reru.104.0729.

▪   Bochet, B., 2006. Métropolisation, morphologie urbaine et développement durable. Transformations urbaines et régulation de l'étalement : le cas de l'agglomération lausannoise , thèse de Doctorat sous la direction du professeur A. Da cunha, Faculté des Géosciences et de l'Environnement de l'Université de Lausanne, Lausanne.

▪   Barr, J., 1969. Derelict Britain. Harmondsworth: Penguin Books.

Figure 15 Film screening in the hangar of the OGEBC, as an alternative to the lack of movie theatres (authors)

Figure 16 meetings between residents and experts on the future of neighborhoods in the territory El Hamma, El Anassers, Ruisseau (authors)

- Boudjadja, R., 2014. the environmental dimension in the urban regeneration Project of Bardo neighborhhod in Constantine. Magister thesis under the direction of Professor Chabbi chemrouk-Naima. EPAU: Polytechnic School of Architecture and Urbanism of Algiers. 259 p

- Boudjadja, R., Sassi-Boudemegh, S., 2020. Efficacité environnementale de la politique et du droit urbains dans un projet de reconquête d'une friche urbaine à Constantine, Journal of Politic and Law Volume: 12 / N°: 02 (2020), p.p. 160-179

- Berbar, A., 2009. Renouvellement urbain à Alger, le cas El Hamma (Algérie). EPLF.

- Bennai, M., 2007. The process of intervention in old neighborhoods in Algiers: Approach, Framework for Action. magister thesis under the direction of Chabou Mariam, Polytechnic School of Architecture and Planning, Algiers, 2010, P. 158

- Bosch, M., Chenal, J., Joost, S., 2019. Addressing Urban Sprawl from the Complexity Sciences, Urban Science. doi: 10.3390/urbansci3020060.

- Chabou-Othmani, M., 2015. Sustainable urban requalification in Algiers as a way to recover deteriorated areas , EPAU, Polytechnic School of Architecture and Urbanism, Algeria. WIT Transactions on Ecology and The Environment, Vol 193, 2015

- Dupras, J., 2016. The impacts of urban sprawl on ecological connectivity in the Montreal Metropolitan Region', Environmental Science and Policy. doi: 10.1016/j.envsci.2016.01.005.

- Doron, G., 2000. The dead zone & the architecture of transgression, CITY, analysis of urbantrends, culture, theory, policy, action, vol 4, no 2, pp 247-64

- Delachaux, F., 2010. Wastelands, renewal issues. Magazine survey environment. No: 1688. P.26.

- Djelal, N., 2005. Morphologie urbaine et développement urbain durable : cas d'Alger.

- European Commission., 2020. A Strategy for Smart, Sustainable and Inclusive Growth; European Commission: Brussels, Belgium, 2010.

- European Commission., 2007. LEIPZIG CHARTER on Sustainable European Cities, Europe

- Farley, P., Roberts M.S., 2011. Edgelands: Journeys into England's true wilderness .London: Jonathan Cape.

- Fouchier, V., 1995. La densification : une comparaison internationale entre politiques contrastées. Éclairage du schéma directeur francilien par des exemples étrangers', Les Annales de la recherche urbaine. doi: 10.3406/aru.1995.1881.

- Fenneteau, H., 2015. l'enquête : entretien et questionnaire, 3eme édition, dunod, 2015, isbn 978-2-10-072234-1

- Gilles, C., 2017. le jardin en movement , Broché : 312 pages, Editeur : Sens Tonka; **Édition :** 6e édition revue et corrigée (10 février 2017)

- Génot, J.C., Schnitzler, A., 2013. La France des friches, La France des friches. doi: 10.3917/quae.schni.2012.01.

- Gravari-barbas, M., 2004. Les friches culturelles : jeux d'acteurs et inscription spatial d'un anti-équipement culturel, in SIINO C., LAUMIERE F., LERICHE F., Métropolisation et grands équipements structurants, Toulouse, Presses universitaires du Mirail, p. 277-300.

- Grésillon, B., 2010. Les « friches culturelles » et la ville : une nouvelle donne ? Dans L'Observatoire 2010/1 (N° 36), pages 50 à 53

- Hall, C.M., 2013 . The Ecological and Environmental Significance of Urban Wastelands and Drosscapes. In book: Organising waste in the city

- Hocine, M., Bryant ,C.S., 2013 . Alger : étalement urbain et défis d'une planification innovante à l'horizon 2029. Revue Alhikma des Études Environnementales et Géographiques Vol. 2013, no. 1, pp.3-22

- Jenks, M., Burton E., Williams, K., 1996. The compact city : a sustainable form, Spon Press Londres.

- Lynch, K., 1990. Wasting away, M. Southworth, ed. San Francisco: SierraClub Books.

- Pragya, N., Sharma N., Devnekar A.E., 2017. Estimation of carbon emissions/savings incurred by wasteland and abandoned cropland-conversion from plantation of biofuel producing perennial tree species - Case study of India', Global Ecology and Conservation. doi: 10.1016/j.gecco.2017.06.002.

- Schenkel W., 2015. Regeneration Strategies in Shrinking Urban Neighbourhoods—Dimensions of Interventions in Theory and Practice, European Planning Studies. doi: 10.1080/09654313.2013.820089.

- Streck, C., Keenlyside, P., Von Unger, M., 2016. The Paris agreement: A new beginning, Journal for European Environmental and Planning Law. doi: 10.1163/18760104-01301002.

▪   Srir, M., 2017. waterfront algérois : enjeux de reconquête d'un espace public métropolitain , Urbia ,Numéro 20, juillet 2017 (51-65)

▪   United   Nations   .,   2017.   Global   indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. A/RES/71/313 E/CN.3/2018/2, Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development.

▪   Winston, N., 2009. Urban regeneration for sustainable   development: The   role   of   sustainable housing?,   European   Planning   Studies.   doi: 10.1080/09654310903322306.

▪   Wilson,   B.,   Chakraborty   A.,   2013.   The environmental impacts of sprawl: Emergent themes from the past decade of planning research, Sustainability (Switzerland). doi: 10.3390/su5083302.

▪   Wang, J., 2019. Quantifying Urban Sprawl and Its Driving Forces in China, *Discrete Dynamics in Nature and Society*. doi: 10.1155/2019/2606950.