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## Urban Renewal in Constantine between Strengthening of Local Identity and Metropolitan Standardization Case of Public Spaces in the Urban Sector SIDI RACHED

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### Abstract

Urban renewal in Constantine guided by the Constantine metropolis modernization project aims to strengthen its status as a metropolis dominating eastern Algeria; through giving it the necessary attributes to establish the status of a metropolis while trying to preserve its local identity. This inevitably involves work on public spaces. The ultimate goal of this study is to analyse the unique identity of these public spaces through their components elements and attributes while focusing on urban furniture and urban vegetation cover based on BENTELEY & Al's approach as well as that of BY DESIGN, the comparison with that of the international standards of a metropolis will allow us to identify the contrast existing between local identity and foreign metropolitan attributes.

**Keywords:** Constantine; urban identity; urban public space; urban renewal.

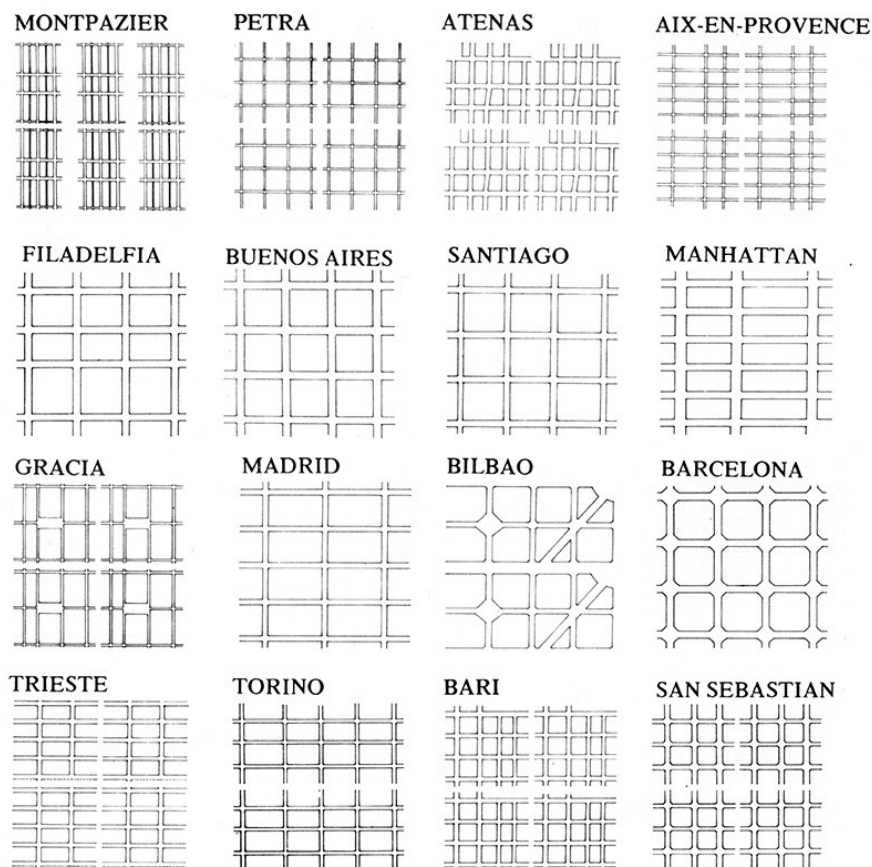
### 1. Introduction

The city is made up of emptiness and fullness in concrete terms of space, the first to conceive is it the empty first or the full? Should we think about them at the same time?

Public urban spaces most often represent these empty spaces. In the majority of urban factories, they are the residual and are reflected downstream from the design of the full. But since the revolution of the project and of urban design, it constitutes a subject of primary reflection and thus becomes part of the lover's reflection. In this course, we will deal with the notion of public urban space, public urban spaces, their characteristics and accessibility as basic elements of these spaces.

"Today, the quality and success of a project depend on the quality of the outdoor spaces it defines: streets, sidewalks, forecourts, local parks, public places, public transport stops, etc." (Rivard, Marchand, Lavoie, & Drouin Chartier, 2012). Public space are these empty spaces of the city (not built) which are left for common use and which are public property not necessarily land but rather in relation to use and belonging to the community revising a right in the city, it is then street, boulevard, square, courtyard, avenue, alley, mall, dead end, passage, stairs, square, esplanade, garden, quay, promenade, park, path, alley, bridge, ... This concept from the English "public realm" is at the heart of urban design but also the fundamental element of the city which by definition means living together and shared. Their interest in public spaces is then a creation of social links in it. The increased interest in this notion lies in the desire to return to the city and the search for urbanity which, in previous decades was problematic with industrialization and mass urbanization, of quantity and the appearance of great together. This desire to find the city began in 1966 after the publication of Aldo Rossi's book "The Architecture of the City".

So we ask ourselves the question of the making of these spaces? by what tools and by what reflection? "The creation of public space involves the creation of the urban forms that contain it; these are effectively implemented by a tool that is increasingly used: the urban project" (Hofstetter, 2006, P 27). Thus, the figure-background (historically in the form of a grid) is most often at the origin of public spaces.



**Figure 1.** Collection of historic framework villages of the network (Source: Manuel de Sola Morales, 1977 (Garcia Barba, 2013)).

Massive urbanization and contemporary urbanism have overturned the logic of the design of the city which started from the urban space towards the public space and not the other way around. The well-thought-out and established grid has given way to completely open islands, seeing the disappearance of the island, giving way to towers and bars without reflection of the public space in the logic of large complexes. The return to urban architecture is a simple return to the city and the search for personality and identity of the public space and not a residue of logic starting from the private space to the outside. We then witness the return to the grid and the block using the urban composition, the urban project and the urban design.

In his article "Urban design, urban project, urban art, urban composition... a question of vocabulary? Daniel Pinson explains the difference between these concepts and defines them. Thus, the urban project, urban art and urban composition are synonyms of urban design (Pinson, 2014).

The birth of urban design or urban architecture goes back to the 1950s with Jose Lluís Sert who started a course in "urban design" at the Graduate School of Design at Harvard. Thus, this concept "Less vague than the term town planning, less restrictive than the term of urban composition, ... is interesting for" designating "both the content of the project and its formalization" (Ibid.). Thus, urban design is both the process of designing the city by seeking an orientation to urban growth, to vocation but also to its development. It is also "... the art of creating spaces for people" (Commission for Architecture and the Built Environment, 2000).

It is then the interface between architecture, landscape and town planning, in fact, Kevin Lynch considers urban design as a branch of architecture while Michael Southworth considers it as a branch of town planning ... it is clear then that no consensus has been established except for a clear definition and the limits of intervention of urban design, but the sure consensus is that it is essentially about the architecture of public space even if it also deals with the density, human scale and pedestrianization.

This concept of public space varies in meaning depending on the context, in fact, the presence of public spaces is an indicator of the richness of urban life, however, what is more important is their appropriation and their creation but also the place that they occupy in the city manufacturing system and urban planning system. It is important to focus on the cultural and traditional differences that impact the very use and appropriation of these spaces. Like Algeria. Public spaces in Algeria are impacted, like many countries, by the desire to keep a historical and cultural link with the past but also the desire to modernize and keep up with the times by adapting to the modern and modernized

needs of the population. and residents. A certain stratification is to be noted when it comes to the creation of public spaces. What is glaring about this fabrication, however, is the minimal importance given to these spaces. Indeed, in a planning that has spanned decades aimed at quantity rather than quality, the emphasis has been placed on housing, habitat and the cell. The exterior (public) spaces were of minimal importance. The colonial heritage today constitutes the major part of so-called public spaces, and in new towns and / or new urbanization, public spaces are almost non-existent, and if they exist, lack of appropriation and good use. Urban design is therefore totally absent in the current Algerian context.

In an attempt to raise awareness, the creation and search for public space appears in the logic of the integration of the urban project as a mode of creation and development of the Algerian city. This urban project approach presents a new area for the country, however, it has remained in an embryonic state. Only a few projects which relate to the modernization of metropolises and which are attached to major infrastructures can be the translation. Thus, the eastern Algerian metropolis "Constantine" has benefited from an approach similar to that of the urban project (MOUHOUBI, 2017). The Constantine metropolis modernization project involving urban renewal actions then focused on public spaces within the city and renewal and modernization work was carried out.

This work, which is of great value for the metropolis, is based on actions that do not fully fall under urban design. This is how the objective of this research is to analyse one of these spaces renewed within the framework of this project by focusing on the principle of character using the methods of Bently and Al as well as the By Design approach. The outcome of this work will allow the distinction between the different elements of character based on street furniture and vegetation and the evaluation of this principle.

## 2. Background

### 1.1 Public spaces and their dimensions

Public spaces are very complex urban elements to design. They obeyed the rules of use, function, aesthetics and identity. It is therefore important to dwell on the dimensions of these spaces in order to better understand their optimal design.

According to Carmona et al. (2003), there are six dimensions of public space (morphology, perception, visual, social, functional and temporal). We will briefly present them here in order to understand the complexity of these spaces.

#### a. The morphological dimension

It is about the morphology of urban space, namely its shape and organization. As we have already specified in previous lessons, the logic of the block having disappeared, the urban space is defined by the assembly of individual objects so that the block has exploded or even disappeared

#### b. The dimension of perception

The dimension of perception refers to the image received by using the senses and specifically the visual. Indeed, this perception allows the creation of mental maps that facilitate movement, orientation and displacement.

#### c. The visual dimension

The appreciation of space is primarily not the visual, so it is important to have visual comfort. Five attributes for a valued environment have been identified by Jack (Kettaf, 2019):

- The presence of nature
- Interview / civility
- The opening / defined space
- Significance and historical content
- Order: in terms of organization, consistency, readability, clarity

He then insisted on rhythm, continuity, balance and proportions in the facades in order to create a harmony that can respond to this visual comfort.

The elements that can promote this dimension are:

- Urban furniture

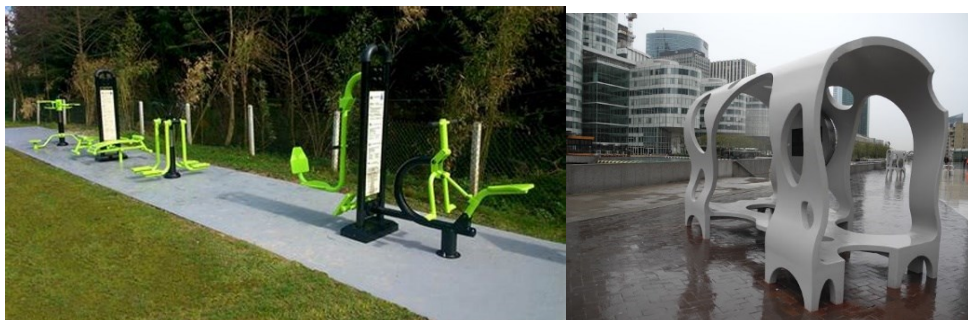


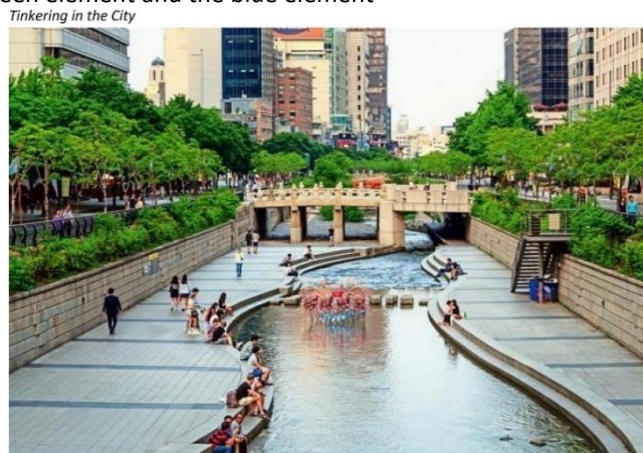
Figure 2. La Défense district in Paris (URL 1)

- Floor drawings floor scape



**Figure 3.** Floorscape in Alicante (URL 2)

- The presence of the green element and the blue element



**Figure 4.** The Cheonggyecheon River after massive reconstruction and the removal of a highway in Seoul (source: Elmqvist, 2018)

#### **d. The social dimension**

Even in public spaces, the needs of the individual socially should be considered. These needs are defined and prioritized by Maslow (1968, in: Carmona et al., 2003 In (Kettaf, 2019)):

- Physiological needs: warmth and comfort,
- Safety and security needs,
- Membership needs,
- Self-actualization needs

These needs are then realized in urban spaces in a formal way (formal urban spaces) but also in an informal way (spaces and informal appropriation). The study of informal spaces provides more information on the needs of society but also on its character and culture.

#### **e. The functional dimension**

The functional dimension focuses on displacement, connection, movement and even animation in public space. Thus, the route network and the accessibility and permeability of the space are important.

This dimension is also linked to the delimitation of space and its readability. The limits of space are important to understand it better.

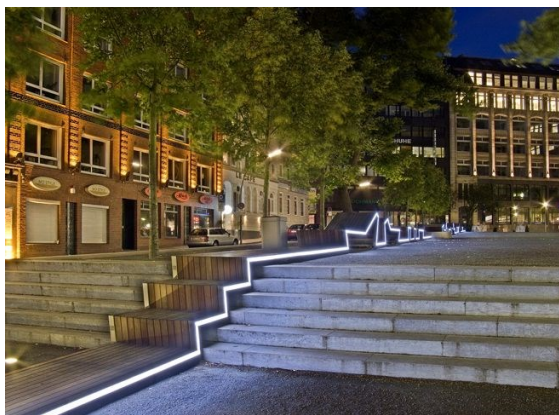
But in this most important dimension and activity, the relationship between space and activity must be taken into consideration in order to create harmony and synergy.

#### **f. The time dimension**

In public spaces it is essential to adapt to the short and seasonal time (Day / Night) and also the seasons of the year by creating spaces with temporal flexibility and which adapt to:

- ✓ Physical conditions (light, cold, heat, etc.): by creating suitable fittings and furniture

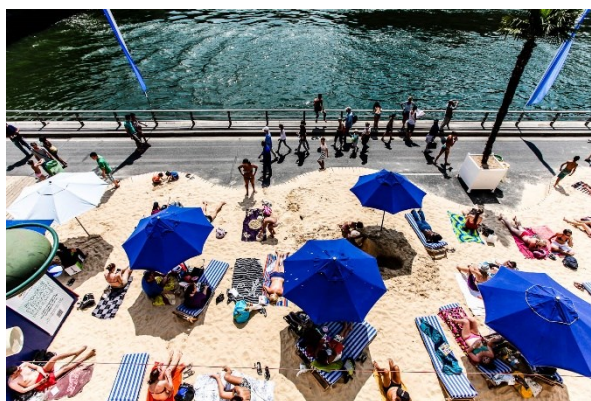




**Figure 5.** example of the layout of spaces answering the night / day question (urban planning in Sydney) (URL-3)  
✓ Physical conditions (light, cold, heat, etc.): by creating suitable fittings and furniture



**Figure 6.** example of layout of spaces answering the question of heat (Makkah parasols) (URL-4)



**Figure 7.** example of the layout of spaces answering the question of the seasons (Paris beach) (URL-5)

- ✓ Societal conditions (parties, event, celebration, etc.): and this by making the space a flexible and adaptable space for these occasions.
- ✓ This running temporality can also linger on the very history of the space and in order to highlight its attribute of character and personalization.

Considering public space as an entire apartment space and treating it in a miserable way by integrating all the attributes necessary to create it is one of the priorities of urban architecture. Among the public spaces most answered and sometimes neglected, especially in the Algerian case, is the street. This carries within it the premises for the success of social life. Because if we succeed in the street we succeed in the public domain. What then of the making of these spaces in Algeria?

#### 1.2 Urban Design repositories

Several references, guides, manuals and standards on urban design were developed, the precursors in these repositories are (MAZOUZ, 2020)

- Kevin Lynch (1991): with these five principles dealing with the sensitive dimension of design, namely vitality, meaning, adjustment, access and control;

- Appleyard & Jacobs (1987): dealing with streets and livable neighborhoods, integrated activities and the enclosure;
- Bently & Al (1985/1990): which defined seven attributes (reduced to 5 in 1990 following the advent of sustainable development) and which are permeability, variety, readability, robustness, resilience, customization and visual fit and richness;
- By Design (2000): character, continuity, enclosure, quality of the public domain, ease of movement, legibility, adaptability and diversity;
- And many other repositories ...

Below is the combination made by the urban design compendium of these repositories with their explanation:



**Table 1.** Aspects, objectives and theories of urban design (Llewelyn-Davies, 2013, p13)

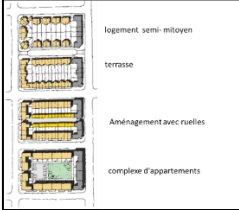


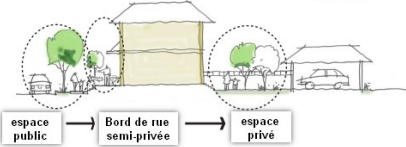
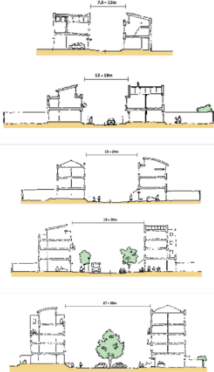


UDC Key aspects of urban design	By Design Principles of urban design	Princes Foundation Design and theory principles	Responsive Environments	PP51 Principles of good design
Places for people	Quality of the public realm	Make Places	Robustness	create an environment where everyone can access and benefit from the full range of opportunities available to members of society
	Continuity and Enclosure			
Enrich the existing	Character	Build beautifully	Visual appropriateness	be integrated into the existing urban form and the natural and built environments
			Richness	
Make connections	Ease of Movement	Allow movement logically and legibly	Permeability	be integrated into the existing urban form and the natural and built environments
	Legibility		Legibility	address the connections between people and places by considering the needs of people to access jobs and key services
Work with the landscape		Design using natural harmonics		consider the direct and indirect impacts on the natural environment.
Mix uses and form	Diversity	Engender social interaction	Variety	address the connections between people and places by considering the needs of people to access jobs and key services
Manage the investment		Sustain land value		
Design for change	Adaptability		Personalisation	create an environment where everyone can access and benefit from the full range of opportunities available to members of society


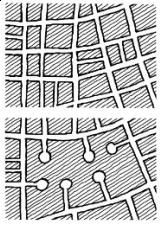
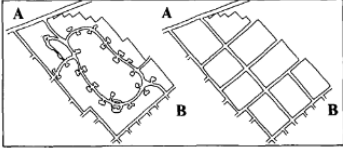

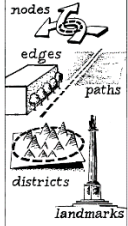

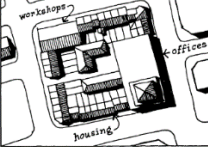

These objectives can be detailed and broken down into principles and can be evaluated using analytical tools as expressed below (author according to (Commission for Architecture and the Built Environment, 2000), (Bently, Alcock, Murrain, McGlynn, & Smith, 1985), (INDB, 2008) ...):

Table 2 principles and objectives of urban design (according to Commission for Architecture and the Built Environment, 2000).

**Table 2.** The identity criterion (character) and its importance

Principle	objectives	Illustration and explanations
<b>Character</b> <i>A place with its own identity</i>	To promote the character and identity of places by responding to and strengthening local particularities, models of development, landscape and culture.	 <p>Skylines are susceptible to being obscured by tall buildings in front of existing buildings or having their silhouette marred by tall buildings behind them (Ibid.).</p>  <p>Create a clearly defined urban border (Ibid.)</p>

<p><b>Continuity and enclosure</b>  <i>A place where public and private spaces are clearly distinguished</i></p>	<p>Promote the continuity of street facades and the enclosure of the space through development that clearly defines private and public spaces.</p>	 <p>Perimeter blocks can operate at any scale (Ibid.)</p>  <p>Alignment with the street and use of individual entrances, articulated and recognizable at street level (INDB, 2008)</p>  <p>Terraces of modern townhouses (INDB, 2008)</p>  <p>From public space to private space (INDB, 2008, traduction auteur)</p>  <p>The scale of buildings should relate to the width of the street (Commission for Architecture and the Built Environment, 2000)</p>
<p><b>Quality of the public realm</b>  <i>A place with attractive and successful outdoor spaces</i></p>	<p>Promote public spaces and routes that are attractive, safe, uncluttered and work effectively for all in society, including people with disabilities and the elderly.</p>	 <p>Victoria Square, Birmingham: successfully redone as a civic and pedestrian center (Ibid.).</p>  <p>Meeting accessibility standards can inspire creative solutions (Ibid.)</p>

		 <p>The experience of the public realm is enriched by details (Ibid.)</p>
<p><b>Ease of movement (Permeability)</b>  <i>A place that is easy to access and move around</i></p>	<p>Promote accessibility and local permeability by creating places that connect to each other and are easy to move, putting people before traffic and integrating land use and transport.</p>	 <p>The top grid offers more permeability than the bottom grid (Bently et Al, 1985)</p>  <p>Small blocks promote permeability by offering more choice of routes (Bently et Al, 1985)</p>  <p>Public transport as an integral part of the road (Commission for Architecture and the Built Environment, 2000)</p>
<p><b>Legibility</b>  A place that has a clear image and is easy to understand</p>	<p>Promote Legibility through development that provides routes, intersections and landmarks to help people find their way.</p>	 <p>The elements of legibility (Bently, et Al, 1985)</p>
<p><b>Adaptability</b>  A place that can change easily</p>	<p>Promote adaptability through development that can respond to changes in social, technological and economic conditions.</p>	 <p>The adaptable form of this former commercial building allowed it to be converted into housing when the market changed. (Ibid.)</p>
<p><b>Diversity (variety)</b>  A place with variety and choice</p>	<p>Promote diversity and choice through a mix of compatible developments and uses that work together to create viable places that meet local needs.</p>	 <p>Diversity according to Bentley &amp; Al (Bently et Al, 1985)</p>  <p>Mixed uses in a building (above) and on a street (Ibid.)</p>



		 <p>The North Laines of Brighton offers a mix of shops, work spaces, residential development, cafes and theaters. (Llewelyn-Davies, 2013)</p>  <p>Birmingham's Brindleyplace is a major mixed-use commercial development (Ibid.)</p>
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The objective of this principle in urban design is to promote the character and identity of places by responding to and reinforcing the specific local models of development, landscape and culture.

It is important to take into account the shape (layout and volume) and the natural character of the land and / or site during a new development in order to maintain a sense of belonging and integration to the site.

The integration of a new development into its landscaped environment - using the planting of structures, shelter belts, green corners and green corridors - reduces its impact on nature and reinforces the local distinctiveness and maintains the continuity of urban form and landscape.

Responding to the existing layout of buildings, streets and spaces ensures that adjacent buildings are linked to each other, streets are connected and spaces complement each other and ensure the continuity of the built fabric.

Integrating into the forms, details of local buildings and layout patterns in the detailed layout helps to strengthen the sense of belonging.

The use of local materials (texture and color), construction methods, details and distinctive elements is a major factor in reinforcing the local distinctiveness.

The scale, mass and height of the proposed development must be considered in relation to those of adjacent buildings; topography; the general scheme of heights in the area; and views, panoramas and landmarks. This does not exclude a certain variety reflecting special circumstances.

### 3. Presentation of the Case Study

The BENNACER public garden, located in the city centre, formerly called Djnane El Mokantiya (garden of the rich) is located in downtown Constantine, along Avenue Ben-Boulaid in the urban sector of Sidi Rached.



Figure 8. Bennacer public garden location (source : BENHASSINE TOUAM et LABII, 2009)

### 4. Method and Data Collection

In order to analyse the criterion of identity in the public space of Sidi Rached in Constantine, we carried out an urban analysis focusing on the following elements:

- Presence of green and blue
- The opening / defined space
- Significance and historical content
- Urban furniture
- Diversity of use

This analysis was carried out through on-site observation.

## 5 Results and Discussions

After analyzing the identity criteria in the Bennacer public garden based on the criteria chosen, the results and discussions are as follows:

### 5.1. The Blue and Green Element

In the study case, the presence of the blue element and the green element is very distinct. The water is present thanks to a central fountain occupying a strategic place and visible from all points of the garden. The presence of a source of drinking water also creates a kind of connection between the city and nature through the use of water. For the greenery, the diversity of the flora is very apparent. Indeed, between small and large plantations but also with permanent leaves allowing the creation of shade

Thus, the combination of blue and green creates a rich and diverse frame that plays a role in the microclimate of the garden and makes it very pleasant.

### 5.2. The Opening /Defined Space

The spaces in the public garden of Bennacer are clearly defined. Indeed, readability is a well-respected principle. This delimitation is made concrete by using a fence but also plantations



Figure 9. Photos of vegetal boundaries and fence (URL-6)

### 5.3. Significance and Historical Content

In the public garden of Bennacer no element of cultural or historical significance, the standardization of elements and spaces is very apparent.

### 5.4. Urban Furniture

Urban supplies are very standard; they have no specific character reflecting the very character of the city, its history or where it belongs.



Figure 10. standard urban furniture (URL-7)

### 5.5. Diversity of Use

The diversity of use and the mix of spaces are very limited. The woman finds herself completely excluded from space.



**Figure 11.** Diversity of use (source: Fergani, Moumene (2018), P. 36)

### 6. Conclusions

From the perspective of the analysis of public space in Square Benacer, it is constant that the principle of character has not been taken into consideration during the redevelopment periods of this space.

Modernization and the search for integration with the times mean that urban design in Constantine and by generalization in Algerian cities completely omits this very important principle.

The Principle of character which gives a sense of belonging to the citizen is to be taken into account during the redevelopment and urban design that the authorities are planning for the city of Constantine and even in other Algerian cities.

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### Conflict of Interests

The Authors declare no conflict of interest.

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