Batna City from Organized Planning to Distortion
(Case Study Biskra Road Axis - Algeria)

Khireddine Dounia
Aichour Boudjemaa

Department of Architecture, Faculty of Architecture, University of BATNA01, Laboratoire D'Architecture d'Urbanisme et du Transport (LAUTr), BATNA, Algeria

DOI: https://doi.org/10.36941/mjss-2022-0008

Abstract

The ecological processes known to the various manifestations of visual pollution, which is defined as: every element of the physical environment is affected by changes or interventions made by man to the natural and constructed environment, which leads to its distortion and harms the public health of citizens. In order to understand its reasons for reaching a balanced urban scene and thus affecting human health. Where its features appear in various visual and visual aspects of public space, especially roads, due to the misuse of this space, which stems from wrong behaviors in addition to the lack of the planning system, which leads to emptying the architectural image of the city of its content.

Keywords: Visual Pollution, Urban Landscape, the city of BATNA, urban roads, Biskra Road

1. Introduction

The city is witnessing a remarkable development due to technological advances, which complicated its problems and accelerated the pace of urbanization, and became the scene of many complex environmental problems.

The main driver of growth and urbanization is the urban concentration resulting from industrial activity and services in the cities, where the city plays the biggest attractive role of the population that is looking to take advantage of these services and improve their standard of living, which has further complicated the social and field problems that have become the hallmark of many cities today. With contrasting and highly differentiated images in its various urban sectors and tissues, not to mention the public space and all its components, from the sidewalk to the street to the square and the junction of roads ..... Etc.

Urban roads, in all their urban and architectural dimensions, have become a dead image that only increases aversion and beauty instead of beauty, especially in the arteries of unplanned urban tissues. The city has become a source of pollution in its various forms, and its landscape is threatened in many aspects, especially with regard to the visual aspect, which raises many questions about the feasibility of its layouts and designs.
2. Pollution: Concept, Causes and Repercussions

2.1 Comprehensive vision of visual pollution

Visual pollution is an unaesthetic environmental experience, perhaps ugly and abnormal in formal terms, and the human failure to change or address ugly appearances or merely a sense of contradictions, resulting in the loss of aesthetic sense towards the surrounding environment.

And then what makes you see ugliness and manifestations of pollution without moving anything in his senses his time sees and does not see because of his loss of motivation towards the sense of the beauty of the environment, it is a term called the elements of the unattractive visual elements, namely landscape, or anything else that the person wants to look at (Nadj Ibrahim, 1997, p. 38), visual pollution is a changing value of the environment based on the cultural background of the viewer and society. These human-made works are usually the result of neglect or misuse in addition to poor planning and design, as well as the poor social and economic behaviors have a big role in making works that hurt the beholder from watching them and lose the sense of aesthetic values of the elements of the physical environment that do not fit with the natural, climatic or functional environment as well as with the cultural and aesthetic values. (Rashwan Hussein Abdul Hamid Ahmed, 1997, p. 80)

The two professors: Samir and Said show that visual pollution is the unwanted transformations of an element of the middle in the elements of the urban environment such as: buildings, voids and roads, which affects the imbalance of the natural atmosphere of air and functional or with cultural and educational values where the values of beauty.

2.2 Sources of visual pollution

Its sources are closely related to its causes and causes, and based on the various literatures and researches that have related to this concept and its different interests, we can divide these sources into three elements, summarized as follows:

Self-pollution, which, as its name implies, is self-sourced, where the architectural or urban element, through its bad design, which does not take into account its surroundings, turns its back on all the harmony and harmony to be available in it, and turns a blind eye to the values of art, beauty and good taste, this element is in itself a source of pollution, and causes aversion and starch to his vision. (M.F. Bin Sheikh Al-Hussein, 1999)

2.3 Visual contamination

The danger of visual pollution lies primarily in its association with the visual and aesthetic issue where it can be monitored in the public spaces of the streets and roads and its various special components: from green spaces and urban installations of lighting poles, comfort and garbage equipment, as well as paintings and signs, which suffer from the loss of beauty this image that has become the visual scale of the city and has become known as tamimi legally exists (D. Kamel Mahdi 2004, P.57)

The sources of visual pollution and its manifestations can be monitored in the streets, roads and neighborhoods of the city through some structural aspects:

a. The contrast of the forms of constructions between the old and the modern in one location, and the emergence of the difference of techniques and building materials between one origin and another leads to a clear schism in the design harmony of them, since the tremendous and rapid development of building materials, especially the materials used in covering the facades of buildings such as glass, aluminum and other finishing materials, led to the variation in the form of the structures even if the time difference between the end of the establishment is simple.
b. The roots of the material cost in determining the materials where other materials are preferred less expensive and beautiful may distort the building.

c. Implementation of the facades of the building contrary to the facades that have been adopted by the municipality, the architect provided the designer with the project perspective for the main interface for example for adoption by the municipality, but when implementing the owner implements a façade completely contrary, for what was relied upon either in form or colors without study, which distorts the building and affects the surrounding buildings.

d. The absence of the distinctive architectural character of the city, which leads to the loss of a sense of unity and shared values between buildings, as the character is the result of the features of the external formation prevailing in a place so that it is given a unified personality that distinguishes it from other buildings.

All these factors indicate a lack of awareness, a lack of cultural level, and the absence of laws on the architectural and urban environment. (Idlibi Yamen, May 2008, p. 80)

2.4 The causes of visual pollution: one of the most important causes of visible pollution of the environment

Economic reasons: the lack of material resources for the State, which has led to environmental degradation and neglect of hygiene

And beautify the places except with the cosmetic elements that distort the buildings under the name of beautifying public squares through fountains

And statues and paint the facades of buildings and street bulldozers when official visits and resort to different solutions

To treat problems in a visually contaminated surface.

Environmental reasons: negligence lies in protecting the environment, maintaining hygiene and the inactivity of encroachments and working

Polluting the environment healthily and visually.

Urban reasons: It lies in the persistence and insistence on distorting the urban environment by slowing down to solve problems

Slums, whether resulting from the region itself or in its own right.

Cultural reasons: lies in the loss of awareness, aesthetic sense and extreme ignorance in the preservation of the environment and the monuments and civilizations that exist in the state. (Ali Gharbi, 2016, p14)

3. Urban Landscape: Concept and Semantics

3.1 The concept of the urban landscape

This concept first appeared in the French under the name paysage in the French dictionary ROBERT LE

And that’s in the 16th century, initially used by painters to go beyond this concept to other vast areas.

And many fields, and the latter has known several different concepts, sometimes converging, and sometimes converging. (Serri Fawzi Abbas Al-Khafaji, 2007) and we will be exposed to this concept and its different connotations according to the vision of each thinker, there are many thinkers who contributed to his crystallization and enriching it, we have known him many thinkers, we chose from him as follows:

• Spreiregen

The urban landscape represents the whole picture that people have drawn from the real components of the city, this The image extracted is the image of the city or the impression of the city that represents the contents of the city of buildings Spaces, experiences, memories, smells, the drama
of life and death, and everyone is influenced according to their inclinations.

and his tendencies, and everyone has his own personal image of parts of the city through
physical relationships between those (Sprieregen, 1965, P50) defines the urban landscape as
everything that emerges from the city, seen by the eye, and aware of the sensations, interacting with
it in the urban body through a sense of unity, place and human experience through several concepts
such as homogeneity, integration and sensory and visual organization.

- **Cullen** knew him

It's the art of visual cohesion and organization of the components of the urban environment,
including buildings, streets and spaces.

Urban also points out that the purpose of the urban landscape is: to introduce all the
components of the environment Urban: buildings, trees, nature water, traffic, advertisements ... etc.
and weave them all somehow to free

The excitement (drama) in the environment, from his point of view, is a dramatic event.
(Eames, 1977, p233)

### 3.2 Factors influencing the organization of the urban landscape

The urban landscape is generally influenced by a range of factors and influences that determine the
specificity and character of the formation of this landscape: visible urban density, transport network
systems. Add to geophysical characteristics and

Social events and activities. From the above it is clear that by the interaction of these factors
mentioned in the nose, an urban scene with urban characteristics is formed.

Distinctive, and any defect in one of these factors negatively and with great doubt on the image
of the urban landscape of the city.

### 3.3 Factors integration of the urban landscape

There are several factors that overlap and intertwine to be the urban landscape, but several
Conditions for creating and crystallizing a distinctive urban scene through the visual comfort it gives
the viewer as well.

One of the most important factors is the unity of all elements of the urban landscape, and the
integration of elements of the urban landscape.

This comes only through the following elements:

- Visual sequence.
- The sequence and fluidity of the elements of the scene.
- The sensory effect of the place, which ranges from inductive to dynamic.
- All interventions aimed at enriching and enriching the contents of the urban landscape
through urban treatments.

### 4. Urban roads Concepts and Mechanisms

#### 4.1 The concept of urban roads

Roads are the most important places that represent the first function in the city, which is located
between buildings, they do not give a vacuum but give the meaning of urban fabric in addition to
public parks, which give siphonthe to the city a special rhythm these forms can imagine as a vacuum
, roads are one of the most important keys to understanding the urban fabric sometimes, the street is
the most difficult urban reality to define. (Keeble, 1969, P90)

The streets are an essential component and a vital artery for the city, and a compass for the
population and physical movement, and it can be said that street planning is one of the most
important things that should be of interest to the planners of the urban plans, the street is a system of fields is an interesting public space consisting of a balanced mixture of pedestrians and passengers due to the large space occupied by the spaces allocated to public spaces.

4.2 Types of roads

The roads can change or change their platform, where the intensity of the flow can change through cars these changes do not exist in the least formal frequency, and their financial and economic characteristics record permanence.

Its view generally summarizes the view of the movement but not only the concept of movement it is also a key for readers of theorists makes symmetry or not in addition to the system or not in the urban facades.

(Zoheir Benamira, 2009, P26) The reality of roads is: a definition of different types, they vary according to their length, size

4.3 Functional classification of roads

This classification depends on the function of the urban city, as the location of all roads affects its function, and this is due to the relationship between the road network, in order to distribute activities in the urban environment, the traditional methodology of the functional classification of streets on the streets» arterial roads »matrix of street patterns, based on absorption A movement. Access to destinations within the street network, however, does not take into account the uses of adjacent land, which is the cornerstone of the design of contextual streets.

- **Commercial Routes**
  Roads offer many jobs for the residents of the city, where it specializes in certain functions, including what offers the side, commercial as the owners of enterprises along the plains roads prefer to access them by various means of transportation, representing such roads, especially the main ones, including the central places in the city. Secondary and local roads are branched out, and these roads are strong side points for the city’s residents.

- **Residential Roads**
  The distribution of the use of residential land in its various forms and sizes on the parts of the urban land directly reflects on the roads it serves, which also serve the nature of real estate, and the demands of the population and their comfort, which connect them to roads different ly, and most of them are integrated so their dimensions vary from another location.

- **Recreational Roads**
  The first part of this type of road is roads overlooking the shores of the seas and rivers that burn forests or green spaces, while the second part is represented in the roads of which there are many recreational uses and spread along the length of the various shows.( Sherif Mohammed, 2006 p ,17)

- **Industrial Roads**
  Industrial zones need a permanent connection to the city through various means of transport (transport of goods and workers) and such services must be characterized by continuity, safety and speed.

    It is believed mainly in three ways:
    - Regional roads that surround the industrial areas and connect them to the rest of the neighboring areas.
    - Local roads that branch from regional roads into industrial zones and divide them into clusters.
    - Internal secondary roads connecting local roads, urban areas, factories and various services in the city.
5. The City of Batna

Colonial cities are part of the architectural and town-planning riches of Algeria, just like Roman cities or Arab – Andalusian, Turkish cities, etc. They are the backbone of the country in urban matters.

5.1 Presentation of the city of Batna

Definition of the city: Following the dictionary of geography - the city is an extensive and heavily populated urban area (as opposed to villages) in which most human activities are concentrated: housing, commerce, industry, education, politics, culture. *(George, Pierre et Verger, Fernand, p 472.)*

The city of Batna is located in the heart of Aurès; the word Aures is probably of Berber origin, which can be found given to other mountains, notably to Jebel Aourès near Khenchela.

5.1.1 Geographical location of Batna

The Wilaya of Batna is located in the eastern part of Algeria between “4 ° and 7 °” of eastern longitude and “35 ° and 36 °” of northern latitude. Covering an area of 12,038.76 km². The territory of the Wilaya of Batna is almost entirely part of the physical whole formed by the junction of two Atlases (Tellien and Saharan) which represents the main physical peculiarity of the Wilaya and therefore determines the characteristics of the climate, and human living conditions.

![Figure 1](image1.png)

*Figure 1: Geographical location of the Wilaya of Batna - Map: Administrative division of Algerian territory Source: Google.dz/ situation city of Batna)*

5.2 Critical overview of the history of the city of Batna

The history of the Aures region is characterized by the passage to important stations which leave imprints on the life of the population in all its sides, precisely in the appropriate space.

Built in Roman times, the town of BATNA (with its outskirts) has been, over the centuries, a place of mixing of several civilizations which have marked its town planning and its architectural models. Let us take note, that on the south-eastern shore of the town of BATNA was developing “TIMGAD”, “LAMBSE”, this unique Roman heritage, very rich in architectural matter. Until the appropriation of the first urban foundation (colonial city) in the mid-19th century, around 1848. *(www.google.com/Chronologie de Batna)*
5.2.1 BATNA-city, French by birth - South Gate

"...BATNA... a nice little center, although located at an altitude of 1060 meters. It is, without a doubt, the most coquettish city of the highlands, in the department of Constantine ... " (MEUNIER M, 1939, P 97)

Noting that according to Hamatou Rachid, in his article on Daily Liberty, the city of Batna is one of the few cities in Algeria to have "an inaugural stone"; founded by the French colonists in 1848 at the northern entrance to the city by the Duke of Aumale, which attests to the birth of a new city which opens a large door to the South, and the establishment of a military garrison. (Duc d'Aumale : Général et historien français, 5ème fils de Louis Philippe 1er, roi des français, occupe Biskra en 1844, et ordonne la construction d'un camp définitif à Batna d'où la naissance de cette ville, le 22/06/1844.)

Since 1844, French traces have been founded on this region, through works, which have been the object of the appearance of an urbanized city, and in a way or one can say European. be materialized by a new urbanism, treated by a new architecture compared to what was done in the past. In the early days, an appropriation of space was made by the colonists in dramatic conditions, destruction and mutilation of pre-existing structures, in order to to allow the establishment and securing of military troops and settlers. (Picard, alth, p 113.)

**French presence (unclassified heritage) :** At that time the civilian city of Batna was founded, and this in several stages:

![Figure 2: French colonial town of Batna in the 1920s](image)

**Source :** Posted by: vielles-photos-Algérie, Photographed by: Philatours, http://www.delcampe.net

1-1844: Foundation of the colonial military town

After the installation of the French soldiers, a military camp was built in the south-east near an already built village (negro village) - Z’mala now -. This camp was surrounded by a perimeter wall with four gates.

".. Batna is the capital of a district which has three fully-fledged municipalities: Batna, Lambèse, Biskra, and five mixed municipalities. The commune of Batna covers 20,000 hectares ... Batna was initially only a supply point installed in 1844, at the time of the Biskra expedition, led by the Duke of Aumale. At first, the military administration was not in favor of creating an important center there. At most, she thought of establishing an agricultural center there with a small fort which controlled the route followed by the nomads in their biannual wanderings. The ancient Lambèse seemed to him quite naturally designated to become the center of French domination. Chance decided quite otherwise. A few suppliers who had come with the expeditionary column had erected barracks around the camp."
Their interests and the theory of the fait accompli prevailed over logic and the lessons of history. Instead of bringing out of its ruins the famous Roman city, seat of the Legion of Augustus, a simple penal colony was created there. *(Meunier .M, , 1939. P 12 – 18.)*

2-1850: Foundation of the civil town

The fortifications: which were built in 1848, of which the enclosure was built around the camp, of a rectangular shape of 900 x 400 m, pierced with 4 gates, leading to Constantine, Biskra, Sétif and the 4th connecting it to the ancient city of Lambese. This rectangle includes:

1. A northern part was intended for the dwellings of the civilian population, and buildings of public interest.
2. A southern part (the rest of the camp): is intended for constructions for military use.

**Figure 3** : The Two Camps Of The Legion IIIe Auguste àLambèse

**Source:** According to Recent Excavations, Drawing made by RENE CAGNAT, member of the academy of inscriptions and belles-lettres, extracted from the memoirs of the academy of inscriptions and belles-lettres, volume XXXVIII, part 1. Paris - national printing house – 190

6. The Evolution Up to 1923

The colonial core inside the fortress is structured in two parts, one square in shape (the military camp), and the other the civilian city in rectangular shape. city (negro village or Z’mala), on the other side of the wadi of the city. Then, a realization of an aerodrome to the southwest of the road to Biskra.

**Figure 4:** The town - Camp: The initial nucleus of the town of Batna, surrounded by ramparts, in 1850.

**Source:** www.fr.geneawiki.com
7. Period From 1923 to 1962

During this period Batna will play its administrative and commercial role, due to its level of equipment. In the north (the European districts), the introduction of apartment buildings, 140 plus 40 housing units in allées Ben Boulaid, Cité Million 158 housing units, Cite Fourrière 100 housing units at the end of the 1950s, as well as a construction and barracks in the North where there are currently finds Sanatorium, on the axis connecting the Christian cemetery and the Camp (rue de France). In the south (the traditional districts): the regrouping of a large part of the population during the war in the resettlement cities: Chikhi city with 252 dwellings, evolving city with 192 dwellings. 

(Chibani Kamel, 1844 – 1962, p 69)

7.1 BATNA after independence to date

After independence, the city experienced an unprecedented spectacular shattering of the agglomeration in all directions. Without forgetting the urban sprawl in its peripheries. Of which, the extension of the city is oriented in three main directions: In the north-east by the Bouzourane district. In the south-west Kchida district - Route de Hamla. In the south: Bouakal.

Figure 5: Current situation of the colonial city - CAMP- (red dashed outline)
Source: www.google.dz/situation-géographique-camp-batna

8. Research Field Study: Biskra Road Axis (From Regular Planning of Deformed Growth)

8.1 The reason for choosing the axis of the Biskra road in the city center

The Biskra road in the city centre is the driving hub of batna, which has been known since its inception with the movement of urban growth and development, which has affected this urban phenomenon, which is emerging in all fields

It is considered one of the most important roads that have a big role which affects its urban appearance and which gives value to the image of the city:

The strategic location of this road and its location in the city) is a national road (as a structure for the first nucleus.

The biskra road is the most frequent and frequent highway, which is a compulsory crossing to reach a specific goal, which has become day after day an area without joy and joy.
Figure 6: The Historical Limit of The Biskra Road  
Source: National Planning Agency 1994 - Biskra

Table 1: Dimensions of The Biskra Road

<table>
<thead>
<tr>
<th>The name of the road</th>
<th>Length (m)</th>
<th>View (m)</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biskra Road</td>
<td>3577</td>
<td>17</td>
<td>Level 1</td>
</tr>
</tbody>
</table>


8.2 Biskra Road Axis: French Occupation Period: (Regular Planning)

The City - Camp, is the first urban trace of the French colonial period to the city of Batna, and it is its initial core of its urban development since its creation. Currently, it symbolizes the spiritual heart of the city. To this end, it needs studies and interests in order to identify its components (homes, equipment, public places, etc.), and to enhance them.

Figure 7: Schematic plan of the urban composition of Camp 1855.  
Illustration plan: Photo capture taken by the researcher at the archive service level  
Civil status of the Wilaya of Batna - (schematic plan is without reference given the anarchic condition of these documents due to a fire accident in level of this service in the 90s)

8.3 Description of the search field

The camp was established at the base of two structuring axes, with reference to the axes of the Roman city (the decumanus and the Cadro), translate, in the form of two main streets: rue de Constantine later called Avenue de la République, and rue de Biskra, called Avenue de France
(currently avenue of independence).

Figure 8: The city - Camp: The initial nucleus of the city of Batna, surrounded by ramparts, in 1850.
Source: CHIBANI Kamel, Si Batna m’ait conté, - 1844 - 1962 (Intramuros - Illustrated), p 65
N.B: The two axes which structure the town planning of the city (avenue de la République, avenue de France)

This period was characterized by organized planning and is completely free of various manifestations of visual pollution

8.4 Biskra Road Axis: after independence to date (deformed growth)

8.4.1 Study of the urban landscape: the impact and appearance of visual pollution

Arcade:
1. The width of the corridors: The width of the Road Biskra shows its importance and the importance of movement, the road consists of only one corridor estimated to be 9 m wide, the degree of flow is great on the road because it is considered a special entrance to the city.
2. The marginalization of the road floor made it suffer from degradation and digging, which hinders movement and because the road knows a large population flow, in addition to the lack of respect for speed by drivers, it is not without the time limits that have distorted its appearance.
3. Water drainage system: That the axis of the Road Biskra contains the last drainage channels, give sins of the way because it does not work which led to the collection of water on its surface, which led to the distortion of the aesthetic image
4. Pavement: The pavement floor with a hub in the old fabric is resistant to slippage but suffers in the modern fabric where we find it not horizontal, in addition to the fact that its surface is soft and non-resistant to slippage. This causes anxiety among passers-by.
5. Hygiene: The garbage is a waste and residue of daily uses, especially commercial and which are kept in special boxes, but often what is thrown for the absence of their own boxes, these wrong behaviors led to the accumulation of negatives resulting in visual pollution and negative impact on human health
9. Analysis of Results

In order to find out the impact of visual pollution on human beings, which is exposed to our public spaces in general and roads and streets in particular, it was necessary to develop a research form for the inhabitants of the axis, in addition to that this form was addressed to the specialists to know how to evaluate the urban scene in terms of architectural and urban.

This form is accompanied by a series of questions, including highlighting the opinion of the population and the ideas of the main actors in visual pollution affecting our roads and streets and their awareness of the various problems of visual pollution to highlight the extent of its impact on humans and the ocean.

Through our analysis of the results of the field investigation form, we recorded a great consensus regarding the suffering of the various components of the axis and their lack of achievement for visual comfort, where it was unanimous that both facades and umbrellas above the shops are in poor condition and not consistent. What causes a state of anxiety when you look at it.

As for the problem of the impact of visual pollution on humans, it was unanimous that seeing such negative visual manifestations affect the human psyche and lead to a state of anxiety and depression.

Based on all of the above, we can say that the problem with the emergence of visual pollution of the city of Batna is due to the misuse of public space, which stems from the misbehaviour of the accumulation of negatives that result in visual pollution. In addition to the limitations of the planning system and its disregard for aesthetic dimensions leads to the emptying of the architectural architectural image of the components of the city from its aesthetic content, the city of Batna needs a more effective planning policy in order to eliminate such phenomena, which have affected the comfort and happiness of man.

10. Conclusion

The axis of the Biskra road has a linear shape as it is a regular consisting of three straight parts as it is known as two types of ancient architectural tissues, its location in the historical center of the city where it is characterized by organization and architectural and architectural images consistent compared to the modern fabric especially in the post-independence stage, which was characterized by some inconsistency between commercial function and movement, which affected the architecture through an unbalanced urban scene indicating the absence of A unified architectural character (i.e., this development led to visual pollution (the axis of the Biskra road: from the regular planning of distorted growth), these architectural and urban problems as a result of commercial movement, which is one of the important features of the latter affected the architecture in general and the road scene in particular. Corridors, sidewalks, etc.

These components were used in a very bad way, especially with regard to the removal of goods and products, which led to the consumption of large areas of the pavement, which resulted in a state of chaos and obstruction of the movement of passers-by (career development led to aesthetic distortion), in addition to the paintings that stand in front of the shops and reflect the culture of society, as a spontaneous society random and unregulated everyone writes what he wants without regulation, which reflects the absence of the state and the absence of the regulator who regulates such things.

In the end we conclude: this visual pollution affected human health and happiness along with the emotions that result from the feeling of seeing a negative visual indicator through an increase in the secretion of adrenaline, a hormonal substance produced by the pituitary gland, translating what the eyes saw and sent by the brain, this is confirmed by the field study through field investigation in the axis of the road of Biskra.

Based on all of the above, we can say that the problem is the emergence of visual pollution of the city, especially for the axis of The Biskra Road, due to the misuse of public space, which stems
from the wrong behaviors to accumulate the negatives that result in visual pollution. In addition to the limitations of the planning system and its disregard for aesthetic dimensions leads to the emptying of the architectural architectural image of the components of the city of its aesthetic content.

To reduce such phenomena by way we must do a well-planned and good architectural and architectural geometry because the main problem in the emergence of visual pollution is due to poor design and the absence of a common unit, so it must be combated by reference to the common architectural character which characterizes the city of Batna, because there is a relationship of integration between design and use, it must be good use of roads and streets by educating people in the use of various facilities in our public spaces in general and roads and streets. In particular.

References


Dr. Kamel Mahdi Tamimi.(2004). Principles of Environmental Pollution. Eligibility for Publishing and Distribution. (P. 57)


Mujib Shamsan, Visual Pollution in the Iraqi Urban Environment, Location


The government’s policy of “de-interest” is to provide a “fair and fair” account of the current political and security security of the country. Hill Book Company, New York . 1965,P 50
