

ALKHUMS CITY IMAGE

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ABSTRACT

In (The Image of the City) , Lynch documented and describes key elements in the built structure of the city that are important in the popular perception and efficient functioning of city. This research was instrumental in raising the profile of spatial thinking within planning and urban design. He aimed at producing new types of cities, socially and spatially, different from the present dynamics of urbanization. The mental picture is considered as the result of both immediate sensation as well as the memory of their past experiences; To Lynch these mental maps are consist of five main elements: paths, edges, nodes, districts and landmarks (PENL). Lynch formulated a new criterion (imageability) and showed its value as a guide for the building and rebuilding of cities. .One of Lynch's innovations was the concept of place legibility, which is essentially the ease with which people understand the layout of a place. By introducing this idea, Lynch was able to isolate distinct features of a city, and see what specifically is making it so vibrant, and attractive to people. Despite the emergence of other theories, the image of the city still one of the most important theories that rely on the memory of people and their past experiences. This paper proposes focus on What does the Alkhums's form actually mean to the people who live in this city ? the study determines the perception of residents in terms of urban image elements by asking people to draw the sketching the mental maps which are conducted in the city of Alkhums . By analyzing the results of this work, We will figured we would be able to watch specifically what about a city's built environment is important to the people who live there. the result described of this paper is particularly timely and relevant for urban, built environment studies and architectural design.

Keywords: environments, The Image of the City, urban design, mental picture, PENL.

1. Introduction

The most popular studies considering the method of mental maps is Kevin Lynch's Image of a city (1960). Lynch developed a mental map method based on five important factors in any urban landscape:(Paths, Edges, Districts, Nodes, Landmarks). Lynch explains the extent of compliance between the sketched and the real environment by saying that most plans look like as if they were drawn on an elastic table [9]. Lynch explains that in most cases, landmarks, directions and distances will not necessarily match, but might still be maintained [9]. Moreover, he believes that the procedure of creating such sketches and their details are of great importance since they are obviously influenced by the objects, which are physically perceptible. He also emphasizes on the

shape of the city. His applied methodology in his book “Image of a city” has been highly inspiring. He has carried out his method of ‘mental maps’ in such a systematic way that is hard to find in another comparable source. Kevin Lynch, in *The Image of the City*, demonstrates qualities of city form that go beyond matters of image. In this book, Lynch discusses a research project, carried out in three American cities, in order to identify the degree of legibility of the cities’ layout. Lynch’ work has been influential to many. Theorist of postmodernity Fredric Jameson (1991) for instance refers to Lynch when he argues that the cognitive map is a means to cope with societies complexities by bridging ‘objective’ and abstract representations of space, and subjective existential experiences of ‘lived space’. Lynch can also be seen as a precursor to the influential thesis by [11].that space is not just ‘out there’ as a mathematical entity or a priori category but always socially produced. Lynch’ work has many implications for urban design and raises various questions about the present role of mobile and locative media technologies in the urban context. One such question is the extend to which our way-finding shifts from orienting ourselves to mostly ‘objective’ urban elements to become increasingly subjective by means of locative media technologies. We are far more able than ever before to “write” the city with our own subjective experiences and share these with other people through mobile media. Despite substantial influences of Lynch’s work, a number of criticisms have been also raised for neglecting empirical bases for the five element types, as he devised the five elements before commencing the research. and, critics pointed out the selective nature of the interviewee sample Lynch employed; most were white, middle-class, able-bodied males. It is possible that urban images of women and of disabled people may differ substantially and in politically important respects from those of able-bodied people. Finally, it has been argued [14].that the factor of legibility is too narrow for assessing the quality of a cityscape. These criticisms urged further urban research that can explain symbolic, historical and cultural meanings of places alongside the spatial aspects of city design. Lynch aim was to legibility of the city. In the sense of being visually clear and imageable to the inhabitants within the whole conte pattern of the built environment. Consequently, this would lead to design and rebuild a better urban environ [9].“The image of the city” has been widely referenced in the scholarly literature that has had a profound effect on the teaching, educating and practice of urban planning worldwide [3-13-2]. Indeed, in academia *The Image of the City* has been compelling and very influential. Not for only planners, but also psychologists, geographers and else social scientists have applied it as a starting point to carry out “the map in the people’s minds ” researches . likewise,, Lynch’s framework has set the foundation for the branch of “mental mapping” in urban psychology that started with the work of Bell et al. (1978). “The Image of the City” has inspired planners to propose more meaningful environments in today’s highly pluralistic society [17].

2. Methodology

This part should contain sufficient detail to reproduce reported data. It can be divided into subsections if several methods are described. Methods already published should be indicated by a reference [4], only relevant modifications should be described.

3. City Form

A city is a multi-purpose, shifting organization, a tent for many functions, raised by many hands and with relative speed. The form must be somewhat noncommittal, plastic to the purposes and perceptions of its citizens. There are fundamental functions of which the city forms may be expressive: circulation, major land-uses, key focal points. As an artificial world, the city should be so in the best sense: maybe by art, shaped for human purposes.

4. Form Qualities

Clues for urban design can be summarized into: singularity, form simplicity, continuity, dominance of one part over another, clarity of joint, directional differentiation, visual scope, motional awareness, time series, names and meanings. The Sense of the Whole: The five elements must be considered simply as convenient empirical categories, within and around which it has been possible to group a mass of information. Having mastered their characteristics, the designer will have the task of organizing a whole which will be sensed sequentially, whose parts will be perceived only in context. The citizen shifts his place of residence more frequently today than ever before, from area to area, from city to city. Good imageability in his environment would allow him to feel quickly at home in new surroundings. Changes in city environment, as techniques and functions shift, are often disturbing to the citizen emotionally, and tend to disorganize his perceptual image.

5. Structure and identity

there are three components of analysis; Identity , Structure and Meaning. A practicable image requires first the identification of an object, which implies its distinction from other things. The image must include the spatial or pattern relation of the object to the observer and to other objects. The object must have some meaning for the observer . so , we may even be astute to focus on the physical clarity of the image and to allow meaning to develop without our direct guidance.

6. Legebility

Visual quality or apparent clarity of the cityscape: its parts can be recognized and can be organized into a coherent pattern. To understand this, Lynch (1960) stated in his study of mental image that he chose legibility as the basic visual quality to focus. Numerous researches covered the concept of legibility in urban settings. They almost reach a consensus on definition of city legibility, which describes clarity of city parts that enable inhabitants to identify and organize in an overall pattern (Lynch, 1960); (Herzog & Leverich, 2003); (Kelly & Kelly, 2003); Mahshid (2003). specified that a more legible city is able to maintain “continuity between salient elements of the city; main integrators and visible fields of the landmarks, to form a coherent structure” (Mahshid, 2003). Moreover, Lynch (1960) mentioned that city could be familiar through other senses like auditory, haptic and olfactory, yet he did not explain how to utilize this fact in his study. This proves that users’ perception is of significant importance when it comes to form legibility of the space. Nearly all urban studies focus on understanding legibility and its aptitude to enhance users’ imageability mental mapping. Their goal is to design and create a lucid city form able to communicate with the inhabitants.

7. AL-Khums City

The city of AL-Khums is located inside the Tripoli area, which lies just about between scope 33°N and 29°N - Longitude 9°E and 20°E , on the Mediterranean Sea. Figure 1



Figure 1. ALkhums location 

7.1. Population and social structure

Mixture population from rounding areas and other cities populated AL-Khums city. It accepts all people and they live amicably between them. The population of the AL-Khums city has reached to the year 2015 about 52000 inhabitants 27404 inhabitants of them males represented 52.7% and 24596 inhabitants females represented 47.34%. city.

7.2. Data gathering and analysis

In order to see how differently people receive Alkhums as a coastal city with mixture inhabitants. To find out how different people perceive their built environments, people were asked to draw sketch for their city in AL-Khums city Inhabitants, visitors and tourists have chosen to draw their perception for Alkhums city. Studies on the modern way of perception show that spatial environments are identified differently by each individual, and that each individual creates and develops mental images of his surroundings subjectively. Subjective concepts of spatial images deal with the function of the perceiver's information gained per day or contacting with such areas indirectly. In a similar way, these images reveal personal needs, assessments and motivations that depend on different factors including: personal experience, level of education, social status, and age. [5]. AL-Khums was segmented into subdivisions dependent on neighbourhoods. To draw mental maps, asking persons to draw sketches in the street was the choice, as well as asking some of college students . The interview was simply asking the person to close his/her eyes and imagine the city and most prominent landmarks and places, then sketch it in his/her way. After that the sketches have been analysis to to extract Lynch elements .According to Heineberg, the physical environment, which is being observed by an individual, is called 'Perceptual Space'. Several methods and techniques have been developed to study such spatial perceptions or subjective mental images of spaces, Cognitive maps and mental maps are two of such cartographic depictions. [5].

7.3. sample size

A sample size can be determined using the Slovin's(1960) formula, which is as follows:

$$n = \frac{N}{1+Ne^2} \quad (1)$$

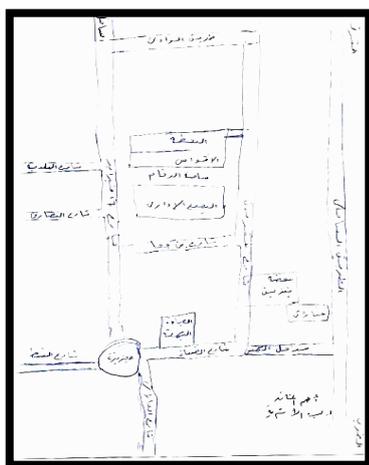
where: **n** is the sample size. **N** is the population size. **e** is the margin of error. **1** is constant value. By 0.05 margin of error, $n = 52000/1+(52000*0.0025)= 396.946 =397$ sketches. 425 sketches have collected. Then it has asked everyone to draw sketch in about 20 minutes and write (his/her) name, age and Address. After the compilation and analysis of sketches we get the following: Gender of respondents: Male 382, Female, Types of respondent group: Inhabitants 244, Visitors 167, Tourists. 425 people were asked in AL-Khums city to draw mantel map sketch for the city, It was obtained 1935 different answers for 182 elements, And Table(1), Figure(3) show The largest readings elements in the two cities:

8. Results and Discussion (Alkhums city image)

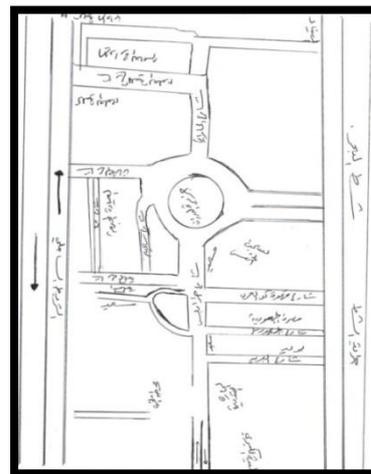
According to Kevin Lynch, the content of the city image refers to physical forms; its components are of five types: paths, edges, districts, nodes and landmarks. They are studied as general components due to the fact that they might be seen in various types of natural pictures.

Paths: The most perceived paths in AL-Khums city were Sea road with 113 times of 507 times

of paths and 22.28 % of paths, 17 February street with 71 times of 507 and 14% of paths, Entrance street (Tripoli Street) with 63 times and 12.42%. The rest was distributed on other 13 paths by low rates. **Edges:** The sea in AL-Khums city is very natural strong edge. Only three edges were perceived in AL-Khums city .The sea mentioned 92 times of 103 times and 89.32%, Zannad valley 10 times and 9.7%, Tawaleb valley with only 1 time and 0.97%. AL-Khums city residents are loving the sea. visitors are mostly just seeing the sea and leptis magna in AL-Khums city. **Nodes:** 28 nodes were perceived in AL-Khums city, the roundabout with 75 times of 335 times and 22.38% , AL-Khums park with 38 times and 11.34% . **Districts:** Eighteen districts were perceived by people in Khums city, most of them focused in city centre and neighbouring areas, they were as following: Haraty district with 34 times of 113 times and 30%, the coastal district with 15 times and 13.27%, Gas station district with 12 times and 10.62%. **Landmarks:** Although AL-Khums is relatively small, but the people realized a lot of landmarks. In this study, in the light of Lynch’s definition, using the drawings of the spatial network the legible parts of the spatial structure are scrutinized in the mental maps of an unfamiliar place that is drawn by the observer. Lynch has offered three criteria of legibility for the cities [10]. Figure. 4. The first criterion is that inhabitants should be capable of fitting the urban components. The structure has to be legible both in metropolitan scale and in detail. The second criterion is that the image of the city needs to be adoptable enough for new developments and possible changes in the physical structure. finally the City image has to be compatible so that it could be easily associated with the form of the available social and functional organizations [10].Figure.4.



By Female-35 years old – inhabitant



By Male-38 years old – visitor

Figure 2. shows the most perceived elements – AL-Khums city(sketch)

Table 1: *The largest readings elements in AL-Khums city*

Paths	Coast road	113
Edges	Sea coast	92
Districts	Haraty district	34
Land marks	Leptis magna	58
Nodes	The roundabout	75

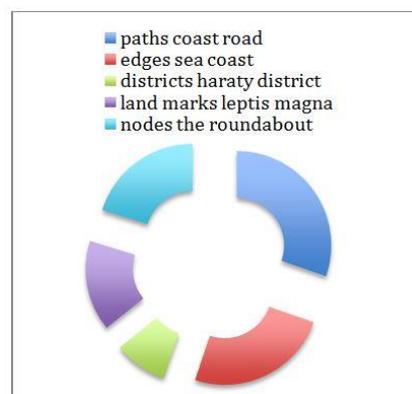


Figure 3. *The largest readings elements in AL-Khums city*

environment; the best examples are air and environmental pollution, though [15]. Rapoport defines ‘material and biochemical aspects of the physical elements’ as the two different indicators in assessing a good. Similarly, in *A Theory of Good City Form*, (1981) Lynch highlighted the significance of biological health in attaining good and lively environments. What he means is that acceptable urban places need to procure psychological as well as physical vitality, which would be shown as follows: First of all, to think of the paths in AL-Khums, let’s consider streets such as: entrance street, Haraty street, 17 february street, city stadium street, prison street, Ben Joha street, 20th street, university street and many others which have been highly rated by the people in connected and integrated areas. Surprisingly, people rated the coast road as the highest; this is a city located in a low

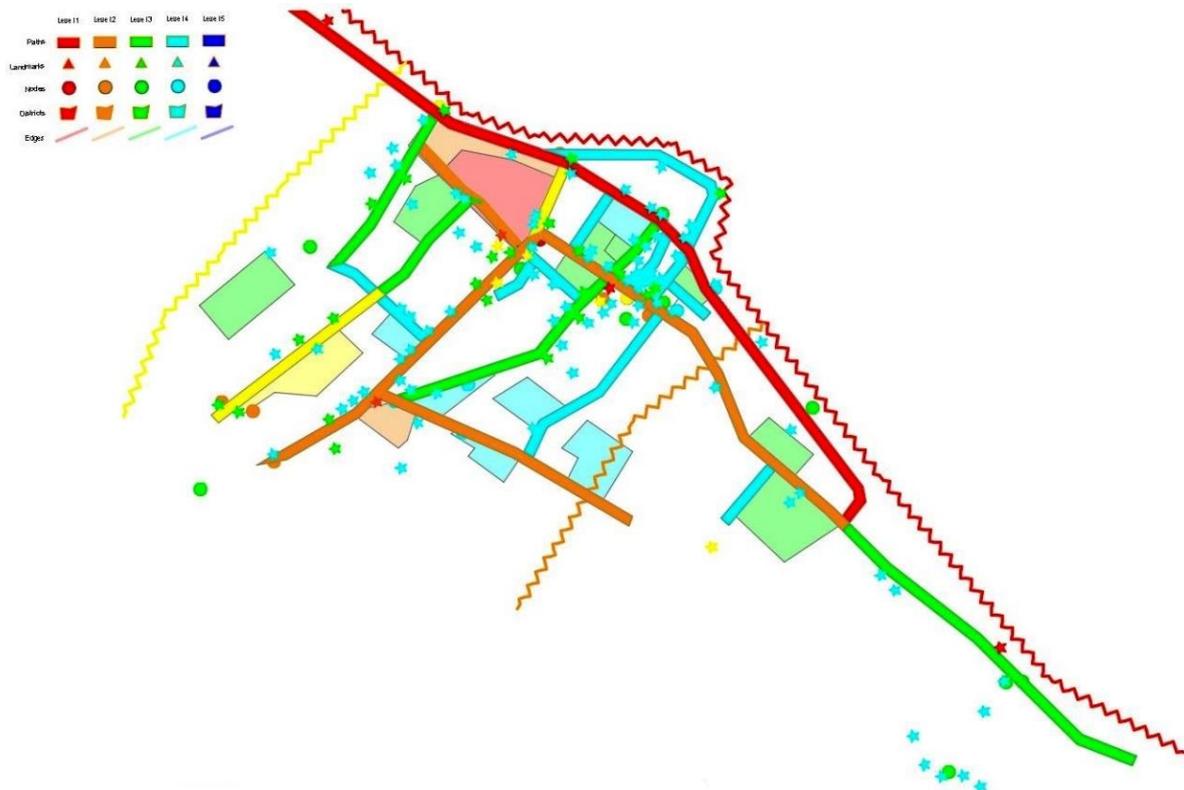


Figure 4.AL-Khums city image

integrated and connected area. Hence, in defining the path as an outstanding element, physical features are of great importance. For instance, in al-Khums the sea is considered as a strong edge and likewise, (edge effect). By this, we mean that the most integrated roads with their highest potential for transporting are generally considered as the most legible and perceivable roads. And what makes a road easily perceivable is whether they have a high integration with the whole system or not. When one of the elements is too strong it also empowers the other elements in its vicinity. The Edges affect the city under study. People stick to natural edges so intensively that these edges ultimately happen to be part of their lifestyle. In AL-Khums, sea is the source of inspiration, love and liveliness. It is not only the source of liveliness but also the city's only place for work. As a result, they have got high ratings from people. Other than paths and edges, districts have achieved good ratings from people on the integrated and connected streets such as: Alhara, Senan district, Mannubeya district, 20th street district and Kol Al Arab district, but the highest ratings go to the coastal district and Haraty district which have been located between a medium integrated and connected street and the sea. Indeed, society has a crucial influence on urban planning and life. Obviously, many landmarks in AL-Khums have received high ratings from those people in the integrated and connected areas like, Gas station, The Complex Administration, City clinic, Haraty shops, Al-Basha mosque and the police

station. Still another finding is that ‘The Port’ and ‘Leptis Magna’ which have been Remote sites received the highest ratings. Thus, these results indicate that although the location in the spatial configuration is an important criterion for a building to be considered as a landmark, it is not the main one. Occasionally, financial, historical or symbolic factors turn out to be more imperative in evaluating a building as a notable component. Nodes in AL-Khums are also effective. The most influential node is the Roundabout located between more integrated and connected streets. A node which has been influenced by its location is the AL-Khums Park on the sea coast. What symbolizes the revolution, for example, is the city entrance in the very beginning of most integrated and connected paths and complex courts square. This, probably points out that all cities give a good results of mental mapping In addition, some of the general characterizations of the City have been collected from the mental maps, which give ideas about perception or configuration and how people perceive different built environments. Lynch has confirmed that the mental maps can also be selective. He argues that although the method appears to be considerable for its affective elements, it might fail to capture the relationship between them at the same time. He also studied the single elements and focused on the relationship between structurally outstanding elements.

9. Conclusion

The physical environments influence the perceived level of in significant way. I argue that a culturally and socially specific need in urban environment as well as the types of people and their mentality is crucial for the common quality of any city. As a matter of fact, what is necessary in urban designing is to consider both the hidden features as well as visual aspects of urban designing and architecture. An interest in the combination of such structures and areas with other elements in the city like: streets, buildings, and uncovered areas must accompany the interest in the outlook of the buildings and places.

Generally, through my observations during the work, I found out that for many of the people was difficult to understand what I meant by asking them to draw a mental map. In fact, the difficulty was increased due to the recent events that have occurred in the country. All people hate politics and I found it difficult to convince them that my work is not for the purpose of politics and also dealing females was problematic due to social restrictions, as asking women in the street was not practical, also the responses of some female college students too, as they refuse to participate in the interview, that leads to made the Female participation in the study limited compared to males . the conditions for the vehicles are good but there are many missing links in the pedestrian network. Human perceptions and built environment are strongly related and this link is defined by integrating those elements that will highly influence the visual and structural factors and components. Culture, Society, Politic and History are strong factors also

Natural edges, Lifestyle, City structure and form, as well as Types of activities. All of these factors and influences have an impact on how to perceive the place and the degree of perception the place. The Selective of mental maps must be addressed by finding their structural features. The visual environments have poorly legible elements, which depends on the extent of the quality of their corresponding urban environments. The physical environments influence the perceived level of in significant way. I argue that a culturally and socially specific need in urban environment as well as the types of people and their mentality is crucial for the common quality of any city. Generally, through my observations during the work, I found out that for many of the people was difficult to understand what I meant by asking them to draw a mental map. In fact, the difficulty was increased due to the recent events that have occurred in the country. All people hate politics and I found it difficult to convince them that my work is not for the purpose of politics and also dealing females was problematic due to social restrictions, as asking women in the street was not practical, also the responses of some female college students too, as they refuse to participate in the interview. Human perceptions and built environment are strongly related and this link is defined by integrating those elements that will highly influence the visual and structural factors and components. Some of the more common features of this city , as identified by the mental maps indicate conceptions of perception and configuration and how people perceive their different environments. The built environment influences the perceived level .It appears that the cultural and societal needs, types of people, and their mentality in an urban environment are an important indicator of the quality of a city. So, in the city of AL-Khums, mental maps sketch more details in comparison with other cities whose mental maps sketch fewer details.

- In mental maps Landmarks were the elements with the most frequency by 60% of the whole, and the less frequently mentioned were Edges by 2%.
- The most effected factors in mental maps were History and Natural edges effects.
- Easy to move from part to another in the city.
- There is a strong linkage with the sea; it is a passion in addition to food source and the (old, new) job. It is very strong edge.
- Sea effect or to say edge effect causes the most perceived path, sea road, to be the result of mental map sketches. Therefore, the most perceived road was sea road due to sea effect.
- The second perceived path is 17 February Street .
- Tripoli Street is the third perceived path.
- Based on their properties Districts are alike; however, they hardly ever differ since there is no distinguishable disconnection among these zones.

- The major Roundabout, which is located between the two important streets, is considered as the most identified node.
- Leptis Magna has got its importance from the history. Since it was dominated and governed by Septimius Severus Augustus, it has historical roots. As a result, History effect has made it an influential landmark.

It is clear that the mental mappings created by the people of AL-Khums are not inclusive in the quest to identify their emotional and mental states, but it is important when trying to understand the perception of the environment and the extent that this environment affects the perception.

The city should become more diverse, lively, and creative to bring an easy mental image.

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