

can shape the modern image of urban agglomerations, with a post-industrial type society and modern characteristics of the quality of life [4]. In order to achieve this, the related issues must be addressed, such as maintenance of transport, social infrastructure and leisure spaces. These issues can become the strategic tasks that will be reflected in the strategies of the largest urban agglomerations.

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4.22 The role of walkability in creating sustainable cities and communities. Case of the city of Bejaia in Algeria

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The increase in car traffic in recent years continues to significantly affect the quality of life in urban areas. Motorized traffic has increased so much that many important aspects of city life are increasingly hampered and the question of the sustainability of means of transport has become an important topic. On the other hand, the World Health Organization affirms that diseases related to obesity and people's inactivity have increased sharply in the last decade, to this end it suggests the promotion of sustainable access to one of the most important goals in the fight against obesity.

The creation of a sustainable transport system has therefore become the main objective of transport policies in many countries of the world. This system should encourage facilities that connect everyone and should be linked to the economic, social and environmental aspects of society. The promotion of walking and cycling is seen as the most important way to ensure sustainability especially in the most populated areas. Walking has been associated with many benefits, ranging from reducing air pollution, decongesting traffic

and consuming resources, to solving obesity and other health problems [Ann Forsyth, 2020]. It has also been seen as a key factor in creating 'livable communities', encouraging interaction between neighbors and making the urban environment a more pleasant and safe place to live [Emery and Crump, 2003].

Walkability has recently been introduced as a concept that reflects the extent to which the urban environment is pedestrian-friendly [Abley and Turner, 2011]. By assessing it, planning professionals may be able to address the quality of the pedestrian environment. Research on walkability is recent and agreement on what to measure and how to measure it is still highly controversial due to the multiplicity of urban attributes that can influence walking. This prompted us to devote our present investigation to the study and evaluation of the degree of walkability within urban centers. This led us to ask ourselves the following main question:

What are the criteria that would make it possible to identify walkability within our social theatres?

The city of Bejaia in Algeria, like other cities in North Africa, does not escape the problems of urban management which generally translates into longer journeys leading to an increase in the use of motorised means of transport. This city experienced an extension in the colonial period due to the plan of Constantine and continued to expand after independence on the part of the plain. The evolution of the old city towards the plain was made on two axes, and the result of this evolution gave birth to several urban entities forming a geometric center and a hypercentre made up of a set of districts within which State buildings with private buildings thus constituting a hybrid urban fabric [Mansouri, Y., Occhiuto, R., & Hanocq, P., 2021].

Can we qualify the hypercentral area of the city of Bejaia as being walkable? and to what extent could we gauge the quality of walkability in this area so that we can improve it eventually?

The complexity of the concept of walkability prompted us to use a variety of analytical tools, ranging from direct observation made several times and at different times and places,

to cartographic and statistical analysis, as well as the use of the spatial syntax method developed by the UCL research center in London. This analysis also gives voice to the inhabitants and users of the place, through a questionnaire survey and the realization of guided tours. All of its methods are supported by the implementation and application of a walkability audit based on the indicator scoring system.

The results of this work show that if there are many studies relating to the evaluation of walkability around the world, little research has focused on Maghreb cities, especially on the city of Bejaia (Algeria). Our research question therefore makes it possible to provide empirical experience on the question of walking in Maghreb cities and indirectly opens the debate around the vivification of the city on new avenues of solutions, and lays the foundations of the argument in favor of the theory that the concept of walkability can be applied for the proper planning of our cities.

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