

Research Article

Environmental Health and Transportation: A Landscape Design of a Vital Healthy Area in An Ecological Town

MAACHOU Abderrahmane*

Searcher in Landscape Architecture.Ouzera. Algeria

Abstract:

Traveling long distances for specialized treatment causes physical and financial costs. In return, convenient and rapid train transportation along scenic routes provides a suitable atmosphere for recovery in therapeutic health environments. Just a traveling by train saves time and contributes to economic development and facilitating trade exchanges, as well as stimulating the economic mobility of regions. Designing a train trajectory that is not considered from an ecological perspective leads to damage to users and sometimes harms to population. Through this research, the ecological space of high speed train station and a parking area on Motorway designed using biomimetics in a healthy area of Ouzera Town in order to avoid the damage resulting from carbon dioxide emissions which provides an appropriate therapeutic environment that provides rapid transportation and specialized healthcare services in natural landscape and optimal therapeutic atmosphere in One Health environment.

Keywords: Train station. Environmental health. Landscape architecture. Biomimetics. Rest Area

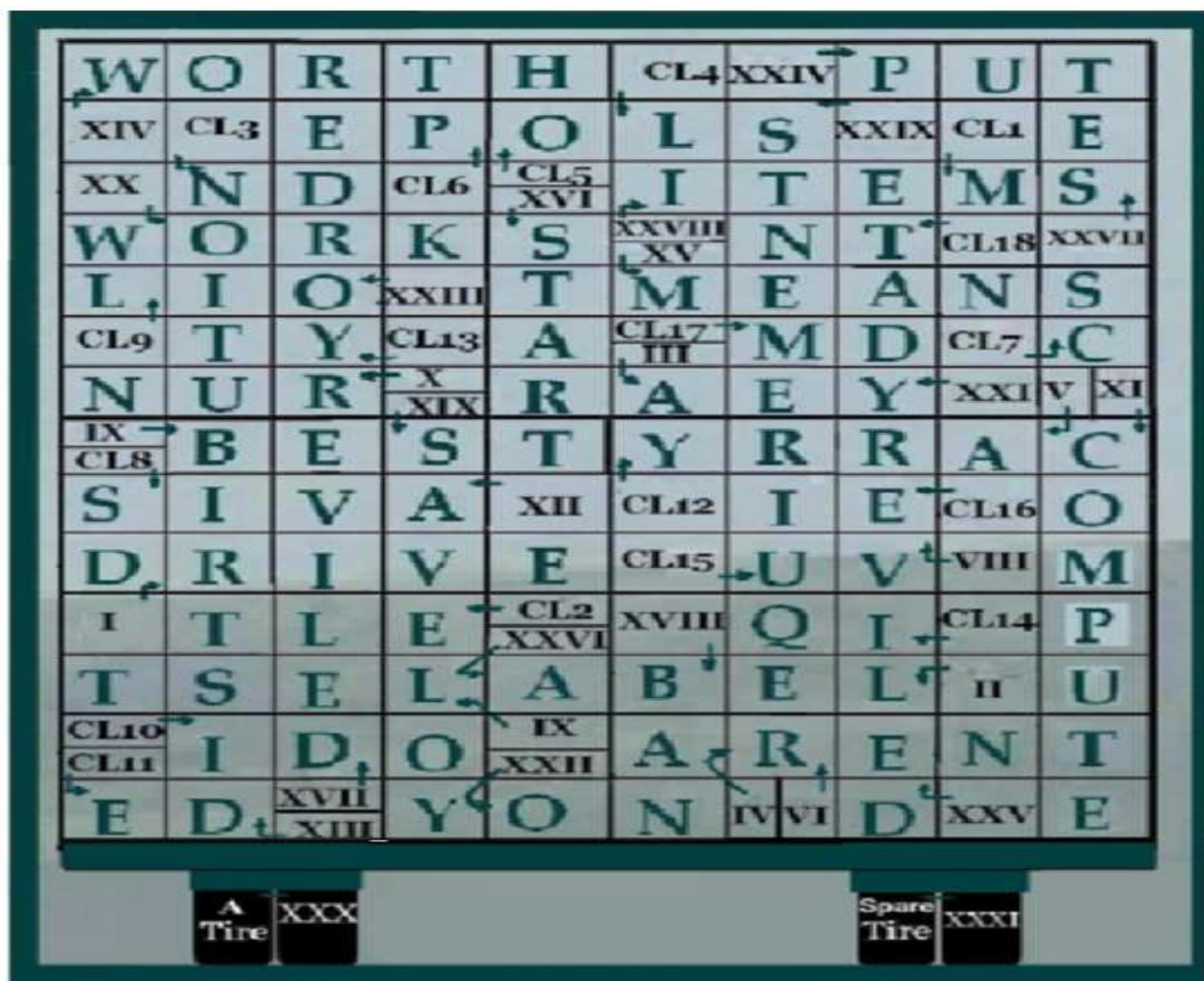
1. Introduction

Transportation is essential to ensure access to all services in the town, it is also the vital engine of the economy. Providing important services in the field of goods and providing the requirements of life. While transportation ensures the movement of people and access to markets, it also ensures access to health services, higher education and scientific researches. How can rapid transportation be provided for considerable distances for a scientific space of Ouzera town with the One Health initiative and healthy environment free of carbon emissions?

2. Observatory of transportation in Ouzera Town.

A description of transportation in Ouzera town through an urban observatory bridged with phrases and sentences on transporting and delivering goods for an urban modeling of transportation in Ouzera Town for drawing the model of transportation. We listed an essential word who forms the capital letters of Modeling. This capital letter and the words of an observatory sentence to form a concise lecture of transportation in Ouzera town.





The model of the transport observatory is inspired from the shape of truck which is the land transport observed in the ecological vital road station of Ouzera Town.

Model of Transportation in Ouzera Town

3. Environmental Health in Ouzera Town

The town of Ouzera is characterized by a healthy climate and a fourth-generation road network with flow traffic suitable for health facilities in an ecological environment.

The active scientific campus also constitutes a scientific space in which research can be developed in the field of standard healthcare and Environmental Health with especially: Foods, water, air and the use of modern technology including technologies of health.

4. Model of an ecological Train station.

The completion of trans saharian railway from Algiers to Tamanrasset has reached an advanced stages with completion of an important section in the high plateaus and the preliminary descriptive of Chiffa Boughezoul section showed that the line passes in a modern trajectory with tunnels and viaducts that shorten the crossing distance of the Atlas Mountains range passing through Ouzera territory.

The importance of Ouzera town is due to its availability of a healthy climatic environment and its location on the North South motorway with an urban landscape and a vital activity of transportation. We are designing an ecological model of train station for passengers and goods in a lively and healthy urban area south the University Hospital specialized in Mini invasive Surgery.

Special area surroundings the Parc of trucks of train station are designed with biomimetics and the main buildings for passengers is designed with an architectural sight derived from the medical balance of precision. The station has a special ecological garden which contains many types of evergreen trees, flowers, shrubs and aromatic plants. The design of garden surrounding train station is inspired from cherry branch and the branch of pistacia lentiscus plant. The gardens contain special corridor for patients as well as a special building for gardening to give an urban character and create a harmonious urban image of the train station.

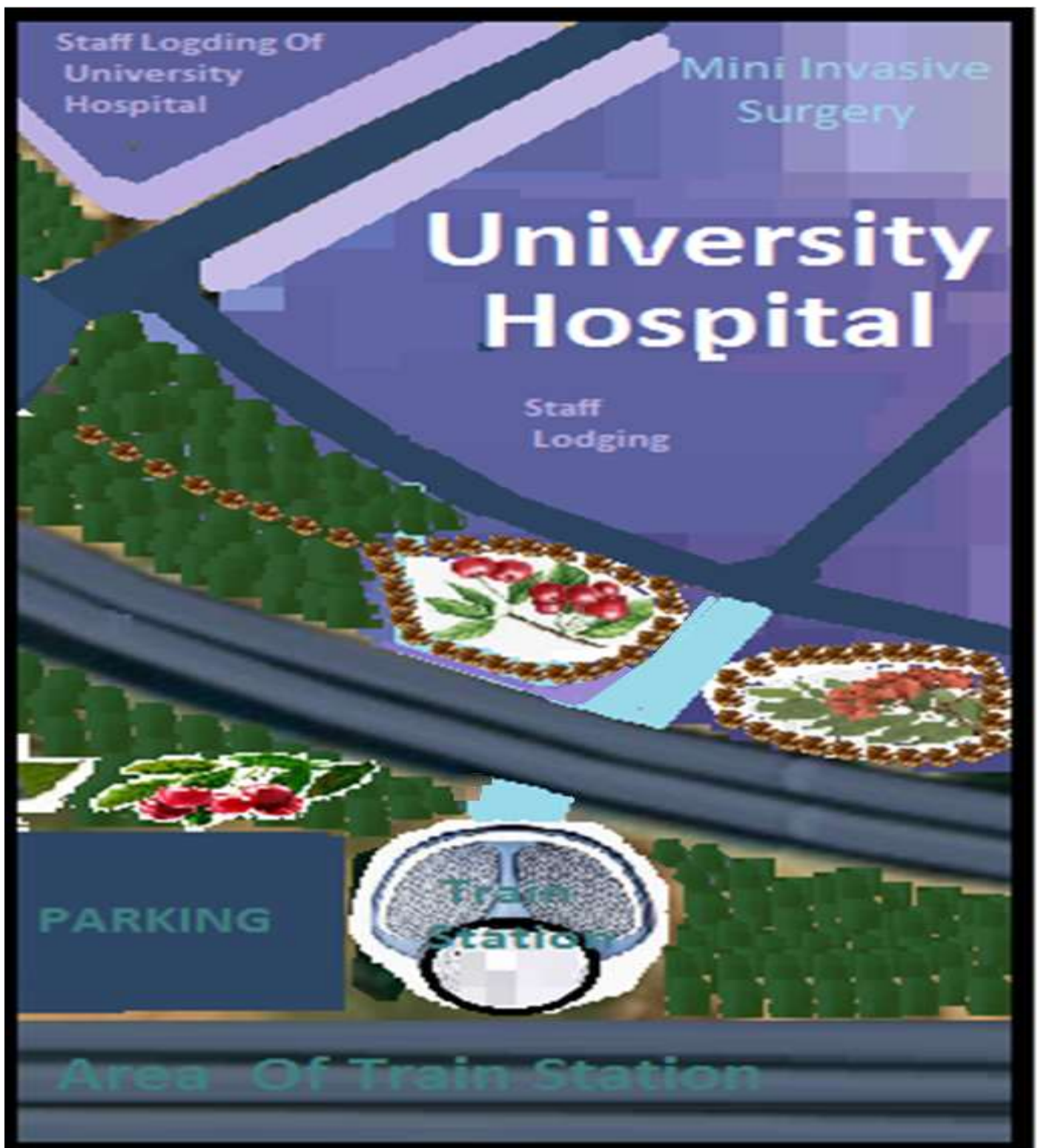


Fig1: Model of an ecological TRAIN Station of OuzeraTown (Source Author 2024).

5. Biomimetic design in urban area of transportation.

The Rest area of motorway have the necessary facilities such as fueling services, food services a bathroom and sometimes picnic area.

Below we present a biomimetic design for a family arboretum and gardens with nurseries in an ecological area of Ouzera interchanger Motorway. where the space is available for fuel station, food services, a bathroom and parking. The design of the family arboretum is derived from the nectarine plant, so that it contains a central covered area overlooking the natural landscape and is surrounded by green spaces of various types of trees and aromatic plants. Next to the family arboretum the nursery gardens draw a shape derived from the plum plant. and the nurseries are located next to a road directly connected to the North South motorway.

In the southern space of this road a parking, a cafeteria, restaurant a bathroom to provide with transportation services the services for land transport in an ecological area without carbon emission.



Fig2: Ecological area of transportation: Model of Ladsaped Rest area (Source Author 2024 /Photography in PK 29 of North South Motorway*)

6. Conclusion

Rapid transportation is provided for health services in a healthy environment of Ouzera Town with a train station designed with biomimetics and landscape architecture.

The land transport services area is also being developed with a parking area at Kilometer Point 29 of the North South motorway. The area includes a fuel station, a family arboretum, a nursery garden, and a parking of trucks with an essential service near the train station in a healthy ecological area.

7. Bibliographical Reading

1. A. Abderrahmane M (2024); Towards One health for All; Maintaining human health in a town through integration of an integrated scientific projects into a healthy landscaped site *Research and Analysis Journal* 7(10).01-07.
2. M Abderrahmane (2024); Observatory of town and biomimetics for urban modeling and Architectural design of scientific space in landscaped site. *Research and Analysis Journal* .7(8).71-91.
3. Philip Smith (2013); Environmental Health. Model child care health policies. 3 pages.
4. Primach R B and al (2021); The growing and vital role of botanical gardens in climate change research. *New Phytologist*. 231 :917-932.
5. Rui Zhang and al (2024); Strategy and methods for carbon emission mitigation during construction of rail transit. *ACS Omega*. 9.3415-34184.
6. Shanushan Jin and al (2023); Comprehensive evolution of carbon sequestration potential of landscape tree species and its influencing factors analysis: Implications for urban green space management. *Carbon Balance and Management*. 18 :17.
7. Xiaodong Hu and al (2022); Carbon emission factors identification and measurement model construction for railway construction projects. *International Journal of Environmental Research and public health*. 19 :11379.
8. Yang LuoJun and al. (2023); Multiobjective path optimization of Highway-Railway multimodal transport considering carbon emissions. *Applied Sciences*. 13,4731.