

## **Bridges Over the Nile: Transportation Corridors Transformed into Public Spaces**

Les ponts sur le Nil : les corridors de transport transformés en espaces publics

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### **RÉSUMÉ**

Le Caire est une ville encombrée avec un taux élevé d'urbanisation et un espace public très limité. La ville a l'un des taux les plus bas de parcs par habitant de toute grande ville. En outre, les rives du Nil, autrefois vivantes avec des activités telles que le lavage, la pêche et les débarquements de felouque, étaient à la fin du vingtième siècle largement coupées de l'accès public gratuit par une barrière de routes pleines de circulation, clubs privés, hôtels de luxe, restaurants, les pépinières et les postes de police / militaires. Les personnes à faible revenu n'ont pas les moyens de payer les options privatisées le long des rives du Nil, de sorte qu'elles utilisent les trottoirs des principaux ponts comme espaces publics. Les familles, les couples et les amis tolèrent le bruit et les vapeurs de la circulation pour profiter de la vue et des brises douces du Nil. À la suite de cette réorganisation extraordinaire des ponts, de nouvelles petites entreprises se sont formées pour répondre aux usages, et une nouvelle interaction avec le fleuve a émergé. Nous avons étudié les modes d'utilisation, les caractéristiques de la population d'utilisateurs et les préférences déclarées des utilisateurs. Nous identifions un ensemble de caractéristiques contribuant à la popularité des ponts en tant qu'espace public, notamment l'abordabilité, l'accessibilité, l'ouverture à la rivière et la connexion visuelle avec l'autre rive. Nous proposons que ces caractéristiques soient prises en compte lors de l'élaboration de futurs projets le long du front d'eau des rivières pour répondre au besoin d'espace public et d'accès au Nil.

### **ABSTRACT**

Cairo is a congested city with high rate of urbanization and very limited public space. The city has one of the lowest rates of parkland per capita of any major city. Moreover, the banks of the Nile, formerly alive with activities such as washing, fishing, and felucca landings, were by the end of the twentieth century largely cutoff from free public access by a wall of busy roads, private clubs, luxury hotels, restaurants, nurseries, and police/military stations. The need for open space for people from lower income who could not afford the expensive options along the Nile banks, has resulted in use of the sidewalks of the main bridges as public spaces. Families, couples, and friends tolerate the noise and fumes of traffic to enjoy the expansive views and breezes over the Nile. As a result of this extraordinary re-purposing of the bridges, new small businesses have formed to cater to the uses, and a new interaction with the river has emerged. We studied the patterns of use, characteristics of the user population, and stated preferences of users. We identify a set of characteristics contributing to the popularity of the bridges as public space, including affordability, accessibility, openness to the river and visual connection with the other bank. We propose that these characteristics be taken into account when developing future projects along the river water front to address the need for public space and access to the Nile.

### **KEYWORDS**

Nile, Cairo, public space, social connectivity

## INTRODUCTION

Through the last seven decades, and since the establishment of the Republic and end of the Monarchy, Egypt has been going through massive urbanization. Rural-to-urban migration, lack of enforcement of zoning and building codes, current housing policies and flow of capital have led to the increased urbanization in Egypt's major cities, at the expense of open public space (Sims 2012).

With over 20 million residents, Cairo suffers from extensive informal housing areas poorly served by utilities, inefficient public transportation, highly congested movement corridors with endless traffic jams, insufficient public space, and almost no green cover (AlSayyad 2011). Cairo has one of the lowest rates of parkland per capita of any major city. Moreover, the banks of the Nile, formerly alive with activities such as washing, fishing, and felucca landings, were by the end of the twentieth century largely cutoff from free public access by a wall of busy roads, private clubs, luxury hotels, restaurants, nurseries, and police/military stations (Kondolf et al. 2011).

In cities whose history is strongly linked to a river, such as Cairo, the social connectivity of the population with the river can be an important element in the city's identity. As Cairenes have been largely cut off from the banks of the Nile, they have had to seek other open spaces. The creation of AlAzhar Park from a former garbage dump near the Citadel (by the AgaKhan Foundation and Cairo Governorate) resulted in new and very popular public space in the city, but was an exceptional effort in what is otherwise a city lacking green public space. However, Cairenes continue to seek access to outdoor spaces. In absence of formally designated open spaces, they spend outdoor time wherever they can. The bridges over the Nile have become one of the major outlets for the city residents. In this study we explored the ways in which Cairenes use such traffic corridors and their interaction with the river.

## 1 THE BRIDGES RE-PURPOSED AS PUBLIC SPACE

Bridges are designed for vehicular movement and not all of the city's bridges have sidewalks for pedestrians. What was neither intended, nor adequately provisioned for in terms of safety, was use of the sidewalks of the bridge as an enjoyable public space on the Nile. Cairenes gather for different purposes such as chatting, having a hot tea at night, snacks, food, fishing, enjoying the Nile view, celebrating weddings, and taking of family photos. The bridges offer visual access to the river, expansive views of the city (attractive both day and night), and fresh breezes over the Nile (in contrast to closeness of many neighborhoods). The bridges are used by many social strata, but are especially important for lower income groups who have no other access to the Nile.



Figure 1 The bridge as public space: Cairenes on the Qasr El-Nil bridge enjoying the Nile and the view of Cairo at night. (Shawn Baldwin for The New York Times 2009)

## 2 METHODS

We focused our research on two bridges over the Nile: Qasr El-Nil and Al-Moneeb bridges. We documented the activities occurring on the bridge sidewalks, the people using the space (their demographics, and from interviews the distance to their homes, their use patterns, how they interact

with the river, and their reasons for using the space). We also assessed potential impacts on the urban corridor such as traffic obstruction, solid waste generation, and the generation of economic activities on the bridge. The Qasr El-Nil bridge crosses the Nile in the heart of the Central Business District, while the Al-Moneeb Bridge is a main traffic corridor and part of the Ring Road, offering views south over Dahab Island and north to the city center.

We documented where the users came from and how they traveled to the bridge, if they come in family groups, with friends, etc, what alternative open-spaces they use, and their level of interaction with the river:

- Passive (not there for the River but for the outdoor space)
- Partially Active (just viewing the Nile from the bridge)
- Interactive (fishing)

### **3 FINDINGS & CONCLUSION**

Our results show that while most users come from neighborhoods near the bridge, some traveled from surprising distances, typically made possible by transport opportunities such as nearby metro stops. Family groups and couples dominated, but a large part of the users were groups of friends, and all age groups were represented. Most users simply enjoyed the view, space, and air, and celebrations or social gatherings. Only a small minority engaged in fishing. Given the poor water quality of the Nile, visual connectivity is more logical than direct human contact (or consumption of fish for that matter). The popularity of the bridge, offering visual connectivity, open space, and (despite nearby traffic) air, provides strong support for the importance of visual connectivity to the river for this urban population. Many users did not specifically call out the river as separate from the city, but tended to view the river as an essential component of the city.

The extent in which these traffic corridors are used beyond their original purpose is unprecedented. Our results provide a better understanding of the need for public space in Cairo, and suggest key characteristics of these spontaneously successful public spaces, which could inform future planning of public space in the new plans for the city.

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