The Impact of Privatization in Re-Shaping the Coastal Cities Planning

Alexandria City as a Case Study

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Abstract: Alexandria is one of the most attractive waterfront cities in Egypt, located at the center of the Mediterranean coastline. The Corniche of Alexandria is the main road that runs along the coastline, a vital public space for all citizens. However, recent privatization has led to a loss of public access to several parts of the Corniche, particularly access to beaches, while it has also raised concerns about social inclusion and segregation. The paper highlights the important role of planners and designers in creating more equitable and accessible public spaces. In this light, the study proposes a design intervention for developing the Corniche, through research findings and emerging urban design and planning methodologies. This comes at an important moment after the Covid-19 crisis, to ensure that all Alexandrians can enjoy this vital public space. To achieve the research objectives, this study employs a spatial analysis to map the changes in the Corniche's form over time and assess the impact of privatization on public access and use. Moreover, the research will be guided by a theoretical framework that draws on concepts of social inclusion, segregation, and public space. The study will also explore emerging urban design and planning methodologies and their potential for creating more equitable and accessible public spaces.

Keywords: Privatization, Alexandria, Urban Design, Public Spaces, Social Interaction.

Introduction

In essence, privatization refers to the transfer of ownership and control from the public sector to the private sector (Ntakana & Mbanga, 2020). The privatization of public spaces in coastal cities has become a common practice in many parts of the world. In the case of Alexandria, a vibrant waterfront city located at the center of the Mediterranean coastline, recent privatization has led to a loss of public access to several parts of the Corniche, a vital public space. This paper investigates the impact of privatization on the planning of coastal cities, using Alexandria as a case study.

The paper highlights the important role of planners and designers in creating more equitable and accessible public spaces. Employing a mixed-methods approach, the study uses spatial analysis to map the changes in the Corniche's form over time and assess the impact of privatization on public access and use. This provides insights into its evolution and the impact of privatization on public access and use. The research is guided by a theoretical framework that draws on the concepts of social inclusion, segregation, and public space. The study also explores emerging urban design and planning methodologies and their potential for creating more equitable and accessible public spaces.

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DOI: 10.36158/979125669182115

The research findings reveal that the privatization of public spaces has led to a loss of public access and increased segregation in Alexandria. The study proposes a design intervention for developing the Corniche that is informed by the perspectives and needs of different stakeholder groups. The proposed design will be evaluated through feedback from stakeholders and assessed for its potential to address issues of social inclusion and segregation.

Overall, the paper concludes with a discussion of the implications of the research findings for coastal city planning, highlighting the importance of preserving public access to vital public spaces and the role of planners and designers in creating more equitable and accessible urban environments.

1. An Overview of the History of Alexandria's Corniche

Alexandria is the second-largest city in Egypt. It is known as a linear city due to its elongated shape. Alexandria's Corniche is a famous waterfront promenade that runs along the coast-line of the Mediterranean Sea. It stretches for about 20 km along the coast and has an average width of 30 meters. The first Corniche in Alexandria was built by Khedive Ismail in the early 1900s, but it was officially opened in 1934 under the reign of Abd al-Fattah Yahya Pasha, who extended it from the quays between Fort *Qaytbay* and Cap *Silsilah* to *Al-Montaza* in the east during Ismail *Sidqi* Pasha's government. The Corniche has a rich historical background that dates to the time of the ancient Greeks, who founded the city of Alexandria in 331 BC. The original Corniche was a narrow road that ran along the shoreline, connecting the city's main port to the royal palace (Katba, 2009).

Over the centuries, the Corniche underwent several transformations. During the historic period, the Corniche was expanded and embellished with gardens, fountains, and public monuments. It was further developed and became a popular destination for recreation and leisure.

The Corniche continued to be an important public space and was further enhanced with the construction of mosques, public baths, and other public amenities. In the modern era, the Corniche has been a symbol of Alexandria's cosmopolitan character and has been celebrated in literature, poetry, and art.

Today, the Corniche remains a vital public space for all citizens of Alexandria, offering stunning views of the Mediterranean Sea, public gardens, cafes, and restaurants. However, recent privatization has led to a loss of public access to several parts of the Corniche, particularly to beaches, and raised concerns about social inclusion and segregation. Efforts are being made to preserve and revitalize the Corniche as a public space that is more equitable and accessible to all Alexandrians.





Figure 1. a) Alexandria's Corniche, Egypt, 1945. Source: an American specialist radar operator during the war; b) Alexandria's Corniche, Egypt, 1910 (Source: Tulipe Noire on Flickr).

2. The Impact of Privatization on Public Access, Social Inclusion, Environmental, and Cultural Heritage in Alexandria's Corniche

The privatization of beaches in Alexandria has emerged as a significant concern for the residents of the city. A substantial portion of the Alexandria coastline is now owned by private enterprises, thereby barring citizens from accessing the beach. Notably, even the available beaches necessitate Alexandrians to pay a fee for utilizing them, thereby compounding the issue. The privatization of Alexandria's Corniche has raised several concerns, including:

- Loss of public access: The privatization of parts of the Corniche has resulted in a loss of public access to certain areas, particularly beaches. This has limited the ability of Alexandrians to enjoy this vital public space.
- Increased segregation: The privatization of the Corniche has led to increased segregation, as certain areas have been reserved for private use, making them inaccessible to the public. This has created a sense of exclusion and inequality among different segments of the population.
- Commercialization: Privatization has led to the commercialization of the Corniche, with commercial establishments such as restaurants, cafes, and shops dominating certain areas. This has changed the character of the Corniche as a public space and has made it less accessible to those who cannot afford to patronize these establishments.
- Loss of cultural heritage: The privatization of the Corniche has also led to the loss of cultural heritage, as historic buildings and public monuments have been replaced by commercial establishments.

The investors begin to impose illegal violations such as constructions, parking, and gates that blocked visibility to the sea, as well as several excesses in their allocated areas such as renting and converting the Corniche corridors into a miniature cafeteria. The sea view became completely non-existent along the Corniche, except in small parts that were not rented.

The privatization of beaches has resulted in the construction of walls and private facilities, thereby impeding the residents' access to the sea. This has generated frustration and disappointment among the populace, as the beaches have been historically enjoyed as a public resource. It is noteworthy that the privatization of beaches not only impedes the residents' access to the coast but also damages the environment. Private entities may prioritize their economic interests over environmental concerns, leading to pollution and deterioration of natural habitats.









Figure 2. Fences and sea view barriers on the corniche (Source: Afte Egypt and the researcher).

To mitigate this issue, authorities must adopt measures to ensure that the beaches are accessible to the public, while also safeguarding the environment. The government must consider regulating the activities of private enterprises to ensure that they do not harm the environment or curtail the citizens' right to access the beaches.

The photograph (Figure 3) presented illustrates the rapid privatization of the Corniche, resulting in a significant loss of public space. The transformation is evident as certain parts of the Corniche have been converted into private clubs, private playing areas, and a circus, among others, and are now owned by hotels. Furthermore, the emergence of new cafeterias and restaurants has encroached upon pedestrian walkways as well, diminishing the public's access to these areas. Additionally, the construction of private facilities along the corniche has resulted in the loss of public spaces and a detrimental environmental impact. Moreover, the increased use of cars parked in front of the sea to access the privatized areas has led to increased carbon emissions and air pollution.

The original design of the Corniche functioned for entertainment and was completely accessible for pedestrians, with an uninterrupted view of the sea (Hareedy, 2016). The shore has been obstructed by the presence of cafes, restaurants, clubs, parking lots, and some private beaches that belong to hotels. In addition, the seashore itself was either privatized or

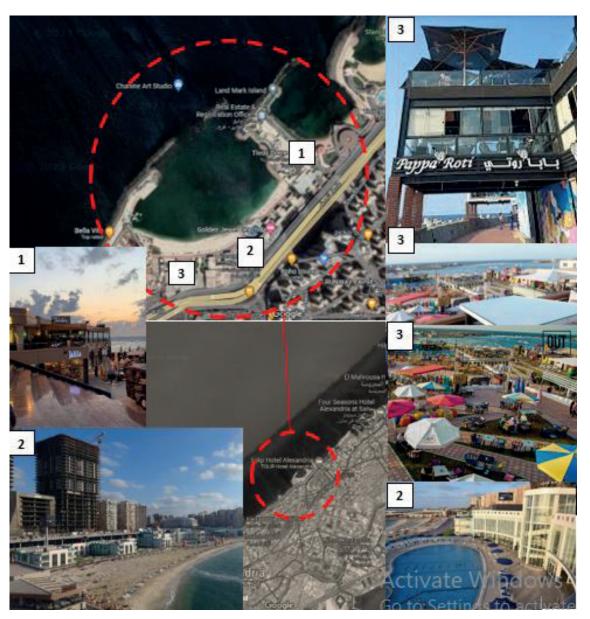


Figure 3. The current situation destroying the panoramic view of the Corniche (Source: Researcher).





Figure 4. a. The original design of Corniche, made as seating for people enjoying the view (Source: Hareedy 2016). b. A protest (Save Alex) of Alexandrians and architects against the disfiguration of Alexandria (Source: Save Alex).

access to certain portions of it have been restricted through ticketing. Fencing was installed in some rental beaches, and some cafes blocked the view with wooden structures. As a result of these developments, there has been a significant public outrage among individuals such as architects, students, and journalists, which led to the commencement of several campaigns protesting the process.

Overall, the concerns about the privatization of the Corniche relate to the loss of public access, increased segregation, commercialization, and loss of cultural heritage. These concerns highlight the importance of preserving public spaces as accessible and equitable places that promote social inclusion and cultural heritage.

3. Privatization and the Climate Change

According to statistics, Egypt is the third country most impacted by climate change. Alexandria, commonly referred to as the "bride of the Mediterranean", is one of 15 coastal megacities from around the world that are at risk of sea level rise and coastal surges, and is listed among the 20 most vulnerable cities (Ismail, 2018; Kamal *et al.*, 2021). This does not only affect Alexandria but the entire Nile Delta, which encompasses a coastal front along the Mediterranean Sea, home to several major cities, including Alexandria, Rosetta, Damietta, and Port Said. These cities are highly vulnerable, due to their low topography, significant land erosion, and high probability of flooding, in addition to their heightened susceptibility to the impacts of climate change.

Alexandria City has many cultural heritage sites along the Mediterranean coast that are vulnerable to climate change impacts, including coastal erosion and flooding. Alexandria, founded by Alexander the Great in 331 BC, was intended to be one of the foremost cities in the Mediterranean region, with numerous Roman and Islamic archaeological sites scattered throughout the backshore. Many of these sites have been submerged, leading several researchers to conclude that sea levels have risen significantly at various points in history. There remains a risk of a sea level rise that could cause severe coastal erosion and flooding, leading to significant impacts on infrastructure, beaches, and cultural heritage sites (Kamal et al., 2021).

The impact of sea level rise (SLR) extends beyond just population displacement and infrastructure damage and encompasses a diverse range of effects on environmental and socio-economic conditions of Egypt. The city of Alexandria, with its numerous archaeological sites, is particularly vulnerable to SLR, as it poses a threat to historic buildings that are already deteriorating and at risk of submersion, complicating access to these sites (Hemeda, 2021). This has the potential to reduce tourism and negatively impact the socio-economic conditions in the area, as the loss of beaches would lead to a decrease in the number of tourists in coastal regions and contribute to an increase in unemployment. It is estimated that by the middle of the 21st century, about 200,000 jobs will be lost due to this trend.

Recent studies have shown that there is a correlation between sea level rise (SLR) and floods, whereby the former exacerbates the causes of the latter. It is predicted that the sea level will rise more than two meters by the end of the century (Farrag & Khalil, 2022).

In the next 15 to 30 years, the sea level is expected to rise, leading to more frequent tidal flooding and potentially causing widespread disruption. This is due to a number of factors, including the increasing erosion of shorelines, the elevation of high tides during full moons resulting in the tide reaching further inland, the elevation of coastal wave tables leading to flooding in low-lying areas, the increased failure of dikes and flood control facilities, and higher waves than those typically caused by storm surges. The privatization of several coastal parts of Corniche will accelerate sea level rise which highlights the need for urgent intervention from decision makers and planning.



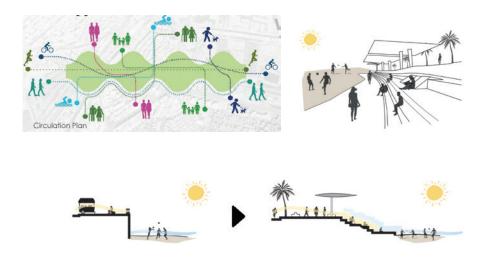
Figure 5. a. The photo shows two scenarios with the amount of sea level rise in meters (mild = 1 m; extreme = 3 m) in several areas in Alexandria city and total population displacement by 2100 (Source: Earth.Org). b. Photo shows the flooded streets and Corniche in 2015 and how commuting across the flooded streets of Alexandria was impossible (Source: Egyptianstreets.com).

The Privatization of Alexandria's Corniche has had significant implications for climate change. Private entities, whose economic interests take precedence over environmental considerations, have caused pollution and the degradation of natural habitats. This has led to several consequences for the environment such as an increase in sea level rise, erosion, and carbon emissions, which contribute to climate change.

It also has resulted in the deterioration of the natural coastline, which plays a fundamental role in mitigating the effects of climate change. The natural coastline serves as a protective barrier against rising sea levels and extreme weather events, such as storms and floods. The destruction of the coastline due to privatization has contributed to a heightened vulnerability of coastal areas to the impacts of climate change.

4. "Revitalizing Alexandria's Seashore: Creating a Hub for Social and Physical Community Activities"

The contribution of Alexandrian architect Eng. Abd El-Hamed Ezzat in the redesign of Alexandria's Corniche has been significant in enhancing the quality of life of its residents and visitors. Through the proposed conversion of the seashore into a hub for social and physical community activities, they have demonstrated their ability to create functional spaces while preserving the aesthetic value of the area through a competition which was titled 'Alexandria 2030' for the redevelopment of Alexandria's Corniche to solve the problem facing Alexandria and create more areas of entertainment for the public.



Creating an intermediary space for urban leisure activity

Figure 6. a. A Circulation plan for various activitives available along the beach. b & c. Accessible areas to the sea for more social vitality (Source: Ezzat, 2019).

The design concept has been developed with the objective of increasing the interaction between people and beaches. This has been achieved by creating more public spaces and new activities, removing obstacles that obstruct the view, and restoring Alexandria's status as one of the most beautiful cities in the world. The architect has also taken sustainability into consideration by balancing social and human aspects and removing barriers that prevent users from freely seeing and using the beach.

The location of all cafes and restaurants under the pedestrian path is a particularly innovative feature of the design. This not only increases investment without damaging the city's waterfront but also provides a direct relationship between the beach and users. The free flow of pedestrians to and from the sandy beach, along with the extension of the city's waterfront, further enhances the human aspect of the design and increases public areas of interaction.

Architects and planners are trying to restore Alexandria's status as one of the most beautiful cities in the world. Their design prioritizes the human aspect and enhances the city's urban landscape and quality of life. Overall, the design has demonstrated the ability to balance functionality, sustainability, and aesthetics in the redesign of Alexandria's Corniche.

Therefore, it is crucial that authorities take action to regulate the activities of private entities and ensure that environmental and social considerations are prioritized over economic interests. This may involve implementing policies to protect natural habitats, reduce carbon emissions, and reduce SLR impact. Also, such threats can be minimized through; awareness, where the causes of climate change can be controlled, and limitingprivatization, where cities are protected from its negative impact. Through these measures, the negative impact of privatization on climate change can be mitigated, and the adverse consequences of climate change can be minimized.

5. Recommendation and Result

Based on the research findings, it is recommended that planners and designers prioritize the preservation of public access to vital public spaces in coastal cities. The proposed design intervention for the Corniche aims to create a more equitable and accessible public space by considering the needs and perspectives of different stakeholder groups. Some recommendations that should be considered are shown in Table 1.

 Table 1. Recommendations that should be considered for the design of waterfront cities (Source: Researcher).

Development Aspects	Development Concept	Recommendation and suggestions
Cultural-Historical	City's Identity	 Strengthening and preserving the identity of the city. Realizing the city with a high cultural and historical value.
Touristic	Aesthetic Image	 Promoting aesthetic characteristics to attract visitors and tourists. Making the city a new tourist destination with water tourism in the future.
Economical	Local Economic Development	 Developing the economy of the city to increase local community income. Increasing economic growth from local to global.
Ecological	Ecological Entertain- ment	Encouraging the community to walkand cycle on the seaside.Creating recreational facilities to be used by the public.
Social	Human-Centered Design	 Arranging a continuous waterfront connected with urban activities. Providing comfortable public space for community activities. Easily accessible for people to enjoy the sea view.
Environmental	Climate change mitigation	 Creating a natural experience to maintain and preserve the environment. Prevent any new development in areas at high risk of flood or erosion. Replace or elevate buildings in the high-risk flood zone. Relocate buildings in flood zones to higher ground is a simple response to sea level rise. The area can be converted to a buffer zone with vegetation to increase biodiversity and reduce shoreline erosion. Natural plants can absorb strong storms and mitigate risk from SLR. Construct levees or sea walls to protect the city from rising sea levels. Some cities around the world have integrated levees into their urban design and landscape, creating open green spaces for recreation and social activities. Additionally, sea walls can be constructed with glass to provide unobstructed views of the sea and land.
General		 It is crucial that authorities take action to regulate the activities of private entities and ensure that environmental and social considerations are prioritized over economic interests. The privatization of public spaces contributes to social segregation, diminishes the public nature of these spaces, and creates privileged areas that have detrimental effects on the socio-cultural landscape. To address this issue, the government should enact legislation to prevent encroachment on public spaces like the Corniche and coordinate high-quality private development projects that benefit the local community. The involvement of urban planners, architects, policymakers, and other decision-makers in the planning, management, and provision of public spaces is crucial, and they should prioritize the human and social aspects of their work.

Finally, Waterfront areas play a crucial role people's lives and are expected to persist over time. The development of urban waterfronts has become a global trend in numerous cities worldwide, extending beyond large urban centers to medium-sized cities and even to small towns. The objective of such development is to enhance the quality of urban spaces by transforming waterfront areas into open public spaces. The development of ambitious waterfront projects in many cities worldwide is an attempt to address environmental preservation challenges while simultaneously improving public spaces. Alexandria has a limited number of recreational public spaces, with one of the most important being the Corniche. More than 70 % of spaces in the Corniche have been privatized and only a length of a few meters is freely accessible after privatizing the entire coast of Alexandria. The creation of additional public spaces can help to reduce the negative impact of privatization, segregation, and inequality. The enhancement of the Corniche requires collaboration between the government and major public and private entities at the national level. A prudent decision in this regard will have far-reaching implications for the city and the Governorate of Alexandria. Therefore, in order to create appealing public spaces, it is imperative to improve the utilization of the Corniche and take into consideration other aspects of the development.

Conclusion

This paper has highlighted the privatization of urban public spaces and its ugly impact on social inclusion and other aspects of urban areas. It has been contended that the sustainable and socially cohesive design of cities is influenced by the actions of local authorities, city planning decision-makers, and the interests they prioritize. As mentioned before the notion of utilizing privatization as a means for economic advancement and financial gain, while disregarding other aspects such as social inclusion, environmental factors and cultural heritage, climate change, and the need for incorporating a comprehensive set of sustainability attributes in the realm of urban planning and development has been deemed unacceptable. The creation of more resilient, livable, and sustainable cities needs a new vision. It is crucial that local authorities and city planning decision makers prioritize sustainability, human-centered planning, and other mentioned aspects in their actions to ensure that cities can meet the needs of current and future generations while maintaining a healthy and thriving environment.

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