

# **The New Administrative Capital of Egypt (Wedian City)**

by

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## Abstract

The Egyptian government's announcement in 2015 of plans to build a New Administrative Capital, to be known as Wedian City<sup>1</sup>, is the most recent example of an ongoing pattern of announced administrative relocations and satellite cities being built on the outskirts of Cairo. Previous relocations and new cities that were intended to be self-sufficient and independent have only been partially successful, and in most cases have remained reliant on the city or have now merged into the original city.

As plans for the new Administrative Capital move forward, this thesis examines the socioeconomic, political, and historical contexts in which the project was announced, as well as the urban context in which it is being implemented. Furthermore, based on the initial documents released, it hopes to critically assess some of the benefits and drawbacks of the development. Furthermore, it attempts to draw conclusions and lessons from this proposal and the experiences of other cities that may guide future phases of the project and aid in the evaluation of potential future initiatives both locally and internationally.

The announcement and current progress with the Wedian City proposal provide an opportunity to examine a wide range of topics pertaining to national, city planning challenges of both old and new cities in Egypt. Because of the scale and nature of the project's implementation, the proposal touches on a variety of urban design topics and elements at various scales and levels. A closer examination of the proposal reveals that the project raises concerns if they are not addressed. Furthermore, because urban design is in many ways a tangible representation of current planning processes, as well as a physical transformation of the current state of affairs, conditions, and priorities, the new

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<sup>1</sup> Wedian city is the name that the Government gave to the new capital during the announcement of the new capital, then in November of 2021 the government made a competition for choosing a new name for the city, "as part of preparations for the opening of the new administrative capital, the egyptian state invites all egyptians, individuals, groups and companies to share ideas and proposals to choose a name for the city and formulate a propaganda sentence in addition to designing an innovative logo and a distinctive visual identity that reflects the state's vision of creating new smart cities and promoting society through science, art, innovation, sustainable development and modern technology, and aims to encourage young people to actively participate in construction and development to achieve a comprehensive renaissance in all fields." [egypt identity contest \(egbranding.eg\)](https://egyptidentitycontest.egbranding.eg)

proposal's urban design will be given special attention within the context of the larger urban planning context.

Based on previous experience, this thesis concludes and recommends additional considerations for long-term sustainability measures, more accurate outcome-oriented socio-economic accounting, and the integrated development of land-uses and urban components in order to promote improved urban design outcomes. Throughout the process, the thesis employs Kevin Lynch's five Good City Form principles to improve key elements of vitality, sense, fit, access, and control.

This thesis was prepared and based on the study of the governmental resources and governmental website and Global and National official newspapers that discussed some of the points that were discussed. A thesis that was prepared and discussed at MIT<sup>2</sup> was also used as per the sources from this thesis were important and efficient for my topic.

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<sup>2</sup> Khorshed, Mirette, 'Cairo's New Administrative Capital Wedian City: Lessons from the Past and for the Future', Master Thesis. Massachusetts Institute of Technology (Februari 2017).

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# Chapter 1

## Introduction

### 1.1 - A brief context and political background

On 13<sup>th</sup> March 2015, the Egyptian government announced to the public at the Economic Development Conference in Sharm al-Sheikh the impressive, futuristic mega project of the New Administrative Capital located 45km outside of current downtown capital city of Cairo.

“The New Administrative Capital will provide outstanding service and a high quality of life for the citizens of Cairo and the surrounding area. The new city will also create a variety of job opportunities, as part of a comprehensive development framework. Once the capital is complete, it will be vital to continue to upgrade the infrastructure and provide constant maintenance, to very high standards, across the various projects, and to provide ongoing high-quality services for citizens, to guarantee a sustainable city.”

- Abdel Fattah al-Sisi, President of Egypt.<sup>3</sup>

In an official video, a better sense of the goals was shown to the public of this futuristic city plan in the desert of Egypt. Cairo 'has grown old and overwhelmed by the crowd'. For decades now, Cairo has been struggling with the immense problems of overpopulation. The result is congested roads, an overburdened public transport system, a lack of suitable housing for low and middle-income earners, growing areas of informal settlements, building on agricultural land and heavy urban sprawl. The video states that a new, livable city must be built in the desert east of Cairo to "rise again as one of the most beautiful capitals in the world. "<sup>4</sup> The way these words disregard the existing Cairo and

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<sup>3</sup> Sisi quoted in 'The Smart Revolution: Reimagining Cities', *darmagazine* i16 (January 2019) 48.

<sup>4</sup> Cube Consultants, 'The Capital Cairo-al- Asima al- Idariyya al- Jadida', Vimeo video, 3 August 2016. (<https://vimeo.com/180717384>).

its 21 million inhabitants is incomprehensible. The new capital is the most important project of the current military regime led by Sisi and is presented as the bright future of Egypt. Given the last few turbulent years since the January 25, 2011 revolution, the ensuing years of protests, the overthrow of President Morsi in 2013 and his subsequent removal by then

head of the armed forces - Abdel Fattah El-Sisi - the country has seen only a staggering economic recovery in recent years. Today, under the administration of President El-Sisi, elected in 2014, the government is attempting to address many of these accumulated problems with the proposal for a new administrative capital.

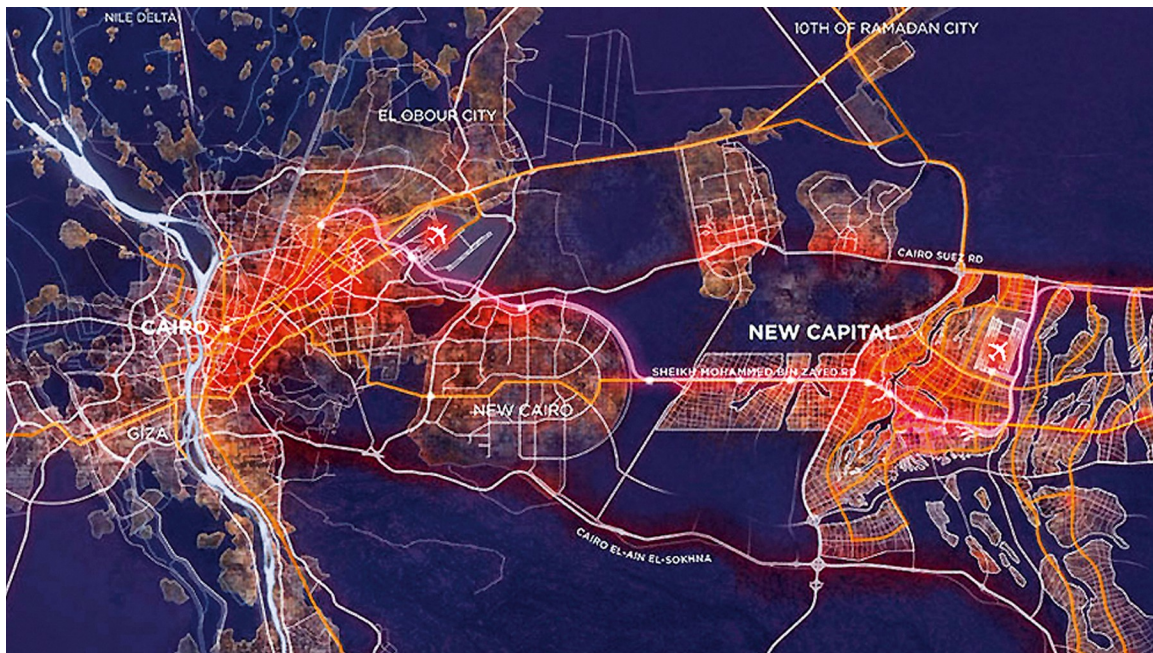


Figure 1 – Facebook Page: ‘al-‘Āšima al-‘Idāriyya al-Jadīda - The Capital Cairo’  
<https://www.facebook.com/SmartCityEg/posts/2048053318826777>

## 1.2 - Is it necessary or just repeated history?

The idea of establishing a new administrative center outside the growing boundaries of Cairo is neither unique nor new to Egypt. As noted in 1994, "the question of relocating the Egyptian capital away from Cairo has surfaced periodically in semi-serious national discussions over the past twenty years."<sup>5</sup> Egyptian administrators have struggled with

<sup>5</sup> p.254 Journal of Architectural and Planning Research 11:3, Autumn 1994.

Cairo's growing population and rapid urbanization since Egyptians migrated from rural areas to urban settlements in the late 1950s, and in recent years they have made similar attempts to decentralize the city. Two such proposals were the Sadat City and Nasr City plans, which when originally released also aimed to move administrative functions outside the original boundaries of Greater Cairo. These earlier attempts and proposals are often referred to as earlier plans that did not achieve their original goals and did not become the intended new administrative centers.

Madinet Al Sadat (Sadat City), the city was created by republican resolution 123 of 1978, amended by prime minister no. 1131 of 2005 on amending the city's administrative boundaries to make the city's total area 121,000 acres. Located 100 km northwest of Cairo, was built well outside the boundaries of the Cairo metropolitan region on one of the main connecting roads between Cairo and Alexandria, known as the Al-Sahraui (Desert Road). It was originally planned to house half a million residents and "create 165,000 jobs over 25 years for the 500,000-target population." <sup>6</sup> Today, Sadat City is home to about 150,000 residents. Although the original plan also called for the relocation of some government buildings to the new site, these relocations have failed despite the funds invested.

Besides the plans which specifically tried to create new administrative centers, recent planning initiatives have tried to remediate Cairo's current overpopulation and congestion by creating new cities outside of the current capital. These cities were originally designed with the intention of drawing large portions of the population outside of the current center and create self-sustaining cities at these nodes. As a result of these initiatives, satellite cities such as New Cairo and Sixth of October City were developed on both the eastern and western edges of the city. However, the success of these initiatives seems to have been only partial, as economic opportunities were undermined during their development plans. As a result, many of these satellite cities proved to be only residential neighborhoods for new residents, while the majority remained dependent on job opportunities in the center. This dependence on the original city has resulted in many residents having to commute daily between the satellite towns and downtown Cairo, as

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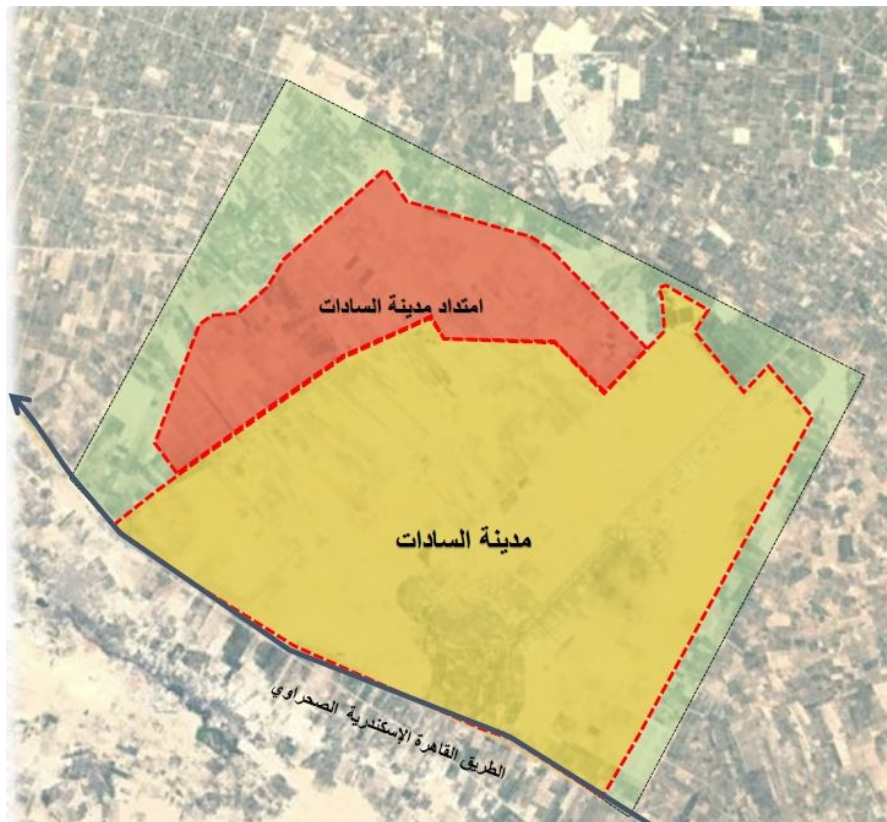
<sup>6</sup> The development of Sadat city. 1978.



they leave their satellite homes during the day and return at night. This daily influx and outflow of residents has resulted in heavy traffic, especially during the morning and late afternoon rush hours. Although the satellite towns were planned to be self-sufficient, they have failed to become truly self-sufficient and are still heavily dependent on the original center of Cairo. This has led to heavy urban sprawl between the original city limits and the new settlements.

The lack of planned transportation systems between these cities has compounded the failure of these plans, as the existing public transportation systems are unable to accommodate the large number of residents who must commute to work each day. This has led to an overcrowded and congested bus system, forcing many to rely on more independent "microbuses" or, for those who can afford it, rely on their own cars. Due to the financial resources that would be required to build an efficient rail line between these satellite towns and the city Centre, no rail and/or subway lines have been developed. In fact, at this point, they are only potential plans for the distant future, leaving current residents with little to no hope for better conditions in the near future.

These new 'desert cities' - as they are often called - struggle not only with lack of accessibility to them, as well as within them, but also struggle with creating thriving centers of life and commerce that attract a diversity of socio-economic groups and form their own identities.



Sadat City
  The expansion of Sadat City

Figure 2 – plan showing the expansion of Sadat City Facebook Page: ‘al-‘Āṣima al-‘Idāriyya al-Jadīda - The Capital Cairo’  
<https://www.facebook.com/SmartCityEg/posts/2048053318826777>

### 1.3 - The appeal of Egyptian deserts

During the turbulent 1950s, Egypt's relationship with its desert began to change. Until then, this vast and inhospitable space had only captured the imagination of pioneers (Western and Arab). trailblazers.<sup>7</sup> From this point on, the desert became the focus of the new revolutionary Egyptian founders of the state. Gamal Abdel Nasser declared in 1958,

‘Today, brethren, we turn to the Western Desert to establish there a new valley, parallel to the valley of the Nile. We are endeavouring to utilize the water of the wells in order to create new land extending from the southern borders, 150 kilometers west of Aswan, and

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<sup>7</sup> Apart from the Bedouin tribes that roamed the desert for centuries.

running northwards through Dakhla, Kharga, Farafra, and Bahria Oases. There are cultivable lands there estimated at 3 million feddans which are being left without cultivation.'

- Gamal Abdel Nasser, Former President of Egypt.<sup>8</sup>

Development of desert lands was not something entirely new. Since the reign of Muhammad Ali Pasha, various plans had been carried out in the desert, notably Port Said, Ismailia (both on the Suez Canal), and Baron Empain's Heliopolis. Nevertheless, Nasser gave impetus to something greater: the idea of the desert as a solution and as a new path for the future of Egypt. Nasser's comments were mainly rhetorical when it came to developing the desert. However, he planted a seed that sprouted during the rule of Sadat, Mubarak, and the post-Mubarak regimes (Morsi and Sisi). Since Sadat and his *infitāḥ*-politics (open door policy), the desert became the most important location for development plans and the "new place" for the future Egypt, at least in the imagination of the planners.

Egypt's population is growing, and growing fast. Between 1952 and 2013, the Egyptian population quadrupled to 85.8 million and is still growing by 2.03 percent annually.<sup>9</sup> Almost all of these people are "cramped [in the words of the World Bank, JV]" <sup>10</sup> within the Nile Valley, which makes up about five percent of Egypt's land area. Of course, Egypt has a high population density (especially in the urban areas), or in the more ominous words of the World Bank 'higher than of Bangladesh and Indonesia'.<sup>11</sup> Since the 1970s, the growing Egyptian population on this small piece of land has staggered many Egyptian and international observers (the Egyptian state, the World Bank and USAID).

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<sup>8</sup> With these words Nasser instigated his New Valley plan, which was aimed to reclaim around three million feddans. Sims, *Egypt's Desert Dreams* (2018) 37.

<sup>9</sup> 'Population, total: Egypt, Arab Rep.', The World Bank (<https://data.worldbank.org/indicator/SP.POP.TOTL?locations=EG>) ; The Egyptian government expects this population to double in 2050.

<sup>10</sup> p.209 Mitchell, *Rule of Experts: Egypt* (2002)

<sup>11</sup> p.212 Mitchell, *Rule of Experts: Egypt* (2002)

According to a World Bank report, "These two issues - the relatively limited amount of usable land and the rapid growth of the population - are seen as leitmotifs in the discussion of Egypt's economic problems."<sup>12</sup> How can the valuable fertile soil of the Nile Valley be protected from urban encroachment? And how can the growing population be housed and fed (with only limited space for crops and houses)? These fears, compounded by new technological possibilities, contributed to the attractiveness of the desert. Only by opening up the desert surrounding the Nile Valley could this looming "ecological-demographic narrative of crisis "<sup>13</sup> be averted. Development plans in Egypt have been underpinned by this rhetoric for the last fifty years.

As David Sims so vividly sets out in *Understanding Cairo and Egypt's Desert Dreams*, the notion of the 'ancient' and 'crowded' Nile Valley in contrast to the limitless possibilities of the vast Egyptian deserts into a 'force of its own',<sup>14</sup> which seemed unstoppable. From time immemorial, the strikingly sharp boundary (compared to other deserts) between the Nile Valley and the desert had felt like it was at the end of the world, but with this change in perception, it became the site of a bright new future. This chapter demonstrates the consequences of this rhetoric by analyzing some of the desert projects that were launched from the 1970s onwards. It shows that the rationale for these developments obscured many deeper relationships in Egyptian society and was based on false assumptions. Driven by speculative capital and cutting-edge rhetoric, this led to disastrous development plans. Instead of a gradual and balanced expansion into the desert, most prime sites in the Egyptian desert were quickly hijacked by dubious investments in a short period of time. As it will be explained, Egypt's new relationship with the desert in a sense closed it off to the average Egyptian, rather than opening it up. By placing Egypt's new capital in this historical context, we can better understand the logic underlying the city and make some predictions about its future.

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<sup>12</sup> p.210 Mitchell, *Rule of Experts: Egypt* (2002)

<sup>13</sup> p.65 Sims, *Egypt's Desert Dreams* (2018)

<sup>14</sup> p.3 Sims, *Egypt's Desert Dreams* (2018)

## Chapter 2

### The New Administrative Capital (Wedian City)

#### 2.1 – The announcement of the New Capital

Since its announcement, the project has gone through many changes, from a change in the lead design team to changes in investors and financial availability. The initial concept drawings were designed by Skidmore, Owings and Merrill (SOM), a large international firm headquartered in the United States, and were presented at the Egyptian Business Conference in March 2015. According to the official announcement video, the plan is to target Egyptian youth (30 years and younger, who statistically make up 75% of the Egyptian population).

The ‘phase one layout’<sup>15</sup> is the centre of the project and constitutes 168 km<sup>2</sup> (40.000 FD) of the total area of 714 km<sup>2</sup> (170.000 FD) and needs to house around 1.5 million people. This area is the main focus of construction at the moment.

This space will be subdivided into:<sup>16</sup> - Green Park and river. - Eight residential zones: a total of 25 km<sup>2</sup>. - Business District. - Government District: 4,5 km<sup>2</sup>. - Medical City: 2,26 km<sup>2</sup>. - Knowledge City: 1,49 km<sup>2</sup>. - Smart Village: 0,86 km<sup>2</sup>. - Conference Zone: 1 km<sup>2</sup>. - Expo City: 3,78 km<sup>2</sup>. Opera (3 halls).

Residential zones	Government District	Medical City	Knowledge City	Smart Village	Conference Zone	Expo City	Opera
25 km <sup>2</sup>	4,5 km <sup>2</sup>	2,26 km <sup>2</sup>	1,49 km <sup>2</sup>	0,86 km <sup>2</sup>	1 km <sup>2</sup>	3,78 km <sup>2</sup>	3

<sup>15</sup> Cube Consultants, ‘The Capital Cairo – al-‘Āšima al-‘Idāriyya al-Jadīda’.

<sup>16</sup> ‘26 Wonderful information in number about The New Administrative Capital’  
<https://www.c-egy.com/en/about-capital>

The total area of the city will be 714 km<sup>2</sup> and needs to house 6,5 million people. The area will be subdivided into: - Housing: 40% of the city (285,6 km<sup>2</sup>) is allocated as ‘living space’, this area is divided into 20 resident districts and 13 valleys. The districts are subdivided into ‘high-density’ (35%), ‘mid-density’ (50%) and ‘low-density’ (15%) areas. Most likely, this degradation also reflects their future prices. Per capita at least 15m<sup>2</sup> of green space is promised. With 6,5 million people this means 97,5 km<sup>2</sup> of green space.

Housing (40%) (285,6 km <sup>2</sup> )	High Density	Mid Density	Low Density
20 Resident Districts	35 %	50 %	15 %
13 Valleys			

Business: 30% of the city (214,2 km<sup>2</sup>) is allocated as business area and is divided into several ‘specializations. - 20 ‘areas’ of 8 km<sup>2</sup> for large investments. - A business area of 8 km<sup>2</sup>. - An industrial zone of 11,5 km<sup>2</sup>. - A solar farm of 11,5 km<sup>2</sup>, that together with a solar system on the roofs of the residential district will provide the city with 70% of its energy. - Urban development/Real-estate area of 50 km<sup>2</sup>.

Business (30 %) (214,2 km <sup>2</sup> )	Large investments	Business Area	Industrial Zone	Solar Farm	Real-estate
	8 km <sup>2</sup>	8 km <sup>2</sup>	11,5 km <sup>2</sup>	11,5 km <sup>2</sup>	50 km <sup>2</sup>

Roads: The roads in the new capital extent over 650 km. 40% of the road system is allocated for bicycles and pedestrians. It is not clear if this 40% is part of the greater network of 650 km (so 260 km). - The River/park: 25 km<sup>2</sup>. - Airport: 33 km<sup>2</sup>.

Facilities: 1250 mosques and churches. - 2000 schools and colleges. - 600 medical facilities. - 40.000 hotel rooms. To put it in perspective, the new capital has a larger surface than Cairo (606 km<sup>2</sup>) and is projected to house around 6.5 million people.

Mosques & Churches	Schools & Colleges	Medical Facilities	Hotel Rooms
1250	2000	600	40.000

Given the plan to accommodate such a large number of residents, as well as a variety of land uses and alternative activities, the question arises as to what extent the project is considered a housing development project or a new city, rather than a true administrative relocation. Although titled as an administrative capital, the design for the new city is quite comprehensive in its components - with the administrative complex being only a part of the overall design. In late November 2015, the land was officially designated for the new capital project. In the months that followed, new land for residential development was approved and the first phase of construction began.

Although an ambitious plan, driven primarily by the need to incentivize foreign investment and create jobs (which such megaprojects can create), the plan has been met with varying degrees of acceptance or skepticism, especially given the unstable economic situation. When the plans were originally announced, financial support was to come from UAE-based private investment company Capital City Partners. However, after further discussions, no agreement could be reached and negotiations broke down. New sources of funding emerged and were announced in early 2016. Amid approximately \$400 billion in investment from China, a portion of the project was awarded to a Chinese construction company: China State Construction Engineering Corporation. A second round of

investment from China was announced in mid-to-late 2016, with additional funding sources still uncertain.

In the months following the initial announcement of the proposal at the 2015 Economic Conference, the master planning and urban design of the proposal was awarded by the Chicago-based firm Skidmore Owings & Merrill to a local group of architects, urban designers and landscape architects. The selection process was swift and the firms were brought together by forming a new consortium for this project. The five firms were then reunited under the name Urban Design Consortium +5, also referred to as UDC +5. Although the Department of Housing and the Department of Defense are the driving forces behind the project, the responsibility for master planning and design development was given to the UDC +5 group. The involvement of a military agency is often questioned. However, as most vacant desert land is owned by the armed forces, the Ministry of Defense is involved in many similar national projects, so its involvement in this project is not unique.

Due to the status and plan changes of the project in the following months, the master plan and blueprints of the new city were kept confidential for almost a year after the original publication of the vision. In addition, there was a great deal of uncertainty about the future of the project, with only sporadic hints and announcements about ongoing financial negotiations throughout the year. In September 2016, various elements of the schematic proposal began to leak to the public through various online news sources, newspapers, social media, and official government sites such as the New Urban Communities Authority portal.

## **2.2 – The administrative relocations throughout history of Egypt**

Capital relocation is not a new idea. In fact, the relocation of the Egyptian capital has occurred at numerous times, and Egypt has located its administrative capital in various places throughout its history. The earliest evidence of human life along the Nile dates back as far as 400,000 years, and the earliest remains of settlement date back as far as 7,000 years. Egypt's long history has allowed for numerous occasions and reasons for



relocating its capital. Although the reasons for these relocations have varied, the significance of this historical fact is that the idea itself is not new.

While Memphis was the original capital of the Old Kingdom of Egypt, located at the present site of Giza (part of the present center of Cairo), "Luxor or Thebes, the city of the god Amon, was the capital of Egypt during the period of the Middle and New Kingdom", shifting over time between the Old Kingdom and the later dynasties. Even after the conquest of Egypt under Greek and Roman rule, the administrative center of Egypt became the newly founded city of Alexandria. The location of this city on the Mediterranean Sea was a clear indication that the center of gravity of Greco-Macedonian Egypt, both for trade and military purposes, was to be in the Mediterranean."<sup>17</sup>

The situation changed again with the Arab conquest: "Fustat was founded at the beginning of the year 642" and forms the basis of the present megacity, as it "laid the foundation for one of the largest capitals of the Arab world"<sup>18</sup>. However, with the re-foundation of the capital in 642 AD, proposals were made even then to move the administration outside the city center. Although the reasons for this relocation are disputed, as the famous historian Andre Raymond discusses in his book *Cairo, City of History*: "(The then) governor Abd al-Aziz had already taken steps to move the center of government to Hilwan in 689, perhaps to escape the plague that struck Fustat."<sup>19</sup> Although the reasons for the move were different from the circumstances of today's proposal, the reasons for the move were uncertain even then, and the move of the administration may also have been due to a desire to represent a new sense of identity or achievement on a national level. As Raymond goes on to point out, "it was more likely that he wanted to establish a command-and-control site - it significantly received the name al-Askar, "the Cantonment" - at some distance from the great and busy city that

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<sup>17</sup> p.293, Lloyd - *Ancient Egypt, State and Society* (2014)

<sup>18</sup> p.11, Raymond, Andre - *Cairo, City of History*

<sup>19</sup> p.23, Raymond, Andre - *Cairo, City of History*

Fustat had become in order to mark in a spectacular way the accession of a new caliphate."<sup>20</sup>

The scale of the endeavor to relocate an administrative capital throughout Egypt's history has varied from more symbolic shifts during ancient times, to more physical relocations in more recent history. More recent relocation attempts have varied in their degree of success or failure. In reference to an attempt to remove the current government to Hilwan, Raymond writes "the attempt did not succeed, because doubtless the distance from the capital was too great"

In a similar way as the rulership changed, so did the locations of the administration and the reasons for its relocation. Previously, "Al-askar continued as a political and administrative center until the arrival of the Tulunids Ahmed ibn Tulun took up residence in the dar al-imara (governor's residence) there before building his own palace."<sup>21</sup> When the palace was finally built, it was erected to the northeast of al-Askar and, as Raymond describes, it was built "to commensurate with his ambitions"<sup>22</sup> showing the close connection between historical changes in rule and administration. Although the question of who, where, and for how long the administration was housed in a particular place varied throughout history and took different forms, it is clear that relocation is not a new concept and there are many precedents to learn from

As Lawrence Vale discusses in *Architecture, Power and National Identity*, it is also important to distinguish the administrative complex or 'capitol' from the so-called larger 'capital' city itself, which may hold some of the administrative functions or host other forms of activity. Furthermore, despite the relocation and construction of the palace itself, this does not mean that a relocation of the administrative center has historically led to the

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<sup>20</sup> p.24, Raymond, Andre - Cairo, City of History

<sup>21</sup> p.24, Raymond, Andre - Cairo, City of History

<sup>22</sup> p.26, Raymond, Andre - Cairo, City of History

successful growth of an associated city. This is reflected in the history of al-Askar: "no trace of the princely city of al-Askar has been found so presumable it had only limited success as a city."

Although new capitals and their associated capitol complexes were developed for different reasons and purposes. As Vale discusses in *Architecture, Power, and National Identity*, "In the emerging postcolonial world of the middle and late twentieth century, the leadership of newly independent states frequently attempted to use architecture not only to house a new form of government (parliamentary democracy), but also to proclaim the worthiness of the new regime and advance its status. The professed goal of such government buildings is to forge something most often termed national identity or national unity; yet...the design of these buildings remains closely tied to political forces that reinforce existing patterns of dominance and submission."<sup>23</sup> While this has been the case in many cities, it is not always easy to discern such motifs amidst other projected purposes.

This could be clearly seen in Egypt in the time of the ancient Egyptians, where the seat of administration was - whether the Pharaonic palace or the more modern citadel complex, served the image of the ruler throughout history. As Lloyd explains in *Ancient Egypt, State and Society*, "As in all state systems, the ethos of the Egyptian state required continual reaffirmation. The palace had a major role to play in this process, in that it served as a context where the king could be accessed... and, as such, it could be employed as a major device for constant image projection."<sup>24</sup> Therefore, much emphasis has been placed throughout history on headquarters and the image that these complexes project of the nation; a phenomenon that has been observed for centuries both in Egypt and outside the country.

Where on the spectrum of such image projections lies the newly proposed administrative capital? Vale goes on to explain, "Although all capitals, beginning with the earliest

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<sup>23</sup> p.10 Lawrence Vale - *Architecture, Power and National Identity*

<sup>24</sup> p.138, Lloyd - *Ancient Egypt, State and Society* (2014)

citadel, have had symbolic roles that fortified and magnified the presence of government, nothing seems quite comparable to the manifold pressures of modern nationalism."<sup>25</sup> The role of representing the capital, then, is inevitably linked to larger notions of nationalism. While this role may not be harmful in itself, the dominance of the projection of this image over the needs of the city and its residents threatens the underlying ecosystem of the city and its growth.

Cities today compete worldwide for recognition as markets for a globalized economy; and seek to accommodate and attract residents, diverse industries, investment and a competitive environment for necessary activities, the image of the administrative city continues to gain importance. Reconciling this 'image' with the reality of the city is perhaps one of the greatest challenges facing decision-makers, particularly in recovering or emerging markets.

The analysis of the proposed city will therefore also address the challenges posed by these two desired outcomes for the new city. With this brief overview in mind, the following sections will consider the analysis of the new proposal for the city of Wedian not as a new solution or idea, but as an old one that has already been tried both within and outside of Egyptian borders. As the proposal for the city of Wedian is only in the early stages of implementation, and future phases of the project may still be ahead.

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<sup>25</sup> p.17, Architecture, Power and National Identity

## Chapter 3

### Justifying the New Capital

‘We need a landmark, a new capital. We have the right to have a dream and this is our dream.’ - El-Husseiny, Chairman of ACUD <sup>26</sup>

In this chapter, the five main justifications for the New Administrative Capital is elaborated. Most of these justifications are supported by the official account (congestion, housing, job opportunities and safety), but a fifth (unofficial) justification is added, namely 'the legitimacy of the current administration', which it's believed should also be briefly discussed (which is better explained in the section itself). At the same time, looking at the logic of desert, capitalization, and high modernism, I want to take a closer look at the justifications and discuss the context that shapes these ideas. As it will be shown, many of the justifications are problematic and are either based on a 'misreading' of Cairo's problems or propose dubious solutions. The 'safety' section will also discuss the (unofficial) 'deeper' reasons why the current Egyptian government might find a large isolated city in the desert is a smart idea.

#### 3.1 – Congestion

The main justification for the new capital is congestion in Cairo. Congestion is a real problem in Cairo. The streets are blocked, the subways are overcrowded, and public spaces and green spaces are scarce, if not non-existent. In addition, Cairo is one of the most polluted cities in the world.<sup>27</sup> The problem of traffic congestion and pollution is so

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<sup>26</sup> Ruth Michaelson, “Cairo has started to become ugly’: why Egypt is building a new capital city’, The Guardian, 8 May 2018. <https://www.theguardian.com/cities/2018/may/08/cairo-why-egypt-build-new-capital-city-desert>

(ACUD) Administrative Capital for Urban Development: is the Owner and Developer for the New Administrative capital in Egypt which is located 35 KM east of Cairo of a total area of 170,000 feddan. The new capital city will help to strengthen and diversify the country’s economic potential by creating new places to live, work and visit. In order to draw people to this new capital city, a series of key catalyst developments will be established at its core. This will include a new government administrative district, a cultural district and a wide variety of urban neighborhoods.  
<http://www.acud.eg/>

<sup>27</sup> ‘Cairo is world’s second most polluted city: WHO’, Egypt Independent, 15 May 2018. <https://www.egyptindependent.com/cairo-is-worlds-second-most-polluted-city-who/>

understandable because people face these obstacles every day. Solutions to the problem of traffic congestion could include expanding public transportation,<sup>28</sup> discouraging car use, and opening up private spaces to the public. However, these measures are not shared by the logic of capitalization and thus by the powerful institutions that dictate major urban projects in Egypt.

Real profits are made on land deals in the outskirts of the desert, and here the ruling powers propose the 'solution' for congestion: an expansion of cities into the desert. The urbanization of the desert over the last fifty years shows that this idea has become commonplace. But as Sims shows, satellite cities in the desert have not relieved Cairo of its traffic, quite the opposite. For most satellite cities still depend in some way on Cairo's Centre for their depend (work, leisure, public institution), these cities/neighborhoods have made the situation on the road worse. More and more people rely on cars and have to travel longer distances to reach their desired destination (increasing pollution in Cairo). The new capital will only add to these problems. If you look at the pictures showing the layout of the city, it looks like the city is surrounded by empty desert, but that is far from reality.

The New Administrative Capital will be connected to the huge satellite district of New Cairo (500 km<sup>2</sup>) and is 62 kilometers (71 km via the Suez Desert Highway) from downtown Cairo (see Figure 3). The new capital will develop as part of the Greater Cairo region. People could live in Cairo and work in the new capital or vice versa. This means that it will contribute to traffic congestion in the city. The new capital will increasingly force people to buy a car and participate in the daily bottlenecks to and from the Centre of Cairo.

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<sup>28</sup> At the moment, a third metro line in Cairo is being built. However, the construction of this metro line takes time and the new metro line does not connect any satellite cities to the urban core of Cairo.

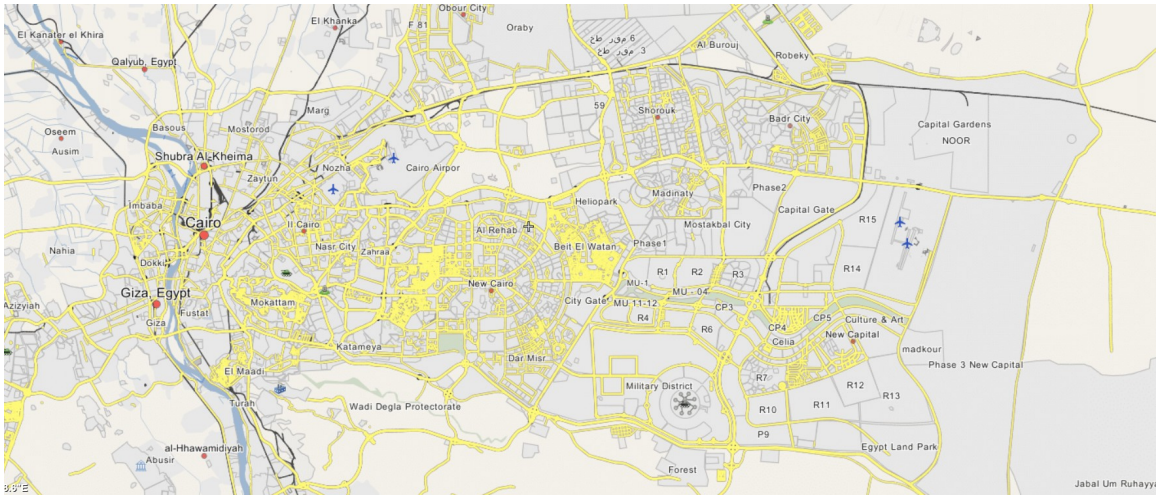


Figure 3: On the left, we see Cairo and Giza, in the middle we see New Cairo, and on the right, we see the new capital. This picture gives us an idea of the magnitude of the eastern urban expansion (including the new capital). This eastern expansion alone is around 1500 km<sup>2</sup> and is larger than for instance Los Angeles.

<http://wikimapia.org/#lang=en&lat=30.066717&lon=31.521835&z=11&m=w&search=cairo>

### 3.2 – Housing crisis

The second justification for the new capital is the housing shortage in Cairo and the encroachment of the city into the fertile lands of the Nile Valley. Urban sprawl is rightly seen as a major threat to the future of Egypt's agricultural land. Many villages in the delta are slowly expanding and 'eating up' the precious land of the delta. Developing desert land could be one of the ways to counter this threat. In its bid to attract a reasonable proportion of the current Cairo population, the new capital is trying to provide alternative, adequate housing options for Cairenes. The relocation of government facilities may also create new space for housing in Cairo. On paper, these ambitions seem to be the right step to ease the pressure on the housing market in Cairo. But again, the problems facing satellite cities today should not be overlooked and could be an indicator of the future of the new capital. Egypt's newly built satellite cities have about 12.8 million vacant homes (about 4.7 million in the Greater Cairo Region).<sup>29</sup>

<sup>29</sup> 'Total Number of Vacant Housing Units in Egypt 12,8 Mn: CAPMAS', Egypt Independent, 2 October 2017. <https://www.egyptindependent.com/total-number-vacant-housing-units-egypt-12-8-mn-capmas/>  
Around a third of these structures are not completely finished.

This is not only a problem of the new cities, but also in the high red brick apartments of the informal areas (‘ashwa’iyyāt) many floors are empty (estimating these empty units is more difficult). If the government could find ways to stop the misuse of real estate in Egypt, a lot of dead capital would be ‘released’ and houses would become available.<sup>30</sup> The main reasons for the vacancy are the disastrous management of public land and the Egyptian real estate income model, where units are sold and bought purely for investment reasons. There are no clear signs that the new capital will offer a radically different approach.

There are some suggestions that might help the Egyptian economy break this impasse, but the most important argument directly problematizes the ongoing construction of the new capital. Sims argues that any reform must begin with “a presidential decree that freezes any further wholesale public land allocations to the main sectoral agencies (NUCA, TDA, GARPAD, and GAID) and all ‘retail’ sales or other land disposals by them to investors or any other end users for a period of five years.”<sup>31</sup> This five-year period can then be used to evaluate existing projects in the desert, move forward with stalled projects, and address the systemic problem of vacancy (which could make millions of homes available). However, we can assume that a proposal like this will lead to an outcry from the powerful capitalists and government officials who profit from these projects, so only a strong collective voice (like the one we saw in 2011) will be able to accomplish something similar. However, when it comes to the new capital, this proposal seems to come too late and would be a huge waste of the money already invested. So, the main goal for the new capital is to not make the same mistakes as the previous satellite cities and to make sure that the real estate market of the new capital does not become another toxic profit machine that could lead to many empty and unfinished structures. In response to these problems, the ACUD chairman issued the following statement, ‘I think when people find all needed services and road networks, as well as, high-class utilities, large green spaces and high-quality technological infrastructure, they will move immediately to

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<sup>30</sup> I call this ‘dead capital’ because this capital has been taken out of the crucial capital flows/circulation of the economy. Instead, this capital just ‘sits’ there in the hope for a better future.

<sup>31</sup> At least five years are necessary to implement radical reforms. Sims, *Egypt’s Desert Dreams* (2018) 305.



live in the city. Moreover, we required developers to deliver their units fully finished so clients won't deal with the hassle of finishing.<sup>132</sup>

Forcing developers to deliver fully finished devices is a sensible decision. If implemented, this could help to solve the problem of underdeveloped structures (as is seen everywhere in Cairo). However, it is far from clear whether this is the only solution to the problem of vacancy. Especially in light of many Egyptians will be enticed to put their money in the initiative because of the many powers sponsoring it. these constructions (finished or unfinished). Sims offers three additional measurements to consider. land speculations could be dealt with First, performance bonds (between 20% and 50% of the total debt) project's total investment worth) that would compel investors to complete the scheme before the deadline. They wouldn't be able to keep this bond if they didn't meet their contractual obligations. The second step is to release land that has been held in usufruct. In order to reduce speculative intent, (long lease) contracts are used. Finally, enact an annual property tax. To discourage the use of land only for investment purposes, a tax has been imposed.<sup>33</sup> However, in the case of the government, in order to maintain the city's attractiveness, the government's first and primary objective is to keep the city appealing to the general public. These Laws of this nature may deter investors.

Another major question is whether the new cash would contribute to the saturation of Egypt's fast-growing real-estate market, which could eventually lead to a bubble and a bust. However, we must consider the "special" circumstances in which Egyptian real estate operates. Egypt's real estate market is mostly based on cash transactions, which complicates matters.<sup>34</sup> Unlike, say, the United States, where credit penetration is

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<sup>32</sup> Shaimaa Ghanem, 'New Administrative Capital Is an Incomparable Integrated City: ACUD Chairman', InvestGate, 7 November 2018 <https://invest-gate.me/features/new-administrative-capital-is-an-incomparable-integratedcity-acud-chairman/>

<sup>33</sup> Sims, Egypt's Desert Dreams (2018) 312-313.

<sup>34</sup> Mohammad Gad and Alya El Marakby (translation), 'On the Egyptian pound, living standards and real estate: An economy forecast for 2019', MadaMasr, 2 January 2019 <https://madamasr.com/en/2019/01/02/feature/economy/on-the-egyptian-pound-living-standards-and-real-estate-an-economy-foreca>

significantly higher. A big bang like the one in the movie. As a result, a repeat of the period 2007-2009 in the United States is highly unlikely in Egypt. In the meantime, there are evidence pointing to major issues in Egyptian real estate, which could lead to speculation. bubble. The tremendous scale of housing has created an enormous supply of homes in recent years. plans in the desert However, only a small percentage of the population can afford these homes. population. The mid- to low-end categories, in particular, are experiencing an increase. There is a scarcity of housing since the prices are too high for the demand.<sup>35</sup> Furthermore, the new capital will be unable to not provide adequate housing for this portion of the population, and as a result, these people are still homeless. compelled to work in the informal sector Fear,<sup>36</sup> as Sims points out,<sup>37</sup> is a saturation of the mind. The new capital may face financial difficulties as a result of the housing market.

### **3.3 – Job opportunities**

The final argument for embarking on a large-scale project such as the new capital is the potential for employment and investment creation. A considerable number of people have already been employed during the earliest stages of the city's construction (a true figure for the number of jobs created by the new capital up to now is difficult to come by). construction will continue for many years to come) and we may expect construction to continue for many years to come. Particularly for Projects like these are vital and can help young Egyptians who are trying to find work.<sup>38</sup> Assist them in establishing a self-sufficient life in Egypt. However, the adversity of these occupations is that they are just

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<sup>35</sup> According to NUMBEO, a crowd-sourced global database, Cairo has a house price-to-income of 12.75, making it a less affordable city than for instance Dubai or New York (however, these numbers should be taken with a grain of salt). NUMBEO, 'Property Prices Index 2019', Accessed 23 May 2019 <https://www.numbeo.com/property-investment/rankings.jsp>

<sup>36</sup> Omar el-Shenety, 'Mid to Low-End Housing: The Unattended Market Segments', Alternative Policy Solutions, 3 February 2019. <http://www.aps.aucegypt.edu/en/commentary-post/mid-to-low-end-housing-the-unattended-market-segments/>

<sup>37</sup> In the words of Sims, 'My fear is that demand might be too thin, given the huge and growing market supply.' Emanuele Midolo, 'Inside Egypt's New Capital', Property Week, 8 March 2019. <https://www.propertyweek.com/insight/inside-egypts-new-capital/5101721.article>

<sup>38</sup> The World Bank estimated the youth unemployment of Egypt at 34% in 2018. 'Unemployment, youth total (% of total labor force ages 15-24) (modeled ILO estimate)', Data retrieved in April 2019, The World Bank, <https://data.worldbank.org/indicator/SL.UEM.1524.ZS?locations=EG>

temporary. It should be noted. Government-led job creation programs can help people get back on their feet, but they are not a panacea. In Egypt, there is a structural answer to unemployment. Large projects, according to Keynes' thinking, could effectively raise salaries and, as a result, demand, but wages do not appear to be rising due to inflation. Egypt is on the rise.<sup>39</sup> As previously said, the city attempts to create long-term jobs. For the typical Egyptian, it is largely out of reach. We should not be deceived about the number of openings in the industry. The business district's enormous glass buildings will not be occupied by those who are struggling to make ends meet in any of Cairo's informal neighborhoods today.

It's difficult to get precise data on how many permanent employment desert initiatives have created. Sims makes a few guesses about this number in Egypt's Desert Dreams. According to Sims, reclamation plans have provided employment to approximately 125.000 individuals, while new-town initiatives have created approximately 300.000 industrial jobs and 250.000 residual occupations. The unique around 100.000 permanent jobs have been created in industrial zones, and around 200,000 in the tourism sector. 400.000. Sixty years of desert (including reclamation, tourism, and industrial initiatives) 1,2 million employment have been created as a result of projects, and this number rises to 1.5 million when indirect jobs are factored in. around 1,8 million (when being generous).<sup>40</sup> Given the fact that around 750.000 individuals visit the site, each year in the Egyptian job market, the desert has not proven to be the much-needed solution. Egypt has a high rate of unemployment (especially if one takes into account the financial toll of these schemes). The huge business zone, which could provide new prospects for Egyptian start-ups, is one of the new initiatives. capital might fare a little better than earlier endeavors. In addition, the fact that the new capital will be located in contrast to earlier desert projects, the government absorbs parts of the government. Several government ministries the government will relocate its staff to the new capital, but this will not result

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<sup>39</sup> Gad and El Marakby (translation), 'On the Egyptian pound, living standards and real estate', MadaMasr <https://madamasr.com/en/2019/01/02/feature/economy/on-the-egyptian-pound-living-standards-and-real-estate-an-economy-forecast-for-2019>

<sup>40</sup> Sims, Egypt's Desert Dreams (2018) 288-289. Sims does not cite any sources when it comes to these numbers so checking these figures is not possible

in the creation of new jobs. The scale of this transfer, as well as the number of jobs that will be lost, is unclear.<sup>41</sup>

### **3.4 – The legitimacy of the current administration**

The fourth argument for the new capital is to improve Egypt's appearance and legitimize its current administration. Some of the military regime's initial public popularity has waned.<sup>42</sup> The popular coup's enthusiasm and the power vacuum left following the deadly crackdown The Muslim Brotherhood provided a solid foundation for the current regime's authority. Nonetheless, the pound's depreciation, the rise in fuel prices, and the silencing of critical voices have all made their mark. Sisi's and his administration's legitimacy has been tarnished. (against the terrorists) Operation Sinai (North Sinai conflict) served as a useful smokescreen for Egypt's economic plight, although this display of might has now lasted much too long and has lost much of its original acclaim. For the time being, the revolutionary spirit that led to Mubarak's overthrow appears to have been effectively extinguished by the military, and Sisi appears to be in a strong position; but, recent events in Sudan and Algeria must worry Egyptian authorities. A large-scale project like the new capital could help the existing administration reinforce its position and credibility in the eyes of the public. The Egyptian army, as well as the new Egyptian army, has a reputation for 'getting things done.' This image can be attested to by capital.

### **3.5 – Safety**

The concern for 'safe spaces' is the sixth and final rationale. Due to the instability and volatility that occurred during and after the 2011 revolution in Egypt, terrorist insurgencies took advantage of the authority vacuum. In Egypt, the consolidation of fundamentalist factions resulted in a slew of new laws. Throughout the country, there have been terrorist strikes, as well as fierce battle in North Sinai, where dozens of these

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<sup>41</sup> The highest mentioned number of government employees being moved to the new capital is 51.000. The government has around 5 million employees (2,8 million in the Greater Cairo Region) so these numbers are negligible. 'Minister of Planning discusses transferring governmental bodies to New Administrative Capital', Egypt Independent, March 31 2019 <https://www.egyptindependent.com/minister-of-planning-discusses-transferring-governmental-bodies-to-new-administrative-capital/>; Sims, Understanding Cairo (2012) 212.

<sup>42</sup> Marwa Fikry Abdel Samei, 'El Sisi's tainted legitimacy', open Democracy, 29 May 2014. <https://www.opendemocracy.net/en/north-africa-west-asia/el-sisis-tainted-legitimacy/>

terrorists have been killed. The cells had penetrated the area. North Sinai has become a no-go zone for Egyptians and foreigners alike due to the fact that it has become a no-go region for Egyptians and foreigners alike. The magnitude of what has happened/is happening in the north of Sinai, according to international observers, is immense. Apart from the formal body count game (of accused terrorists) by the government, it is still unclear<sup>43</sup>. As if we're talking about reclaimed feddans once more.<sup>44</sup>

At the same time, these terrorist concerns, as well as the fallout from the 2011 revolution, have altered Cairo's appearance.<sup>45</sup> Today, blast-proof walls, barricaded streets, heavily armed soldiers, and military checkpoints are all part of daily life in Cairo, and the new capital follows suit. A new capital, to secure the city and its residents, a camera system and other digital instruments will be built. Population (addressed in further depth in Chapter 8's 'Smart City' section). Following the release of various videos, the image of a massive wall within the new capital has been released,<sup>46</sup> and it is rumored that this wall will be built. Encircle the city completely. These sources, however, are almost certainly incorrect.<sup>47</sup> The wall that used to be filmed is part of a separate, heavily protected plan on the official's south-western border. the blueprints for the new capital.

This 'Octagon' or 'military entity' (al-Kiyn al-'Askar)<sup>48</sup> will most certainly be the new Headquarters of the Armed Forces (and the Ministry of Defense) and might become the true core of the New Administrative Capital. Google Earth offers us a sense of the area's

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<sup>43</sup> 'Egypt: Serious Abuses, War Crimes in North Sinai', Human Rights Watch, 28 May 2019. <https://www.hrw.org/news/2019/05/28/egypt-serious-abuses-war-crimes-north-sinai>

<sup>44</sup> The 40 militants killed in North Sinai after the terrorist attack near the Giza Pyramids illustrates the strange logic with which the Egyptian army operates. 'Egypt police 'kill 40 militants' in raids after tourist bus blast', BBC, 29 December 2018 <https://www.bbc.com/news/world-middle-east-46708695>

<sup>45</sup> Mona Abaza, 'Walls, Segregating Downtown Cairo and the Mohammed Mahmud Street Graffiti', Theory, Culture & Society 30, no. 1 (January 2013).

<sup>46</sup> 'Yūtūbiyyā 'sūr al-'Āṣima al-'Idāriyya al-'Jadīda', YouTube video, posted by Mudawwana Uksijīn Maṣr, 5 September 2017. <https://www.youtube.com/watch?v=gLiFJSgrJiU> and 'Āmer 'Abd al- Mun'im, 'Aswār al-'Āṣima al-'Idāriyya wa al-hurūb al-kibīr', al-Jazeera, 28 August 2017. <http://mubasher.aljazeera.net/opinion>

<sup>47</sup> The spokesman of the New Administrative Capital denies this claim. al-Ḥadath al-Yawm, 'Mutahaddith al-'Āṣima al-'Idāriyya yaruḍḍ 'alā shā'i'āt al-Ikhwān 'an inṣā' sūr ḥawl al-'Āṣima al-'Idāriyya', YouTube, 6 January 2018. <https://www.youtube.com/watch?v=oRnjXEKVIDE>

<sup>48</sup> It is not exactly clear why this 'controversial' name is used. al-Kiyān (the entity) is commonly used for Zionism, the Zionist entity (al-Kiyān al-Ṣahīyyūnī).

development (that are not included in the official plans). These photographs show a massive blast proof wall encompassing this big area (which is taller than the walls that encircle the airport). The images back up reports that Egypt's military is constructing a (unannounced) military fort on the outskirts of the new capital. Within the property,<sup>49</sup> residential houses appear to be under construction; however, it is unclear who will live in these homes.

Safety is clearly a top priority for the new capital's planners, but who is this metropolis aiming to protect and from whom? Should we entirely trust the government's narrative that the protective measures in Cairo and the new capital are just against 'terrorists' and 'criminals' (whom they may be) in light of Egypt's complete crackdown on civil society and the present number of political prisoners?<sup>50</sup> Out the reach of the Egyptian government, some outlets (al Jazeera, Carnegie) speculate on the new capital's more 'darker' motivations. The new capital is being constructed far from Tahrir Square and its revolutionary crowds. As I have stated, the average Egyptian will very certainly never live in Cairo. Only the wealthy, who are typically supportive of the existing quo, can afford to buy a home in the new capital and join this exclusive safety net. Michele Dunne compares the American Green Zone in the heart of Baghdad,<sup>51</sup> where Little America was recreated, to the American Green Zone in the heart of Baghdad.

This gated enclave, which housed a McDonald's, theatres, and cafés, became an emblem of American illusion during the Iraq war. Disconnected from reality, American strategists attempted to pick up the pieces and reorganize wrecked Iraq while enjoying a Big Mac and a beer from outside their safe space.<sup>52</sup> The comparison between the Green Zone and

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<sup>49</sup> Karīm Muḥammad, “Qīṣṣat ‘al-kiyān al-‘askary’ dākhl al-‘āṣima al-‘idāriyya .. Burūj mushīda li-ḥimāyya al-Sīsī wa-jinirālātuh”, Freedom and Justice Gate, 17 May 2018. <https://fj-p.com>

<sup>50</sup> Human Rights Watch estimates the number of political prisoners in Egypt at 60.000 (Sisi denies this). Richard Hall, ‘Egypt's Sisi denies his country holds any political prisoners, but rights groups say tens of thousands detained’, The Independent, 4 January 2019. <https://www.independent.co.uk/news/world/middle-east/egypt-political-prisonersabdel-fattah-alsisi-president-cbs-a8710951.html>

<sup>51</sup> Michele Dunne, ‘Sisi Builds a Green Zone for Egypt’, Carnegie Endowment for Peace, 27 November 2018. <https://carnegieendowment.org/2018/11/27/sisi-builds-green-zone-for-egypt-pub-77803>

<sup>52</sup> The journalist Rajiv Chandrasekaran illustrates his visit to the Green Zone in Baghdad with the following words, ‘from inside the Green Zone, the real Baghdad—the checkpoints, the bombed-out buildings, the paralyzing traffic jams—could have been a world away. The horns, the gunshots, the muezzin’s call to prayer, never drifted over the walls. The fear on the faces of American troops was rarely seen by the

the new capital might not be too far off if the new capital develops into an entirely upper-class metropolis secured by an impenetrable military ford. By relocating the government to this safe elitist bubble, officials will become even more disconnected from current events in Egypt, attempting to rule the country in the same way that imperial powers such as the United Kingdom, the Netherlands, or the Soviet Union attempted to rule/colonize large hegemonial territories from enclosed spaces (the settlement, the home country, the capital city) far removed from daily realities.

### **3.6 - A sum-up of why Egypt is building a New Capital**

You have probably seen traffic maps that Google displays for its navigation service, where green roads mean little to no traffic and red indicates strong congestion. This is how Cairo looks like on those maps in the morning. Traffic has become a real problem. Just as the city's growth in general represents a massive political challenge. Of the 104 million inhabitants of Egypt, around 20 million live in the metropolitan area of Cairo. While the government buildings in many of the world's capital cities are bundled together in one place in order to simplify cooperation within the government, the Egyptian ministries are currently spread all across the city. This makes for long distances congestion and heavy pollution. Even when the ministries are closer together, like around to centrally located Tahrir Square, the infrastructure is simply overloaded. but also, the Egyptian parliament, which requires special security measures and sometimes has to be cordoned off. Additionally, located right onto Tahrir Square is the Mogamma. This is the main administrative building in Egypt where citizen requests are processed. The political administration is a massive burden for Cairo, a city that is already under growth pressure. The population of Greater Cairo has been increasing rapidly for decades at a rate at which urban expansion just can't keep up. It is a development that doesn't only affect Cairo. In fact, the population of the entire country is growing at a rate that is higher than the growth of the world population. The Egyptian government considers this a key threat to

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denizens of the palace. The acrid smoke of a detonated car bomb didn't fill the air. The sub-Saharan privation and Wild West lawlessness that gripped one of the world's most ancient cities swirled around the walls, but on the inside, the calm sterility of an American subdivision prevailed.' This quote highlights the 'otherworldliness' of the Green Zone in Baghdad. Rajiv Chandrasekaran, *Imperial Life in the Emerald City: Inside Iraq's Green Zone* (2006) 21.

the country's prosperity. As far as housing is concerned, most of Egypt is dominated by the Sahara Desert, which is sparsely populated.

This population distribution shows most people living along the Nile and in the Nile Delta, where there is water for agriculture and industry, as well as a milder climate and fertile soil. The land for cities to naturally expand is completely exhausted. Since the Nile is the main source of water, accounting for 97 percent of freshwater in the country, the population growth also leads to a supply problem here. As per the current conflict between Ethiopia and Egypt, the Egyptian government regards the country's dependence on the Nile as a threat to its national security. As today, Egypt is already suffering from water scarcity.

Since the Egyptian government is facing these massive challenges with population growth, it is therefore trying to buy time and has initiated a campaign under the motto, “two is enough”<sup>53</sup>, discouraging people from having more than two children, as well as making contraceptives more widely available and affordable. But even if politically unwanted, the reality of population growth demands answers with only one option left on favorable as it is. Egypt saw itself forced to build new cities in the desert.

Since the 1970s, massive new development projects have been set up around Cairo with the aim of reducing the strain on the capital city. In 1977, construction began on the 10th of Ramadan city. In 1979, on the opposite side of Cairo does sixth of October City was built. Adjacent to it in 1995, the Sheikh Zayed City, as well as in the East, the city of El Obour, El Shorouk, Badr, and Madinaty, as well as the largest such project to date, New Cairo, which construction began in the year 2000. These cities are not suburbs in the traditional sense because the intention was not only to relieve Cairo of housing requirements, but where to establish new separate metropolitan areas with their own local economy. In addition to large industrial complexes, these newer cities also host many internationally oriented schools and universities. The Greater Cairo Area is going at an enormous pace and it seems that every new project exceeds the previously developed

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<sup>53</sup> ["Two is enough," Egypt tells poor families as population booms | Reuters](#)



cities, both in size and in ambition. Yet still, the project currently under development can hardly be surpassed in terms of ambition. As the government is now creating a completely new capital east of Cairo and New Cairo.

## Chapter 4

### The financing of the new administrative capital

The new capital's total costs are anticipated to be between 45 and 58 billion dollars (800 billion/ 1 trillion Egyptian pounds).<sup>54</sup> There hasn't been any information given on the costs or how they'll be paid for. The only official declaration (apart from some ambiguous figures) indicates that no funds from the state budget will be utilized to fund the new capital.<sup>55</sup> The project is overseen by the New Administrative Capital for Urban Development (ACUD), which is owned 49 percent by NUCA (New Urban Communities Authority), a Ministry of Housing-affiliated body,<sup>56</sup> and 51 percent by two military-affiliated bodies, Armed Forces National Land Projects Agency and National Service Products Organization. These institutions have given ACUD a cash injection of 216 billion Egyptian pounds (204 according to the Guardian in 2016) to get the first development projects off the ground.<sup>57</sup>

In addition, ACUD has increased their capital liquidity by roughly 24 billion dollars.<sup>58</sup> Both the NUCA and the Armed Forces have their own budgets and are financially independent of the state (at least in their own perception). The Armed Forces have bought enormous tracts of (mainly) desert property throughout the years and are one of Egypt's top investors. NUCA generates cash through land agreements.<sup>59</sup> The fact that these institutions claim to be independent of the state budget helps to explain why the ACUD

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<sup>54</sup> The consensus seems to be 45 billion, however, in a recent article, Reuters estimates the costs at 58 billion dollars. Aidan Lewis and Mohamed Abdellah, 'Egypt's new desert capital faces delays as it battles for funds', Reuters, 13 May 2019. <https://www.reuters.com/article/us-egypt-new-capital/egypts-new-desert-capital-faces-delays-as-it-battles-for-funds-idUSKCN1SJ10I>

<sup>55</sup> Beesan Kassab, 'The new administrative capital: Outside the state budget or outside public accountability?', MadaMasr, 25 May 2019. <https://madamirror12.appspot.com/madamasr.com/en/2019/05/25/feature/economy/thenew-administrative-capital-outside-the-state-budget-or-outside-public-accountability>

<sup>56</sup> Although financially independent, NUCA is a state institution and has the power to allocate public land for development. Over the years, NUCA profited from shady land deals. Sims, Egypt's Desert Dreams (2018) xxxiv, 125-126.

<sup>57</sup> Michaelson, 'Cairo has started to become ugly', The Guardian.

<sup>58</sup> Kassab, 'The new administrative capital', MadaMasr.

budget has been opaque so far. Even the parliament is unable to scrutinize ACUD's spending because the new capital is primarily a military enterprise.<sup>60</sup>

Beesan Kassab of MadaMasr recently questioned ACUD's independence and how it places itself outside of the state budget in a recent piece. Despite their financial independence, NUCA and the Armed Forces are both public institutions, and their budgets should be open to public scrutiny. Furthermore, because the land designated for the new capital is public property (owned by the government), Parliament and the general public should have the right to be informed about the new capital's expenditures and income. Most crucially, as AUC Professor Mostafa Kamel al-Sayed puts it, "the administrative capital project's goal is totally civilian, and therefore cannot be viewed as a project that would influence weaponry in any manner," implying that the budget secrecy surrounding the new capital is unjustified.<sup>61</sup>

The new capital will be mostly funded by paid-up private investors, aside from the initial capital injection. Land development, like that of past satellite cities, is primarily a concern of real-estate businesses. The army/government gives the investor with the plan, layout, and basic utilities, and the capitalist will profit from these plans by building, for example, residential or commercial units. The end-user or other investors will then buy or rent these residential or commercial structures.<sup>62</sup> So far, it appears that significant and well-known firms have a stake in the new capital. REMCO is an acronym for "Responsible (project Stella Park),<sup>63</sup> <sup>64</sup> members of the Talaat Mustafa group (project CELIA). Safwa Urban Development,<sup>65</sup> Misr Real Estate Assets Management, Misr Real

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<sup>59</sup> Cristina Casabón, 'Egypt's military economy', open Democracy, 29 July 2015. <https://www.opendemocracy.net/en/north-africa-west-asia/egypts-military-economy/>; Laila Sawaf, 'The Armed Forces and Egypt's land', MadaMasr, 26 April 2016. <https://madamasr.com/en/2016/04/26/feature/economy/thearmed-forces-and-egypts-land/>

<sup>60</sup> NUCA does publish its books but has not made a financial statement for 2018 yet. Kassab, 'The new administrative capital', MadaMasr.

<sup>61</sup> Kassab, 'The new administrative capital', MadaMasr.

<sup>62</sup> Fahīma Aḥmad, 'Ba'd khaṭīfha.. Hadhihi as'ār 'aqārāt al-'Āšima al-'Idāriyya', Al Arabiya, 23 October 2017. <https://www.alarabiya.net/ar/aswaq/realestate/2017/10/23>

<sup>63</sup> Official Website Stella Park <http://www.stellapark.com.eg/>

<sup>64</sup> Official Website Midtown Egypt <http://www.midtownegypt.com/>

<sup>65</sup> Official Website SUD, 'Commercial Projects' <https://sud.com.eg/projects/>

Estate Assets Management, Misr Real Estate Assets Management, Misr Real Estate Assets Management, The National Bank <sup>66</sup> and Amoun Co <sup>67</sup>, both of which have a share in the new capital, are already in charge of other desert projects in Egypt. The cost of acquiring land for these corporations has been estimated at various amounts. According to Sims, Talaat Mustafa (one of Egypt's major real-estate corporations) purchased land for 1.500 Egyptian pounds every square meter (payment is spread over 8 to 10 years).<sup>68</sup> According to the news outlet Al-Arabiyya, the price of real estate corporation can exceed 7000 EGP per m2 (repayment of 6 years).<sup>69</sup>

Large Egyptian real-estate companies' investments are critical to the scheme's financial viability. As a result, we may anticipate huge, well-known, and, in the eyes of the government, trustworthy enterprises to be given first priority in acquiring access to the property. Furthermore, these firms maneuver within a position of power, and the wealthy corporations, in particular, will almost certainly receive concessions to keep them on board. The powerful partnership between the state and the corporation (organized power) is preserved in this way, determining the shape of the city and the daily lives of its residents. Both the government and these businesses are looking for ways to assert influence over these individuals and assimilate them into their capitalist ideology. In the new capital, a square meter costs between 11,600 EGP (apartment) and 19,150 EGP (villa). <sup>70</sup>155 A typical 150 m2 apartment will cost roughly 1.75 million EGP. According to the head of the ACUD, Egyptians earning \$8,000 and up (about 10% of the population, according to Sims) will be able to afford a unit in the new capital. Egyptians with the financial means to do so might invest in the new capital by purchasing individual plots for sales, rental, or personal use/investment.

<sup>66</sup> Manāl al-Maṣry, 'al-Bank al-ahly yaḥguz 13 'alf mitr li-'iqāma farra' al-'Āṣima al-'Idāriyya', Maṣarāwī, 14 Januari 2018. [https://www.masrawy.com/news/news\\_economy/details/2018/1/14/1241635](https://www.masrawy.com/news/news_economy/details/2018/1/14/1241635)

<sup>67</sup> Official Website Amoun Company <http://www.amouncc.com/commercial.html>

<sup>68</sup> Sims, *Egypt's Desert Dreams* (2018) xxxiv.

<sup>69</sup> Aḥmad, 'Ba'd khaṭifha..', Al Arabiya.

<sup>70</sup> Both the real-estate website Aqarmab and Sims can give us some perspective on the general costs of housing in Egypt. According to Aqarmab a square meter in New Cairo is 9.800-18.600 EGP, in Nasr City 6.700-14.550 EGP, in Zamalek 22.100 EGP, and in Giza 3.750-5.500 EGP and for Greater Cairo proper, the 2008 study (before inflation) estimated a square meter at around 923 EGP. 'Dalīl as'ār 'Aqārāt al-Qāhira al-Kubra', 'Aqārmāb, Accessed on 31 May 2019 <https://egypt.aqarmap.com/ar/neighborhood/cairo/>; Sims, *Understanding Cairo* (2012) 149.

Around 80% of the land in the first phase has been sold, according to ACUD's chairman (as of November 2018). Foreign investors account for 40/50 percent (20 percent, according to Reuters). <sup>71</sup>156 The project's success hinges on the infusion of foreign finance. Previous attempts to collaborate with overseas investors have failed, demonstrating the importance of foreign investors. Both the deal with Emirati Mohamed Alabbar (Capital City Partners) and the \$20 billion financing from China (for phases 2 and 3 of the project) fell through, and it appears that problems have not yet been resolved. Foreign investors are returning at a rapid pace, according to a recent article published by the news agency Reuters. <sup>72</sup>157 These issues highlight the project's financial vulnerability by relying solely on upfront money and loans. Construction can only continue if enough investors sign on; otherwise, the project will have to be funded from the state budget, which would be embarrassing for the government. As previously stated, the scheme's intransparent aspect is largely explained by the manner in which the fresh capital is financed. Any negative report could jeopardize the project and kick off a downward spiral in which investors quit it entirely. In this corporate climate, reports of a speculative bubble, delays, and project limits are not appreciated. The government makes it a point to exercise its power by discouraging or censoring such stories.

Foreign capital's support also raises the issue of concessions made by the Egyptian government to these firms and states. Large investments by Gulf states and Saudi Arabia in the Toshka reclamation project, one of Egypt's greatest reclamation efforts, have been used as a political instrument to secure water and land for agriculture across the border, according to a recent MadaMasr report. The Arab Peninsula,<sup>73</sup> even more than Egypt, experiences water scarcity and is concerned about food security. Corporations are allowed to a certain quantity of water to restore vast expanses of land in Egypt (and other

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<sup>71</sup> Lewis and Abdellah, 'Egypt's new desert capital faces delays as it battles for funds', Reuters; Ghanem, 'New Administrative Capital Is An Incomparable Integrated City: ACUD Chairman', Invest-Gate.

<sup>72</sup> Ghanem, 'New Administrative Capital Is An Incomparable Integrated City: ACUD Chairman', Invest-Gate.

<sup>73</sup> Şafr al-Nūr and Nada 'Arafāt, Kayf taḥaqqaq mayyāh Maşr 'amn duwal al-Khalīj al-ghidhā'iyya', MadaMasr, 22 March 2019. <https://madamasr.com/ar/2019/03/22>

locations) by obtaining large tracts of land. The food produced on these fields is subsequently sold to Saudi Arabia and the Gulf region. Although the Egyptian government profits from these partnerships, it is an odd and contentious subject that the expensive and fragile Nile water is being utilized to improve food security in the Arabian Peninsula. 158 This essay reveals some of the underlying incentives for foreign capital in Egypt, demonstrating that a critical perspective is required to fully comprehend these investments. When it comes to growing Egypt, China, Saudi Arabia, and other Gulf countries (who are the greatest investors in Egypt) all have their own agendas. By relying too heavily on foreign aid, Egypt may find itself in a tough situation. Non-governmental perspectives on the issue may help us better grasp the long-term repercussions of these money injections as well as the power dynamics underlying these investments.

## Chapter 5

### Designing the New Administrative Capital: Constructing a new everyday life

#### 5.1 – Digital tools in urban planning

Because official information on the new capital's shape is scant and occasionally incorrect, this research will rely heavily on conceptual maps and movies, both of which are plentiful. The rise of 3D images and movies in architecture is a fascinating trend that is altering how we think about and interact with cities. Urban planners can now not just sketch a building or a street, but can also envisage and visualize a complete urban ensemble thanks to technology advances in 3D graphics and cinematic VFX. This strengthens the viewpoint from the imagined space since it appears as if planners are suddenly able to 'plan' the seen and lived space as a whole. Although Lefebvre demonstrated that this is impossible, we should not underestimate the power of these fake worlds on our wants. Planners have always been interested with rethinking our daily lives, but today this planned everyday has evolved into a product that seeks to embrace all areas of our lives and can be slickly depicted for individuals who aren't familiar with urban technocrat lingo. Because of their beauty, simplicity, and cleanliness, it's easy to mistake these representations for reality. Planners and consumers (through advertising) can become engrossed in this virtual reality and lose sight of the realities that are created on the ground. Or, in Adhem Selim's words,

'the government's growing interest photoshopped maps, architectural visualizations, video promos and professional presentations might simply be good PR campaigning, but it's also part of a ruling paradigm. These plans, drawings, maps, images, videos, presentations and other visual media about grand schemes for a new Egypt are in fact some of the ways in which the authority produces itself, rather than being a mere product of the regime.'<sup>74</sup>

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<sup>74</sup> Adham Selim, 'Capital Cairo: A Regime of Graphics', *Failed Architecture*, 29 October 2015. <https://failedarchitecture.com/capital-cairo-a-regime-of-graphics/>

This innovative high modernist society is evidenced by the ongoing construction of satellite towns and reclamation plans. There were no lessons learnt from prior blunders, and computer animated worlds continued to be released, despite the fact that reality depicted a totally different picture.

The way apartments are advertised and sold in Egypt already provides us an indication of how electronic images alter our relationship space. Many of the formally built residences in desert satellite communities are sold mainly through advertisements. While these constructions have not yet been erected, apartments are sold from a folder or a website. Modern technology can show potential buyers' photos of their future goods or even take them on a 'visual tour.' The physical structure can be erected once enough individuals have invested in these future images or films. This form of investment gives the capitalist an edge because it does not require a bank loan, and there are few risks associated. This system, on the other hand, adds gasoline to the fire by encouraging overbuilding and speculative capital.<sup>75</sup>

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<sup>75</sup> “Liqa’ maftūḥ ‘al-rafāhiyya al-mushawwaha lil-Masāḥāt al-imutanāhiyya: ‘Āṣimat Maṣr al-Jadīda’ – al-Liqa’ bilkāmil”, YouTube, published on 3 April 2019 by Alternative Policy Solutions, Lecture by Sims, 1:40:40 till 1:42:25 [https://www.youtube.com/watch?v=cJSp4\\_YA6MQ&list=WL&index=31&t=5939s](https://www.youtube.com/watch?v=cJSp4_YA6MQ&list=WL&index=31&t=5939s)



## 5.2 – A fragmented design

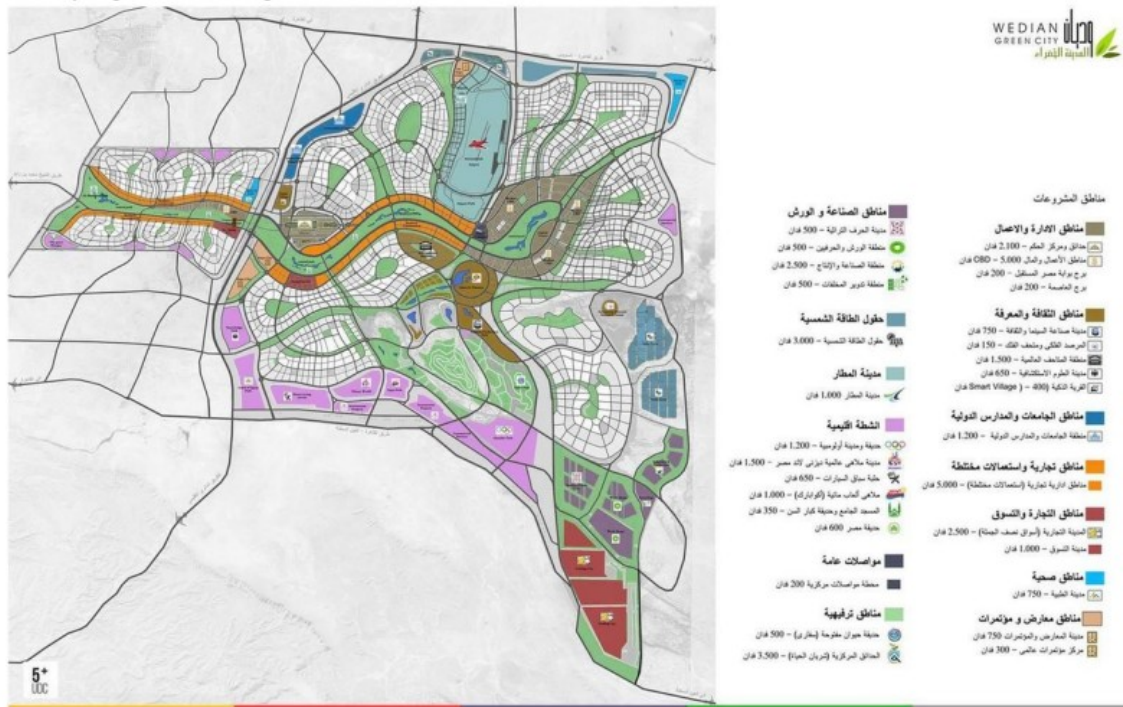


Figure 4: Some of the Specialized Districts of the New Administrative Capital, <https://www.skyscrapercity.com/showthread.php?t=2083071>

The new capital's space will be highly dispersed and fractured. Each district will have its own designed 'purpose,' according to the blueprints. This means that a 'Smart Village,' a 'Academic City,' a 'Medical City,' a 'Health & Sustainability Park,' and so on will be established. Although their names give us a hint, the specific purpose of these spaces is not often evident. The neighborhoods are separated from the utilities, same as we observed in Brasilia. Space is provided for commercial and administrative functions on the edges of the neighborhoods, at the limits of the phase one design. This region is expected to serve residents with everyday requirements such as shopping and other services. This perspective on space provides us (as outsiders) with a clear picture of the city's layout and makes life easier for planners and investors. Services can be clustered in specific locations and complement each other.

Utility centralization is a significant modern urban development that has become the norm in many modern cities plans around the world. The most recent development is the

concentration of technical knowledge and utilities into a 'specialized space,' with Silicon Valley as the most well-known example. Concentrating knowledge, particularly in societies/cities with a knowledge-based economy, appears to be a reasonable choice for allowing this attitude to flourish. Similarly, university campuses and shopping malls must be viewed through the lens of this 'centralization' logic, or what Lefebvre refers to as 'minimal/induced difference.' The utilization of this type of minimal difference, according to Lefebvre, is an inherent feature of modern urban planning. In order to optimize their performance in a specific economic and societal context (as decided top-down by the planner) and to please the technocrat's high modernist aesthetic, utilities and population groups within a city are purposefully separated from one another (student, worker, consumer, and tourist). The same can be said for activities such as recreation (parks), consumption (malls), and movement within the city (roads). Difference within the system that is minimal/induced is usually carefully handled and regulated.

If we look at more traditional spaces in Cairo, like Old Cairo/Islamic Cairo, we see a very different kind of 'urban'.<sup>76</sup> Live and utility spaces (in a huge variety) are mixed within this urban fabric and can even barely be separated from one another. This complexity makes the city from the outsider's perspective very unorganized and unreadable, however, from the 'local experience',<sup>77</sup> these spaces are perfectly logical and a necessity for everyday life. The urban diversity of the 'old city' does not mean that concentrated (homogenized) spaces are absent in the areas. Over many years, certain streets and neighborhood have emerged that specialize on certain products like pots/pans, jewelry, and garbage. Often from a practical perspective, these spaces grew naturally and absorbed the local knowledge of generations.<sup>78</sup>

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<sup>76</sup> The Medieval inner-city spaces of Cairo (as used in this example) have a different history than the 'recent' phenomenon of the 'ashwa'iyyāt. Nevertheless, Sims does see some comparisons between the urban fabric of the informal areas and the Medieval urban of Cairo. The urban of these areas is much more complex and 'localized' than the formal satellite cities. For pictures of the comparison between the informal and the Medieval town see Sims, *Understanding Cairo* (2012) 117.

<sup>77</sup> What Lefebvre would highlight as the 'lived experience' of space which we have to see in his larger dialectical ensemble.

<sup>78</sup> What Scott would call the knowledge of the *mētis*. This practical knowledge has developed naturally over generations and is the result of the solution-oriented approach of people in local contexts. In the perception of the high modernist state, this *mētis* is disregarded and rearranged to the liking of the planner with often disastrous results. Scott, *Seeing Like a State* (1998).

The concept of maximal/produced difference, which 'endures or arises on the borders of the homogenized domain, either in the shape of resistances or in the form of externalities,' was assigned by Lefebvre to the areas of autogestion (self-management).<sup>79</sup> "Why should places formed by virtue of human knowledge be any less diversified, as works or products, than those generated by nature, than landscapes or living beings?" Lefebvre says.<sup>80</sup> Lefebvre is not advocating a return to a "natural condition," but rather attempting to demonstrate, as Scott did with the parallel of the Prussian forest revolution, that ordinary life is considerably more complex than the abstract space envisaged and generated by modern urban planners.<sup>81</sup> The state and corporations are constantly fighting for control of future places by infusing their moralities and calculations into them. The divisions of the new capital were drawn in a short amount of time by a few specialists who have particular beliefs on aesthetics, durability, and how Egyptians should spend their lives, rather than forged through a lengthy history shaped by local actors. This thesis does not attempt to portray these notions as essentially "bad," but rather to demonstrate that the high modernist approach frequently follows a flawed line of reasoning, obscures local contexts, and is anchored in a specific economic and state logic (that not necessary tries to improve the collective wellbeing).

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<sup>79</sup> Smith, 'Repetition and Difference' (2001) 40.

<sup>80</sup> Lefebvre *The Production of Space* (1992) 397.

<sup>81</sup> Lefebvre's experiences during the 1968 revolution in Paris formed the background for Lefebvre's famous call for a 'right to the city' or in different words, 'the right to differ'. Lefebvre saw in this uprising different social groups, students, workers, and French-Algerians that did not accept their fragmentation on the base of their socioeconomic/ethnic position in the peripheries and who called for the right to centrality and difference. Goonewardena et al. *Space Difference Everyday Life* (2008) 292-293.

## Chapter 6

### A closer look at the plans and Main buildings



Figure 5: A map showing all the districts and main building in the capital

<http://www.bbc.com/news/business-31874886>



Figure 6: <http://www.bbc.com/news/business-31874886>



First of all, as a new capital, this administrative area was established which will house all different ministries of the Egyptian government. These will move from their current spread out locations in Cairo to these ministry buildings which extend opposite one another along one central axis. Centrally located is the cabinet building in which the various government ministers can meet to coordinate their work. At one end of the axis there is a circular development in which other national institutes are located, including the post-office headquarters and the Egyptian Central Bank.

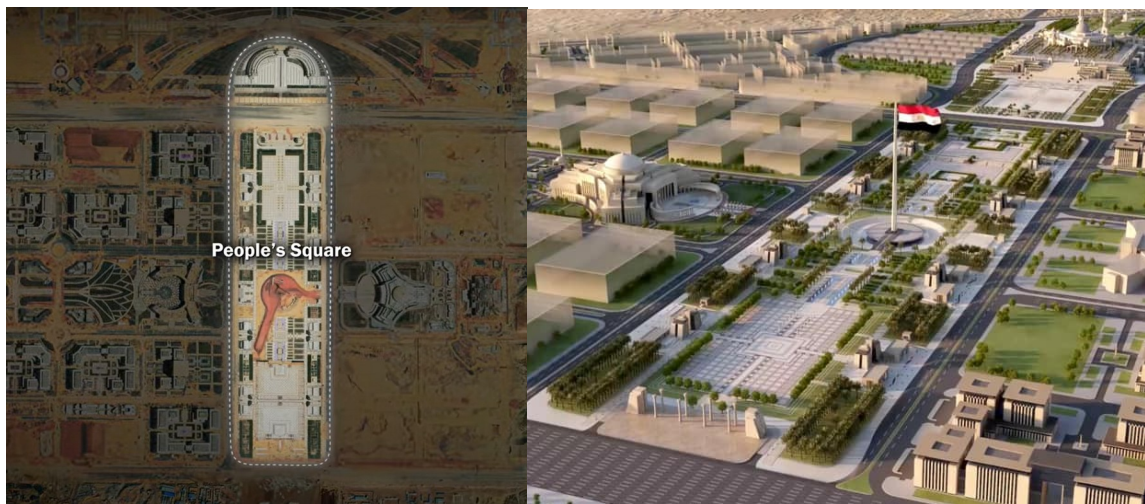


Figure 7 & 8: People`s square. <http://www.bbc.com/news/business-31874886>

On the other side of the axis is People Square, which will include the largest flagpole in the world, as well as to open theaters. This square is anchored by a large arc building, the unknown soldier monument, referencing pharaonic architecture and commemorating fallen soldiers. This People Square will also likely be the setting for future military parades.

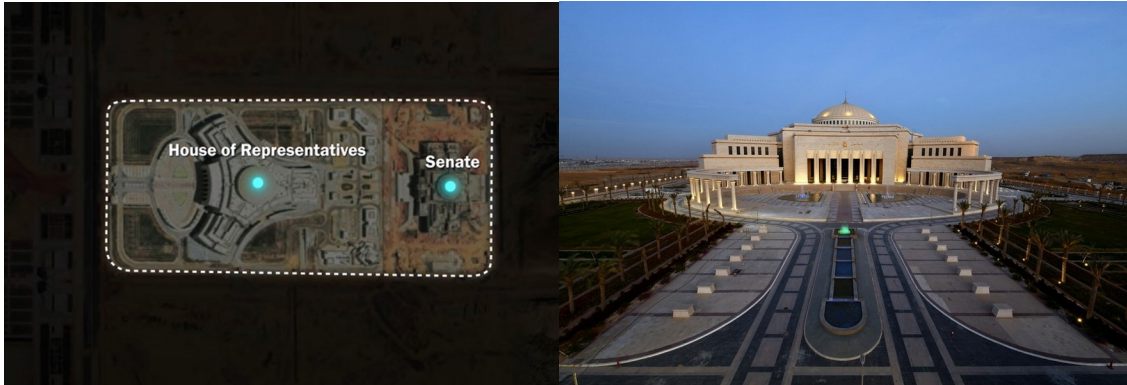


Figure 9 & 10: <http://www.bbc.com/news/business-31874886>

On the right side of the square, there are two buildings for the two chambers of the Egyptian Parliament, the House of Representatives and the Senate. "The Parliament Building in the New Administrative Capital is built upon 126000m, it consists of the main building, the service building and the landscape works includes the fences, internal roads and the green areas. The main building is built on 18000m; it comprises a basement, a ground floor, 8 typical floors, a dome with 50m diameter, the main hall accommodates of 1000 member and the administrative offices. The services buildings (a mosque accommodates 300 persons –hospital with 50 beds capacity –firefighting station - civil and real estate registrar for employees - building dealing with the public - walls length 1400 m long - 8 entrances - front fountain). Besides, the garage which built on 40000m on two levels which accommodates 1500 cars. The project is characterized that all the used materials are local manufacturing and equipped with the latest systems of lighting, alarm, fire – fighting and central air conditioning. The concrete structure of the main building is finalized and will be finished and equipped according to the highest standards of the modern governmental buildings. It is a noteworthy that the total concrete quantities of the project is 180 thousand m<sup>3</sup>, the total amount of drilling in the project (320,000 m<sup>3</sup>), including about (160.000 m<sup>3</sup>) of rock." <sup>82</sup>

<sup>82</sup> [The Parliament Building in the New Administrative Capital | The Arab Contractors](#)

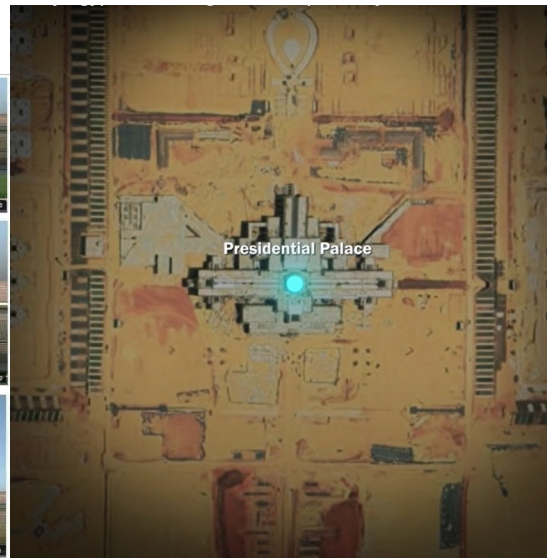


Figure 11, 12 &13: <http://www.bbc.com/news/business-31874886>

North of this area is the presidential palace, the seat of the head of state of Egypt, which is also the most politically powerful position in the country.

This new administrative center may seem straightforward. It resembles a formula that many planned capitals in the world follow: a large area full of grand city squares, and wide avenues that demonstrate strength. Yet it is a layout that keeps the country's most important institutions relatively compact together. But where this Egyptian capital certainly stands out from other countries is with the sheer size of one ministry; the Egyptian Ministry of Defense.







Figure 14, 15 & 16: <http://www.bbc.com/news/business-31874886>

This is the octagon comprised of ten buildings. It is the new headquarters of the Egyptian Ministry of Defense, as well as the Egyptian military and houses control, analysis and data centers. When completed, this will be the largest defense complex in the world, surpassing the Pentagon in the United States. “The project is located on a total area of 189,000 square meters, while the actual area of the buildings is estimated at 45,000 square meters.”<sup>83</sup> These buildings are part of an extended area where facilities for employees and military personnel, apartment units, places of worship, hotels, schools, hospitals, and administrative services, all located in this circular defense district. In a way, this is a city within a city. The scale of this complex also serves as a strong reminder of the large role the military place politically in Egypt. Ever since the military overthrow of Mohamed Morsi, the country has been ruled by former General Abdel Fattah el

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<sup>83</sup> [A picture of the readiness of "Octagon", the new Egyptian army, the largest in the Middle East \(trendswide.com\)](#)



Figure 17, 18 & 19: <http://www.bbc.com/news/business-31874886>



While these two areas are almost exclusively characterized by government buildings, the new capital is by no means intended to serve purely as an administrative center. Wherever the intention is for this city to become a new Global Center with a strong economy and vibrant city life. For example, two ambitious sports centers are being built in the very north and south of the city. In sport city, there are a number of outdoor fields, as well as a large indoor hall which has already served as the venue for the 2021 World Man's Handball Championship. The sports complex in the south of the city the Egypt International Olympic City is even bigger. Two indoor stadiums, as well as Olympic complexes for tennis, squash, aquatics, equestrian, and a large national stadium with a capacity of 90,000 spectators is under construction. The Egyptian government has also publicly signaled interest in applying for hosting global sports events such as the Olympics as well as the FIFA World Cup. “Egypt wants to be the first African nation to host the Olympics”<sup>84</sup>



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<sup>84</sup> [Egypt wants to be first African nation to host Olympics - OlympicTalk | NBC Sports](#)



Figure 20, 21 & 22: <http://www.bbc.com/news/business-31874886>

Additionally, large places of worship were built in the new city, including two mosques in the East and West of the city, with the Al-Fattah Al-Aleem now being the largest mosque in the country. Also, a Coptic Orthodox Cathedral was built. The Cathedral of the Nativity of Christ which also is the largest of such in the country. While Sunni Islam is by far the most widespread religion in Egypt, Coptic Orthodox Christians represent the second largest religious group.



Figure 23: <http://www.bbc.com/news/business-31874886>

There are also a number of universities being built across the city, many of them international institutions, as well as the Knowledge City and Knowledge Hub areas where several learning institutions are bundled together. In line with the country's vision 2030

initiative, these universities also showed that the intent is to create infrastructure that can drive innovation and boost the economy.

Egypt Vision is an ambitious national agenda launched in February 2016 by the Egyptian Government and unveiled by the Egyptian president Abdel-Fattah Al-Sisi. the vision consists of eight main national goals to be met by 2030 that are in line with the United Nations Sustainable Development Goals (SDGs), and the Sustainable Development Strategy for Africa 2063.<sup>85</sup>



Fig

ure 24, 25 & 26: <http://www.bbc.com/news/business-31874886>

The Iconic tower of the New Capital and the Oblisco tower. [10 information about the iconic tower in the new administrative capital \(cairotimes24.com\)](http://cairotimes24.com)

What would a capital city be without office and high rise buildings. These are built in the central business district. Here, the construction of the Iconic Tower is underway, which

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<sup>85</sup> ["Egypt's Vision 2030". Ministry of Planning and Economic Development | mped.gov.eg.](#)



when completed will be the tallest building in all of Africa.<sup>86</sup> It's just the beginning because an even taller building is already being planned here called Oblisco. This tower's design will directly reference the ancient Egyptian obelisk. If completed in 2030, this will be the tallest building in the world with a height of exactly one kilometer.<sup>87</sup>

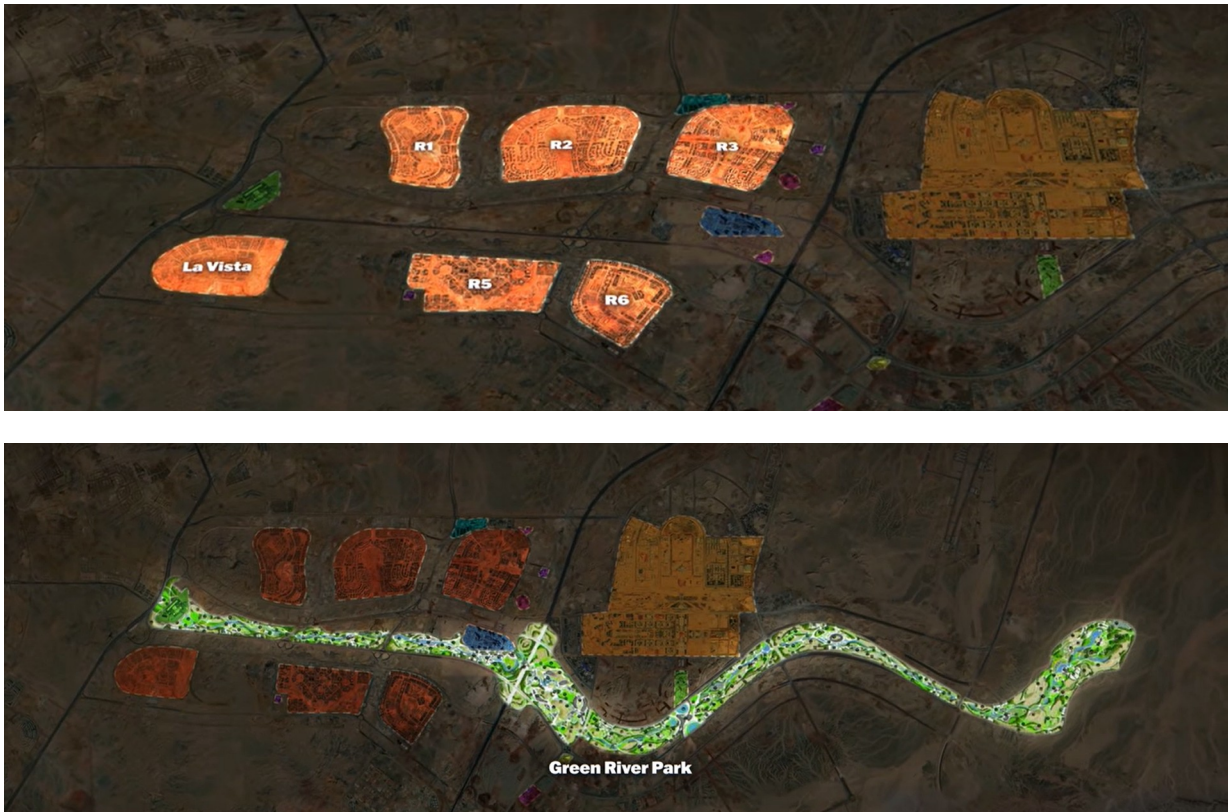


Figure 27 & 28: <http://www.bbc.com/news/business-31874886>

For housing in the city, the master plan consists of 20 residential centers with distinct architectural styles. As visible on this satellite image, six of them are already largely completed. For the entire length of the city, a park, six times the size of New York's Central Park will meander. The Green River Park is intended to serve as a recreational

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<sup>86</sup> [10 information about the iconic tower in the new administrative capital \(cairotimes24.com\)](http://www.bbc.com/news/business-31874886)

<sup>87</sup> [Oblisco Capitale Tower - The Skyscraper Center](#)

area, providing shade and encouraging social activities. Along this park, an artificial river will be created inspired directly by the Nile which flows through the current capital Cairo. Despite this direct or marsh, the new and the old capital of Egypt could hardly be more different with large distances bridged by highways that connect these planned modern districts. The new capital differs from the historical densely populated city of Cairo. Planned cities like this are fascinating. All these large sports complexes and innovation and finance hubs represent an aspirational plan for what Egypt wants its future to look like.

This plan city can be an indication of how the country navigates the many cultural influences in its society in which it chooses to emphasize. There are, for example, references to ancient Egypt, such as the ankh symbol representing life, or the design of the national monument into proposed Oblisco skyscraper. There is also a traditional Islamic reference such as the architecture of buildings in the sixth residential district and to grant new mosques being built. There are influences such as American style suburbs like the one residential zone located in the east of the city called La Vista. Then there is residential zone 5, which very directly tries to mimic French architectural style. This particular district aims to provide luxury for high-income citizens.

Perhaps this odd mix of influences has to do with what appears to be the real core objective of this project overall, which is to be an international city. The planners borrowed ideas from all over the world; an Olympic sports complex, international science hubs and expo centers underlying this bold ambition. To create a global city that can solve Egypt's problems at home and look abroad for its future. The question will be how natural growth will shape the city's future once the initial plans are realized.





## Chapter 7

### Urban Design Contents

#### 7.1 - Economic development and the Suez development corridor

The physical location of the new city is one of the most important physical elements for this mega-project. The economic impact of a project of this magnitude is unavoidable, and it is a major determining factor in site selection. Depending on site selection, the consequences could have a favorable or bad impact on the surrounding environment, meet or fail national expectations, and decide the project's likelihood of success or failure. "The strategic placement of Sadat Metropolis and Alexandria on desert territory near to the Delta suggests that it might be-come the third or fourth largest city in Egypt," the hopes for Sadat City were similarly high.<sup>88</sup> Sadat was also intended to "be further spurred by the establishment of national government functions in a "Capital Crescent Region" of new and existing cities on the periphery of the Delta," similar to today's concept (The Development of Sadat City, Official Brochure, 1978) However, since Sadat City failed to meet these objectives, it is vital to take a more critical approach to such methods in order to develop more effective strategies.

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<sup>88</sup> Sadat City's Development, Official Brochure, 1978

## New Cairo & New Capital Map

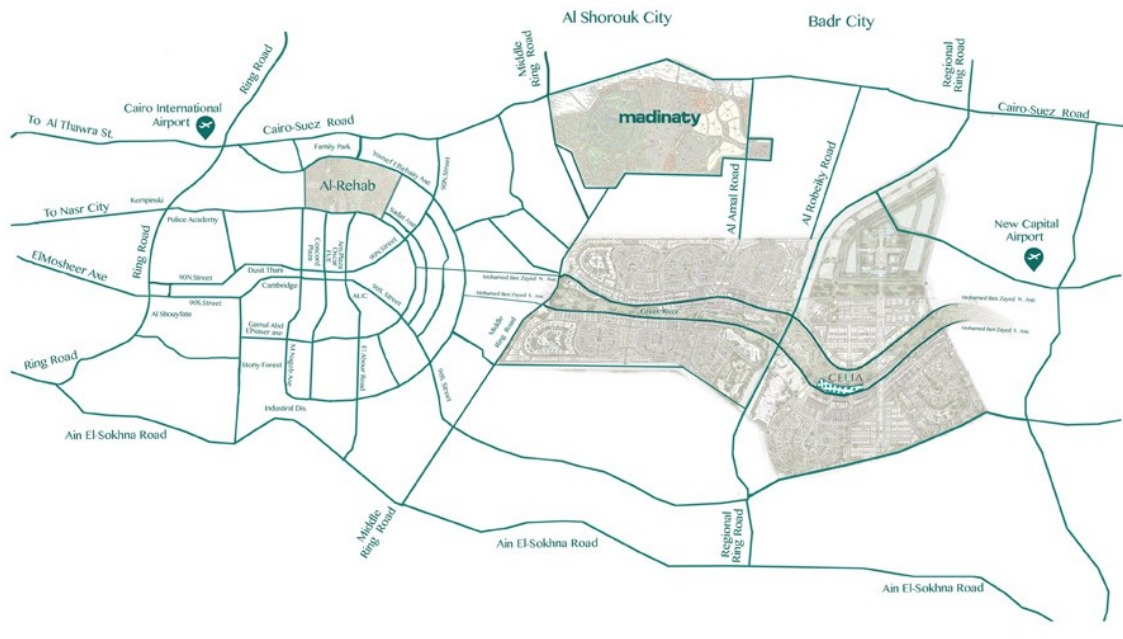


Figure 29: <http://www.bbc.com/news/business-31874886>

The concept is now being constructed at a unique site halfway between Cairo, Ain el Sokhna, and Suez. This is significant for a few reasons. New Cairo, one of the fastest-growing satellite cities in the world, has been quickly developing over the previous decade, with new private and public residential areas swiftly filling. Simultaneously, New Cairo has recently seen a major influx of firms that have either relocated their headquarters or established subsidiary or tertiary locations on the outskirts of the city. In certain ways, Cairo has experienced an increase in enterprises expanding outside of the city's core and clustering in New Cairo's primary artery, known as road 'no.90.' The area around the artery has evolved dramatically over time, from desolate desert terrain to a burgeoning business zone with great locations for huge corporate headquarters, banks, commercial functions, and retail use.

Suez and Ain el Sokhna are also on the other extreme of the spectrum. Suez and Ain el Sokhna, despite its modest size and population, play a vital economic role in Egypt. The position of the new administrative capital is located within the context of three significant economic hubs and thus places the new city in a very significant location due to the very

important trade functions both due to the freight economy passing through the Suez Canal as well as due to the trade and port services at Ain el Sokhna.

If the city succeeds as a new economic and urban center, positioning the new administrative capital in the middle of the country, halfway between the current capital and the Suez Canal region, would secure investment in and around the new location. Following the 1973 conflict with Israel, many of the cities in the Suez region that were at risk of cross-fire were evacuated and subsequently repopulated when the hostilities ended. However, many of these communities have never fully recovered their populations since then, and the nation has shown a strong desire to repopulate and develop the region as a result<sup>89</sup>. As a result, it's predictable that earlier initiatives to reinvigorate and promote significant economic growth in this region have failed. The Suez Canal Corridor was part of a bigger national plan at the period of Sadat's planning. "The development of the Suez Canal Sector into an industrial, agricultural, and tourism area, as well as expanding development along the Mediterranean and Red Sea beaches, as well as around Lake Nasser, are all part of President Sadat's "new map for Egypt"<sup>90</sup>. Despite this objective, national planning is still having trouble accomplishing this goal today.

Rather than attracting investment to other areas of Egypt, this proposal appears to favor investment in one zone. As a result, it's important to distinguish between investments in Wedian city and investments in the Suez Development Corridor. On this basis, I'll pose two issues that will be crucial in determining the city's potential contribution to such a larger economic goal in the future. First, would the project's investments be sufficiently large or strong enough to create a significant enough ripple effect to affect development or enterprises in the canal's intended region? Second, if the ultimate goal is to attract investment to the corridor, would investing in the Suez Development Corridor be more effective?

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<sup>89</sup> Sims, 2014

<sup>90</sup> The Development of Sadat City, Official Brochure, 1978

## 7.2 - As a real estate development

The country's economic situation has fluctuated greatly since the 2011 political unrest, but despite a somewhat favorable prediction for 2015, 2016 has seen greater economic destabilization. "2015 will be a rather favorable year for the Egyptian economy, as the currency stabilizes and investment returns to the nation," according to BMI Research's projections. (2015, BMI Research) Despite these expectations, the Egyptian pound gradually devalued in the months preceding up to its official floatation due to a drop in foreign investments and a lack of foreign cash. Official exchange rates surged from around 8 EGP/USD to more than double at 18 EGP/USD after being floated overnight on November 3, 2016. With an economy that has been battling to recover since the 2011 political upheavals, such economic developments have only heightened the need for foreign investment and aid across the country. Although Egypt has acquired a loan from the IMF as a result of the flotation, more long-term and sustainable collaborations and investments will be required.

It is neither surprising nor probable a coincidence that a megaproject the size of the new administrative capital has been suggested in the aftermath of the current economic crisis. Looking back further in time, some argue that the capital-driven economy has been a persistent trend. "Under a capitalist mode of production, the reproduction of daily life is dependent on the production of goods through a system of capital circulation that has profit-seeking as its direct and socially acceptable purpose."<sup>91</sup> Adding to the author's explanation, he says:

‘One possible way out of this problem is to channel capital and labor into long-term or geographically dispersed investments. These often take the form of physical and/or social infrastructure, such as investments in science and technology, new production capacities, new urban settlements and built environments, or educational infrastructures.’<sup>92</sup>

With Egypt's severe need for foreign investment and the reconstruction of its economy and investor confidence, such a project, while questionable on many urban planning and

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<sup>91</sup> Nasser's Agro-politan Planning, p.12

<sup>92</sup> Nasser's Agro-politan Planning, p.13

design levels, provides a key source of foreign investment at this time. Even if economic pressures and investments are possibly a key driving force behind the project, it is critical that other important considerations for Wedian's future as a city are placed into context. The challenge is, how can this process be changed and refined as needed to increase the project's ability to meet longer-term objectives? Many cities have traditionally sacrificed the underlying demands of a city in order to cater to a certain image in order to put the new city on the global map. In relation to several more established cities in the global arena, the authors of *Planning World Cities* write:

‘The flows of the global economy are not the whole business of cities and other issues have become increasingly important. Higher urban quality has come onto the planning agenda in most world cities, from New York to Singapore. This high quality can mean a better physical environment but also a more varied and exciting cultural life.’<sup>93</sup>

This highlights a growing worldwide awareness of other demands, especially in cities attempting to compete on a global scale. In the case of Wedian City, regardless of the project's dominant factors (which may be controversial or multi-faceted), these forces must be kept in perspective with longer-term needs.

Furthermore, it is critical to distinguish between the project's pure construction procedures and its contribution to long-term economic gains. As an example, consider the following: "Carried away by the power of money to finance enormous capital endeavors, many people appear to think of such investments as constituting development itself," Jane Jacobs said of Ghana's Volta Dam (considered one of the world's greatest hydro-electric infrastructure projects). You have development if you build the dam! But in reality, construct the dam and you'll have nothing until you have solvent city makers and transferred companies" (p.105, Jacobs, 1985) As Jacobs points out, it's important to analyze the genuine benefits of the CBD, as well as other infrastructure expenditures around the city, and to distinguish them from the simple "project completion."

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<sup>93</sup> Newman and Thornley, 2011, p.274

Wedian is also intended as a 'green' city, which is an important aspect of the design. Although the term 'green' can be construed in a variety of ways in the academic world, it also has distinct implications in the real estate and commercial worlds. "Through science parks,' it helps to attract international financial and technological investment, and it operates as a 'incubator' for start-up renewable technology corporations and diverse 'green' industries," says the 'green city.'<sup>94</sup> Although 'green' development has numerous long-term benefits, as previously said, the phrase must be distinguished from its more commercialized counterpart, which is frequently used for marketing.

The requirement for capital flow and foreign investment at the current period of the proposal is a significant lens that must be evaluated and kept in mind, even if the next sections will analyze the new plan through other parameters based on Kevin Lynch's parameters for a good city. This section finishes with the necessity for the following special considerations, in addition to these demands and design parameters. First, can the country's requirement for capital flow be balanced with the need for long-term environmental and economic sustainability, affordability, and appeal to all socio-economic groups in the city? Second, given that real estate has become one of the most popular avenues of attracting investment, can these developments be re-envisioned to better meet Cairo's growing societal needs? Finally, are new cities in the desert, and therefore real estate developments, the best sources for possible investment, and if not, what are the alternatives?

### **7.3 - Parameter set 01: sense, vitality and fit**

The urban design of a new city encompasses a diverse set of issues. As previously stated, the methodology of the thesis will base the examination of the new design on Kevin Lynch's five factors as a baseline from which the new city's design may be assessed. The first set will assess the proposal's logic, vibrancy, and fit; the second will look at more technical issues of city access and control; and the third will consider Lynch's proposed 'meta-criteria' for 'efficiency' and 'justice.'

#### **The Vision, Concept and Symbolism**

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<sup>94</sup> Joss, 2015, p.106

Although the idea for this new city has been framed around the relocation of the government center outside of the current capital, the concept contains broader aspirations and objectives for the city. Some of these aims, as shown on documents gradually issued by the official Urban Design Consortium +5, have roughly expressed the following vision and mission:

Vision: "Constructing a modern and current new Egyptian City that creates the base of Egypt's deeply rooted culture and presents to the world a worldly and human prototype to build a life with innovation."

Mission: "Integrated growth and development that spurs a good and socially just life, connected to services, environmentally friendly and sustainable growth that respects the characteristics of history and place"

Although these goals may be described in two lines, achieving them is not that simple or straightforward, and the plans would need to meet a number of requirements before they could be realized. The transformation of these declarations into a built environment necessitates a broad range of urban planning and design concerns, from the planning, design, and decision-making processes itself to their development, implementation, and eventual maintenance. Furthermore, with a wide range of interests and requirements at risk, governmental and private entities involved in the development process would need to facilitate open and transparent communication among all parties concerned.

For successful planning and urban design strategies, a comprehensive grasp of demands, potentials based on realistic evaluations of existing conditions and future restrictions (whether environmental, economic, etc.) and accessible technical competence form a substantial part of the foundation. Without this planning, resources may be misallocated, issues may be addressed inefficiently, or superficial solutions may be provided. The iconic image of the city, as well as the intended and unintended connotations associated with it, are inextricably linked to this concept. With the lofty aspirations for the city's future projected, it's critical to distinguish between the 'picture' of the city being portrayed and the reality of its implementation. In some ways, the 'image' that is being provided to



the city is similar to what Kevin Lynch refers to as the 'sense' of the city in his literature. Lynch expands on 'sense' in his book *Good City Form*, stating it as the 'identity, structure' (or composition of a city), 'congruence,' 'transparency,' and 'legibility' all rolled into one. However, it's vital to distinguish between a city's desired vision (which, ideal or not, is still hypothetical until developed) and the 'sense' of an existing, built urban environment.

Although drawings and initial graphics for a city, such as that of Wedian, may depict a visionary aim for a new city, it is critical to emphasize the relevance of the actual outcome for a true appraisal of the plan. Furthermore, according to Lynch's five characteristics of excellent city analysis, 'sense' alone will not generate good city form; it requires all of its supporting parameters of 'vitality' and 'fit,' as well as the more technical aspects of access and control. As a result, a city's 'sense,' or an idealized vision for a city's or country's future, will serve relatively few genuine problems or challenges. As a result, a city's 'vision' or future 'sense' should not be mistaken for a solution in and of itself. As appealing as it is to rely on iconic images of the city to represent a fresh start, an iconic or monumental edifice delivers nothing more than that - an icon or image - or, at the most superficial level, a sense of national pride or solidarity.

As a result, the following sections will cover some of the urban difficulties that have confronted Egyptian cities in the past, which will not be handled with any degree of symbolism for new beginnings unless properly addressed. Key sections will seek to highlight these regions and identify where alternative techniques would be required if different outcomes are desired. The analysis will again use Kevin Lynch's framework of the remaining four parameters and 'metacriteria.'

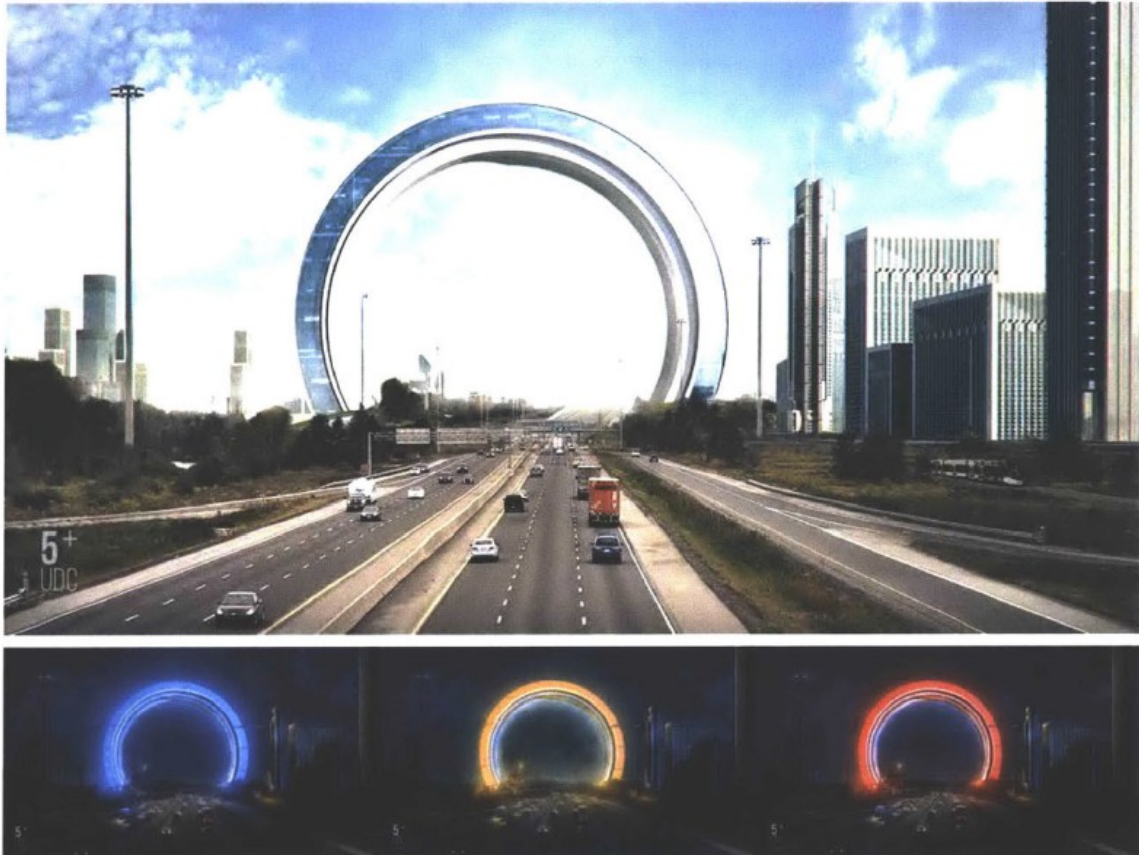


Figure 30 & 31. The rendering above shows the new gateway to the city. Although it is too early to tell if the ring-like gateway will be constructed, such visionary images cannot be expected to solve other problems. Beijing's CCTV Towers below, although icons for the city do not solve the cities heavily congested streets or heavy air pollution. (Above image credit: UDC +5. Below: [www.Sciencemusings.com](http://www.Sciencemusings.com))



### 7.3.1 - Land-Use and Zoning

The city is depicted as a 'green metropolis' made up of 12 valleys, each of which focuses on a different type of activity, a dominating theme, or a value, with its own set of houses ranging from low-income to high-end housing, as well as supporting services. Planned green spaces, entertainment zones, trade, educational, and healthcare are all included in the components of each 'valley.'

Much of the master-plan is dedicated to distinct single land-uses, with few mixed-use zones, as the land-use map shows. This is a crucial point, because Sadat City has such a strong separation of places, it would be necessary to address interconnection between the various land uses, expected activities, and residents.

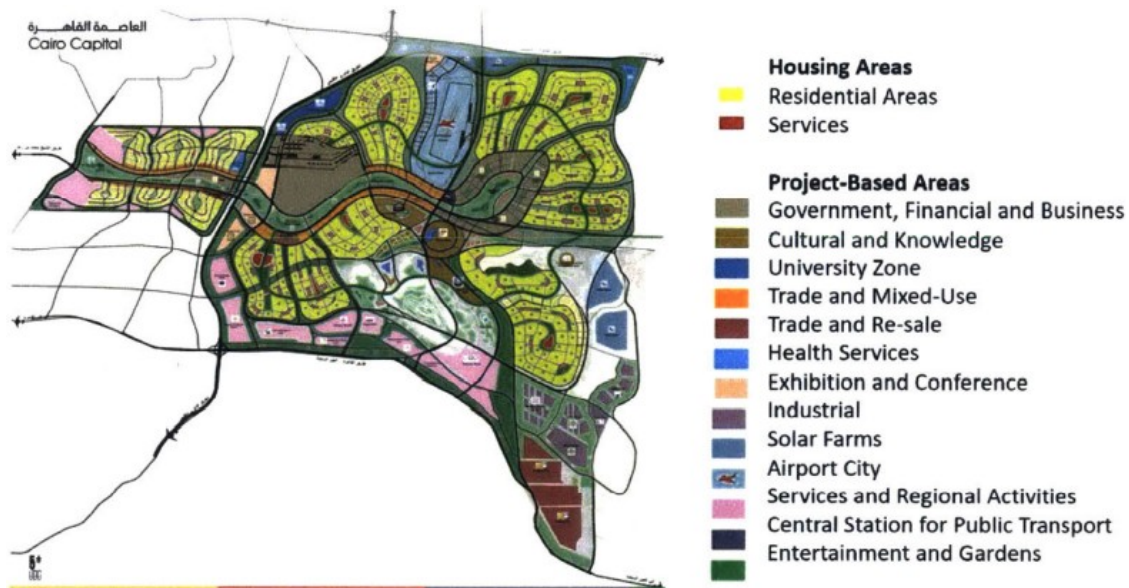


Figure 32: <http://www.bbc.com/news/business-31874886>

### 7.3.2 - Open Space, Public Space and Green Space

In Cairo, open and truly public space is a rare commodity. There are only a few spaces that can truly be classified as designated public spaces. Although there are public gardens and the occasional open space, these areas are rarely meant for public use and are frequently fenced off, guarded, or encroached by other forms of privatization. The only abundant public spaces available across all districts are the road and street networks, which are encroached upon not only by pedestrians, but also by youth seeking open

spaces to play, vendors seeking affordable locations to set up their temporary stalls, and more permanent services in the form of local coffee shops and retail spaces. These encroachments on the cityscape suggest not only a lack of open space, but also a lack of space to accommodate retail requirements and services.

The addition of huge open green areas in many of the newly developed satellite cities and private gated communities appears to be a reaction to the lack of such spaces within the major metropolis. In this aspect, the new city's plans look to be no different in terms of seeking to improve open space access. However, in an effort to remedy this shortage of open space, it appears that the distinction between 'open space,' 'public space,' and 'green space' has been lost, with the words being used interchangeably and combined during the design and implementation phases across Egypt.

Although the three phrases "open space," "public space," and "green space" are distinct in almost every urban environment, this distinction is especially important in a dry, hot, and arid climate like Egypt's. To emphasize this point, in a severe desert climate, it is unrealistic to anticipate that every open area or public space can be greened with plants due to the large amounts of irrigation required for upkeep. Simultaneously, green space does not always imply that it is open to the public; in fact, many public gardens in Egypt are gated and only open during specific hours, holidays, or special occasions, implying that, while public, they are not necessarily open areas. Furthermore, public space does not always have to be open space; it could be a semi-enclosed or even a group of enclosed structures that are available to the public. Because the aims of each of these three locations are different and must be evaluated and used in their own settings, a distinction between them is important.

At this point, I'd want to bring to light another perspective on urban space, namely Margaret Crawford's concept of 'everyday space,' which, while readily mistaken with 'open space,' 'public space,' and 'green space,' could imply any of these at any given time or none at all. Everyday Urbanism, as defined by Margaret Crawford, is the space and/or series of places across the urban environment that are shaped to cater to the individual's everyday life. This indicates that the everyday place is the space that is the product of or

designed for the needs of a single person, or on a larger scale, the spaces that cater to the needs of groups of people. Although the specifics of these spaces will vary from person to person and community to community, the concept is particularly pertinent in Egypt, where everyday space is defined not only by the outcomes of formal planning but also by the outcomes of informal processes.

The urban idea of Everyday Urbanism has referred to more localized interventions or urbanization of space responding to the specific requirements of individuals in urban environments where high levels of restrictions are enforced. In Egypt, the rise of informality in both the living and economic realms has brought this style of urbanism to the city and its spaces in a roundabout way. This type of urbanism will thus be investigated further in the Egyptian context, particularly in terms of the 'interstices' or 'in-between' spaces that exist between more formal functions and planned uses, as I will refer to them. In this context, the term 'interstices' will apply to all the spaces in-between 'formal activities,' such as public plazas and streets, semi-public or semi-private spaces, mobile transportation systems, bridges, markets, and/or vacant lots, to mention a few.

Furthermore, in Egypt's hot, arid, desert climate, where sun protection is required and green flora is difficult to maintain, how much open space is too much open space? Furthermore, studying low-cost interventions is an important technique for activating open spaces and public spaces with limited resources and financial budgets available for time spent on design and implementation.

### **7.3.3 - Housing**

According to the official drawings, 30% of the New City's area will be allocated to residential areas and 'living,' with 1.5 million residential units. The earliest suggestions for the residential mix designate 35% of the units as high density housing (50-100 sq.m), 50% as medium density housing (100-200 sq.m), and 15% as low density housing (less than 50 sq.m) (200-350 sq.m).

Every valley, according to the pre-schematic master-plan, should have a residential area ranging from 5,000 to 15,000 feddans, with all services and activities, as well as dwelling typologies that can accommodate various socio-economic demographics. Government, Work/Business 'Valley', Monetary/Trade 'Valley', World 'Valley' (embassy and international centers), Knowledge (universities and research) 'Valley', Art and Culture 'Valley', Green (Environmental) 'Valley', Life (entertainment and exercise) 'Valley', Planning, Justice (courts), Information (Media and communication), and Hope 'Valleys'. The goal of each cluster is for it to act as the designated residential area for the industry or service sector it serves. As shown in the diagram below, the government district will have its own residential cluster, the school zone will have its own, healthcare facilities will have their own, and so on.

Although this concept divides the ambitious housing districts into smaller districts with the goal of facilitating access to facilities on a more local level, antecedents show that there appears to be a disconnect between these goals and their actual constructed environment. As a result, this section will attempt to examine the urban planning of these residential districts more objectively. Because some of the patterns exhibited in the new design are similar to those seen in many of the new satellite cities around central Cairo, it would be vital to anticipate and address the emergence of these patterns in the new city's future phases.

Such ambitions for inclusive and diverse socioeconomic and income groups have been highly highlighted in the history of new cities around Egypt and new satellite cities - with little translation to reality. The difficulty is that these visions are still being presented and declared without critically addressing some of the challenges that these new housing projects and programs encounter on a regular basis. As highlighted by A.D.C. Hyland on the housing trends of the time in the 1980s:

"...regarding housing and new settlement policy in Egypt, one cannot help but be impressed by the boldness of the vision, and the magnitude of the task of implementing that vision, to which the government of Egypt is committed."<sup>95</sup>

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<sup>95</sup> Hyland, A.D.C., 1985

Despite such observations however, little has changed since then. As noted by David Sims in his book *Egypt's Desert Dreams* "... under the current national social housing program, ... (the program) unrealistically aims to build a colossal one million subsidized units nationwide over the 2012-2017 period,"<sup>96</sup>

Furthermore, he continues to explain "the new towns' share will probably exceed 70 percent of the national total. These figures for both private and social housing in the new towns are impressive, but...a large portion of these are unfinished and even more are vacant."<sup>97</sup> This is a phenomenon which furthermore has not changed significantly since 2005 when "Under Egypt's National Housing Program (2005-11), 255,000 public housing units were allocated to the new towns, representing a much higher 51 percent of national production."<sup>98</sup>

The urban fabric of modern cities is jeopardized by gated communities. The urban landscape in nearby New Cairo has been invaded by enormous areas of private development, as can be seen in the satellite image adjacent. As Metwally and Sahar wrote, "gated Compounds have physical impact upon the built environment, as it physically isolates a specific area from its surrounding and creates zones of restricted access within the urban (space)". The physical isolation generated by these private developments fragments space, increasing walking and driving/(limited) public transit durations as a result of the need to circumvent their borders. The formation of more uniform development and both socially and physically integrated forms of growth has been hampered by such apparent spatial boundaries.

Looking at the specific case of El Sheikh Zayed City (New Cairo's equivalent competing city on the West side of Cairo) Magda Metwally and Sahar Soliman Abdalla write "All the above cases of gated communities provide what the residents are seeking for, the clean... and comfortable environment, quietness, privacy, parks, green open spaces and social homogeneity. Projects differ in their design, social vision, and degree of

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<sup>96</sup> p.146, Sims, 2014

<sup>97</sup> p.14, Sims, 2014

<sup>98</sup> p.146, Sims, 2014

exclusivity as they all offer a combination of healthy environments, quality of lifestyle, greenery, convenience, socially homogenous communities and prestige."<sup>99</sup> Although the appeal of such enclaves to many is understandable, the purpose of this section is to highlight both physical and intangible components of the built environment that are sought after in the built environment. Furthermore, the sale of these commonplace parameters at exorbitant prices indicates their clear absence or limited availability outside the confines of the gated compound.

However, it is necessary to consider the larger context in which the development and sale of these gated units has occurred. Although these developments may have served as quick and easy 'fixes' to a clear demand in recent years, it is clear that their rapid growth has neither alleviated Cairo's housing problems for the average citizen nor benefited the surrounding urban fabric.

As expressed by Metwally and Abdalla in their work, "gated communities can hardly participate in the solution of our urban and housing problems since most of the gated communities are not affordable for the average Egyptian."<sup>100</sup> With this in mind, it is necessary to seek out alternative solutions to both the needs of the average citizen as well as those seeking better living environments and conditions.

Despite not being written in reference to the new administrative capital, Metwally and Abdalla's research on the Impact of Gated Communities on the Urban Development of New Cities in Egypt indicates that future growth of gated compounds in the Greater Cairo Region's new cities is expected. Furthermore, they conclude writing explicitly that "Hence, planners and professionals should take in their consideration how to achieve the balance between the city and the irregular expansion of gated communities."<sup>101</sup> a statement that, given the numerous challenges that compounds have created, is unsurprising - emphasizes a key risk to the new city if not addressed. Keeping this in mind, as well as other bodies of literature on the subject, the prevention of such

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<sup>99</sup> p.11, Metwally, Magda, and Sahar, 2016

<sup>100</sup> P.22, Metwally, Magda, and Sahar, 2016

<sup>101</sup> P.30, Metwally, Magda, and Sahar, 2016



developments should be prioritized in terms of new city housing models. Even if the city is intended to attract people of all income levels, past experiences, both local and international, have shown that gated communities have a negative impact on their surroundings. As a result, private compounds should not be considered as a design strategy for any city seeking to improve community integration and urban connectivity.

Looking at the proposed new administrative capital, the vision and mission indicate a desire to achieve greater social justice, integration, and equality. Analyzing the designs for the new city; however, there are several points that must be kept in mind as the new city plans move forward.

- 1) The new city is located directly adjacent to the New Cairo satellite city (which is already densely populated with private enclaves) as well as the private gated community of Madinaty. As a feature of the nearby urban landscape, unless private development regulations are changed to restrict similar developments, the rise of this profitable model in the new city will likely be difficult to harness.
- 2) As evidenced by the firms' previous portfolios, much of the firms' work and experience has been in the field of private development of gated communities. In many ways, it may be more convenient to rely on financing, development, and design processes that have proven feasible and profitable in the past; however, if a new vision is intended for a city of diverse incomes, new models must be pursued.
- 3) According to the general master plan for the new city, there will be plenty of open green space throughout the city. Although open space is essential to the well-being and wellness of city dwellers and is highly desired in the context of Greater Cairo, such vegetated landscapes indicate the need for highly profitable developments to help finance such vast amounts of open space. With this in mind, it is critical to carefully balance the financing of open spaces through private developments against the long-term effects of walled off-neighborhoods on the growth of new cities. Competitive alternative financing methods must therefore be developed to prevent the private sector from resorting to such high-priced

developments. Despite the fact that such lofty targets are frequently met, the construction of these housing units is not a predictor of their occupancy or people's perceptions of them. This distinction is significant because the solution to housing appears to have been and continues to be addressed as a game of numbers for a long time.

The current strategy has resulted in underserved residential areas that are cut off from basic services. Furthermore, New Cairo has experienced significantly sprawled development as a result of the creation of low-density residential zones designed solely for vehicular access. In line with many of Egypt's larger national plans to address Cairo's informal housing crisis, there has been significant effort in recent years to set large targets for new housing units. The plan for the new administrative capital follows this trend, and as can be seen in the master-plan, a significant portion of the new city plan is devoted to new housing zones. The intention to provide housing for different socioeconomic income groups is part of the new city's written mission. The goals appear to advocate for the inclusiveness of housing for government employees, middle-income communities, social housing, and housing for higher-income groups within that attempt.

This phenomenon is replicated in today's proposal for a new administrative capital, as it has been in previous decades. Today's new proposal calls for the construction of one million new housing units, with each zone devoted to a specific industry. These residential neighborhoods are intended to form their own 'valleys' or 'oases,' and are to be divided based on the most adjacent industry.

Because the project's 'vitality' is heavily reliant on the city's economic vitality, the following section will concentrate on the mixed-use developments, economic centers, nodes, and supporting services planned for the new urban agglomeration.

#### **7.3.4 – Mixed- Use, Economic Centers and Services**

New cities face the significant challenge of providing access to not only basic services for their inhabitants, but also a variety of those services and choices to accommodate the diverse populations that are expected to live in them. The different types of services, price brackets of goods, and their exclusivity (intentionally or unintentionally) reflect the various communities and economic groups whose needs are being addressed, and for whom the project's design and capacity caters.

Aside from planning for the presence of new economic generators, it is also critical to consider how those opportunities will be distributed throughout the city. The same 'amount' of economic opportunity can be planned as clusters, or concentrations of various types of industries, as isolated concentrations of industry, or as mixed-use development with various functions interspersed with smaller nodes or spaces designated for those same activities. The various forms in which economic opportunity can be placed have an impact on how these activities and industries interact with the rest of the city.

Recent urban planning and design theory has advocated for an increase in integrated activities and mixed-uses to meet residents' daily needs. In this context, mixed use refers to the vertical and horizontal distribution and integration of activities. As Chapple (2015) discusses in *Planning Sustainable Cities and Regions* "Mixed-use proponents generally support both horizontal mixed use (i.e. walkable clusters of different uses) and vertical mixed use (i.e. a mixture within a specific building or development)" <sup>102</sup>

Measures towards increased sustainability also commonly advocate for increased integration between different activities and land-uses. As suggested by Pollalis in *Planning Sustainable Cities* "The blend of workability and quality of life - each supporting the other - is what draws people to take on the practice of sustainable urbanism: to live, work, and play in cities that sit lightly on the earth. A specific objective of the Zofnass Planning Guidelines is to illustrate synergy, the essential interactions

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<sup>102</sup> p.209, *Planning Sustainable Cities and Regions*, Chapple, 2015

among infrastructural systems that make up the city. The Transportation guidelines cross-reference the infrastructures of Energy, Water, Food, Solid Waste, Landscape, and Information, enriching and lending nuance to the strategies of balancing transportation and land use."<sup>103</sup> An infrastructure-based approach (Pollalis, 2016) It is therefore essential to consider the distribution and integration of economic centers amidst the remainder of land uses.

When looking at Sadat City, it is clear that the sprawled distribution and separation of land-uses has hampered walkability, access to services, and overall accessibility. As a result, while the city contains a wide range of functions and uses, the distribution of those uses has a significant impact on the outcome and vibrancy of a neighborhood. "The context also shapes the character of mixed use: a vertically mixed-use development within a single-use district may not be particularly vibrant, while a horizontally mixed-use district may also not be very lively if different types of uses are dispersed and not within a short walking distance."<sup>104</sup> It is therefore essential that such problems with urban development are addressed in the planning of the new city.

Many businesses have recently decided to relocate to Cairo's satellite cities. Many of these domestic and international companies have already relocated to New Cairo (immediately to the west of the planned new capital). On the one hand, the existing precedent of such relocations, as well as their growing popularity, suggests that such relocations may be welcomed in the future. On the other hand, some question the incentive for further relocations away from the city center if a new business district in New Cairo has already formed.

#### **7.4 – Parameter Set 02: Access and Control**

The city's accessibility is inextricably linked to its location. Although it may seem obvious, it is critical to distinguish between access and location. Previous Sadat City experience has shown that choosing a seemingly strategic location does not immediately

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<sup>103</sup> p.76, Planning Sustainable Cities and Regions , Chapple, 2015

<sup>104</sup> p.209, Planning Sustainable Cities and Regions , Chapple, 2015

correlate with accessibility unless clear access networks are in place. Although the location was chosen with nearby urban poles and their potential economic significance in mind, access to the site is a technical parameter that must be planned for, developed, funded, and then maintained. Citing some of the initial reasoning behind Sadat City's site selection written at the time of the proposal: "The proximity of this site to national markets makes Sadat City a viable alternative to Cairo and Alexandria for locating industry and commercial activities."<sup>105</sup> Such reasoning however does not replace the definite need for developing structured means of transportation and should be accounted for in Wedian.

Furthermore, previous experiences with satellite cities have revealed a recurring pattern of absent or deficient public transit planning outcomes. Whether intentional or not, this creates a significant barrier for socioeconomic groups with limited resources. With private cars and limited bus routes serving as the only formal modes of transportation in many emerging new satellite cities, these new towns cater primarily to car owners and individuals of higher economic means.

In this section, I will expand on and compare the business district in New Cairo to the newly proposed central business district of the new city. The focus of this section will once again be on the district's urban design. Despite the fact that the spine along Route 90 has gradually attracted businesses, similar urban design challenges of space segregation and a lack of integration and connectivity can be observed. As the business district expands, so does the pressure on the surrounding urban environment to accommodate the increased number of employees, residents, and visitors. Because the district is underserved by formal public transportation, even those who live in a nearby residential zone are unlikely to walk to any of the commercial developments or workspaces. The current distances are beyond the scale of walkability, and the design process results show little consideration for pedestrians in the design of the streetscape.

## **7.5 – Parameter set 03: 'meta-criteria': 'efficiency' and 'sustainability'**

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<sup>105</sup> The Development of Sadat City, 1978

Kevin Lynch places 'efficiency' within his category of 'meta-criteria,' in other words, "criteria distinct from the five that precede them...(and) are meaningless until costs and benefits have been defined" <sup>106</sup>. He further elaborates they "are repetitive subdimensions of each of the five (original parameters)"<sup>107</sup>. In many ways Lynch's term for 'efficiency' can be equated with today's modern term of 'sustainability' a term which is affected by every dimension of a city and is similarly "meaningless" as Lynch refers towards 'efficiency' without the consideration of opportunity-costs (whether qualitative or quantitative).

One of the key elements advocated by the project is sustainability. I bring it up within Kevin Lynch's meta-criteria because every mentioned urban parameter for a successful city must take into account its contribution to the project's overall sustainability. Many cities today strive for higher levels of sustainability and lower environmental impacts, as well as increased energy efficiency and low-carbon construction. This has resulted in sustainability factors influencing daily urban planning and design processes in a variety of settings. Achieving higher levels of sustainability has necessitated additional considerations such as interconnected urban economics, policy incentives, and other regulations. As a result, a city's sustainability must take into account the entirety of its complex system.

However, I argue that if the current proposal is not expanded beyond its initial plans, it could easily fail to achieve sustainability measures and fall into the same repeated patterns faced by many cities throughout Egypt. In many cases, sustainability appears to be defined as simply installing solar panels on building rooftops and incorporating green-roofs and/or greywater systems. This approach, however, undermines the entire complexity and ecosystem of sustainability, where the core infrastructures and relationships between different components of the city must be considered, coordinated, and aligned in order to achieve sustainability multiplicity.

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<sup>106</sup> p.119, Lynch, 1984

<sup>107</sup> p.119, Lynch, 1984

Looking at Wedian's neighboring satellite city of New Cairo Reham Hafez notes in her publication *New cities between sustainability and real estate investment: A case study of New Cairo city* that New Cairo "has been developed as a result of the economy and investment politics of the Egyptian government at this time, which made it the focus of real estate investment. However, this resulted in negative influences on...(its) sustainability. This is made clear in the different stages of developing the city, - before laying the general comprehensive plan, during preparing the plan and the successive stages of development till now" <sup>108</sup>

### **7.5.1 - 'Sustainability': the green spine**

The central Green River is estimated to cover 30.2 square kilometers (equivalent to 7,464 acres). When compared to Central Park in New York, which covers 843 acres, as the proposal's initial announcement did, this equates to 8.85 times the size of Central Park. What the proposal fails to mention however, are two important parameters of consideration; namely, maintenance costs and management.

While Wedian is planned to be located in a desert climate, Central Park, which is already located in a more hospitable environment, invests \$67 million in annual maintenance. In fact, since its inception in 1980, the Central Park Conservancy has invested \$875 million in transforming the park into the urban space that it is today. Such figures, while not directly transferable to Egypt without more accurate conversions or taking into account the additional cost of bringing water to the site for irrigation, are at the very least strong indicators of the budgets required for upkeep.

Furthermore, any planned green space must not only consider the short-term development costs of the area but also the management, technical expertise and co-ordination of its long-term maintenance. To cite the Central Park Conservancy "Healthy cities need parks, and parks need management."<sup>109</sup> Although this appears to be self-evident, it is clear from the examples of both Sadat City and other Egyptian cities that existing public-sector models for managing and financing such green spaces have frequently failed.

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<sup>108</sup> Hafez, 2015

<sup>109</sup> Conservancy, Central Park, 2017

Green spaces not just in the Egyptian context require a complex understanding of all the underlying systems involved. "To manage the Park, Conservancy crews aerate and seed lawns; rake leaves; prune and fertilize trees; plant shrubs and flowers; maintain ballfields and playgrounds; remove graffiti; conserve monuments, bridges, and buildings; and care for water bodies and woodlands, by controlling erosion, maintaining the drainage system, and protecting over 150 acres of lakes and streams from pollution, siltation, and algae.' Similar but more contextual considerations would need to be taken into account in Wedian, employing and involving management systems with both technical and managerial capacity. Again, the cost of managing a park space of this size cannot be overstated, and careful planning and consideration of suitable financing models for its long-term viability must be developed.

These concerns however are not limited to the Green River alone. Based on the initial statistics, open and green spaces are to be generously at approximately 15 sq.m/person.<sup>110</sup> The considerations made above, similarly need to be made for the rest of the green spaces extending across the city. As David Sims questions with regard to other attempts of greening desert lands; "Assuming for a moment that Nile waters stored behind the High Dam will remain plentiful for Egypt to continue to consume its allocated water total, is there enough Nile water for Egypt's desert reclamation schemes and plans?"<sup>111</sup> With limited water supplies in the new city's arid, desert environment, careful irrigation planning is required to reduce water consumption. Only then will the open green spaces be able to be sustained in the long run.

### **7.5.2 'Sustainability': Density and Residential Housing**

The proposal calls for the new city to include high, medium, and low-density residential areas. Although density is frequently perceived negatively in the context of Cairo due to the city's struggles, moderate density can provide many benefits to the urban environment. "The world that is evolving will increasingly value proximity, which will

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<sup>110</sup> UDC+5, 2016

<sup>111</sup> p.67, Sims, 2014



create new development pressures on regions' urban cores. Just as cities and regions are trying to prepare for millions of new residents, these pressures will translate into higher land prices and, potentially more exclusion." <sup>112</sup>

However, in reaction to the original city catering towards a large private sector demand (and predominately wealthier segments of the society) both public regulations and private developers have prioritized low density development. "Regulations limiting the density of population are extremely strict, and this combined with the large unit sizes, forces the development of residential units that are very expensive and difficult to market. As a result, virtually all privately built housing units available on the market are completely unaffordable to the large majority of Cairo's households, even if finance were to be available - which, for most, it is not." <sup>113</sup> David Sims emphasizes that this issue is not unique to Cairo and that it is a challenge noted in many of Cairo's surrounding developments. "Cairo's desert development seriously threatens the current compactness of the metropolis, probably the single greatest advantage of Greater Cairo as an efficient megacity." <sup>114</sup> Despite this, low density development – typically in the form of twin-houses and villas within gated communities – has become a highly profitable model for developers. Furthermore, because of its financial return, it is a model that is unlikely to be phased out anytime soon unless higher density is incentivized, enforced, or mandated where necessary.

However, many sustainability principles are inextricably linked to density. Although the parameters themselves may be listed as separate categories, as in the example below, guidelines for sustainability measures emphasize the importance of the relationship between the various entities. One approach, for example, emphasizes seven components that must be considered in order for the entire system to be sustainable: landscape, transportation, water, energy, solid waste, information, and food." However, as will be

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<sup>112</sup> p.283, Chapple, 2015

<sup>113</sup> p.187, Sims, 2010

<sup>114</sup> p.209, Sims, 2010

discussed further, "The approach is intended to be a first step toward high-level integrated planning, not separation; classification does not imply separation."<sup>115</sup>

### **7.5.3 'Sustainability': Urban Fabric and a Quick Comparison to New Cairo**

‘The mid-1990s also saw the emergence of New Cairo as an independent entity brought about by the amalgamation of three new settlements in the desert east of Cairo plus the addition of new tracts of land. Its enormous size (at 264 sq.km, more than half of the existing Cairo agglomeration) dwarfed any other new towns in the eastern quadrant.’<sup>116</sup>

As David Sims points out in his book *Egypt's Desert Dreams*, New Cairo, Wedian's neighboring satellite city with a similar history of expansion into the desert, provides a useful example for comparison. The final iteration of New Cairo's masterplan (though developed in three stages) is strikingly similar to the current plans for Wedian. A look at the masterplan for New Cairo reveals a city centered on a central business district drawn across the length of a central spine, surrounded primarily by residential areas (both private and public), and interspersed with green space.

Today, however, strong forces are segregating the fabric of New Cairo. Although the city is frequently perceived as having been successful in attracting residents, it is necessary to distinguish the type of urban growth occurring in New Cairo before it is used as a model for future development. Furthermore, extensive research on the sprawling urban fabric of New Cairo has revealed that the city's urban growth is currently, predictably, unsustainable. In reference to New Cairo David Sims in his other book *Understanding Cairo: The Logic of a City out of Control* writes, the reality of the city is "very far from any idea of a sustainable city with a low carbon footprint."<sup>117</sup>

Sprawl has become a growing phenomenon in recent years, owing to the rapid growth of satellite cities around Cairo. Although new satellite cities were purposefully established around Cairo, the subsequent sprawl was unintended. Although there are numerous reasons for the sprawl, including limited land availability in Cairo's central region, the

<sup>115</sup> p.23, Pollalis, 2016

<sup>116</sup> p.130, Sims, 2014

<sup>117</sup> p.209, Sims, 2010

need to conserve arable land, and the growth of informal settlements within the city (which also cover vast expanses of land), further growth has inevitably occurred on the outskirts of the city.

Satellite cities, despite having fueled much of this sprawl, were not necessarily a bad idea in and of themselves. The problem, however, stems from cities' inability to sustain their own communities to the full extent required by a growing continuous demand for housing, economic opportunity at all income levels, and the provision of services and amenities for all, which has left satellites struggling.

Furthermore, while the initial trend toward unsustainable urban growth and sprawl resulted from well-intended incentives and regulations designed to attract development to these new satellite cities, recent growth patterns indicate a need for a shift in approach to future urban growth. "Residential neighborhoods in the new towns were designed for low gross densities, with as much as 60 percent of the area devoted to open space, green areas, playgrounds, schools, and other services."<sup>118</sup> Although abundant open space was viewed favorably in response to the original city's problems of overcrowding and high-density, the outcome of urban growth has seen the results of overly spaced development.

The development of a new city outside of New Cairo's existing boundaries will most likely absorb some of the expected continued sprawl that would (likely) have occurred in all cases at the site of the first phase of the newly proposed Wedian. It is important to note that the new city is already located alongside existing, gated, private development, which, while partially populated, is an urban barrier in and of itself. Because of its strategic location and the knowledge gained from neighboring New Cairo, the new city has the potential to reshape future urban growth patterns in its surroundings.

‘Some might say that the answers to resiliency must be sought primarily in building up center cities, glossing over the fact that suburbs now comprise the majority of our urbanized areas - in land area, population, and economic activity. This line of thinking overlooks the potential that more gain could be achieved by focusing on adapting our

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<sup>118</sup> p.133, Sims, 2014

least sustainable landscapes, in suburbia, to transform them into more resilient, equitable, adaptable, walkable, transit-oriented, and more public-oriented places.’<sup>119</sup>

This observation is significant for the future of satellite cities, which are currently suffering from sprawled out development and could benefit from potential changes in strategy. Because its Wedian proposal calls for a new 'city' rather than a new 'suburb' or urban fringe, appropriate urban planning and design strategies should be used to achieve the desired result. The resulting suburban-like urban fabric of new satellite cities emphasizes the extent to which a new proposal for a new self-sufficient and sustainable city should contrast with the strategies originally used for New Cairo. To emphasize this further, I will quote Dunham-Jones from his book *Retrofitting Suburbia*:

The characteristics of suburban form differ markedly from urban form in several important ways:

- Suburban form is distinguished by buildings designed "in the round" to be viewed as objects set back in a landscape they dominate; in urban form, the fronts of buildings are clearly focused on how they line up to meet the sidewalk and shape the public space of the street.
- Private buildings are the dominant spatial figures in suburban form. There are public roadways, schools, and parks, but they are rarely treated as dominant spatial figures or outdoor public rooms, as is the case with urban form.
- Suburban buildings are typically dedicated to a single use - residential, retail, office, or industrial - whereas urban buildings are more frequently mixed-use or may transition in use over the life of the building.
- Suburban form is almost entirely automobile-dependent, with surface parking lots surrounding buildings, whereas urban form is not.

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<sup>119</sup> p.105, *Retrofitting Sprawl*

- The suburban form is almost entirely dependent on automobiles, with surface parking lots surrounding buildings, whereas the urban form is not.
- Suburban forms are lower-density and more evenly distributed, whereas urban forms have a higher net density as well as a wider range of localized densities. This is true for population and building area densities.
- Suburban form is primarily funded by volume-invested short-term investors, such as real estate investment trusts (REITs) and large homebuilders, whereas urban form is more likely to be funded by a combination of short- and long-term investment vehicles, as well as a variety of partnerships.<sup>120</sup>

Looking at the current urban fabric of New Cairo, the satellite city meets most, if not all, of these criteria, particularly where private developments and gated compounds are present. As a result, based on these criteria, planning outcomes in New Cairo could be classified as suburban rather than urban growth. Although it is possible that a strict classification of New Cairo as lower-density suburban or higher-density urban development was not made during the satellite city's planning stages, the intention to develop Wedian as a self-sustaining and walkable new city would necessitate clear strategies and steps towards increased 'urban' (Dunham Jones, 2009) forms of growth.

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<sup>120</sup> Dunham-Jones, 2009

## **Conclusion**

### **Recommendations for the Future**

Based on Kevin Lynch's five parameters of good city form, the following recommendations focus on various aspects of planning and urban design processes that could potentially improve city design outcomes. As a result, the recommendations are categorized and ordered sequentially based on those criteria. For example, developing contextually sound sustainability necessitates accurate access to data, whereas developing good urban design guidelines necessitates accepting urban development as a long-term process and similarly necessitates access to data and a clear definition of the target population.

#### **Who is this City for? Clear identification of the Target Population**

Settlements, towns, and cities were built to serve their settlers from the beginning. The design of a city's streetscape, public outdoor realm, and building relationships can thus be interpolated to serve the city's settler. "Site planning, then, is the organization of the external physical environment to accommodate human behavior." <sup>121</sup> As a result, it is critical that the intended settlers for these cities be identified, planned for, and designed with care. With the growth of formal systems to govern cities, the individual's abilities and self sufficiency have been delegitimized along the way. However, where the informal sector has a strong presence as a result of a lack of public systems "Governments and local authorities must, unequivocally recognize the important role of the informal sector and ensure that urban planning systems respond positively to this phenomenon, including through legislation." <sup>122</sup>

In the aftermath of desert developments, local government has avoided the resistance and negotiations that previously accompanied 'urban renewal' or resettlement housing strategies. However, the lack of existing settlements at these newly designated locations

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<sup>121</sup> p.12, Lynch, K. and Hack, G.

<sup>122</sup> p. xxviii, Planning Sustainable Cities

of new cities appears to have resulted in an apparent legitimization of government projects to be planned and processed without the need for consultation with the larger public and wider stakeholder. According to Ahmed Soliman, author of "Urban Informality in Egyptian Cities: Coping with Diversity" and "Typology of Informal Housing in Egyptian Cities: Taking into Account Diversity," informal settlements in Egypt can be divided into three main categories (settlements built on agricultural land, desert land, and public/private land), which can then be further subdivided into 22 more specific categories based on land type/ownership. Such categorizations demonstrate the complexities of land tenure and home ownership, as well as the insufficient production of formal housing, which forces many to rely on informal means of securing shelter.

With an understanding of the complexities of housing in Egypt, it is critical that populations struggling for secure housing be accommodated for in the planning processes for new cities, even if the lands themselves do not necessarily interact with existing populations. Since Wedian City's plans advocate for equal housing for all socioeconomic groups, such goals must be clearly translated with increased attention to both previous and future potential affordable housing models, in addition to any other forms of housing models planned.

### **Who decides? Greater transparency in the selection of private and public entities involved in such projects**

This section discusses some of the key players in the creation of new districts and cities. Identification of parties and their roles in the urban development arena is critical for understanding why current trends have emerged, how they have shaped new cities, and how their presence may affect future trends. In recent years, urban growth has resulted from both formal and informal processes; thus, key actors in the built environment have ranged widely from the individual citizen to the public sector to the Military Armed Forces to both local and international private real estate developers. In many cases, these actors have formed alliances, whereas in others, projects have been built entirely on their own.

Although the government is the dominant and seen as the dominant leading entity in social housing, its relationship to housing as well as its responsibility in the arena of affordable housing has been difficult to track. Ahmed Soliman lists that "Within the last six decades, the role of the government changed from innovator, producer, provider, facilitator or enabler into a cost recovery trend." Explaining that "The change of role of the government is due to the rapid socio-economic and political transformation that faced the country."<sup>123</sup> Although published prior to the 2011-2013 political turbulences, I would argue that the statement is equally applicable today, when the government's relationship to much public work has been heavily influenced by political insecurity, the resulting economic fluctuations, and frequent changes in administration and government responsibilities.

Localized pocket interventions by both private for-profit small businesses and non-profit organizations have been on the rise as an active response to slow or ineffective government interventions. These small-scale interventions have filled a clear void in addressing many of Cairo's most under-served and under-represented communities, particularly those belonging to low-income groups.

Such non-profit and non-governmental organizations have amassed a wealth of knowledge and experience working with many underserved communities. Furthermore, as a result of their close collaboration with these communities, they have earned the trust of many local residents as well as internal organizational structures. Although the new city is being built on new land with no informal settlements or low-income housing in its vicinity, the experiences and understanding of such organizations in lower-income communities across Cairo would be invaluable knowledge in the development of new strategies for the new cities, especially since the project is expected to be inclusive of all income groups.

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<sup>123</sup> Soliman, 2011



## **Access to Data and Platforms**

This is not to say or imply, however, that data is not available to local or international scholars or practitioners who seek it. Information is released as needed with the proper authorization or a backed-up request to the appropriate authority; however, this is not an easy task for a variety of reasons. To begin, determining which authority should be contacted about the information under consideration is not always clear, and it is not uncommon for individuals seeking information to be directed to contact multiple authorities before determining which they should approach or who they should contact. Once the proper authority has been identified, it is often necessary to demonstrate to the authority the need and intentions behind the information search, either through supporting documents or authorization letters from academic or professional institutions.

As a result, resolving delayed access to data and information is required in two ways:

- Transparent access to information about plans and projects, particularly in the early stages of development.
- Access to up-to-date and current statistics, maps, future projections, and legal change plans.

In the first case, a lack of transparency in the early stages of public sector plans prevents citizens from not only being aware of changes in the neighborhoods, districts, or cities in which they live, but also from engaging in and receiving both positive and critical advice from a large number of highly educated professionals and academics specializing in various relevant fields. Furthermore, while plans and proposals are announced and progress is reported at some point, it is frequently too late to make major changes or alternations.

In the second case, access to current data and information; while not impossible to obtain, access to data is frequently a lengthy process, with the knowledge that data obtained is frequently inaccurate. Critical analysis of existing conditions with the intention of implementing any type of urban intervention is very difficult at a larger scale without a solid foundation of knowledge of existing statistics and the current state of affairs. As a result, data access is a significant barrier to grounded and accurate professional and/or academic engagement with many urban planning issues.

### **Developing Public Participations Structures**

There is a lot of harsh criticism of the current lack of citizen participation in political and government processes: "Municipal government in Egypt is sick, and the majority of the population suffers. The illness is actually political -institutional crises characterized by excessive centralization, lack of transparency, and communication failures between the administrative apparatus and citizens. Moreover, the enormity and the diversity of the city's problems exponentially accentuate the dysfunction and deficiency of the local administration." <sup>124</sup>

This relationship between the citizen and the government raises serious concerns about citizen involvement and highlights the critical need for more elaborate and long-term relationships with affected communities in relation to national and local projects. However, Egypt is not the only country experiencing difficulties with public engagement. "In Dubai, planning decisions are not typically shared with the public. Because the government prefers to make decisions quickly and without interference, it does not involve the public in its decision making" <sup>125</sup> Such methods appear to attempt to shorten and accelerate development processes, but the long-term consequences appear to be equally overlooked. One of the most significant impediments to addressing urban challenges early on is the lack of open communication and early opportunities for dialogue, discussions, and critique of those plans and developments. This applies not only to large-scale national plans, but also to smaller-scale interventions. Furthermore, access

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<sup>124</sup> p. 179, Sarah Ben Nefissa

<sup>125</sup> Alawadi, 2017

to data refers not only to early transparency regarding future plans, but also to access to data on what is already in place.

Many of the more recent satellite cities have sprouted up on desert wastelands. Due to the lack of existing communities on these sites, there has been less resistance to these projects than to projects attempted in central Cairo. However, the absence of communities on the sites of these developments has created the convenient illusion that citizen participation in the planning phase of these projects is unnecessary or optional. However, I must argue that a citizen's right to be aware of, involved in, and participate in a project on desert land is just as important as it is in projects taking place in communities. Large-scale urban planning projects necessitate massive budgets, financial investments, long-term planning, and large-scale collaboration among various agencies. The large scale of these projects, on the other hand, means that not even the most established economy could proceed with such projects without incurring some form of opportunity cost to the citizen as a result of proceeding with such a project. With such large-scale investments and projects having direct or indirect effects on every individual, citizens should at the very least have the opportunity to participate in the decision-making process.

Although there is a structure and a defined hierarchy between planning and city management entities, the structures are quite cumbersome, and members of local communities are frequently misinformed or unaware of how, where, or to whom they should express local community needs, problems, or suggestions. Furthermore, even if an issue, suggestion, or maintenance concern is raised, addressing these concerns can take months, if at all.

Structured city management, as well as clear and organized communication with the local community, are thus critical missing components in the effective maintenance and development of a city. In the absence of a well-organized and transparent city management system, necessary organizational structures and technological infrastructures are urgently required.

## **Sustainability in the Egyptian Context**

In an effort to "modernize" the built environment, the architectural general trend and perception of designers and architects has led many to import western trends and ideals into their work to fit the general perceived trend of modernity. Many design elements were imported in an attempt to fit a specific image, without regard for the drastically different environmental conditions. Whereas glass facades may be appropriate in cold environments where sunlight and warmth are welcomed, such materials present enormous environmental challenges when used in the hot, arid climate surrounding Cairo, imposing enormous energy loads on their HVAC systems required to compensate for the amount of heat transferred.

As a result, it is critical that the city's sustainability measures take into account broader and more interconnected relationships. One of the city's goals is to cover 70% of all rooftops with solar panels or green roofs, and 40% of the right of way is projected to be dedicated to pedestrians and bicycles to further promote the city's goals as a 'Walk-able City' (UDC +5 Proposal). Because direct sunlight is abundant in Egypt, such renewable energy sources have a high potential for meeting at least a portion of the energy needs in various sectors. However, simply installing such systems is not a comprehensive solution to sustainability.

The use of solar panel systems is not an indicator of sustainability unless other factors such as the energy loads of the buildings, the transportation systems used by individuals to reach those buildings, or the maintenance costs of upkeep are taken into account.

Previous trends show a clear tendency to overlook the city as an ecosystem when pursuing sustainability; thus, deeper considerations are required.

'Sustainability' is a word that is widely misused in many contexts; it is used ambiguously in different contexts to mean different things. It has come to mean many different things to different people and entities when used in the context of environmental sustainability, organizational and financial sustainability, or the long-term sustainability of a living ecosystem. When it comes to the implementation of sustainability in Egypt, efforts can be seen across a wide range of industries and activities. However, there appears to be a lack of coordination of efforts and depiction of the interrelationship of various fields and activities toward sustainability.

Many cities' sustainability efforts have included installing solar panels and greywater systems in various public sector buildings, encouraging the construction of solar and wind farms, and promoting more energy efficient lighting systems. In terms of the environment, these efforts are critical in promoting more clean energy, as well as reducing energy loads and promoting greater energy efficiency.

However, in order to truly meet international levels of sustainability, efforts to promote sustainability must be taken to the next level. To make such a leap, it is critical that the perception of sustainable cities shifts away from the outwardly perceived sustainability of individually solar-powered buildings or the construction of individual solar farms and toward the city as a fully fledged ecosystem.

As a result, the goal of sustainability will be linked to another goal of the city, namely, Wedian as a smart city. The proposal advocates for the use of digital technology in a variety of forms, including wireless telecommunication, digital displays, street-lighting control, local and satellite television networks, and electronic forms of inquiry and maintenance. Although the importance of some systems, such as "satellite TV," in a city's "smartness" is debatable, elements such as public transportation are also discussed. "Contemporary policy discourses, however, appear to conceive of the sustainable city more generally as high-tech city: it is not just various 'green' technologies that chiefly

define this city, but also the integral use of 'smart' or 'ubiquitous' technology" <sup>126</sup> The coordination of these various elements in their complex systems, on the other hand, is critical. Although this is mentioned in the proposal, the implementation of such goals has been the main challenge for many Egyptian city initiatives.

Without a sustainable transportation system, a city cannot be considered sustainable. It cannot be considered sustainable if local members of a community are unable to access their jobs within a reasonable distance of their home or via a sustainable mode of transportation. By providing green space while ignoring the massive cooling loads required to compensate for vast expanses of glass covering its rooftops or facades, the built environment cannot be considered environmentally friendly. Through individual research or various projects, both local researchers and professionals in Egypt have attempted to reduce carbon emissions from the built environment. However, in order for cities to achieve true environmental sustainability, such considerations must be made on much larger scales, addressing larger expanses of the urban environment and incentivizing both the public and private sectors towards more sustainable construction models, taking into account both design, implementation, and maintenance. In relation to Dubai's urbanization, "the most sustainable neighborhoods will feature compactness, connectivity and multiple transportation options, diversity, culturally relevant urbanism, and climate-sensitive urbanism, all integrated in the urban fabric" <sup>127</sup>.

Another level of sustainability that is frequently overlooked is the urban environment's long-term financial sustainability in terms of not only project completion but also management, upkeep, and maintenance. It is not enough to consider only the initial financial feasibility of plans for their implementation; it is also necessary to project the future consequences of urban decisions made today. To accomplish this, the intricate interdependencies between various elements of city life must be identified and considered as codependent elements of the urban eco-system.

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<sup>126</sup> p.107, Joss, 2015

<sup>127</sup> Alawadi, 2017

Because one of the main premises of the new administrative capital is its portrayal as a sustainable city of the future, these parameters must be considered.

### **Re-grounding the Egyptian Modern Identity**

Many foreign elements of perceived modernity are being imported across the country's-built environment in order to emerge and compete with global economies and provide an image of a technologically advanced state. Unfortunately, impressive images are frequently sought after as solutions to problems rather than investments in the root causes.

Egypt, like many other nations with long histories, struggles to reconcile the old and the new. Because of the presence, much land in Egypt is protected (and often even just potential presence of historic artifacts and monuments). These regulations, quite rightly, prevent the formal development of these lands. Although informal forms of encroachment are not uncommon, these regulations go a long way toward protecting Egypt's irreplaceable monuments.

There is little conflict and clash between the demands of the urban setting and its neighboring monuments when such lands are located on the outskirts of cities or far outside the boundaries of the urban realm. However, where the boundaries are much closer together, the demands of the urban environment and the protection of such lands do not always coexist.

As the populations of many cities in Egypt continue to grow, so do the demands for good living conditions and economic opportunities. Due to Egypt's harsh weather conditions, urban settlements have historically settled along the Nile River, primarily for access to

water and fertile agricultural land, which differs significantly from Egypt's desert terrain. As a result, the Nile Valley and its riverside cities have a high concentration of historic monuments. As a result, the rich settings of these cities provide unique historic, educational, and economic opportunities. Although Cairo may have attracted the majority of the country's population, many other historic cities and their resources are under-capitalized. Furthermore, while much research has focused on the visual inconsistency of architecture, the lack of visual uniformity, or the absence of a modern 'Egyptian architectural language,' the connectivity between monuments, historic landscapes, and natural resources and reserves, with a particular focus on the spaces between different uses and functions, has been undermined and requires further investigation.

It is critical that the value of such elements of both historic and natural heritage be recognized and recognized as resources, rather than as boundaries cutting through the urban landscape. In many cases, these issues are viewed as purely "tourism" issues and are delegated to the Ministry of Tourism. Activating such cities, on the other hand, is far more deeply rooted than developing tourist programs or incentives. The relationship between rapidly urbanizing areas and many of Egypt's historic monuments is especially important in cities where urbanization has not yet engulfed some of these historic sites.

### **The City as A Long-term Growth Process**

The emphasis on time in this section, on the other hand, attempts to emphasize the rapid pace at which development and solutions are expected to be delivered. Although many problems may go unaddressed for years at a time, solutions are sometimes presented as complete packages ready for implementation - only to be implemented with varying degrees of success or completely stopped due to widespread public dissatisfaction.

The construction of an iconic building or the image of a new sustainable or smart city may provide short-term benefits in terms of new spaces, businesses, national identity, or hope, but such imagery should not be used to replace the more difficult search for a sustainable, long-term solution to the root causes of a city's problems. As Jane Jacobs succinctly puts it "It may be that we have become so feckless as a people that we no



longer care how things do work, but only what kind of quick easy outer impression they give. If so, there is little hope for our cities or probably for much else in our society. But I do not think this is so." <sup>128</sup> Similarly, it is believed that many people are concerned about the root causes of Egyptian cities' urban problems.

Regardless of the pressures to provide immediate solutions and the desire to accelerate outcomes, it is critical that current pressures as well as both short-term and long-term potential outcomes be considered and weighed during the decision-making process. Design processes must be given adequate time in order to take these larger considerations into account and to allow for the integration of local community members, local professionals, and both local and international research communities as needed. Further research and accounting for the possibility of devoting more time to the design phase is thus required in order to create more designs and plans that are more reflective of citizen needs.

Furthermore, beyond the initial establishment of a city, the development of its ecosystem is a long-term process that must be taken into account. This means that, rather than design-build approaches, cities may require more long-term investment approaches.

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<sup>128</sup> Jacobs, 1961

## Bibliography

Abo-saada, Hesham. "Interdisciplinary Urban Design: Toward Egyptian Manifesto." Accessed January 17, 2017. [http://www.cpas-egypt.com/pdf/HeshamAboSeada/Hesham-Abo-saada/Researches/English/1-](http://www.cpas-egypt.com/pdf/HeshamAboSeada/Hesham-Abo-saada/Researches/English/1-Interdisciplinary%20Urban%20Design%20Toward%20Egyptian%20Manifesto.pdf)

[Interdisciplinary%20Urban%20Design%20Toward%20Egyptian%20Manifesto.pdf](http://www.cpas-egypt.com/pdf/HeshamAboSeada/Hesham-Abo-saada/Researches/English/1-Interdisciplinary%20Urban%20Design%20Toward%20Egyptian%20Manifesto.pdf).

Alawadi, Khaled. "Rethinking Dubai's Urbanism: Generating Sustainable Form-Based Urban Design Strategies for an Integrated Neighborhood." *Cities* 60, no. Part A (February 1, 2017): 353-66. doi: 10.1016/j.cities.2016.10.012.

Alberti, Marina. *Cities That Think like Planets: Complexity, Resilience, and Innovation in Hybrid Ecosystems*. Seattle: University of Washington Press, [2016], 2016.

BMI Research, "Egypt: Country Risk Report -." *Egypt: Country Risk Report (Q4 2015)*, 2015. "Cairo's Strategic Development Vision: What about Participatory Planning?" *Tadamun*, April 1, 2014. <http://www.tadamun.info/2014/04/01/cairos-strategic-development-what-about-participatory-planning/?lang=en>.

Chandrasekaran, Rajiv, *Imperial Life in the Emerald City: Inside Iraq's Green Zone* (Alfred A. Knopf, 2006)

Chapple, Karen. *Planning Sustainable Cities and Regions: Towards More Equitable Development*. Routledge Equity, Justice and the Sustainable City Series. Abingdon, Oxon; New York, NY: Routledge, 2015.

Chase, John, Margaret Crawford, and John Kaliski. *Everyday Urbanism*. New York: Monacelli Press, 2008., 2008.

Davis, Mike, *Planet of Slums* (Verso 2007)

Chiri, Tayssir. "Sadat City: New Settlement in the Desert." *Open House International* 10, no. 2 (1985): 50-56.

Conservancy, Central Park. "Central Park." Accessed January 18, 2017. <http://www.centralparknyc.org/>.

Duany, Andres, Elizabeth Plater-Zyberk, and Robert Alminana. *The New Civic Art: Elements of Town Planning*. New York: Rizzoli, 2003.

Dunham-Jones, Ellen, and June Williamson. *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs*. Hoboken, N.J.: John Wiley & Sons, 2009.

"Egypt Unveils Plans to Build New Capital East of Cairo." *BBC News*. Accessed October 26, 2015. <http://www.bbc.com/news/business-31874886>.

"Egyptian Government Reveals Plans to Build New Capital City." *Text*. ABC News, March 14, 2015. <http://www.abc.net.au/news/2015-03-14/egyptian-government-reveals-plans-to-build-new-capital/6320144>.

El-Shakhs, Salah. "Sadat City, Egypt and the Role of New Town Planning in the Developing World." *Journal of Architectural & Planning Research* 11, no. 3 (1994): 239-59.

Embaby, Mohga. "Promoting Cultural Identity along Streetscape Redesign 'Case Studies in Cairo and Luxor Cities, Egypt,'" May 2015. [https://www.researchgate.net/profile/MohgaEmbaby/publication/277814271\\_PromotingCultural\\_Identityalong\\_StreetscapeRedesign\\_Casestudies\\_in\\_Cairo\\_andLuxor\\_CitiesEgypt/links/55745c7908aeacfflffbc21.pdf](https://www.researchgate.net/profile/MohgaEmbaby/publication/277814271_PromotingCultural_Identityalong_StreetscapeRedesign_Casestudies_in_Cairo_andLuxor_CitiesEgypt/links/55745c7908aeacfflffbc21.pdf).

Hafez, Reham M. "New Cities between Sustainability and Real Estate Investment: A Case Study of New Cairo City." *HBRC Journal*. Accessed November 28, 2016. doi: 10.1016/j.hbrej.2015.03.001.

Harvey, David, *Limits of Capital* (Verso 2018 [1982]). *A Companion to Marx's Capital* (Verso 2010)

Holston, James, *The Modernist City: An Anthropological Critique of Brasília* (The University of Chicago Press 1989).

Jacobs, Jane. *Cities and the Wealth of Nations: Principles of Economic Life*. New York: Random House, 1984.

Jacobs, Jane. *The Death and Life of Great American Cities*. [New York] Random House, 1961.

Joss, Simon. *Sustainable Cities: Governing for Urban Innovation*. Planning, Environment, Cities. New York: Palgrave Macmillan, 2015.

Khorshed, Mirette, 'Cairo's New Administrative Capital Wedian City: Lessons from the Past and for the Future', Master Thesis. Massachusetts Institute of Technology (Februari 2017).

Krieger, Alex, and William S. Saunders. *Urban Design*. Minneapolis: University of Minnesota Press, 2009.

Le Corbusier. *Looking at City Planning*. Orion Press Book. New York, Grossman Publishers, 1971.

Lefebvre, Henri, *The Production of Space* (Blackwell Publishing, 1992 [1974]). *The Urban Revolution* (University of Minnesota Press, 2003 [1970]).

Lloyd, Alan B. *Ancient Egypt: State and Society*. New York: Oxford University Press, 2014.

Lynch, Kevin, and Gary Hack. *Site Planning*. Cambridge, Mass.: MIT Press, 1984.

Lynch, Kevin, and Kevin Lynch. *Good City Form*. Cambridge, Mass.: MIT Press, 1984.

Marcuse, Herbert, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (Routledge Classics, 2002 [1964])

Marx, Karl, *Het Kapitaal 1. Het Productieproces van het Kapitaal: Kritiek van de Politieke Economie* (Boom, 2010 [1867])

Mitchell, Timothy, *Rule of Experts: Egypt, Techno-politics, Modernity* (University of California Press, 2002).

Metwally, Magda, and Sahar S. Abdalla. "Impact of Gated Communities on the Urban Development of New Cities in Egypt." Accessed November 28, 2016. <http://www.cpas-egypt.com/pdf/Sahar%20Soliman/English/04%20IMPACT%20OF%20GATED%20COMMUNITIES%20N%20THE%20URBAN.pdf>.

Newman, Peter, and Andy Thornley. *Planning World Cities: Globalization and Urban Politics*. Planning, Environment, Cities. Houndmills, Basingstoke, Hampshire; New York: Palgrave Macmillan, 2011.

Nicholas Hamilton, Dana Kardoush, Muneeb Ansari, Meredith Hutchison, Rehan Rafay Jamil, and Farah Al-Sweel, Jose Vericat, Maheen Saleem Farooqi. "Land, Legitimacy and Governance in Revolutionary Cairo," March 2012. <http://csud.ei.columbia.edu/files/2012/08/120311-SIPAEPD-Cairo-Land-Legitimacy-Governance.pdf>.

Nitzan, Jonathan, and Shimshon Bichler, *Capital as Power: A Study of Order and Creorder* (Routledge, 2009).

*Planning Sustainable Cities: Global Report on Human Settlements 2009*. London; Sterling, VA: Earthscan, 2009.

Pollalis, Spiro N. *Planning Sustainable Cities: An Infrastructure-Based Approach*. New York, NY: Routledge, 2016.

Raymond, Andre. *Cairo*. Cambridge, MA: Harvard University Press, 2000.

Ross, Kristin, *Fast Cars, Clean Bodies: Decolonization and the Reordering of French Culture* (MIT Press, 1996).

Ryan, Brent D. *Design after Decline: How America Rebuilds Shrinking Cities*. The City in the Twenty-First Century. Philadelphia: University of Pennsylvania Press, 2012.

Scott, James, *Seeing Like a State: How Certain Schemes to Improve the Human Condition have Failed* (Yale University Press, 1998).

Sharp, Deen S., *Corporate Urbanization: Between the Future and Survival in Lebanon* (CUNY Academic Works, 2018)

Sims, David. *Understanding Cairo: The Logic of a City out of Control*. Cairo; New York: The American University in Cairo Press, 2010.

Sims, David E., and Timothy Mitchell. *Egypt's Desert Dreams: Development or Disaster?* Cairo; New York: The American University in Cairo Press, 2014.

Singerman, Diane, and Paul Amar. *Cairo Cosmopolitan: Politics, Culture, and Urban Space in the Globalized Middle East*. Cairo; New York: American University in Cairo Press, 2006.

Soliman, Ahmed M. "The Egyptian Episode of Self-Build Housing." *Habitat International* 36, no. 2 (April 2012): 226-36. doi:10.1016/j.habitatint.2011.08.004.

The Development of Sadat City. [Cairo: Arab Republic of Egypt, Ministry of Housing and Reconstruction, Advisory Committee for Reconstruction], 1978.

Uphill, Eric. Egyptian Towns and Cities. Shire Egyptology Series. April 1 t, 1988.

Vale, Lawrence J. Architecture, Power, and National Identity. London; New York: Routledge, 2008.

Wahdan, Dalia. Planning Egypt's New Settlements: The Politics of Spatial Inequities = TakhtTt AI-Mudun AI-Jadidah F1 Mi r: SiydsdtAI-Tabyyun AI-Makdnr. Cairo Papers in Social Science: Volume 32, Number 1. Cairo; New York: The American University in Cairo Press, 2013.

## Bibliography of Additional Sources Consulted

ArabFinance. Accessed November 29, 2015. <http://www.arabfinance.com/2015/pages/news/newsdetails.aspx?id=332876&lang=ar&repcat=egne>.

"Australia Best Country in the World to Live While Canberra Best City." Mail Online. Accessed October 26, 2015. <http://www.dailymail.co.uk/news/article-2784541/Its-official-Australia-best-country-world-live-Canberra-best-city.html>

Azharkent. Penang, Malaysia- World's Heritage City by UNESCO (2012). Accessed November 19, 2015. <https://www.youtube.com/watch?v=afvBYEgi-ME>.

Bonface. "More Administrative Cities in Egypt to Be Constructed." Construction Review Online. Accessed November 1, 2015. <http://constructionreviewonline.com/2015/10/more-administrative-cities-in-egypt-to-be-constructed/>.

"Cairo-2050-Vision-v-2009-Gopp-12-Mb.pdf,"

"Cairo's Metropolitan Landscape: Segregation Extreme - Failed Architecture." Accessed October 26, 2015. <http://www.failedarchitecture.com/cairos-metropolitan-landscape-segregation-extreme/>. CBCeXtra. Accessed October 21, 2015. <https://www.youtube.com/watch?v=RuKzR2ieqlw>.

"Chinese Investments in Egypt Estimated at \$400bn - AMEInfo AMEInfo." Accessed December 2, 2015. <http://ameinfo.com/finance-and-economy/trade/international-trade/chinese-investments-in-egypt-estimated-at-400bn/>.

"CoreyRelocation of Nat'l Capitals I (published).pdf,"

"Countries Which Have Moved Their Capital City," August 29, 2014, sec. World. <http://www.telegraph.co.uk/news/worldnews/southamerica/argentina/11064008/Countries-which-have-moved-their-capital-city.html>.

Cube Consultants, 'The Capital Cairo – al-‘Āşima al-‘Idāriyya al-Jadīda', Vimeo video, posted 30 August 2016. <https://vimeo.com/180717384>

Darmagazine, 'The Smart Revolution: Reimagining Cities' i16 (January 2019).

"Du Brings UAE's Smart City Vision Closer to Reality with New Breed of Network - Khaleej Times." Accessed November 23, 2015. <http://www.khaleejtimes.com/business/telecom/du-brings-uaes-smart-city-vision-closer-to-reality-with-new-breed-of-network>.

"EGP 8.5bn to Be Pumped in New Capital, 1.5m Acres." Daily News Egypt. Accessed December 15, 2015. <http://www.dailynewsegypt.com/2015/12/08/egp-8-5bn-to-be-pumped-in-new-capital-1-5m-acres/>.

"Egypt close to Revealing Plan for Its'new' New Cairo Capital I The National' Accessed November 10, 2015. <http://www.thenational.ae/business/property/20150225/egypt-close-to-revealing-plan-for-its-new-new-cairo-capital>

"Egyptian Construction Companies Can Build Cairo Capital in 1 Year: EFCBC. Daily News Egypt. Accessed October 21, 2015. <http://www.dailynewsegypt.com/2015/08/02/egyptian-construction-companies-can-build-cairo-capital-in-1-year-efcbc/>.

"Egypt Profile - Timeline." BBC News. Accessed October 25, 2015. <http://www.bbc.com/news/world-africa-13315719>

"Egypt's New Capital Project to Involve Chinese. The Arab Weekly. Accessed December 2, 2015. <http://www.thearabweekly.com/?id=2361>.

"Egypt to Build 3 New Administrative, 'eco-Friendly' Tourist Cities: Sisi." Cairo Post. Accessed November 1, 2015. <http://www.thecairopost.com/news/171246/business/egypt-to-build-3-new-administrative-eco-friendly-tourist-cities-sisi>.

Felipe Acevedo M. Cairo: Garbage - Cities on Speed - People Earn a Living Sorting and Recycling Garbage. Accessed November 6, 2015. <https://www.youtube.com/watch?v=zloVamXB86w>

Feteha, Ahmed. "Sadat City Is a Cautionary Tale as Egypt Plans New Capital" Bloomberg.com. Accessed October 25, 2015. <http://www.bloomberg.com/news/articles/2015-05-12/sadat-city-a-cautionary-tale-as-egypt-leader-plans-new-capital>.

GSFStudiosOfficial. Cairo's Belle Epoque Documentary Film I Part 2. Accessed November 6, 2015. <https://www.youtube.com/watch?v=bM521px33ZA>.

Hegazy, Ibrahim Rizk, and Wael Seddik Moustafa. "Toward Revitalization of New Towns in Egypt Case Study: Sixth of October." International Journal of Sustainable Built Environment 2, no. 1 (June 2013): 10-18. doi: 10.1016/j.ijbsbe.2013.07.002.

Human Rights Watch, 'Egypt: Serious Abuses, War Crimes in North Sinai', 28 May 2019. <https://www.hrw.org/news/2019/05/28/egypt-serious-abuses-war-crimes-north-sinai>

IskanAIZil. Government Urbanism, New Cities. Accessed August 6, 2016. <https://www.youtube.com/watch?v=9JvnhkKgTO>.

Kotb, Amr. "Is It Time for Egypt's New Capital City?" August 27, 2014. <http://english.ahram.org.eg/NewsContent/1/0/109304/Egypt/Is-it-time-for-Egypt-s-new-capital-city.aspx>

Lynch, Kevin, Tridib Banerjee, and Michael Southworth. City Sense and City Design: Writings and Projects of Kevin Lynch. Cambridge, Mass.: MIT Press, 1990.

Masr, Mada. "Sisi Sets Two-Year Deadline for Phase 1 of New Capital." Mada Masr. Accessed November 1, 2015. <http://www.madamasr.com/news/economy/sisi-sets-two-year-deadline-phase-1-new-capital>

M. Egy. Accessed February 28, 2016. <https://www.youtube.com/watch?v=-CExEYhmtQ>.

MUSIQE ALG. Welcome to the New Capital Bougehzoul 2014. Accessed August 6, 2016. <https://www.youtube.com/watch?v=mBeJc6ECOfQ>.

"New New Cairo: How to Make Sense of Egypt's Capital Plans. UrbanAfrica.Net. Accessed November 23, 2015. <http://www.urbanafrika.net/urban-voices/new-new-cairo-how-to-make-sense-of-egypts-capital-plans/>

NYC Open Data, 'Water Consumption In The New York City', <https://data.cityofnewyork.us/Environment/Water-Consumption-In-The-New-York-City/ia2d-e54>

"Okopress-The Strategic Plan for the New Administrative Capital." OKOPLAN, November 24, 2016. <http://www.oekoplan.com/okopress-strategic-plan-new-administrative-capital/>.

"Philip Enquist I ArchDaily." Accessed October 26, 2015. <http://www.archdaily.com/tag/philip-enquist/>. "Putrajaya City Centre Master Plan & Urban Design I Urbanisma." Accessed November 1, 2016. <http://www.urbanisma.com.my/v3/?page-id=1144>

Roberts, Brian, and Trevor Kanaley. Urbanization and Sustainability in Asia: Case Studies of Good Practice. Asian Development Bank, 2006.

"Sadat City, a Cute White Elephant, Should Be Warning as Egypt Plans New \$75bn Capital." MG Africa. Accessed November 30, 2015. <http://mgafrica.com/article/2015-05-14-sadat-city-a-cute-white-elephant-should-be-a-warning-as-egypt-plans-new-75bn-capital/>.

Schatz, Edward. When Capital Cities Move: The Political Geography of Nation and State Building. The Helen Kellogg Institute for International Studies, 2003.

Selim, Adham. "Capital Cairo: A Regime of Graphics!" Mada Masr. Accessed November 23, 2015. <http://www.madamasr.com/sections/culture/capital-cairo-regime-graphics>.

"Sharing Good Open Government Ideas: A New Experiment! "Open Government Partnership. Accessed October 23, 2015. <http://www.opengovpartnership.org/blog/linda-frey/2013/08/01/sharing-good-open-government-ideas-new-ex>

Shenety, Omar el-, 'Mid to Low-End Housing: The Unattended Market Segments', Alternative Policy Solutions, 3 February 2019. <http://www.aps.aucegypt.edu/en/commentary-post/mid-to-low-end-housing-the-unattended-market-segments>

Siemens Global Website, 'Completion of world's largest combined cycle power plants in record time', 24 July 2018. [https://www.siemens.com/press/en/feature/2015/corporate/2015-06-egypt.php?content\[\]=Corp&content\[\]=WP&content\[\]=PG&content\[\]=SFS](https://www.siemens.com/press/en/feature/2015/corporate/2015-06-egypt.php?content[]=Corp&content[]=WP&content[]=PG&content[]=SFS)

Singerman, Diane, and Paul Amar. Cairo Cosmopolitan: Politics, Culture, and Urban Space in the Globalized Middle East. Cairo; New York: American University in Cairo Press, 2006., 2006

"SOM Masterplans Egypt's New Capital City." ArchDaily. Accessed October 26, 2015. <http://www.archdaily.com/612328/som-masterplans-egypt-s-new-capital-city/>.



"SOM Unveils Vision of New Egyptian I.' Accessed November 29, 2015. <http://dorchester-magazine.com/2015/11/25/som-unveils-vision-of-new-egyptian>

Street Pulse. Accessed August 6, 2016. <https://www.youtube.com/watch?v=4LPCNTHZpj4>. "Sustainable Urban Development in Africa - UN-Habitat." Accessed October 30, 2015. <http://unhabitat.org/sustainable-urban-development-in-africa/>.

"TADAMUN Team."Tadamun. Accessed December 12, 2015. <http://www.tadamun.info/about/tadamun-team/?lang=en>.

"Town Planning Schemes for Cairo Conceived by Egyptian Planners in the Liberal Experiment Period." Accessed October 21, 2015. [https://www.academia.edu/2076736/TOWNPLANNING\\_SCHEMES\\_FOR\\_CAIRO\\_CONCEIVED\\_BY\\_EGYPTIAN\\_PLANNERS\\_IN\\_THE\\_LIBERAL\\_EXPERIMENT\\_PERIOD](https://www.academia.edu/2076736/TOWNPLANNING_SCHEMES_FOR_CAIRO_CONCEIVED_BY_EGYPTIAN_PLANNERS_IN_THE_LIBERAL_EXPERIMENT_PERIOD).

Travel Curiosity. A Glimpse of Putrajaya - Malaysia. Accessed November 18, 2015. <https://www.youtube.com/watch?v=P3dlrbr-nrY>.

"Will Egypt's New Administrative Capital Help Its Economy? - Al-Monitor: The Pulse of the Middle East." Al-Monitor. Accessed November 29, 2015. <http://www.al-monitor.com/pulse/originals/2015/04/egypt-economy-conference-foreign-investments-future-gdp.html>.

Zubir, S. S., and C. A. Brebbia. The Sustainable City VIII (2 Volume Set): Urban Regeneration and Sustainability. WIT Press, 2013.

## Academic articles

Abaza, Mona 'Walls, Segregating Downtown Cairo and the Mohammed Mahmud Street Graffiti' Theory, Culture & Society 30, no. 1 (January 2013) 122–39

Abotera, Mohamad, and Safa Ashoub, 'Billboard Space in Egypt: reproducing nature and dominating spaces of representation', Urban Transcripts

Abourahme, Nasser and Omar Jabary-Salamanca, 'Thinking against the sovereignty of the concept' (interview with Timothy Mitchell), City, 20 no. 5 (2016) 737-754

Brenner, Neil, Stuart Elden, 'Henri Lefebvre on State, Space, Territory', International Political Sociology, 3 no. 4 (Dec 2009) 353-377

Cornish, Edward, 'Building Utopia: Lessons from Brasilia' The Futurist 25 no. 4 (Jul/Aug 1991).

Elsheshtawy, Yasser, 'From Dubai to Cairo: Competing Global Cities, Models, and Shifting Centres of Influence?', in Cairo Cosmopolitan: Politics, Culture, and Urban Space in the New Globalized Middle East, ed. Diana Singerman and Paul Amar (AUC Press 2006).

Huchzermeyer, Marie, 'Humanism, creativity and rights: invoking Henri Lefebvre's right to the city in the tension presented by informal settlements in South Africa today', Transformation: Critical Perspectives on Southern Africa 85 (2014) 64-89.

Mitchell, Timothy, 'The Capital City' in: *The Arab City: Architecture and Representation*, ed. Amale Andraos and Nora Akawi (Columbia Books on Architecture and the City 2016).

Kipfer Stefan, Kanishka Goonewardena, 'Urban Marxism and the Post-colonial Question: Henri Lefebvre and 'Colonization'', *Historical Materialism*, 21 no. 2 (2013) 76-116. 'Colonization and the New Imperialism: On the Meaning of Urbicide Today', *Theory & Event* 10, no. 2 (2007)

Richter, Thomas, and Christian Steiner, 'Politics, Economics and Tourism Development in Egypt: insights into the sectoral transformations of a neo-patrimonial rentier state', *Third World Quarterly*, 29 no. 5 (2008) 939-959.

Roll, Stephan, 'Finance Matters! The Influence of Financial Sector Reforms on the Development of the Entrepreneurial Elite in Egypt', *Mediterranean Politics* 15 no. 3 (2010) 349-370

Schmid, Christian, 'Henri Lefebvre's Theory of the Production of Space: Towards a Three-Dimensional Dialectic', in *Space, Difference, Everyday Life: Reading Henri Lefebvre*, ed. Kanishka Goonewardena, Stefan Kipfer, Richard Milgrom and Christian Schmid (Routledge 2008).

Smith, Mick, 'Repetition and Difference: Lefebvre, Le Corbusier and Modernity's (Im)moral Landscape, Ethics, Place & Environment' 4 no. 1 (2001) 31-44.

Shokr, Ahmad. "Hydropolitics, Economy, and the Aswan High Dam in Mid-Century Egypt." *The Arab Studies Journal* 17, no. 1 (2009): 9-31.

Stanek, Lukasz, 'Space as concrete abstraction: Hegel, Marx, and modern urbanism in Henri Lefebvre' in *Space, Difference, Everyday Life: Reading Henri Lefebvre* ed. Kanishka Goonewardena, Stefan Kipfer, Richard Milgrom and Christian Schmid (Routledge 2008).

Woltering, Robbert, and Wladimir Riphagen in 'Tales of a Square: The Production and Transformation of Political Space in the Egyptian (Counter)Revolution', *Arab Studies Quarterly* 40 no. 2 (Spring 2018) 117-130.

## News articles

'4 sharakāt Maṣriyya tanaffidh mashrū' qatār al-'Āṣima al-'Idāriyya al-mukahrab', *Ṣawt al-Ama*, 22 February 2019. [www.soutalomma.com](http://www.soutalomma.com)

'An elephant in the desert: Egypt prepares to open its grand new capital', *The Economist*, 24 January 2019. <https://www.economist.com/middle-east-and-africa/2019/01/24/egypt-prepares-to-open-its-grand-new-ca>

'Bombardier-Orascom consortium wins Egypt monorail train bid', *Al-Masry Al-Youm*, 29 May 2019. <https://egyptindependent.com/bombardier-orascom-consortium-wins-egypt-monorail-train-bid>

‘Cairo is world’s second most polluted city: WHO’, Egypt Independent, 15 May 2018. <https://www.egyptindependent.com/cairo-is-worlds-second-most-polluted-city-who/>

‘Egypt’s New Capital to Be First ‘Cashless’ City in the Country’, Egyptian Streets, 17 Februari 2019. <https://egyptianstreets.com/2019/02/17/egypts-new-capital-to-be-first-cashless-city-in-the-country>

‘Egypt police 'kill 40 militants' in raids after tourist bus blast’, BBC, 29 December 2018. <https://www.bbc.com/news/world-middle-east-46708695>

“al-Hukūma: Nuqil ‘al-’arḍ al-ma‘āraḍ’ ilā al-‘Āṣima al-’Idāriyya al-Jadīda”, al-Waṭan, 2 August 2017. <https://www.elwatannews.com/news/details/2383391?t=push>

‘Minister of Planning discusses transferring governmental bodies to New Administrative Capital’, Egypt Independent, March 31 2019. <https://www.egyptindependent.com/minister-of-planning-discusses-transferring-governmental-bodies-to-new-administrative-capital>

‘New Capital's Business District to include 20 towers’, Egypt Today, 18 March 2018. <https://www.egypttoday.com/Article/3/45544/New-Capital-s-Business-District-to-include-20-towers>

‘Total Number of Vacant Housing Units in Egypt 12,8 mn: CAPMAS’, Egypt Independent, 2 October 2017. <https://www.egyptindependent.com/total-number-vacant-housing-units-egypt-12-8-mn-capmas/>

‘University of Canada in Administrative Capital opens door for 2018-2019 students’, Egypt Today, 9 August 2018. <http://www.egypttoday.com/Article/1/55632/University-of-Canada-in-Administrative-Capital-opens-door-for-2018>

Abdellah, Mohamed, ‘Egypt's new desert capital faces delays as it battles for funds’, Reuters, 13 May 2019. <https://www.reuters.com/article/us-egypt-new-capital/egypts-new-desert-capital-faces-delays-as-it-battles-for-funds-idUSKCN1SJ10I>

Al-Aees, Shaimaa, ‘57 embassies request to move to New Administrative Capital’, Daily News Egypt, 16 October 2018. <https://dailynewssegypt.com/2018/10/16/57-embassies-request-to-move-to-new-administrative-capital>

Aḥmad, Fahīma, ‘Ba’d khaṭīfha.. Hadhihi as’ār ‘aqārāt al-‘Āṣima al-’Idāriyya’, Al Arabiya, 23 October 2017. <https://www.alarabiya.net/ar/aswaq/realestate/2017/10/23/>

Bennet, Olivier, ‘Why Egypt is building a brand new mega capital city’, Independent, 10 September 2018. [https://www.independent.co.uk/news/long\\_reads/egypt-capital-city-cairo-architecture-the-new-administrative-capital-a852198.html](https://www.independent.co.uk/news/long_reads/egypt-capital-city-cairo-architecture-the-new-administrative-capital-a852198.html)

Casabón, Cristina, ‘Egypt's military economy’, open Democracy, 29 July 2015 <https://www.opendemocracy.net/en/north-africa-west-asia/egypts-military-economy/;Laila>

Dunne, Michele, ‘Sisi Builds a Green Zone for Egypt’, Carnegie Endowment for Peace, 27 November 2018. <https://carnegieendowment.org/2018/11/27/sisi-builds-green-zone-for-egypt-pub-77803>

Esterman, Isabel, 'Water shortage shrivels dreams of the good life in New Cairo', MadaMasr, 4 September 2014. <https://madamasr.com/en/2014/09/04/feature/society/water-shortage-shrivels-dreams-of-the-good-life-in-new-cairo>

Gad, Mohammad, and Alya El Marakby (translation), 'On the Egyptian pound, living standards and real estate: An economy forecast for 2019', MadaMasr, 2 January 2019. <https://madamasr.com/en/2019/01/02/feature/economy/on-the-egyptian-pound-living-standards-and-real-estate-an-economy-forecast-for-2019>

Farid, Farid, "How can a proud country kill its heritage?" Cairo calls time on oldest watch shop", The Guardian, 7 August 2019

Ghanem, Shaimaa, 'New Administrative Capital Is An Incomparable Integrated City: ACUD Chairman', Invest-Gate, 7 November 2018. <https://invest-gate.me/features/new-administrative-capital-is-an-incomparable-integrated-city-acud-chairman/>

Hall, Richard, 'Egypt's Sisi denies his country holds any political prisoners, but rights groups say tens of thousands detained', The Independent, 4 January 2019. <https://www.independent.co.uk/news/world/middle-east/egypt-political-prisoners-abdel-fattah-alsisi-president-cbs-a8710951.htm>

Kasāb, Bīsān, 'al-ʿĀṣima al-ʿidāriyya.. Kharij al-muwāzana am kharij al-muḥāsaba?', MadaMasr, 25 April 2019. <https://madamirror12.appspot.com/madamasr.com/ar/2019/04/25/feature/>

Kassab, Beesan, 'The new administrative capital: Outside the state budget or outside public accountability?', MadaMasr, 25 May 2019. <https://madamirror12.appspot.com/madamasr.com/en/2019/05/25/feature/economy/the-new-administrative-capital-outside-the-state-budget-or-outside-pu>

Magdy, Mirette, 'China to Finance Majority of New Egypt Capital's Tower District', Bloomberg, 18 March 2018. <https://www.bloomberg.com/news/articles/2018-03-18/china-to-finance-majority-of-new-egypt-capital-s-tow>

Mandour, Maged, 'The Primacy of Torture in Egypt', Carnegie, 20 December 2018. <https://carnegieendowment.org/sada/78014>

Maşry, Manāl al-, 'al-Bank al-ahly yaḡuz 13 ʿalf mitr li-ʿiqāma farraʿ al-ʿĀṣima al-ʿIdāriyya', Maşarāwī, 14 Januari 2018. [https://www.masrawy.com/news/news\\_economy/details/2018/1/14/](https://www.masrawy.com/news/news_economy/details/2018/1/14/)

Michaelson, Ruth, "Cairo has started to become ugly': why Egypt is building a new capital city", The Guardian, 8 May 2018. <https://www.theguardian.com/cities/2018/may/08/cairo-why-egypt-build-new-capital-city-desert>

Midolo, Emanuele, 'Inside Egypt's New Capital', Property Week, 8 March 2019. <https://www.propertyweek.com/insight/inside-egypts-new-capital/5101721.article>

Morsi, Ahmad, 'From Greater Cairo to Egypt's New Administrative Capital: An easy commute', ahramonline, 26 January 2019. <http://english.ahram.org.eg/NewsContent/1/64/322410/Egypt/Politics-/From-Greater-Cairo-to-Egypt-New-Administrative-Ca.aspx>

Muḥammad, Karīm, "Qisṣat 'al-kiyān al-'askary' dākhil al-'āṣima al-'idāriyya .. Burūj mushīda li-ḥimāyya al-Sīsī wa-jinirālātuh", Freedom and Justice Gate, 17 May 2018. <https://fj-p.com>

Mun'im, 'Āmer 'Abd al-, 'Aswār al-'Āṣima al-'Idāriyya wa al-hurūb al-kibīr', al-Jazeera, 28 August 2017. <http://mubasher.aljazeera.net/opinion/>

Najjar, Farah, 'Egypt's NGO law aims to 'erase civil society'', Al Jazeera, 16 February 2017. <https://www.aljazeera.com/indepth/features/2017/02/egypt-ngo-law-aims-erase-civil-society-170215121321442.html>

Nūr, Ṣafr al-, and Nada 'Arafāt, Kayf taḥaqqaq mayyāh Maṣr 'amn duwal al-Khalīj al-ghidhā'iyya', MadaMasr, 22 March 2019. <https://madamasr.com/ar/2019/03/22/feature/>

Samei, Marwa Fikry Abdel, 'El Sisi's tainted legitimacy', open Democracy, 29 May 2014. <https://www.opendemocracy.net/en/north-africa-west-asia/el-sisis-tainted-legitimacy/>

Sawaf, Leila, 'The Armed Forces and Egypt's land', MadaMasr, 26 April 2016. <https://madamasr.com/en/2016/04/26/feature/economy/the-armed-forces-and-egypts-land/>

Selim, Adham, 'Capital Cairo: A Regime of Graphics', Failed Architecture, 29 October 2015. <https://failedarchitecture.com/capital-cairo-a-regime-of-graphics/>

Walsh, Declan, 'What to Do About Cairo's 'Uncivilized' Buildings? President Orders Epic Paint Job', The New York Times, March 8 2019. <https://www.nytimes.com/2019/03/08/world/middleeast/egypt-cairo-sisi-pyramids-ring-road.html> and Adham Selim, 'Slums, Gated Communities and Public Space', MadaMasr, October 19 2016 <https://madamasr.com/en/2016/10/19/feature/culture/slums-gated-communities-and-public-space/>

'Īsā, Aḥmad, 'al-Ḥukūma: muwāzana al-dawla lā tataḥammal ayya a'bā' fī tamwīl inshā' al-'Āṣima al-'Idāriyya al-Jadīda', Aghbāran al-Yawm, 5 March 2019. <https://akhbarelyom.com/news/newdetails/>

## Websites

'Aqārmāb, 'Dalīl 'as'ār 'aqārāt al-Qāhira al-Kubra', retrieved information on 31 May 2019 <https://egypt.aqarmap.com/ar/neighborhood/cairo/>

Amoun Company <http://www.amouncc.com/commercial.html>

Arab Contractors: <http://www.arabcont.com/English/projects/project-552.aspx>

[The Parliament Building in the New Administrative Capital | The Arab Contractors](#)

Cairo times24 [10 information about the iconic tower in the new administrative capital \(cairotimes24.com\)](http://cairotimes24.com)

Capital <https://www.c-egy.com/en/about-capital>

Council on tall buildings and urban habitat [Oblisco Capitale Tower - The Skyscraper Center](#)

Cube Consultants, ‘City of Knowledge – The Capital Cairo’ <https://cubeconsultants.org/home/project/city-of-knowledge/>

Facebook Page: ‘al-‘Āšima al-‘Idāriyya al-Jadīda - The Capital Cairo’ <https://www.facebook.com/SmartCityEg/posts/2048053318826777>

Midtown Egypt <http://www.midtownegypt.com/>

Ministry of Planning and Economic Development | [www.mped.gov.eg](http://www.mped.gov.eg)

NBC sports [Egypt wants to be first African nation to host Olympics - OlympicTalk | NBC Sports](#)

NUMBEO Property Prices Index 2019  
<https://www.numbeo.com/property-investment/rankings.js>

Reuters ["Two is enough," Egypt tells poor families as population booms | Reuters](#)

Stella Park <http://www.stellapark.com.eg/>

SUD, ‘Commercial Projects’ <https://sud.com.eg/projects/>

Trends wide [A picture of the readiness of "Octagon", the new Egyptian army, the largest in the Middle East \(trendswide.com\)](#)

## The world bank

‘Population, total: Egypt, Arab Rep.’ <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=EG>

‘Unemployment, youth total (% of total labor force ages 15-24) (modeled ILO estimate)’, Data retrieved in April 2019. <https://data.worldbank.org/indicator/SL.UEM.1524.ZS?locations=EG>

## YouTube videos

Alternative Policy Solutions, “Liqā’ maftūḥ ‘al-rafāhiyya al-mushawwaha lil-Masāḥāt al-imutanāhiyya: ‘Āšimat Maṣr al-Jadīda’ – al-Liqā’ bil-kāmil” (Lecture by David Sims), YouTube video, Published 3 April 2019. [https://www.youtube.com/watch?v=cJSp4\\_YA6MQ&list=WL&index=31&t=5939s](https://www.youtube.com/watch?v=cJSp4_YA6MQ&list=WL&index=31&t=5939s)

al-Ḥadath al-Yawm, ‘Mutahaddith al-‘āšima al-‘idāriyya yarudd ‘alā shā’i’āt al-Ikhwān ‘an inshā’ sūr ḥawl al-‘Āšima al-‘Idāriyya’, YouTube video, posted 6 January 2018. <https://www.youtube.com/watch?v=oRnjXEKVIDE>

IDSCEGYPT, 'ta'araf 'alā taṣmīm inṭaqqa al-'A'māl al-markaziyya.....al-'Āṣima al-'idāriyya al-jadīda', YouTube video, posted 26 March 2018. <https://www.youtube.com/watch?v=VcFy8R3EoNM>

Mudawwana Uksijīn Maṣr, "Yūtūbiyyā 'sūr al-'Āṣima al-'Idāriyya al-Jadīda", YouTube video, posted 5 September 2017. <https://www.youtube.com/watch?v=gLiFJSgrJiU>

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