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The Tale of Two Egyptian Architects:

Projects, Challenges, Success and Shortfalls

This essay will explore the works of two of Egypt's 20th-century architectural figures: Hassan Fathy and Sayyed Karim. It will investigate how the architects approached the housing crisis in different parts of Egypt and whether their projects were successful. It will first review Hassan Fathy's New Gourna project and the challenges he met. It will review how he dealt with the bifurcated challenges of providing cost-efficient homes using local materials and techniques in a unique Nubian cultural and demographic context imposed by the Old Gourna inhabitant's needs. Similarly, the essay will also study how Sayyed Karim, in his Nasr City residential project, responded to the challenges of providing efficient mass housing solutions within an existing infrastructure and a large urban population.

Sequential to this introduction, this essay will be structured in three distinct sections. The first section will investigate Hassan Fathy's architectural vision and how he implemented it to satisfy his world-famous "Build for the Poor" concept and respond to the population's needs and cultural and demographic challenges facing the New Gourna Project. The second section will focus on Sayyed Karim and his pioneering architectural visions in Egypt during the second half of the 20th century, focusing on his Nasr City Development Project in Cairo. The analysis will cover the technical components of Karim's master plan and block designs to satisfy the population challenges and density parameters imposed on the development. The third section will compile a comparative analysis of both architects' visions applied to those projects. Lastly, the essay will conclude and reinstate the significant findings and conclusions of the analysis sections.

Hassan Fathy: Architecture for the Poor

Hassan Fathy was well known as the architect of the poor and the leading architect of Egypt in the 20th century.¹ He had always dreamed of building a village and improving the standard of living for the poor since he was a child, as he believed they were the most neglected part of the society with no plans for improvement.² His experience of watching the countryside through the train's windows influenced this dream.³ The way his parents perceived the countryside also influenced his dream. His mother had fond memories of growing up in the countryside and would tell him stories about life there, whereas his dad thought of it as a place with poor living conditions.⁴ As a result, Fathy viewed the countryside as a "heaven" that needed to be restored.⁵

He achieved his dream when he was commissioned to design one of his most recognized projects between 1945 and 1948, the New Gourna Village nearby Luxor.⁶ The plan was to relocate seven thousand people who formed a village on top of the ancient site and were illegally excavating and selling ancient pharaonic goods for a living.⁷ The Old Gourna Village presented a

https://www.bibalex.org/Attachments/Publications/Files/hassan_fathy.pdf.

https://books.google.ca/books?id=KhrHzE5yOOkC&printsec=frontcover#v=onepage&q&f=false

http://meis500.weebly.com/uploads/1/3/5/2/13525224/ruleofexperts_egypt_techno-politics-modernity.pdf.

https://core.ac.uk/download/pdf/35469027.pdf.

¹ Ismail Serageldin, *Hassan Fathy* (Alexandria: The Bibliotheca Alexandria, 2007): 10.

² Hassan Fathy, *Architecture for the poor: An Experiment in Rural Egypt,* (Chicago: The University of Chicago Press, 1976): 1,2.

³ Fathy, *Architecture for the Poor*, 1.

⁴ Fathy, *Architecture for the Poor*, 1.

⁵ Fathy, *Architecture for the Poor*, 2.

⁶ Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley: University of California Press, 2002): 184.

⁷ Abdel-moniem M. El-Shorbagy, "The Architecture of Hassan Fathy: Between Western and Non-Western Perspectives" (PhD diss., University of Canterbury, 2001), 41.

significant problem for the preservation and scientific investigation of these important archaeological sites.⁸

It was an opportunity to finally test his ideas, materials, and techniques on a large scale and explore whether they could offer a viable solution to the rural housing problems in Egypt. However, with every project, comes a challenge. The architect had to approach the construction of the village from two perspectives. The first one was socio-economic problems as well as the health of the community. The second one was designing a home appropriate to its occupants' lifestyle. Rather than following the standard and repetitive mass housing designs, the architect preferred to design a limited number of unit types. Each unit is unique and satisfies the individual needs of each family that would inhabit it, 11 explaining in his book, "In nature, no two men are alike. Even if they are twins and physically identical, they will differ in their dreams." He also believed in involving the poor in constructing their homes, encouraging the idea of "Architecture without Architects," and recognizing that architecture is for the people. 13

At a time when modern architecture and technological advancements were rising, Fathy favoured a reinterpretation of traditional Egyptian architecture and local materials that was appropriate to the culture, economy, and specific climate of the region in his projects. He believed that Islamic architecture is more modern and universal if the accents of style and decorative values were removed, explaining that it would consist of an inward-looking plan with plain external walls and elements such as a courtyard, entrances/doorways, domes, and vaults. The courtyard is considered the most crucial element that was commonly used in traditional architecture, both rural and urban, that achieved comfort within privacy, generated air movement

https://archnet.org/publications/3528.

⁸ El-Shorbagy, "The Architecture of Hassan Fathy," 41.

⁹ El-Shorbagy, "The Architecture of Hassan Fathy," 43.

 $^{^{\}rm 10}$ El-Shorbagy, "The Architecture of Hassan Fathy," 43.

¹¹ Serageldin, *Hassan Fathy*, 12

¹² James Steel. *The Hassan Fathy Collection, A Catalogue of Visual Documents at the Aga Khan Award for Architecture,* (Geneva, Switzerland: Aga Khan Trust for Culture, 1989): 8.

¹³ Serageldin, *Hassan Fathy*, 2, 11, 15.

¹⁴ El-Shorbagy, "The Architecture of Hassan Fathy," 41

¹⁵ El-Shorbagy, "The Architecture of Hassan Fathy," 115.

in which in summer it would maintain cold weather and warm weather in winter.¹⁶ The courtyard also helped divide space into private, semi-private, and public spaces based on functions and level of privacy needed.¹⁷ This project is widely discussed because of its sustainability, and ecology, and handling of materials.¹⁸

Nubia, a village in Aswan, also influenced his methods and choice of materials and helped him successfully implement vaults without centring using mud bricks, which were old and traditional techniques of the Nubians.¹⁹ The project's design and choice of materials were considered a great success by UNESCO, and some renounced global institutions. The Western world and the wealthy appreciated the project.²⁰

However, the project was unsuccessful in Egypt for many reasons. Economically, the Gournis refused to settle in the new village because that would mean losing their only income.²¹ Culturally, they felt it was like living in tombs and not homes due to the mudbricks and domes.²² Nationally, the project did not fit Egypt's modernization urban development plans.²³

Sayyed Karim: The Flying Architect

The Flying Architect was a nickname for Sayyed Karim for continuously establishing a broad portfolio of developments and projects in several places, including cities in the Middle

https://books.google.ca/books/about/Hassan_Fathy_and_Continuity_in_Islamic_A.html?id=oA2z
YXWNSTEC&redir_esc=y

¹⁶ El-Shorbagy, "The Architecture of Hassan Fathy," 119.

¹⁷ El-Shorbagy, "The Architecture of Hassan Fathy," 116.

¹⁸ Ahmad Hamid, *Hassan Fathy and Continuity in Islamic Architecture: The Birth of a New Modern Cairo* (Cairo: The American University in Cairo Press, 2010): Foreword, xvi.

¹⁹ El-Shorbagy, "The Architecture of Hassan Fathy," 33.

²⁰ Serageldin, *Hassan Fathy*, 16.

²¹ El-Shorbagy, "The Architecture of Hassan Fathy," 41.

²² El-Shorbagy, "The Architecture of Hassan Fathy," 43.

²³ Hamid, *Hassan Fathy*, Introduction.

East.²⁴ When foreign architects' works dominated the Egyptian urban developments, Karim was the first Egyptian to earn a doctorate in architectural engineering in 1938 and to open Egypt's first architectural consulting firm and Arabic architectural magazine in 1939.²⁵ The magazine included essays, historical articles, works of Egyptian and Arab architects in Egypt, and articles focusing on buildings types, materials, technologies, and other content.²⁶ The magazine's purpose was to "serve art for the sake of art, serve knowledge and the exchange of architectural culture."²⁷ It was a magazine where Karim and other architects could provide a vision for modern Egyptian architecture.

Karim had the opportunity to introduce his visions through the Nasr City Urban Development project. He was commissioned as the project architect. In 1952 the Egyptian Revolution shifted the monarchy regime to a Republican one, prompting massive economic and cultural changes. The 1952 revolution urged the country to transform itself after a long period of political, religious, and cultural instability. The new revolutionary government made land and properties of the previous monarchy available to the public, which resulted in a rise in urban change, redevelopment, and construction of "popular" housing that would reflect a modern and luxurious culture that introduced an increase in the population of Cairo and an urban expansion problem. More than fifteen thousand public housing units were built in Cairo between 1952 and 1965. However, it barely fulfilled the growing need for affordable housing in the city. The surface of the project architect. In 1952 the Egyptian Revolution on the properties of the project and long period of political, religious, and cultural instability. The new revolutionary government made land and properties of the previous monarchy available to the public, which resulted in a rise in urban change, redevelopment, and construction of "popular" housing that would reflect a modern and luxurious culture that introduced an increase in the population of Cairo and an urban expansion problem. The properties of the provious monarchy available to the public housing units were built in Cairo between 1952 and 1965. However, it barely fulfilled the growing need for affordable housing in the city.

The project was established by presidential decree and promoted as the City of the Revolution (Nasr City in Arabic).³² It was a part of the national plan that promised Egyptian to

²⁴ Arthur Goldschmidt & Arthur Jr Goldschmidt, *Biographical Dictionary of Modern Egypt*, (Colorado, USA: Lynne Rienner Publishers, 2000): 103.

²⁵ Goldschmidt, *Biographical Dictionary*, 103.

²⁶ Goldschmidt, *Biographical Dictionary*, 103.

²⁷ Mohamed Elshahed, *Cairo Since 1900: An Architectural Guide*, (Cairo: The American University in Cairo Press, 2020): 36.

²⁸ El-Shorbagy, "The Architecture of Hassan Fathy," 53.

²⁹ El-Shorbagy, "The Architecture of Hassan Fathy," 53.

³⁰ El-Shorbagy, "The Architecture of Hassan Fathy," 53.

³¹ Elshahed, Cairo Since 1900, 27.

³² Elshahed, *Cairo Since 1900*, 340.

resolve the housing crisis in Cairo by expanding towards the surrounding desert of Old Cairo, where a rise in urban change, redevelopment, and population emerged throughout the city.³³

Karim created the master plan for the new city, divided into nine zones, such as the governmental zone, military zone, touristic zone, medical zone, residential and university area.³⁴ The low-density plan targeted the middle-income class with 250-500 persons per hectare, with residential buildings ranging from tens of apartments and duplexes to small individual houses and four to six apartments.³⁵ Each block in the development required the buildings to be oriented, built at a certain height, and within walking distance of green areas and schools. Trees and green areas were also utilized to reduce sun exposure and increase air circulation.³⁶

In his endeavour to satisfy the broad lines of design parameters and accomplish the density requirements, Karim introduced many block designs. Within the development, three residential housing models, each varying in height and density, will be discussed.

First, the housing Model 10 consisted of ten floors and two-bedroom apartments occupying up to five hundred occupants.³⁷ The bedrooms would be situated towards the exterior of the buildings with equally sized balconies. The kitchens and bathrooms would be in the middle of the building to separate wet and dry areas, with eight air shafts for ventilation.³⁸ The model also consisted of small front gardens created by situating the blocks diagonally to the street grid.³⁹

Second, the housing Model 15 is a high density of eleven-story buildings divided into three parts, creating an H shape to avoid creating the appearance of a large monolithic structure. The building would contain forty-three-bedroom apartments and sixty-six four-room

³³ Elshaded, Cairo Since 1900, 340.

³⁴ Elshahed, Cairo Since 1900, 342.

³⁵ Elshahed, Cairo Since 1900, 342.

³⁶ Elshahed, Cairo Since 1900, 342.

³⁷ Elshahed, Cairo Since 1900, 353.

³⁸ Elshahed, Cairo Since 1900, 353.

³⁹ Elshahed, *Cairo Since 1900*, 353.

⁴⁰ Elshahed, Cairo Since 1900, 354.

apartments, with symmetrically arranged floors and two circulation cores consisting of a stair, two elevators, and five apartment entrances on each floor.⁴¹

Lastly, the housing Model 33 reflects Karim's vision of mass housing and interest in high-rise construction.⁴² The model consists of five buildings, each consisting of three connected sections. The sections include buildings shaped like a three-pointed star, with three extended arms from a central circulation core, living and sleeping rooms situated towards the exterior, and service rooms located within the middle of the buildings with air shaft ventilation.⁴³ The plan exhibits elements of metabolis, founded by the Japanese architectural movement, in which more stories could be added to the building to create a vertical city.⁴⁴ The architect also made sure that there was no wasted space.⁴⁵

Karim enjoyed duplexes and villas as an ideal form of dwelling, which were widely constructed and favoured in Modern Cairo, so he integrated them into large apartment building designs. His residential designs were spacious, inefficient, and free of decorations with luxurious finishes, focusing on various amenities. Most designs are multi-use buildings with stores, offices, apartments, hotels, and duplexes to maximize rentable space while respecting the city's height requirements. Elements such as Brise soleil (sun breakers) were often used in Karim's projects to reduce direct sunlight and distinguish the offices and hotels from the upper floors of apartments.

⁴¹ Elshahed, Cairo Since 1900, 354.

⁴² Elshahed, Cairo Since 1900, 358.

⁴³ Elshahed, Cairo Since 1900, 358.

⁴⁴ Elshahed, Cairo Since 1900, 358.

⁴⁵ Elshahed, Cairo Since 1900, 358.

⁴⁶ Elshahed, *Cairo Since 1900*, 370.

⁴⁷ Elshahed, Cairo Since 1900, 30.

⁴⁸ Elshahed, Cairo Since 1900, 37.

⁴⁹ Elshahed, Cairo Since 1900, 138.

The Tale of Two Egyptian Architects

In order to further understand both architects' visions, it is essential to note the architectural history of Egypt. The country went through different architectural styles under the occupation of the British, French, Arab-Islamic, French, and Ottoman Turks over the past centuries. The occupation of the Ottoman Turks was the beginning of Modern Egypt, in which the ruler Muhammad Ali introduced a European-style state school system. Fathy, who admired Medieval Cairo, believed that this was when Egypt began to lose itself to modernization, arguing that the new architecture influenced by technology had failed to acknowledge traditional architecture and led to cities "becoming more ugly." He criticized modernists and considered their methodology rapid mass destruction that could erase urban heritage and layers of experience in the built environment.

Meanwhile, Karim opposed neo-Islamic architecture and advocated for a Modern Egyptian architectural style and the country's modernization.⁵⁴ Although Cairo did not suffer from any damage during World War as the European cities did, Karim thought that for this reason, it was more difficult to rebuild the city with modern concepts and designs.⁵⁵

Hassan Fathy and Sayyid Karim are similar in that they wanted to provide an architectural voice for Egypt. Fathy believed that it was through the rejection of modern western

file:///C:/Users/Bibzyee/Desktop/Revolutionary Modernism Archi.pdf.

http://urban-resources.net/pdf/discovering downtown cairo.pdf

⁵⁰ El-Shorbagy, "The Architecture of Hassan Fathy," 2.

⁵¹ El-Shorbagy, "The Architecture of Hassan Fathy," 3.

⁵² El-Shorbagy, "The Architecture of Hassan Fathy," 7.

⁵³ Mai Elwakil, "Modernist Indignation: Two architects on the forgotten legacy of Sayed Karim," Interview by Mai Elwakil, *Mada*, February 16, 2019.

 $[\]underline{https://madamasr.com/en/2019/02/16/feature/culture/modernist-indignation-two-architects-on-the-forgotten-legacy-of-sayed-karim/.}$

⁵⁴ Mohamed Elshahed, "Revolutionary Modernism? Architecture and the Politics of Transition in Egypt 1936-1967," (PhD diss., New York University, 2015): 156,

⁵⁵ Mohamed El-Shahed, "Downtown as seen by a Modernist," in Discovering Downtown Cairo: Architecture and Stories (Berlin: Jovis, 2014): 224.

concepts to preserve the historical and Egyptian architectural buildings and the reinterpretation of traditional Egyptian Architecture to maintain architecture preservation. Fathy envisioned his project as an example of providing future affordable public housing with beautiful vernacular architecture and developing the Egyptian national style.⁵⁶ Meanwhile, Karim wanted to create a distinctive Modern Egyptian Architecture unrelated to European Architecture.

In terms of materials, Karim focused on utilizing imported materials in a national and local context. At the same time, Fathy favoured natural and local materials that reflected the culture and region. Both architects were known at the time. Hassan Fathy is only more widely known today due to the publication of his book "Architecture for the Poor" which gained him exposure from the Western World.⁵⁷ Although, his architecture was eventually realized in Egypt later. However, Karim's publication in El Emara magazine only helped him gain recognition among the architectural community in Egypt. However, due to the poor preservation and documentation of his work, not many are familiar with Karim's projects anymore. Another reason is that it was common in the 20th century to not include architects' names in government project commissions.⁵⁸ The architects also targeted different demographics; Fathy sought after low-income communities, whereas Karim's designs were suitable for middle-income to high-income communities. It is essential to clarify that although the low-income community initially did not approve of Fathy's New Gourna Village, it attracted the wealthy and elites.

The issues with the architects' projects are that they did not achieve their initial goals of providing homes for the targeted people and were mostly unfinished. Karim's Nasr City was heavily modified or largely unbuilt, and it was more expensive than the middle class could afford. Although Fathy initially struggled to persuade the Gournis into moving into their new homes, they eventually began to appreciate his project. The problem was that people were not comfortable with new and unfamiliar concepts at first and instead followed what was considered fashionable and modern at the time. Karim's projects perhaps were successful in modernizing Cairo; however, it seems they had not solved the housing crisis.

⁵⁶ Mitchell, *Rule of Experts*, 185.

⁵⁷ Steel, *The Hassan Fathy*, 8.

⁵⁸ Elshahed, Cairo Since 1900, 340.

⁵⁹ Elshahed, Cairo Since 1900, 342.

Today, Egypt struggles with overcrowded buildings due to people wanting to live in Cairo. Instead of expanding towards the desert, many agricultural lands are sold and illegally built at an uncontrollable rate, resulting in an excessive number of crowded and unoccupied high-rise apartment buildings with exposed red bricks that lack architectural style. Homes became investments and not a way of life. The informal buildings also consist of awkward and crowded landscapes and improper urbanism with poor infrastructures. These informal buildings and improper infrastructure are due to the government's lack of control and interest, and interest in preserving and utilizing older historical buildings. Most importantly, the lack of Egyptian architectural history education.

In Conclusion, Hassan Fathy and Sayyed Karim are two imminent architects representing modern Egyptian architecture during the second half of the 20th. Century. They both had the similarity of being challenged to implement their different architectural visions while facing several populations, social and cultural challenges. They also were partially successful and partially unsuccessful.

Hassan Fathy successfully implemented his vision of "Architecture for the Poor" and utilized the construction material available in the surrounding environment in his project, The New Gourna Village. He was globally applauded and recognized through several global architectural awards. ⁶⁰ On the other hand, the same project was unsuccessful because his target audience, the Nubian residents of Old Gourna, did not appreciate his new development, which they sensed did not fit into their economic and cultural needs.

Sayyed Karim also successfully pioneered modern Egyptian architecture and created a design that perfectly met the design parameters and destiny requirement imposed by the national development plan. On the other hand, he was unsuccessful because his Nasr City project faced a radical shift in reaching the targeted middle-income class. It turned out to be a development that had been quickly occupied and absorbed by the high-income class at the time.

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⁶⁰ El-Shorbagy, "The Architecture of Hassan Fathy," 1.

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Appendix:

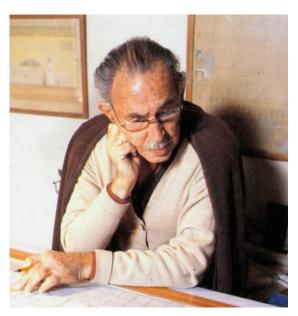


Figure 1: Architect Hassan Fathy

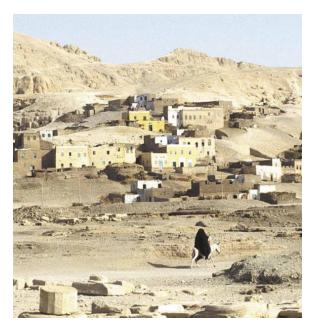


Figure 2: Old Gourna Village



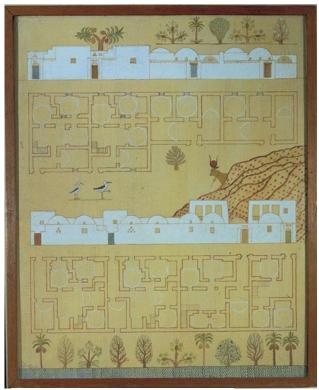


Figure 4: Village Housing, Gouache on paper, New Gourna Village, 1948

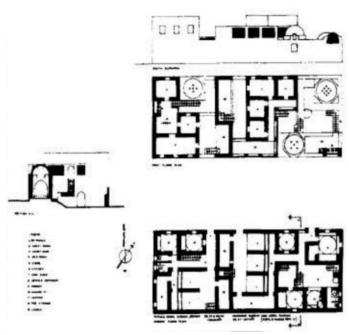


Figure 5: Typical House Plan of New Gourna



Figure 4: Courtyard at New Gourna Village



Figure 5: Sayyed Karim with Nasr City Master Plan



Figure 6: Nasr City Master Plan



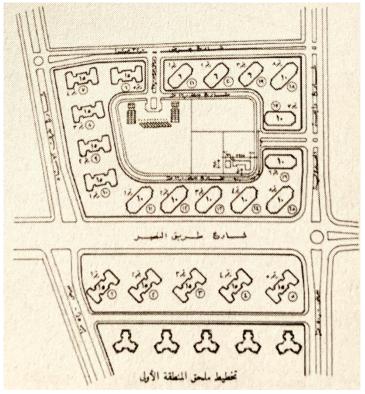
Figure 9: Housing Model 10, Nasr City



Figure 10: Housing Model 15, Nasr City



Figure 11: Housing Model 33, Nasr City



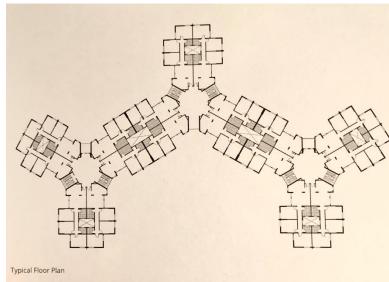


Figure 7: Housing Model 33 Floor Plan, Nasr City

Figure 13: Floor Plan of Housing Model, 10, 15, and 33

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