

TDK_2018
SCHOOL FOR NEW GOURNA
LUXOR WEST BANK, EGYPT





Egypt

With its 90-100 million inhabitants Egypt is the most populous country in the Arab world, and without doubt one of the most interesting and intriguing lands of the Middle East. The country looks back on more than 5000 years of history and is abundant in extremely valuable cultural heritage.

Since the Arab Spring uprising of 2011 there is a relative political stability, but for decades the country has been seriously burdened with the drastic population growth and its economic and social consequences. The only inhabitable place in Egypt is basically the Valley of the Nile, which in size is the equivalent of Transdanubia- at the same time, this is the only area suitable for agricultural production as well. The space occupied for housing by the population that grows by 2 million per year is taken from the agricultural land. The result of this process is that Egypt now depends on a considerable amount of food import, whereas a couple of decades ago it was completely self-sufficient. The people living in the country are mostly involved in agricultural production, and the areas close to the available ancient landmarks can gain a quite poor income from tourism as well.

New Gourna

The construction of New Gourna in Upper Egypt started in 1945 with the goal of relocating the tribes that lived at the archaeological area of the Valley of the Kings at the time and were systematically looting ancient tombs. Architect Hassan Fathy (1900-1989) was commissioned by the Department of Antiquities to design the settlement. He did not only create a masterplan and the architectural design of the buildings, his project included a complete social-lifestyle program as well, which he described in his book 'Architecture for the Poor' almost two decades later. He intended to create an example, a model for improving the living conditions of Upper Egypt with this project, however, due to a number of serious problems only a fraction of the settlement was actually built. The architectural concept included the synthesis of a wide range of traditional solutions with the modernist form. Vernacular elements were mostly the traditional architectural answers to the extremely hot, dry climate: he used thick mudbrick walls against the heat, traditional shading elements, mashrabiyyas, and the wind-catch towers, the malqafs. The dense, crooked street system is common in the area as well. The modern-contemporary character is represented by the simplified, pure forming, the regular system of the floorplans and, because of the scale of the projects, the inevitable use of certain modular elements.



The Hassan Fathy Survey Mission

Traditional – Vernacular – Modern(?)

Current Site Research on Hassan Fathy's Architecture in Egypt

"I want to bridge the gulf that separates folk architecture from architects' architecture."
Hassan Fathy

The research of the Department of Industrial and Agricultural Building Design (BME Faculty of Architecture) concerns the work of Egyptian architect Hassan Fathy (1900-1989). The arguments below are based on a large-scale literature and results and experience gained through on-site research. The number of articles, dissertations and monographs about the work of the architect is in the thousands by now, and there are new ones being published every year. This phenomenon raises attention on the architecture of the Islam world in the 20th century and Fathy's special importance in it, but also highlights the universal significance of the architect.

The mission of the Budapest University of Technology and Economics have visited Egypt seven times since January of 2015 aiming to precisely document the still standing architectural heritage of Hassan Fathy. This means the photographic and traditional, hand-drawn documentation of nearly 50 buildings or remains of buildings. In Upper Egypt (Luxor West Bank-New Gourná, Garagus and Fares) one can find the iconic early works of the architect, as well as some important pieces of later periods, such as President Sadat's rest house in Gerf Hussein, and the village centre of New Baris. The work of the mission is not concluded yet, the research of some constructions that are challenging to approach either because of the environment or because of the need for special permissions is still to be done. The analysis we can conduct based on the research is up-to-date in two aspects: firstly, because of the growing interest in sustainable architecture and the potential of mud-brick as a low-cost solution for the housing needs of indigent countries and, secondly, it propounds reflections on modernism from a position in postmodernity on modernism and the possibility that there are alternative modernisms besides the international modernism specific to Europe and North America.

This leads to debates around modernism, tradition, and vernacular architecture, and Fathy occupies a multi-layered position in this regard. But His work also raises questions about the quality of space, not least inprimarily concerning the a relation between of residentialspecific design and corporate public building design, and we can't ignore the importance of the involvement of involving local masons as key figures of the projects either.

The research is connected to the "big picture", Fathy's oeuvre in multiple aspects. Fathy is generally considered to be an important architect due to his design of New Gourná and his professional work in the following period, thus in the light of the new results the re-evaluation of his oeuvre seems justified. However, the entire topic can be studied in an even broader context. There is disproportionately little discussion about Fathy's contemporaries, especially architect Ramses Wissa Wassef (1911-1974), whose remarkable works can be compared with Fathys' in several aspects. On this area further research is due on our part to fill in the missing links and correlations of the two.

Furthermore, it could be rewarding to study the architects, who, besides Fathy and Wissa Wassef, could renew postcolonial architecture by getting to know the roots and traditions and constructively developed and modernised them on the scale of African and the Middle-Eastern architecture – including for example, but not limited to a French architect of Hungarian origin, Laszlo Mester de Parajd (1949-) and his work in Niger; Tunisian-French architect Charles Boccara (1940-) and his work in Morocco, and an outstanding contemporary architect, Diébédo Francis Kéré (1965-), whose constructions in Burkina Faso and Mali justify the contemporary interpretation and application of traditional solutions.



Classroom in Garagus (Hassan Fathy 1950?) / photo by Zsolt Vasáros 2018

Egyptian school system

In the Egyptian school system students generally start their education at the age of 6 and finish at the age of 17-18. The first six years of education is called "primary school", which is compulsory, after which two three-year-long terms come called „preparatory" and „secondary school". In secondary school students can choose between general (art and science) education and learning a more profession-focused technical school. To be accepted to university one must complete preparatory and secondary school, and have some good marks. At the beginning of their studies pupils have Arabic- English- Math- Religion lessons, and start learning geometric, science, art subjects later. In most schools there is an IT lab, whereas, due to lack of time and space there are no physical education classes.

Primary schools

Generally 1200 students attend a school, which is much more than the capacity of the buildings, therefore they go to school in two shifts, one in the morning (7.30-12.00) and one in the evening (12.30-16.00). One grade includes 4 classes of 30-60 students. A lesson takes 45 minutes with 10-15 minute breaks. Because of the short school day kids eat at home, that's why schools usually don't have any canteen, only a small buffet.

Religion is important to be mentioned, Christians and Muslims are not separated, they practice, eat together. Kids of both religions are provided the chance attend religious classes according to their faith, otherwise, they participate on other courses together..

About the school buildings in Egypt

The schools usually have high fences, even surrounding walls to close the school off from the street. At the first floors lower grades can be found, the higher floors are for classes for the elder students. Usually a classroom is a place of 4mx4m. There is no possibility to have own lockers, only in private schools. Every school needs a place (or places) dedicated for prayer, which fits the two major religions - Islam and Christianity.

Problems of the current practice

The main problem of the schools currently are the overcrowded spaces, the heat and the bad orientation of the buildings, which does not reflect on the climatic conditions at all, making the rooms either too dark, or unbearably hot. These circumstances all have an impact on the quality of the education. The only community place is the separated courtyard, which is not a pleasant place for spending time in the heat. Also, teachers very rarely have their own room for storing equipment and prepare for classes.



Design brief

Participants are asked to transform the unused building marked on the site plan and the site nearby to design a new primary school for New Gourna. The site is located in the village centre, next to the mosque, in front of the khan, thus the plan should reflect to the central situation of the school.

The school must be able to accept 6 grades, 2 classes per grade and 30 students per class. The task must be accomplished according to the Egyptian school system, thus the new building must be proper for the two-shift school day. During the design process all the special circumstances of Egyptian climate and the possibilities of material usage should be taken into consideration. Also, considering that the school is theoretically funded by public investment in a poor area, the solutions should be as economic and reasonable as possible.

The program

6 classrooms (approximately 2m²/ person should be used)
IT lab
room for the teachers
director's office
courtyard
restrooms
room(s) for praying
library

Submission requirements

The design proposal should include:

site plan (1:1000-1:2000)
floor plan(s) (1:200)
section(s) (1:200)
facades (at least 2 typical facades that best show the concept) (1:200)

The visual representation should be fit to best introduce the concept and the architectural ideas of the proposal.

All written information on the drawings and the description submitted with the design proposal is required to be in English.

Submission of the panels containing the drawings and the submission of the physical models is according to the Faculty's deadlines and to the Department's requirements.



The site

Two large-scale projects of Fathy's mud-brick architecture (New Gourna and New Baris/Kharga Oasis) remained unfinished. The construction of New Gourna (1946-1952?) made Fathy's name known worldwide, the Model Village is a sort of archetype of participatory design and construction. The fact is though that only about a quarter of the original plans were realised; the mistakes and misjudgements made during the design and construction process aborted the project shortly. The studies are introducing it as a project with a model value rightfully, while they are mostly pointing out the supposed and actual mistakes as well. The exact causes and circumstances of the failure of the project are still to be clarified. The people living in New Gourna these days have basically overwritten major part of the village, i.e. demolished the mud-brick houses and built new ones on the plots, even though it is a UNESCO World Heritage Site. Only some of the public buildings remained as they were (Theatre, Mosque, Khan, Cattle Market), while others disappeared completely (Boys' School, Girls' School, Crafts Centre, Exhibition Hall, etc.).

The goal of the competition is to reestablish the much needed school to the village, hence the site is located in the centre of the village, next to the mosque, facing the main square and the other public buildings.

the mosque

The mosque is the space of prayer and community activities, a much more freely used facility than churches. There are some mosques which are hidden in residential houses, but not the mosque of New Gourna. This is high-quality building, where the designer mastered the possibilities of mudbrick structure, creating a truly intimate and spiritual space for prayer and contemplation.

the khan

The khan is the „hotel” for travellers, where passers-by could spend a couple of nights with their animals. The khan of New Gourna is in a quite bad condition, UNESCO started its reconstruction in 2018.

the theatre

Fathy's idea to design a theatre in a rural village was quite unprecedented at the time of construction. Time has proven that locals never really used it, the building has been empty for years, maybe even for decades. The facade though is an important part of the main road.



the arches of the khan



facade of the mosque



interior of the theatre



The khan in New Gurna
photo by Zsolt Vasáros, 2015

Further information

Members of the jury

Laszlo Mester de Parajd, Architect/Agence Française de Développement-France
 Dr. Tarek Waly, Architect/Tarek Waly Center Architecture and Heritage-Egypt
 Dr. Péter Bach, Architect, Assoc. Prof./Széchenyi István Univ. Győr
 Dr. habil Anthony Gall PhD, Assoc. Prof./SZIE Ybl Miklós Fac. of Architecture
 Zoltán Schrammel, Honorary Assoc. Prof./BME Dept. of Public Building Design

Due to the scale and the complexity of the task we encourage participants to do a pre-registration so that they can get more information and help in the design process.

The .dwg and the 3D version of the site plan and pictures for visual representation of the site are going to be delivered to participants after the preliminary registration.

For the pre-registration and further information please contact us via **email: komplex.ipar@gmail.com**

Please keep in mind that concerning the international jury, the oral presentation of the projects is going to be in English.

Recommended literature

KÉRÉ, Francis: Radically Simple. Hatja Cantz, Berlin 2017
 STOHR, Kate: Design Like You Give a Damn 1. Thames & Hudson, UK 2006
 STOHR, Kate: Design Like You Give a Damn 2. Abrams, New York 2012
 TIBAI Friderika, VERES Laura: Kultúrák között – Egy magyar építész Észak-Afrikában Kritikai esettanulmány Parajdi Mester László munkásságáról. TDK essay, Ipartanszék 2017 (<http://tdk.bme.hu/EPK/DownloadPaper/Kulturak-kozott-magyar-epiteszek-Eszak1>)
 van der PLAS, Els: Cultural Emergency in Conflict and Disaster. Nai010 Publishers, Prince Claus Fund, Rotterdam 2011
 STEELE, James: Architecture for People: The Complete Works of Hassan Fathy. Whitney Library of Design, New York 1997
 FATHY, Hassan: Architecture for the Poor: An Experiment in Rural Egypt. University of Chicago Press, Chicago 2000
 HAMID, Ahmad: Hassan Fathy and Continuity in Islamic Arts and Architecture: The Birth of a New Modern. AUC Press, Cairo 2010

Inspiration

<https://www.archdaily.com/889960/how-schools-in-africa-can-benefit-from-clever-design-and-mango-trees>
<https://www.archdaily.com/262012/in-progress-school-library-gando-kere-architecture>
<http://www.kere-architecture.com/projects/primary-school-gando/>
<https://www.dezeen.com/2015/10/06/annabelle-selldorf-architects-mwabwido-primary-school-rural-zambia-africa-14-plus-foundation/>
<https://www.dezeen.com/2010/03/12/school-in-chimundo-by-bergen-school-of-architecture-2/>
<https://www.dezeen.com/2013/10/30/flat-pack-moving-school-by-amadeo-bennetta-and-dan-larossa-building-trust/>
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