



Publications of the  
Office of the Hungarian  
Cultural Counsellor in Cairo 2016–2017

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Current Research of the  
Hassan Fathy Survey Mission in Egypt



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Cultural Counsellor in Cairo

2016–2017

The content and layout of the present downloadable publication corresponds to that of the printed version.

Grammatical inconsistencies in the printed version have been corrected, additionally, in certain places the maps and drawings have also been corrected, these do not change the essence of the content of the given chapter.

Front cover:

Detail of the Market in New Baris (Photo: Zsolt Vasáros, 2015)

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edited by Dóra Dávid and Zsolt Vasáros

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Vivien Friderika Tibai, Zsolt Vasáros, Laura Veres



**IPARTANSZÉK**

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## THE BEGINNING

### The Hassan Fathy Survey Mission: 2015–2017

Zsolt Vasáros



*Sites in Egypt visited by the Hassan Fathy Survey Mission in 2015-2017.*

Hassan Fathy (1900-1989) is a role model for generations in architectural education. Survey works on twentieth-century architecture usually discuss his work; his famous New Gurna experiment laid the foundations for community-based construction and design in the mid-1940s. Nearly one thousand monographs, articles, publications, and dissertations have been published on the Egyptian architect. His prominence and legacy draws attention not only to twentieth-century Islamic architecture and Hassan Fathy's special place in it, but also highlights his universal significance.<sup>1</sup>

Born in Alexandria, Fathy moved to Cairo when he was eight. He graduated as an architect in Cairo in 1925. He was cosmopolitan and multi-lingual; he composed music, wrote dramas and painted. At the beginning of his career, he used historical forms and style, later on his work was clearly modernist. His first commission was the design of an elementary school in Talkha,<sup>2</sup> so he made a study trip in 1926, and he became interested in the countryside and its architecture. Between 1930 and 1946, he served as an instructor at the École des Beaux Arts in Cairo. By the end of the 1930s, he had turned to vernacular architecture through specific prototype experiments, and he was almost obsessed with the use of ancient materials and blending traditional forms with new features. In 1941, he organized a field trip to Aswan with his students to discover the potentials of Nubian architectural structures and forms, focusing primarily on arches and structural simplicity.<sup>3</sup> After several smaller successful projects, he was able to pursue these ideas in the design of the New Gurna Model Village. The Belgian restorer Alexander Stoppelaëre's house was built at that time near the Valley of the Kings in Luxor on the west coast; similarly, in Garagous a Pottery and Ceramics Factory commissioned by Jesuit monks, a Cultural and Health Centre, and a School were built based on Hassan Fathy's design. The design of the latter project was abandoned, and most of the buildings were finished without Fathy's assistance after the plans were modified. Other schools designed by Fathy were built at that time. The 10-classroom elementary school in Fares is still there, it is a progressive professional work with numerous draft versions;<sup>4</sup> the one in Edfu has already been demolished.<sup>5</sup>

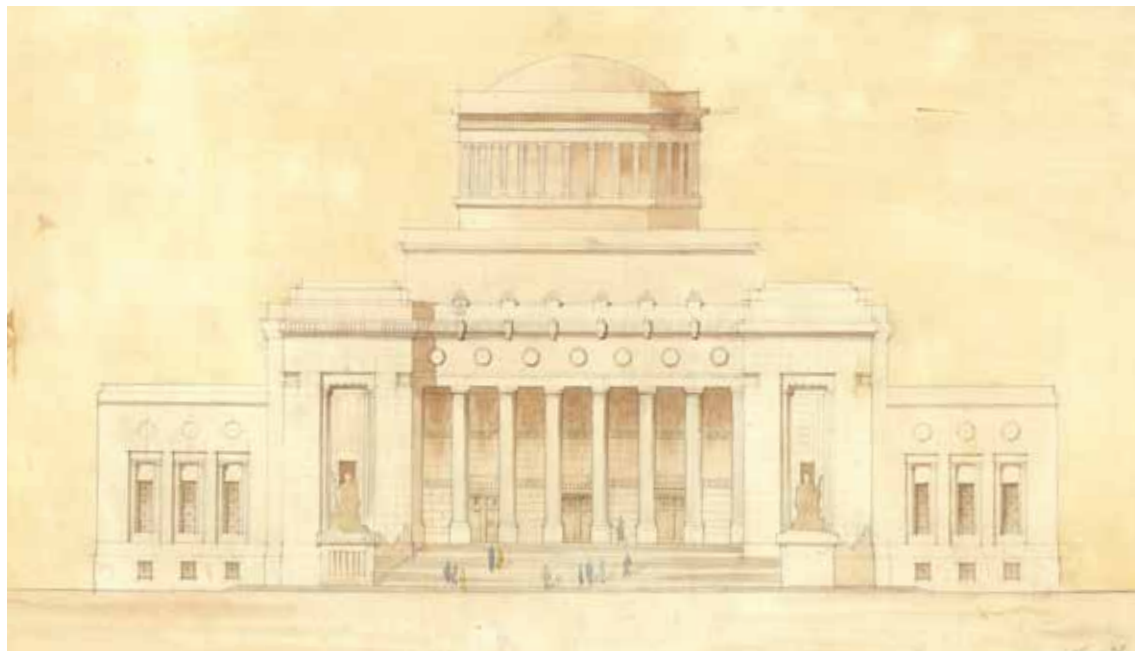
<sup>1</sup> About Fathy's oeuvre see in general DAMLUJI – BERTINI 2018; EL-WAKIL 2018; STEELE 1997; STEELE 1989; STEELE 1988; RICHARDS – SERAGELDIN – RASTDORFER 1985; SERAGELDIN 2007; HAMID 2010; also VASÁROS 2019.

<sup>2</sup> See about the Talkha project (1928) EL-WAKIL 2018a, 46-49.

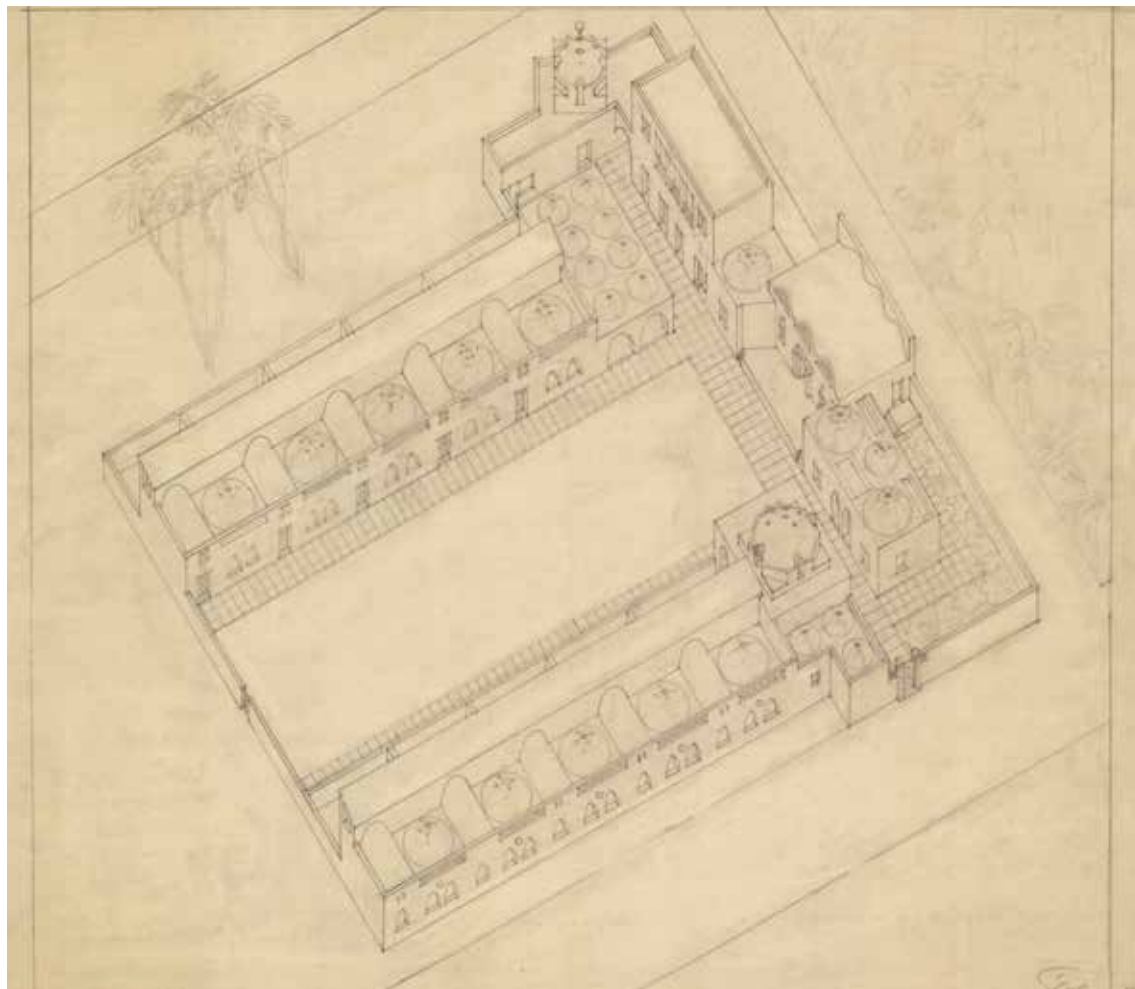
<sup>3</sup> See BERTINI 2018b, 64.

<sup>4</sup> See VASÁROS 2020, 58-61; DAMLUJI 2018, 41-43; also STEELE 1988, 84-85.

<sup>5</sup> See STEELE 1988, 84-85.

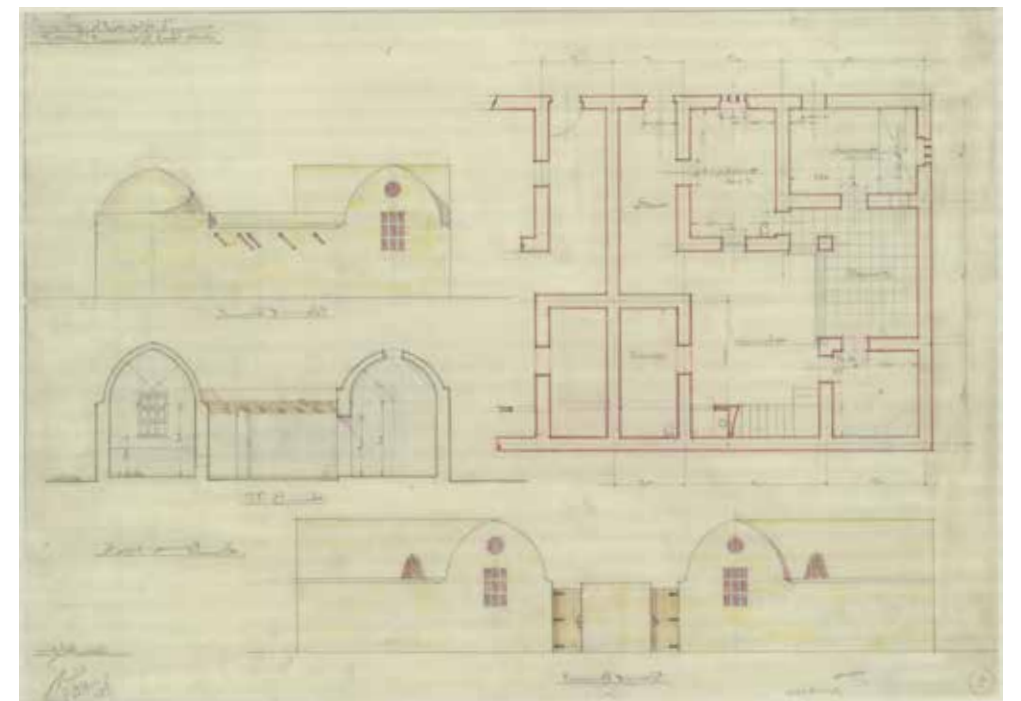


Original plan of the Primary School in Talkha (1928). Source: RBSCL, AUC



Axonometric view of the School in Fares (1956). Source: RBSCL, AUC

In 1953, Fathy returned to Cairo, where in 1954 he became head of the Department of Architecture of the Faculty of Arts. Mainly due to cumbersome bureaucracy, he left Egypt in 1957 to work in Athens, and returned in 1961.<sup>6</sup> He moved into the Darb el Labbanah apartment near the Citadel and the Mosque-Madrassa Sultan Hassan and the Al-Rifa'i Mosque and lived there until his death in 1989. His work raises many questions in many respects. After his early professional phase, he was experimenting with vernacular architecture, which brought him both success and failure; this strand is often described as 'Architecture for the Poor',<sup>7</sup> which was also the title of his book on New Gournia published in several editions.<sup>8</sup> He achieved innumerable successes in the last third of his life and career, but during this period, he mainly took commissions from wealthy clients to design villas and embassies; later his earlier vernacular architectural work won international appreciation. In 1980, he received the Aga Khan Presidential Award for Architecture, followed by the UIA<sup>9</sup> Gold Medal in 1984. An exhibition of Fathy's lifework opened at the Pompidou Centre in Paris in 1981, and a year later, curator Jean Dethier published the first publication summarizing his work in English.<sup>10</sup> In the same year, the construction of his last, only partially realised project outside Egypt, organised by a non-profit educational foundation in New Mexico (USA), begins; in this, he returns to the 'purity' of the initial vernacular experiments, representing the legitimacy of design based on local traditions blended with Egyptian architectural patterns.



Original plans of the Abu Jabal Ragab farm (1941). Source: RBSCL, AUC

<sup>6</sup> See in general STEELE 1997, 109-123; BERTINI 2018c, 102-107; ABELE 2018, 272-287; also BAUDOUÏ 2018, 290-311.

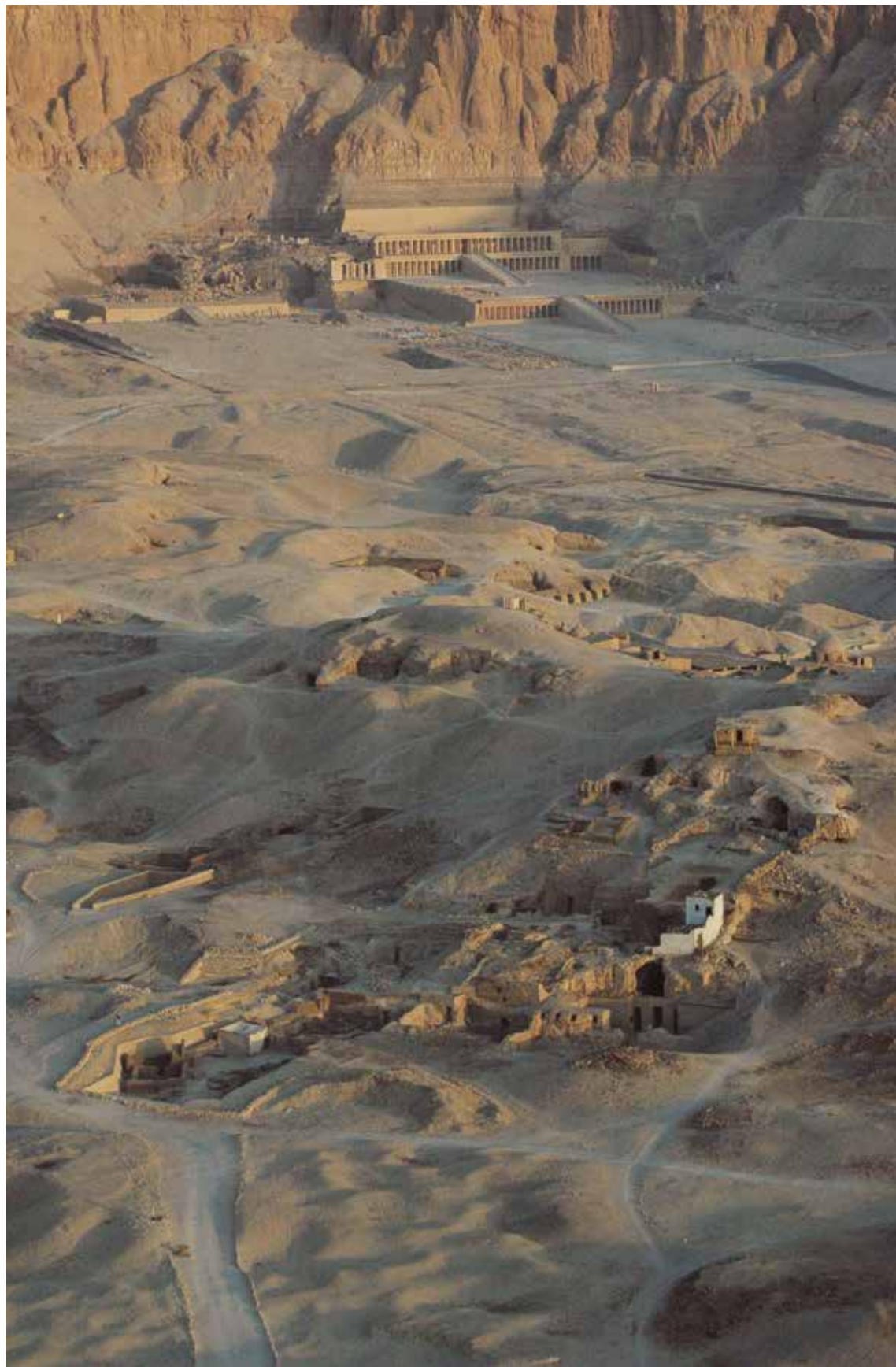
<sup>7</sup> See FATHY 1973.

<sup>8</sup> The original edition is published under the title of „Gournia. A tale of two villages“, see FATHY 1969.

<sup>9</sup> Union International des Architectes / International Union of Architects

<sup>10</sup> See DETHIER 1982.





Deir el-Bahari and the excavation area of two Hungarian Archaeological Missions in the front. The area to the left directed by Dr. G. Schreiber, the area to the right by Dr. Z. I. Fábíán. Photo: Zs. Vasáros, 2012.

## THE MISSION'S HISTORY <sup>11</sup>

The Faculty of Architecture at the Budapest University of Technology and Economics, with the help of Hungarian architects and students of architecture, launched an expedition to Egypt in the spring of 2015 to document Hassan Fathy's remaining architectural heritage. Upper Egypt (Luxor, Garagous and Fares) is predominantly emblematic of his early work, while the distorted New Baris settlement is a sad memento of monumental mudbrick architecture, and Anwar Sadat's presidential holiday house in Gerf Hussein is a significant example of Fathy's late work.

The scientific aim of the research project, was partly based on specific scholarly goals and partly on personal interest. By 2014, I had been working on various archaeological projects in Egypt for almost 20 years. I knew Hassan Fathy's name and work related to Luxor, more specifically to Old Gourná and New Gourná, from my university years. I read Charles Jencks's monograph, *Architecture Today*,<sup>12</sup> which discussed New Gourná and which was considered a fresh and authoritative part of the body of secondary literature in the mid-1990s.<sup>13</sup> Since 1996 I have taken part in study trips and in the Hungarian excavations at the Cemetery of Nobles of Luxor West Bank almost every year;<sup>14</sup> essentially, they were carried out among Old Gourná's houses; in a village which was to be evacuated as early as the mid-1940s and which became Fathy's first serious vernacular architectural project after the promising prototype experiments.<sup>15</sup> The history, the successes and failures of the New Gourná project are well-known in our field. Old Gourná was not demolished until 2006, which then fulfilled the decade-long expectation of archaeologists and researchers working there, but at the same time the sight of the ruins and the lack of people shocked everybody. The first time I visited New Gourná was in 2004; before that I only saw it from the car: the unique minaret façade of the Mosque and the vaults of the former stables of the Cattle Market. At that time, a significant portion of the residential buildings was intact, defining the street view from the main road.

There were no major demolitions and reconstructions for a while, and then something changed around 2010. In 2010-011 UNESCO also expressed its concerns about the condition of the village, and several conferences were organized to save New Gourná. Fortunately, UNESCO and the World Monuments Fund produced several reports at that time, covering the basic facts, e.g. existing buildings, their condition and environmental data were recorded.<sup>16</sup> The world organization made a symbolic act to show their presence, too: they restored one of the domes of the Khan portico which had collapsed by that time - although it was not reconstructed according to its original geometry. By 2014, the pace

<sup>11</sup> The field research of the Hassan Fathy Survey Mission in Egypt of the Budapest University of Technology and Economics, Faculty of Architecture was possible due to the contribution of sponsors: the Narmer Architecture Studio Budapest and the Department of Industrial and Agricultural Building Design; also '*a (Modern) (Ipari) Építészeti Alapítvány*' (Foundation for the Modern Industrial Architecture), Budapest, the ÚNKP-18-4 New National Excellence Program of the Ministry of Human Capacities and the ÚNKP-19-4 New National Excellence Program of the Ministry of Innovation and Technology and by the János Bolyai Scholarship of the Hungarian Academy of Sciences 2018-2021.

<sup>12</sup> See JENCKS 1988, 142-143.

<sup>13</sup> See further contemporary interpretations of Fathy's work ENNOTT 2004, 728; HABRAKEN 2000, 265-266; also MILES 2006, 116-139.

<sup>14</sup> About the Hungarian Missions in Thebes see in general: BÁCS - FÁBIÁN - SCHREIBER - TÖRÖK 2009.

<sup>15</sup> See in general about Old Gourná VAN DER SPEK 2011; SIMPSON 2003; EIGNER 1984.

<sup>16</sup> See UNESCO 2011; WORLD MONUMENTS FUND 2011; also EL-WAKIL - RADWAN 2008.



*Satellite picture of Luxor West Bank, the area Old Gournah before the complete removal of the village in 2006. Source: Google Earth*



*Satellite picture of Luxor West Bank, the area of Old Gournah after the complete removal of the village in 2009. Source: Google Earth*

of change accelerated, with many homes in decent condition being demolished, rebuilt, and the Khan and Theatre deteriorated further. Then, research revealed that much of Fathy's plans were preserved and became accessible in the RBSCL AUC<sup>17</sup> archive, but there were often significant differences between the completed buildings and the plans. One explanation for this may have been Fathy's active presence during construction, but in any case, it was clear that the reality was often different from the plans. Thus, at the outset of the project, we had two motives beyond being interested in the topic: one was a time pressure on documentation because of the significant and fast deterioration, and the other was a great potential for research in the subject. Fathy was one of the most important influencer architect of Islamic architecture in the 20<sup>th</sup> century, a role model for generations, and is still an important reference today. These facts moved the planned research, or rather field research, immediately towards the university setting, not only because of the potential participants of the research, but also because of the potential circulation of the findings in academia. Looking at the rich plans and photo archives of the AUC Archives and the extensive literature, it became obvious that there are hardly any up-to-date surveys, documentation, and imagery apart from the frequently published photos. At the moment, there is no available detailed architectural documentation for any of the completed buildings, and one of the issues to be clarified in the future is that which plans were used when the houses were built, or what was the actual construction based on. It is also a question whether the level of elaboration affected the spatial quality of the completed buildings. All of this also suggested that Hassan Fathy's buildings would disappear without ever being fully documented, so even though the plans of varying quality of almost all of his houses are available, considering the differences and undocumented details of the buildings, his work would disappear without a trace. This was the main drive at the early stages of the project: given the speed of deterioration, we aimed for the most complete documentation possible to make further research possible. We clearly saw this as a quest to salvage things of value. This is how the mission began, which from the outset was sensitive to other observable phenomena, in particular contemporary architecture and its dimensions which are often incomprehensible from a European perspective. Thus, in addition to documentation, we studied the current environment of buildings, their changes, changes in social conditions, and their effects on the built environment. The contrasts and tensions that can be felt in the relationship between the landscape and the people seemed interesting and difficult for us to understand, and it still seems to be. Field studies, historical and contemporary architecture, and the study of relevant literature have shown an intention beyond basic documentation objectives, which we exploited in the early years of the project.

## 2015 – GETTING STARTED: SUCCESSES AND DIFFICULTIES

In January 2015, I travelled to the site to prepare the mission. Originally, the plan was to document the public buildings of New Gournia first, then the residential buildings.<sup>18</sup>

<sup>17</sup> Rare Books and Special Collections Library, The American University in Cairo

<sup>18</sup> At the same time I made a short visit to the Kharga Oasis in New Baris to prepare the site survey.

After the preparations, we finally started our first fieldwork season in March 2015.<sup>19</sup> An important precursor to the on-site work was a workshop in Budapest, which was attended by the students and professors of the Higher Technological Institute and the students of architecture of BUTE;<sup>20</sup> a significant number of students joined our fieldwork in March in Luxor, where we continued the workshop. In Budapest, mainly Hungarian students prepared and discussed a topic from Fathy's oeuvre, while in Luxor we included Egyptian students in the practical part of the documentation and development of several design concepts regarding future strategies for New Gournia.<sup>21</sup>



*Aerial image of New Gournia. Photo: Zs. Vasáros, 2011.*

The construction of New Gournia (1945/46-) made Fathy world-famous, and the Model Village, even though just partially realised, is considered the archetype of participatory design and construction.<sup>22</sup> However, the fact is that only a quarter of the plans could be realised; errors and mistakes made during the design and construction phase resulted in the construction process being finally shut down. A separate monograph could be written about the history of the construction and origins of New Gournia, but in a nutshell, the impetus for design was highly profane. For a century and a half, those living on Luxor

<sup>19</sup> The participants of the Mission in 2015 were: Dr. Zsolt Vasáros (Architect, Field Director), Mr. Áron Sasvári (Architect, Deputy Field Director), Ms. Diána Alexandra Nusszer (Architect), Ms. Bernadett Csendes, Ms. Nóra Csobolya, Ms. Dóra Dávid, Ms. Rita Dolmány, Ms. Zsófia Fűsi, Mr. Áron Farkas Lévy, Mr. Márton Löw, Ms. Bernadett Miklós, Ms. Eszter Nagy, Ms. Szilvia Odry, Mr. Péter Róbert Szabó (Students of Architecture).

<sup>20</sup> Participants of the workshop in Budapest from the HTI: Muhammad Salah Eldaidamony (Supervisor), Omnia Monir Ebraheem Ahmed, Asmaa Mohamed Mohamed Sharawy, Ehsan Moustafa Kamal Ali, Ghada Mohamed Amin (Teaching Assistants), and Fatma Moussa Ali Mohamed (Student of Architecture).

<sup>21</sup> Participants of the workshop in Luxor from the HTI: Muhammad Salah Eldaidamony (Supervisor), Caroline Shoukry Hakim, Youstina Bert Albier, Asmaa Elsaid Mohamed, Joseph Melad Naguib, Jihad Jalal Seif, Nuha Amer Said, Naglaa Ibrahim Shehata, Mostafa Mohamed Elhusainy, Ahmed Abu Bakr Batea, Mary Monir Ramzy, Tarek Mohamed Mostafa, Virena Raafat Ramzy, Mariam Wagih Kaml, Marina Mahrous Ibrahim, Peter Sobhy Khalaf, Antonio Nashaat Georgeos, Mariam Hassan Elsaid, Mahmoud Basiouny Ali Hawas, Monica Mamdouh Aziz, Mostafa Mansour Ali, Mahmoud Abu Bakr Ali, Doaa Gamal Abdelaziz, Monica Nabil Girges, Abdallah Mostafa Mohamed (Students of Architecture).

<sup>22</sup> See in general FATHY 1973; STEELE 1988, 63-75; BERTINI 2018a, 194-211; DAMLUJI 2018, 219; ZACHER 2020, 72-77; KAKNICS 2020, 78-83; BALOG 2020, 84-89; also DÁVID 2020a, 102-109.

West Bank settled on the hills of what was once the Necropolis of the Nobles, where they basically were looting thousands of ancient tombs.<sup>23</sup> The authorities wanted to stop all this in the 1940s and asked Fathy to design a separate village for families still clustered in tribal structures.<sup>24</sup> Everything was ready for the architect to fulfil his dreams: the Nubian experiences, his admiration for mudbrick architecture,<sup>25</sup> and the rich historical layers prompted intense work, and numerous surviving plans, records and the first book on the construction of New Gournā show his determination. The publications present the project as a model, while also highlighting perceived and real errors. The exact causes of failure were yet to be clarified. Nowadays, those living in New Gournā have almost completely 'overwritten', that is, demolished and rebuilt much of the settlement. Only a fraction of the public buildings (Theatre, Mosque, Khan, Cattle Market) survived, while others (the Boys' School, Girls' School, Art Centre, Exhibition Hall) disappeared completely.<sup>26</sup>



*Fathy's Field House in New Gournā. Photo: Zs. Vasáros, 2004 (above) and 2017 (below).*

23 See in general about Old Gournā VAN DER SPEK 2011; SIMPSON 2003; EIGNER 1984.

24 See in general about Old Gournā VAN DER SPEK 2011; SIMPSON 2003; also BERTINI 2018a, 195.

25 About mudbrick constructions see FATHY (with DAMLUJJ) 2018, 316-329.

26 See UNESCO 2011; WORLD MONUMENTS FUND 2011; also EL-WAKIL – RADWAN 2008.

In New Gournā, we specially focused this season on public buildings, and Fathy's own so-called 'Field House'.<sup>27</sup> The latter was necessary because the house was still in good condition during the preliminary site visit in January, although it showed numerous cracks and structural damage, which deteriorated by March. The doors and windows were removed, the upstairs brick parapet collapsed and the domed space partially disintegrated. The importance of Fathy's own house in his first major project may not need to be emphasized. Partly because of this, and partly because of the lack of relevant design documentation in the AUC Archives, we endeavoured to produce the most complete documentation of this vanishing house.



*The Theatre in New Gournā. Photo: Zs. Vasáros, 2011.*

The Mosque was in operation at the time of our survey, and apparently parts of it used for prayer were maintained. The vaults of the former school and library sections of the Mosque, once open to the courtyard, had been severely damaged, and this part had already been detached, presumably in the 1990s. The so-called female prayer space was also separated, and the pillar collapsed in one of the courtyards in the northeast. The original entrance near the ablution area is no longer in use and the door below the minaret has been replaced. We did not see any other significant changes during the survey, but the plans kept in the RBSC AUC raise many questions. Apart from some façade sketches and small-scale floor plans on the masterplans, there is no other design documentation for Fathy's work which is probably referred to the most frequently in the oeuvre.<sup>28</sup> Here again, the preparation of complete documentation was a priority.

27 See STEELE 1988, 72-73; also STEELE 1997, 64-65.

28 See in general about the Mosque STEELE 1988, 68-69; STEELE 1997, 68-77; also SÁGI in this volume.

The Theatre is one of Fathy's the finest but already questionable creations in New Gourná.<sup>29</sup> The theatre as a function was rather foreign in the rural context at that time, but it was able to accommodate community events, as evidenced by contemporary documentation. Unfortunately, the Theatre was in such a bad condition by the 1970s that it had to be renovated, under Fathy's supervision. The traces of this renovation are clearly discernible when compared to the numerous archival photographs, so it is possible to make a reconstructive plan. The structures around the stage suffered the most damage, there were significant distortions in the geometry of the walls, and the structure became life threatening, which unfortunately also deforms the main façade.



*The Khan and Fathy's own Field House in New Gourná. Photo: Zs. Vasáros, 2011.*

<sup>29</sup> See STEELE 1988, 68, 70; STEELE 1997, 78-81; also BERTINI 2018a, 206-209.

Our survey also revealed the poor condition of the Khan.<sup>30</sup> On the one hand, on the opposite side of the UNESCO-restored corner dome, the other corner dome began to collapse, and the archway tilted toward the square, which was threatening the stability of the entire building. The barrier wall of the northern tract of the inner courtyard almost fully collapsed, so the series of Nubian vaults can be seen like cross sections. However, it was also noticeable that this wall section and the arches were not connected, i.e. they were not linked structurally, which could have contributed to the damage. Given that the building had not been used for decades, deterioration seemed almost irreversible, which is why we considered documentation indispensable.

The interesting Cattle Market is fragmented today.<sup>31</sup> The former marketplace, the land is still there, but its buildings have hardly been preserved. The northern series of vaults is essentially still there, but hardly any remains of the western gate, and some rooms in the eastern part have been preserved in a carpentry shop. Restoration of the once generous composition is no longer possible due to the diverse ownership of the land, but it would be possible to make a theoretical reconstruction based on the preserved and documented spatial fragments.



*Archive image of the Cattle Market in New Gourná. Source: RBSCl, AUC.*

Mr. Ahmed Abd el-Rady, who maintains the Hassan Fathy Museum in what was once the Khan's building, has been particularly helpful in surveying all four of the remaining public buildings and managing the site work in a special way, while preserving the designer's memory. Mr. Abd el-Rady called our attention to a few remaining, partly or wholly original dwellings, which we surveyed in the coming seasons. He also showed new or rebuilt dwellings which followed Fathy's former architectural style and heritage. Especially in Luxor West Bank, there is a striking renaissance of domed vaulting architecture, which often uses, in a highly eclectic way, the sets of forms that Fathy became known for, although, as Fathy emphasized, they are rooted in vernacular traditions. The intense work in New Gourná, with the help of Mr. Abd el-Rady and Mr. Gamal Ahmed Tawfiq, outlined the tasks for the following seasons: to somehow get into the residential buildings, to get the residents there to trust us and to be able to make documentations of their houses. We also considered this important because after the events of 2011, construction activities intensified almost everywhere in Egypt, especially in the more prosperous regions. The transformation of agricultural areas near Cairo into informal neighbourhoods is well known, several publications have covered the subject.<sup>32</sup>

<sup>30</sup> About the Khan see STEELE 1988, 68, 70-71; STEELE 1997, 62-63, 67; also BIELIK 2020, 90-95.

<sup>31</sup> See BERTINI 2018a, 211; ÁCS 2020, 96-101.

<sup>32</sup> See in general KIPPER - FISCHER 2009; SINGERMAN 2009; ABABSA - DUPRET - DENIS 2012; SIMS 2014; ANGÉLIL - MALTERRE-BARTHES 2016.; SINGERMAN 2009; also ELSHAHED 2020.



The buildings of New Gourna documented by the Hassan Fathy Survey Mission between 2015-2019, which still had significant original or reconstructed/rebuilt parts of the original structures.

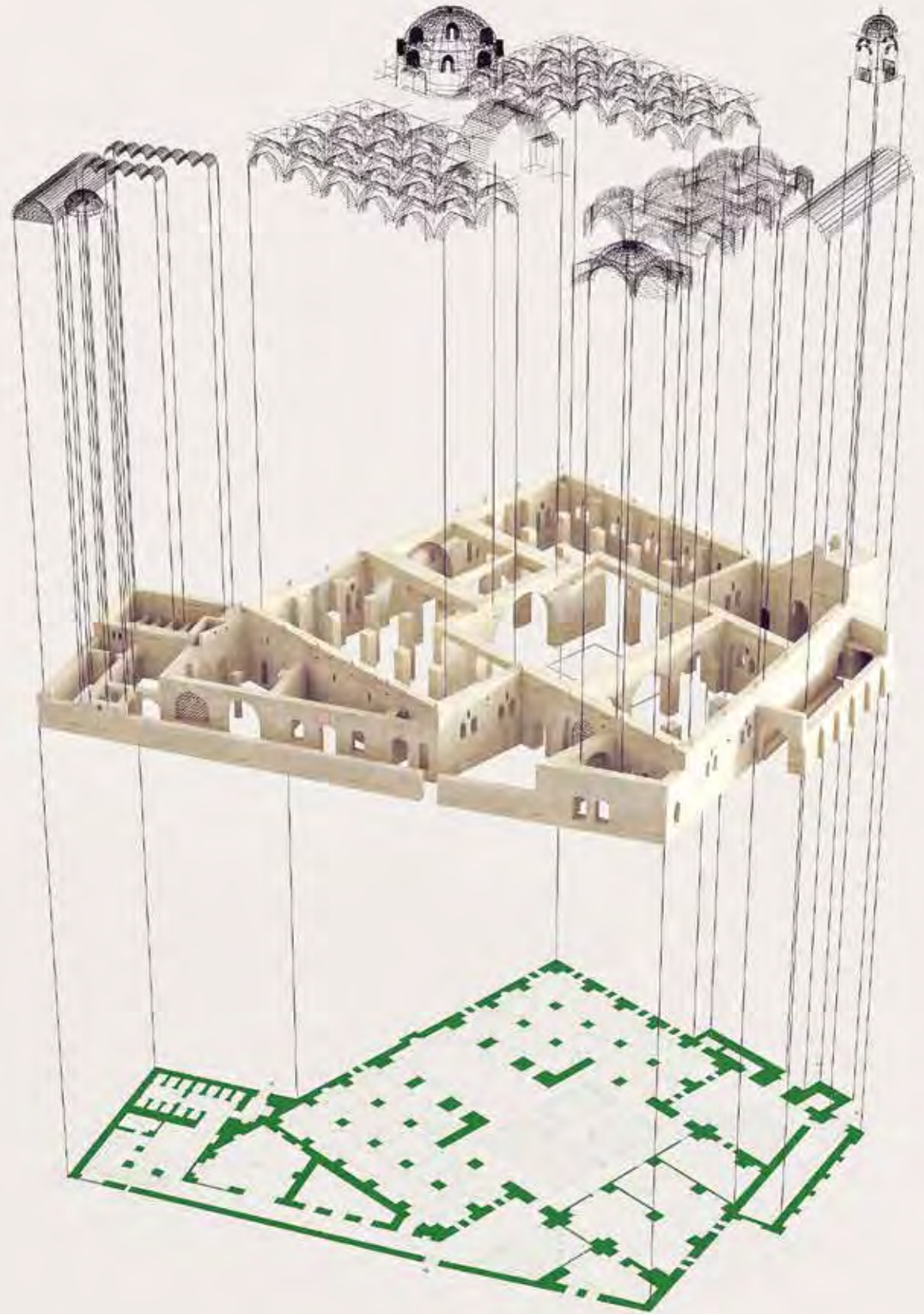
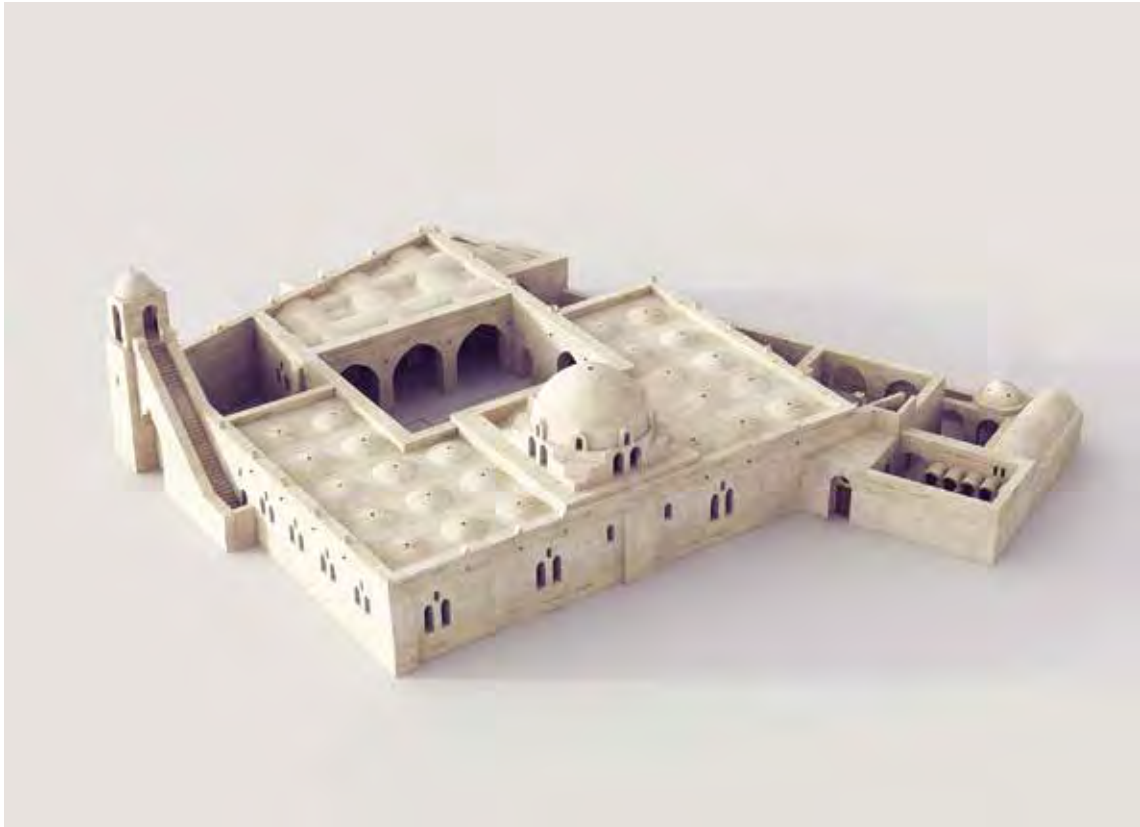


The houses surveyed by the Mission: 1. Mosque (2015-19), 2. Theatre (2015-16, 2019), 3. Khan (2015-19), 4. Fathy's Field House (2015-17, 2019), 5. Abd el-Rassoul House (2016-17), 6. Cattle Market (2015, 2017-18), 7. Village Hall (2017-18), 8. Village Fountain (2017); Houses: 9. Type F (2016-17), 10. Type A (2016), 11. Type G (2017-18), 12. Type H (2016-17), 13. Type I (2017-18), 14. Type J (2017-18), 15. Type K (2018), 16-17. Type D (2018), 18. Type E (2017-18), 19. Type L (2017), 20. Type B (2018), 21. Type M (2017-18)



The buildings of New Gourna recorded to be original by UNESCO in 2010 (dark and light) and the ones that still had significant original or reconstructed/rebuilt parts in 2019 (dark)





3D view (above) and spatial analysis (right) of the Mosque of New Gourna. Compiled by G. Nagy, based on data captured in 2015-16.



*Domed-vaulted architecture in Luxor West Bank. Photo: Zs. Vasáros, 2011.*



*Domed-vaulted architecture in Luxor West Bank. Photo: Zs. Vasáros, 2011.*



*Domed-vaulted structures and the typical reinforced concrete and burnt brick architecture in Luxor West Bank. Photo: Zs. Vasáros, 2011.*



This has been a trend in rural Egypt as well, although on a different scale, but New Gournia is no exception either. The boundaries of the former blocks and land survive the recent building process, which is mainly due to private ownership. Everything else goes beyond this, however, and the need for 3-4-6 level homes is now the main reason for the expansion of originally two-storey houses. These can no longer be built in mudbrick; new reinforced concrete frameworks were created, which changed the architectural landscape of the cities.<sup>33</sup> There are shortcomings in the plans known in the AUC's Archive as well, since most of the residential house types are only known in the ground floor plans corresponding to the scale and details of a masterplan, so documentation was crucial here, too.

In addition to the primary results of research on Fathy's architecture (that is, surveys), it is really important to look for changes in design principles. Besides propagating traditional technology, i.e., mudbrick architecture, Fathy exhibited a technically feasible, structurally evident and formally rich set of historical architectural repertoire. The tectonic possibilities of the old-new material have not changed since the antiquity, and the meanings of historical spaces and forms have been broadly the same. I should mention Fathy's well-known 'mistake' or intention (?) regarding domes and vaults. In the case of the roofing of community spaces in traditional flat-roofed dwellings in Upper Egypt, Fathy used the so-called Nubian vaults and domes inspired by the Fatimid Caliphate (10<sup>th</sup>-12<sup>th</sup> century AD) and the Ayyubid dynasty (12<sup>th</sup>-14<sup>th</sup> century AD). The former mainly included the roofs of stables and farm buildings in traditional setting, while the latter were known for tomb and mausoleum architecture and mosques. On the one hand, they made upward extension impossible, but at the same time caused resistance of the inhabitants either because of their banal character or their memory evoking mortality. The possibility of horizontal expansion was already limited due to the fixed street system, the strict and measured masterplan.

Another highlight of the 2015 season was visiting New Baris in the South of Kharga Oasis.<sup>34</sup> This project of Fathy's turned out to be as controversial as New Gournia in the end. After returning from the Doxiades studio in Greece, and having gained experience in numerous international projects,<sup>35</sup> he was primarily engaged in the design of New Baris, the construction of which was aborted barely a year after its start. The now existing New Baris was built later a few miles to the South from the location of Fathy's masterplan; some of Fathy's unfinished buildings are still standing untouched in the desert. The buildings are in a relatively good condition, as they are far from other settlements, so it is probably not worth for locals to use them as construction materials. The recyclability of the so-called sand brick used by Fathy is also questionable, at least in comparison with the unfired clay bricks used in the Valley. The so-called villa buildings that are sometimes used by art schools are exceptions.

This settlement-scale work for peasants (*for fellahin*) occupies a special place in the oeuvre.<sup>36</sup> The circumstances of the design, the scale and purpose of the problem fit Fathy's professional profile. The design process began in 1963, based on the water resources explored in the Kharga Oasis, which encouraged the Desert Development Organization to design a new agricultural production settlement for 250 families.

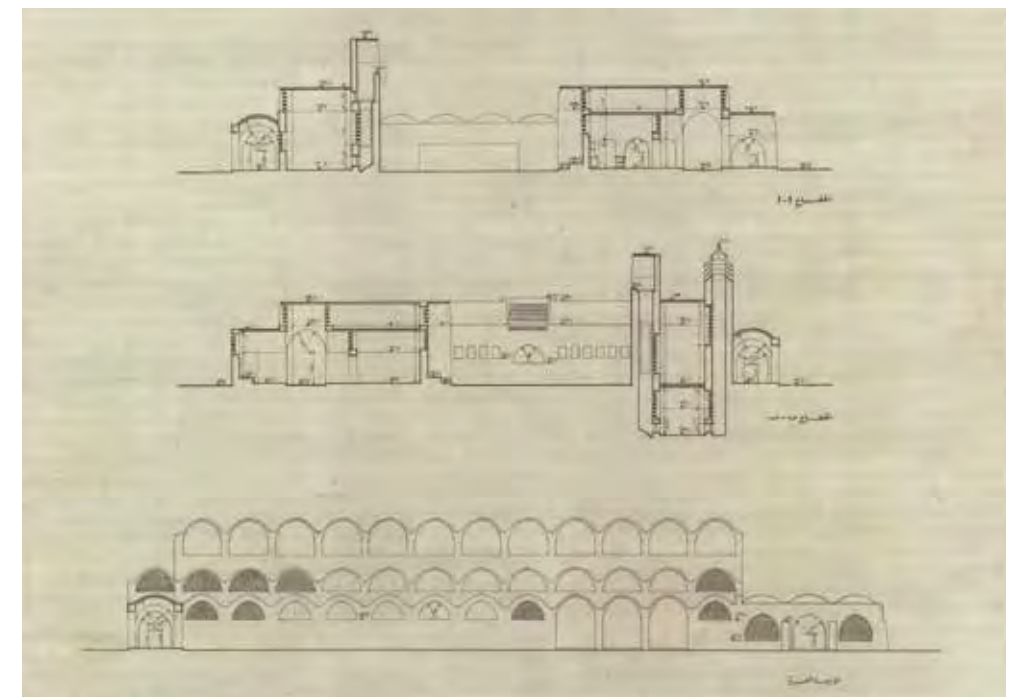
33 See DIENER et al 2010; ANGÉLIL - MALTERRE-BARTHES 2016; DÁVID 2020b, 190-195.

34 About the New Baris project see RICHARDS - SERAGELDIN - RASTDORFER 1985, 90-94, 126-139; STEELE 1988, 92-95; STEELE 1997, 131-145; SERAGELDIN 2007, 82-83; BERTINI 2018d, 220-259; EL-WAKIL 2018b, 226-229; also DÁVID's study about New Baris in this volume.

35 See in general ABELE 2018, 272-287; BAUDOUÍ 2018, 290-311; also recently BERTINI 2018c, 102-107.

36 See EL-WAKIL 2018b, 220-235.

The realization began three years later and was stopped in 1967 due to the Six-Day War which was very damaging for Egypt. Among the realised elements of the building complex, the Market, which can be considered as a kind of centre of the settlement, is the strangest. The architectural features of his work before New Baris are uniform, the composition of some typical elements – typical but not exclusively characteristic of Fathy – is harmonious, but their proportions are still to be found in historical architecture. However, the building of the Market is a special design. Here, as in New Gournia, Fathy began with traditional architecture, studying the old village near the planned New Baris and Balat in the Dakhla Oasis,<sup>37</sup> which offered more novelties than the typical architecture in the Nile Valley. As shades are a strange yet evident means of protection from extreme temperatures during the summer months, ancient oasis town cores were built with narrow, winding, often covered streets and formed much more compact, closed designs compared to the Nile Valley complexes. Besides the oasis settlements, Fathy also considered the tombs of the Bagawat Early Christian Cemetery as an important precursor.<sup>38</sup> However, the effect of these is only partial, as neither the narrow, covered streets nor the brick architecture of Bagawat can be clearly recognized on the New Baris buildings. The familiar built environment was certainly important to Fathy, and we know the design of his early vernacular buildings, but something else happened in New Baris. As it is known, in 1957 he moved to Athens for a while, where he worked with Constantinos Apostolou Doxiadis. Besides to community projects in Iraq and Pakistan based on traditional values and eco-architectural principles, he was also involved in the African 'City of the Future' program.<sup>39</sup>



Sections and façade of the Market in New Baris, showing the malqafs. Source: RBSC, AUC

37 See DABAIEH 2011.

38 See in general FAKHRY 1951; CIPRIANO 2008; also ZÖLLNER 2020, 122-125.

39 See BERTINI 2018e, 124-135; also BAUDOUÍ 2018, 301-304.



*The Cattle Market in New Gourna. Photo: Zs. Vasáros, 2004.*



*Façade of the Village Workshop in New Baris. Photo: Zs. Vasáros, 2015.*



*Inner façade of the Market in New Baris. Photo: Zs. Vasáros, 2015.*

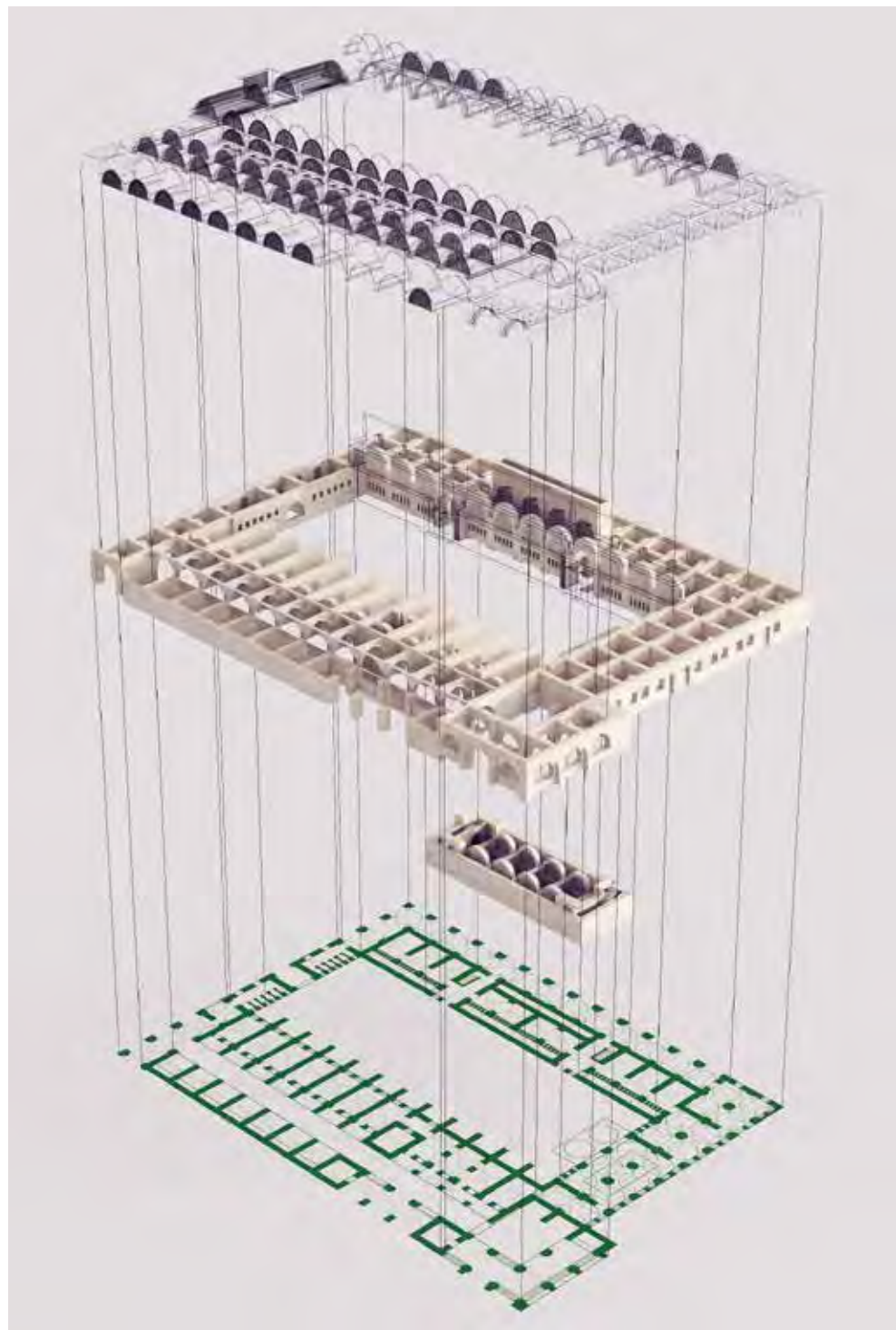


*Vaulted structures at the St. Simeon Monastery in Aswan. Photo: Zs. Vasáros, 2017.*

He returned to Egypt in 1963 and started to design New Baris almost immediately. Buildings designed and constructed between 1942-1957 constitute a legible collection of his early phase. His architectural repertoire can be interpreted as a set of elements and traditional forms such as Fatimid domes, and the historical roots of the so-called Nubian vaults and rows of terraced domes are clearly present in his work; these trends partly originate in the late 19<sup>th</sup> century and the first third of the 20<sup>th</sup> century and the then popular brick architecture, which Fathy 're-invented' or popularized in the 'national' context. In New Baris, the exterior arched façade of the Village Workshop is partly reminiscent of the warehouse at the New Gourna Cattle Market, but it also takes on a new meaning as a porch. The architecture of the Market is special. In the southern tract, Fathy designed areas cooled by natural airflow, and based on on-the-spot measurements the air in those areas was 8-10, according to some publications, even up to 15 °C cooler in the summer due to shading and cooling by active airflow. A well-known architectural tool for this is the so-called malqaf, which Fathy implemented using Nubian vaults and domes. The solution for this is unknown in earlier buildings, malqaf was usually built with a wooden structure and was additively connected to the buildings.<sup>40</sup> The high ceilings were joined by a basement level. The tight air shafts, which accelerated the movement of air, connected the ground-floor spaces and the cellar, so that the cooled air could pass through the spaces due to the constant wind. The large-scale solution is clearly perceptible and can be clearly seen on the roof structures; it resulted in a composite architectural design not seen elsewhere, a unique, unmistakable character on the façades and roofs of the courtyard. The north façade of the courtyard is of industrial character due to the series of vaults planted on high and essentially solid walls. The northern tract's elongated, parabolic arches on slender walls extending out and perforated walls also help airflow. The complex series of domes and arches extend beyond the mere rethinking of historical roots in tectonic terms, evoking the intricate vaults of Coptic churches. Here, Fathy applies his trademark repertoire in a virtuosic way, in compositions never seen before, and yet remains functional. Spatial analysis based on detailed documentation revealed the building's operational and compositional principles. The otherwise additive character of the floor plan is based on a complex spatial world. The pieces in New Baris play an

<sup>40</sup> About the traditional malqaf structures see RAGETTE 2006, 87-90.

important role in the oeuvre, especially considering Fathy's late works. Ironically, this outstanding project could not be realised in the end, so much of Fathy's ideas can only be assumed. At the same time, it is a definite goal, based on the available documentation, to visualize the original concept at least virtually, while keeping in mind the realization of the buildings and Fathy's contemporary designs, and to study them.



*Analysis of the spatial structure of the Market in New Baris. Compiled by G. Nagy*

## 2016 – THE NEXT STEPS: FURTHER RESEARCH ‘EVERYWHERE’

We continued the fieldwork at both locations of the previous year in 2016.<sup>41</sup> In New Gourná, we conducted a partial survey of three residential buildings, and we extended the documentation of the different types of residential houses. In addition, we refined our survey of the Fathy Field House, the condition of which deteriorated greatly since the previous year. We visited the houses of a retained but mainly uninhabited part of Old Gourná located on a hill called Qurnet Murai in the immediate vicinity of Deir el-Medina. We studied the houses, especially the construction technique and the construction of flat roofed-houses on sloping terrain. Perhaps this was one of the most interesting parts of Old Gourná when the whole complex was still there.<sup>42</sup>



*The remains of Old Gourná. Photo: B. Tihanyi, 2012.*

The most important research of the season was the survey of the Stoppelaëre House,<sup>43</sup> for which I filed an official permit application at the Supreme Council of Antiquities headquarters in Cairo in the spring of 2015.<sup>44</sup> The Permanent Committee permitted

<sup>41</sup> The mission in 2016 consisted of the following members: Dr. Zsolt Vasáros (Architect, Field Director), Mr. Áron Sasvári (Architect, Deputy Field Director), Mr. Gergely Sági, Mr. Imre Ferenc Szűcs, Ms. Dóra Dávid, Ms. Stefánia Balázsik, Ms. Kata Kovács, Ms. Klára Lovas, Ms. Vivien Friderika Tibai, Ms. Júlia Pokol (Students of Architecture), Ms. Emőke Erika Bandur-Juhász, Ms. Diána Alexandra Nusszer, and Mr. Gábor Nagy (Architects).

<sup>42</sup> See in general about Old Gourná VAN DER SPEK 2011; also SIMPSON 2003; also EIGNER 1984.

<sup>43</sup> The 2016 site work of the Survey Mission of Hassan Fathy's Architecture/Project Stoppelaëre House lasted from March 9 to March 20.

<sup>44</sup> The Ministry of Antiquities was represented by Inspector Ms. Christen Jouzef Tanous to whom I am much indebted for kindly facilitating the survey work of the mission on the site. I express here my sincere thanks to Dr. Mamdouh Eldamaty, Minister of Antiquities for the support to realise this season. A debt of gratitude is owed to Mr. Hany Abu el-Azm, Director of the Department of Foreign Missions' Affairs, Mr. Sultan M. Eid, Director of Antiquities of Upper Egypt, Mr. Mustafa el-Wazery, Director of Antiquities of Luxor, Dr. Talaat Abd el-Aziz, Director of Antiquities on the West Bank of Luxor, Mr. Mohamed Abd el-Nasser, Director of the North Area, Luxor, West Bank and Mr. Adel Ervan, Director of the Foreign Mission's Office, Luxor, West Bank.

the preparation of the documentation, after which restoration work began under the supervision of architect Dr. Tarek Waly in April 2016; the work was conducted according to his plans. Thus, in many respects, we were able to document the original state. The Stoppelaëre House, which dates from the years (1950, or 1952) after the construction of New Gourna (1946-48) had been stopped, was designed to be both a guest house for the Department of Antiquities and the headquarters and apartment of Dr. Alexander Stoppelaëre who was the chief restorer of the Department at that time.<sup>45</sup> Afterwards, in the 1980s it was the expedition house of the Hungarian Mission in Thebes used by the team headed by Prof. László Kákosy. The house was probably extended at the north-eastern corner, and several openings were blocked or rebuilt. From the 1990s the building was in occasional use by the staff of the Department of Antiquities, until 2016 it was empty and without use.<sup>46</sup> The architect's drawings of the house, which went through several revisions, all convey the difficulty of combining these two diverse entities into one, showing how the architect was struggling with the duality of functions involved.<sup>47</sup> This house is more ambitious than the others in terms of the extension and the number of its cupolas, the characteristic elements of Fathy's design in this period. This house incorporates three inner courtyards and a garden at the entrance. The particular proportions and surface finishing Fathy used give the building a certain character in the landscape. This work relies on the architect's sensible creativity for composition.<sup>48</sup> Fathy's writings, paintings and drawings for his projects are more contemporary than the buildings themselves. His interest in vernacular architecture was not only aesthetic. He was interested in the construction solutions used in each area, the consistency between buildings and their environments or the landscape<sup>49</sup>. At first glance, this house looks simpler and more asymmetrical than other villas and buildings of the period. For example, the four differently positioned cupolas on the accessible roof are more extravagant than the flat roofs that cover Nubian vaults. Nevertheless, a number of important Fathy characteristics are present at this house. Briefly, these are: the above mentioned cupolas and Nubian vaults, mashrabiyyas, courtyards and their annexes, irregular window placement, low-key ornamentation. The use of a variety of window types is enhanced by the window designs and is mostly typical of Fathy's vernacular structures.

In spite of the fact that no final drawings for this project exist, the small collection of initial sketches that have survived provide a rare insight into the creative thought processes of the architect, and show how actual site conditions began to influence an initial design idea. The photographs of the actual building are equally important as they include interior views of both the rooms and the courtyards. As is the case with so many of Hassan Fathy's surviving works today, access into the Stoppelaëre house is now restricted, our application aimed to extend our knowledge with this important early work of the architect. Just like every building designed by Fathy, this one is also built of mudbricks.

45 Alexandre Marie Jean Baptiste Stoppelaëre (St. Paul-de-Fenouillet/France, May 15. 1890-Issy-les-Molineaux/France, April 13. 1978), for more biographical information see BIERBRIER 1995, 406.

46 After the reconstruction works the Villa is used currently used by the Factum Foundation for Digital Technology in Conservation. See <http://www.factumfoundation.org/pag/245/Restoration-of-Stoppelaëre-House> (downloaded 17.02.2020.)

47 See STEELE 1989, 90-92.

48 See STEELE 1997, 40, 44-47.

49 See WARNER 2018, 268-269.



*Southern façade and the surroundings of the Stoppelaëre House. Photo: Zs. Vasáros, 2016.*



*Southern façade of the Stoppelaëre House. Photo: Zs. Vasáros, 2016.*

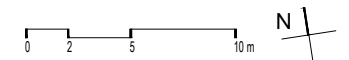
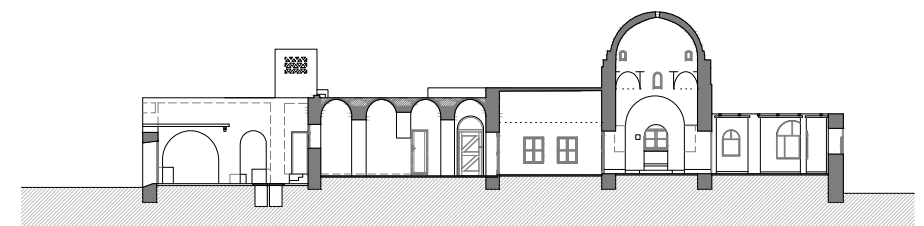
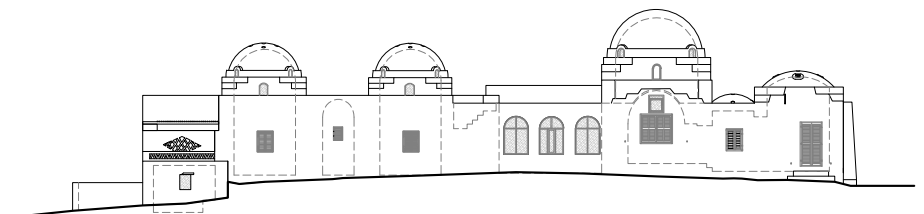
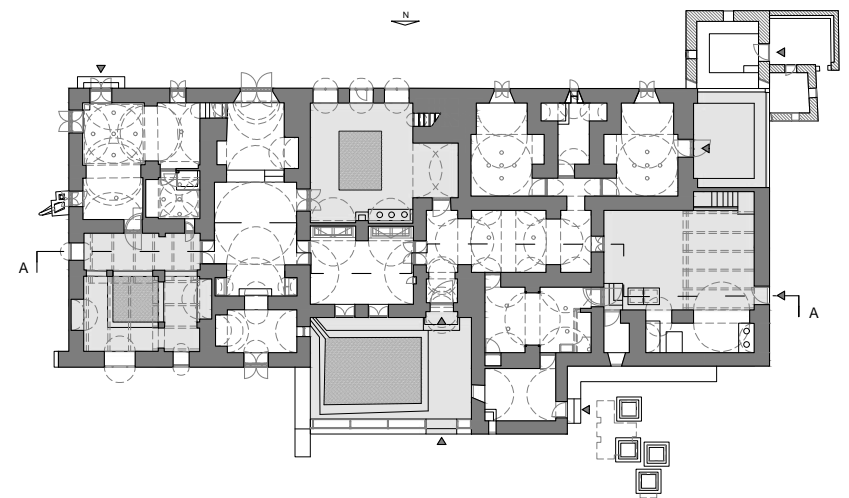
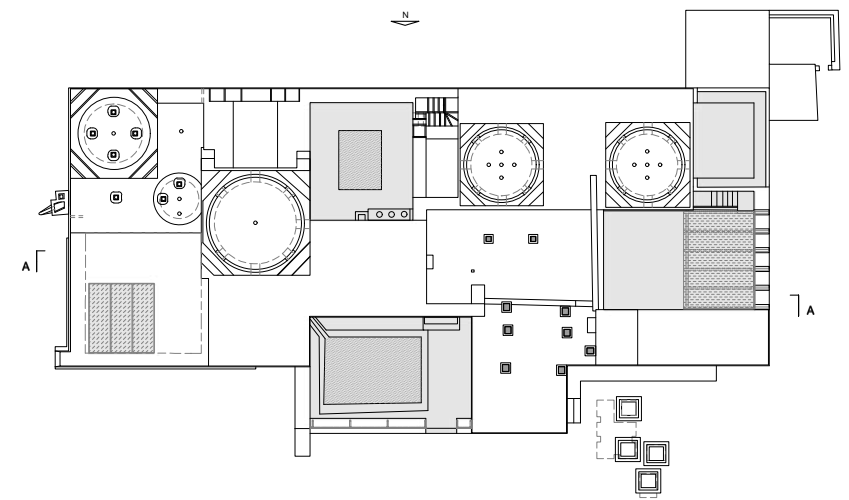


*Eastern façade of the Stoppelaëre House. Photo: Zs. Vasáros, 2016.*

At times, heavy rainfall left its marks on the plaster that covers the mudbrick construction. The plastering was once completely repaired, partly renewed. Large cracks in the walls and on the floor make one wonder. Having been built on the top of a conglomerate hill, slightly descending in western direction, endanger the stability. The western section of the hill has suffered some damage over the years. Although the house is still in a very good condition, it could do with a lot of repairs. The foundation and partly the outer wall (up to cca. 2,0 m) was made of limestone blocks. For the rest, wood and mudbricks were used, while burned bricks were used for some of the interior walls. In order to get some cooling, the house was constructed using cupolas with flexible openings above the squinches. Doors, some lamp fittings, floor tiles, some of the mashrabiyyas and the windows and doors have been able to withstand the test of time. Not all of the original house and surrounding structures have survived, though, this should be cleared by further research.



Interiors of the Stoppelaëre House. Photos: Zs. Vasáros, 2016.



Survey plans of the Stoppelaëre House, compiled by the members of the Hassan Fathy Survey Mission based on data captured in 2016.

We also returned to New Baris where we reviewed and completed the plans for the buildings surveyed in the previous year. We also surveyed the Bus Stop and the Guard's House, as well as the unfinished house between the Market and the Khan. Unfortunately, we could not enter the villa buildings, but we documented their façades.<sup>50</sup>

We also worked on a new location in Garagous, where several buildings are linked to Fathy's work.<sup>51</sup> According to available publications, the circumstances of construction are still unclear. Originally Fathy designed the Cultural and Health Centre and Pottery and Ceramics Factory for the Jesuit community. Plans for this, at least one site plan for each, have survived; the rest, if any, are currently unknown. Photos of the buildings have been published in studies on Fathy and, recently, in a volume illustrated with archival images of the Garagous community. The study of the site revealed how differently the buildings have been constructed: Fathy's concept has been either thoroughly redesigned or realised differently. Some of the buildings may correspond to certain details of the original design, but certainly not to the whole. Records reveal conflicts between Fathy and the monks, which may have been enough reason for the architect to leave the project before its completion. Either way, we decided that the case of Garagous itself is quite interesting and needs to be clarified at many levels, so we would pursue the survey. Both groups of buildings, the Pottery and Ceramics Factory and the school-kindergarten-hospital-church-parish unit have been used, which guaranteed their survival so far, but has caused many logistical difficulties. During the survey, especially regarding the Factory, it seemed that in some cases Fathy's plans were fully realised, while other buildings contained only traces of his vision. This was also evident in the school building, where some details and parts remotely resembled the well-known, unique forms, while others, such as the classrooms, typically followed Fathy's style. Due to organisational difficulties, it became clear that our work would last for years, but the hospitality of locals helped a lot with the documentation.<sup>52</sup>

## 2017 - IN SEARCH OF NEW BUILDINGS AND HISTORICAL ANALOGIES

We visited the site twice in 2017, in January and March. In January, we also conducted surveys with a small team and studied important analogies in Fathy's oeuvre. We looked at some of those that he mentions or refers to in his writings, but also the ones that he may have known and therefore can be of interest for further research.<sup>53</sup>

We spent only a short period of time in Garagous to refine last year's Pottery and Ceramics Factory surveys. We visited the Red and White Monasteries in Sohag,<sup>54</sup> the architecture of which Fathy does not explicitly refer to, but the complex vaulting structure of their shrines appears several times in his oeuvre.

<sup>50</sup> See DÁVID's study in this volume.

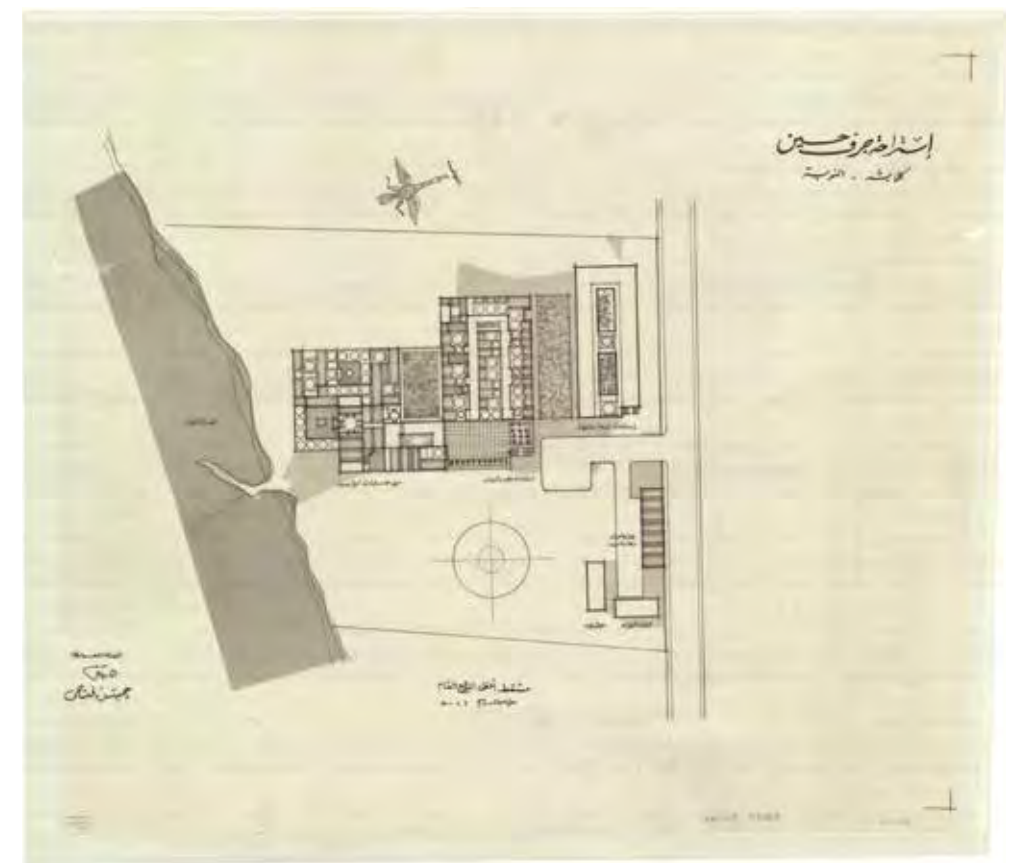
<sup>51</sup> See SIDHOM 2018; HAMID 2010, 136-139; also STEELE 1988, 79.

<sup>52</sup> We are grateful for the managers of the Pottery Factory in Garagous, Fawaz Sidhom, Hebeish Kamal (Riad), Isqag Youssef, Guirguis Youssef, Louis Ayad, Fabien Morcos, Matta Sidhom and Maurid Soliman for allowing us to enter and survey their workplace year after year. Accordingly, we thank Father Rafael Nashed, the priest of the church in Garagous and Ishaq Guindi, the director of the school in Garagous for enabling our work in their institutions.

<sup>53</sup> The mission in January 2017 consisted of the following members: Dr. Zsolt Vasáros (Architect, Field Director), Ms. Dóra Kalász, Ms. Kinga Gacsályi, Ms. Enikő Kosztolányi, Ms. Ticiána Nagy, Ms. Augusztina Vörös (Students of Architecture).

<sup>54</sup> See BOLMAN 2016 about the Red Monastery and PEERS 1904 about the White Monastery.

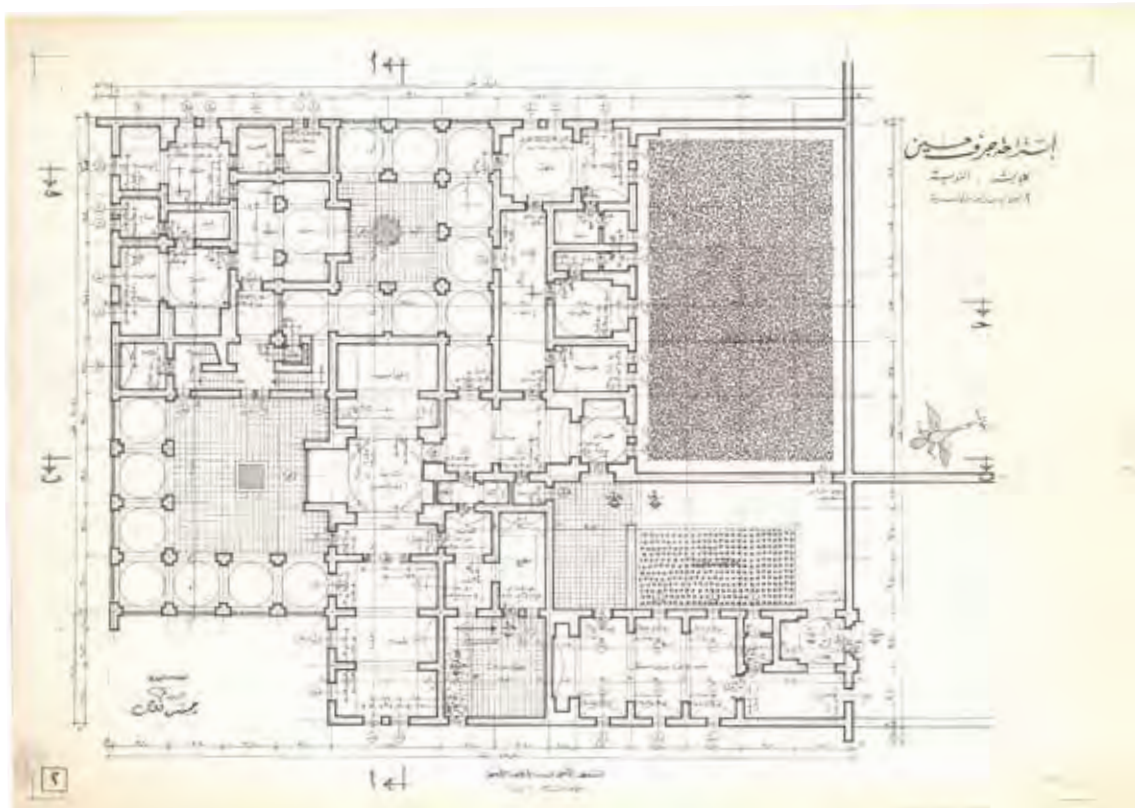
We visited a residence partially built in Gerf Hussein in 1981, originally designed for the President Anwar Sadat.<sup>55</sup> We conducted several surveys but did not finish the work. This is a puzzling work of Fathy. At this time, he became an internationally recognized architect, and he was also working on the plans of Dar al Islam Village in New Mexico. Fortunately, almost the entire construction design documentation for the entire rest house complex has been retained in the AUC collection, including plans for plumbing and arched windows, etc.<sup>56</sup> Being a presidential residence, the complex would have consisted of several buildings, but only the main building was actually realised. Only the walls of the building are intact on the site and only fragments of the former wooden windows and doors remained; the decorative water basins and floor coverings were smashed, and the building was ransacked. It seems this part was never finished, and the built units show smaller deviations from the original design. The full 3D reconstruction of the villa building is a long-term goal of the research, as available plans allow it; additionally, the highly complex, generous and partly realised villa could become a more significant virtual part of Fathy's legacy. The site's interior spatial relationships and its visual connections to the exterior and landscape constitute a fascinating system.



Original siteplan of the Sadat Rest House. Source: RBSCL, AUC

<sup>55</sup> See in general SERAGELDIN 2007, 94-95; EL-WAKIL 2018b, 233-235; RICHARDS - SERAGELDIN - RASTDORFER 1985, 51, 78-81; POKOL 2020, 110-115; also SERFŐZŐ 2020, 116-121.

<sup>56</sup> I express my sincere gratitude to the Rare Books and Special Collections Library of the American University in Cairo, especially to Mr. Philip Croom for agreeing to an official cooperation with us, and Ms. Balsam Abdel Rahman and Ms. Ola Seif for their help.



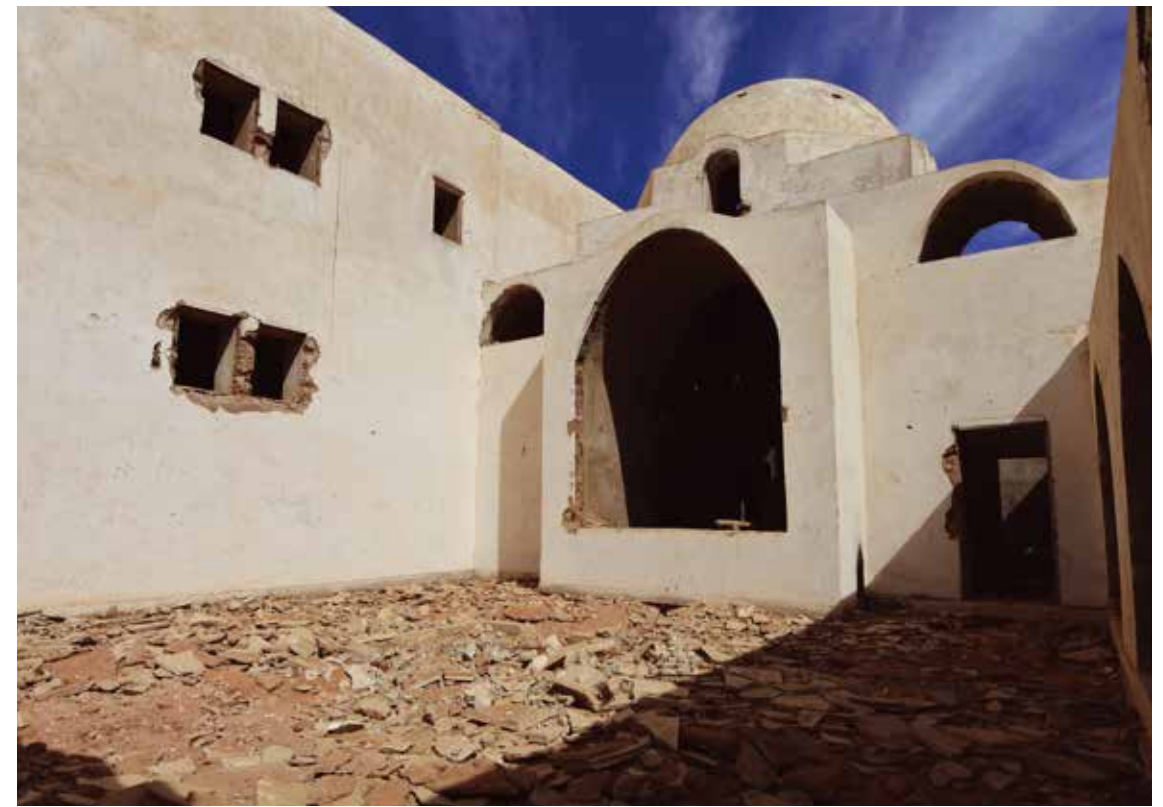
Original plan of the Sadat Rest House. Source: RBSC, AUC



The destroyed interior of the Rest House. Photo: Zs. Vasáros, 2017.

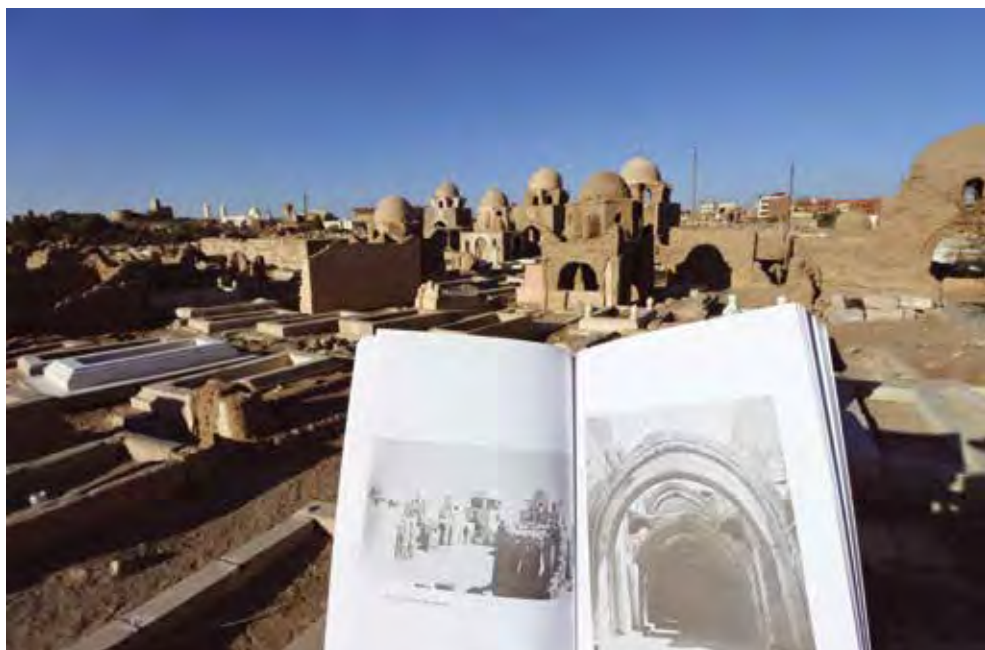


The Sadat Rest House. Photo: Zs. Vasáros, 2017.



Abandoned courtyard of the Rest House. Photo: Zs. Vasáros, 2017.

During our stay in Aswan, we visited the Monastery of Saint Simeon;<sup>57</sup> its vaults are also referred to by Fathy.<sup>58</sup> We made several study drawings, including the Nubian vaults of farm buildings, which were often part of Fathy's oeuvre, e.g. the vaulting rows of New Baris, the Cattle Market in New Gourná, the New Gourná Mosque, and the Khan lavatory area. We visited the Fatimid Cemetery in Aswan and studied the architecture of the mausoleum group which is mentioned in Fathy's book titled 'Architecture for the Poor'.<sup>59</sup>



*The Fatimid Cemetery in Aswan. In the front: H. Fathy's own picture of the site in 'Architecture for the Poor'. Photo: Zs. Vasáros, 2017.*

In March 2017, we returned with a larger team to continue our field research.<sup>60</sup> There was another important piece among Fathy's Upper Egyptian works, the Fares School, which we definitely wanted to document. We had already visited the site in January 2017, but the school was closed and had not been in use for quite some time due to rising groundwater levels. The teacher in charge of maintenance could not let us enter the building and directed us to Kom Ombo and to Aswan, from where we were sent to Cairo to apply for official permission. Our application was finally filed with the Ministry of Education in March, and we were granted permission in 2018, and conducted the survey in 2019.

We worked in many places during the March season. In New Gourná, we conducted minor refinement surveys on almost every previously surveyed public building, but we also surveyed new residential buildings, two of which were extremely important. One example is the so-called Abd el-Rassoul House, one of the few residential buildings that still exists today, that is, existed in 2017 and is shown in several archive photos.<sup>61</sup>

57 See DE VILLARD 1927; also CLARKE 1912, 95-111.

58 See FATHY 1973, Fig. 4.

59 See FATHY 1973, Fig. 3.

60 The mission in March 2017 consisted of the following members: Dr. Zsolt Vasáros (Architect, Field Director), Ms. Dóra Dávid (Student of Architecture, Deputy Field Director), Ms. Nóra Andrásy, Ms. Kata Kovács, Ms. Anna Lukács, Ms. Lili Maklári, Ms. Bernadett Miklós, Ms. V. Friderika Tibai, Ms. Laura Veres (Students of Architecture), Ms. Anikó Somlai (Architect).

61 See FATHY 1973, Figs. 53-54., 56.

This was probably due to the special character of the house and to the fact that the Abd el-Rassoul family was well-known. The island-like building has a specially constructed layout. The house was built with intricate arches and it has been thoroughly rebuilt, yet it still exhibited the essential elements, so its original style could be documented. Several plans of this house have been preserved in the AUC archive, so further research can provide interesting insights into the construction process. Another very important house is the Village Hall, originally built perhaps for the Omda, the prefect of Old Gourná.<sup>62</sup> We do not know who it belonged to after the construction, but to our knowledge, the Omda remained in Old Gourná. Part of the house has since been remodelled and expanded, but thanks to Fathy's generous design and larger spaces, the building has been largely preserved. Nowadays, many families live in the complex, and it was very interesting to observe the transformation of the house and the volume of interventions which made its use. In addition to the above two, the team also documented five more houses in New Gourná, many of which were already ruined or partially uninhabitable. The habitable ones, of course, displayed the difficulties of upward expansion caused by the domed spaces, for which Fathy has been criticized, yet as they were inhabited, the buildings survived. Of course, the one-storey mudbrick houses look strange between the 4-6-storey new buildings, but at least some of Fathy's unfinished dream survives.

We returned to Garagous, where we began surveying the former Cultural and Health Centre. We could not access every room, but we documented much of the school and the church. The conversations and interviews revealed many details; much of the building complex is marked by Hassan Fathy's style, although the whole complex was ultimately realised in a different way from the original plans made by the architect.

In Aswan, we revisited the mausoleums of the Fatimid Cemetery, and made several study drawings and spatial-structural analyses.<sup>63</sup> There are buildings in Fathy's oeuvre that display elements of the Fatimid forms and structures, but Fathy did not tend to use these composite dome systems; instead, he sought inspiration in the much simpler domes found in Nubia, and in early Islamic, and Coptic architecture. In many places in Gharb Al-Aswan (West Aswan), one can observe the construction technology that once fascinated Fathy. The Abu Riche village documented by Fathy still exists, but most of its old buildings are no longer intact; however, very similar ones can still be found in Aswan. Curiously, the Nubian vaults are still used today and constitute integral parts of many buildings but have been used exclusively to cover storage and farm buildings and stables. Residential buildings, like those in Old Gourná and practically in all of Egypt have flat roofs. Fathy could certainly have studied this or similar settlement structures, but this ordinary form inspired him to use it extensively, and even to make it part of his buildings at a monumental scale.

We also returned to Gerf Hussein, where we continued to document the Sadat Rest House. We were intrigued by the marble mosaic fragments of the former water basins. The original designs include two pools, while the other plans include a third one, although the latter is only a sketch.<sup>64</sup> There were no accurate drawings of these pools, and it is difficult to identify the details in the photos. We have documented the fragments on site, and in the future, we intend to complete the theoretical restoration of the pools as part of a 3D reconstruction project. In the next volume Fruzsina Serfőző presents a possible reconstruction of one of the pools.

62 See FATHY 1973, Fig. 88.

63 See SPEISER et al., 2013; also BJÖRNESJÖ – SPEISER 2014.

64 See on Fathy's plan, RBSCL, AUC Archive Nr. 81.03 A 102 XP 1.





*The prayer hall of the Mosque in Mahamid. Photo: Zs. Vasáros, 2017.*



*The minaret of the Mosque in Mahamid. Photo: Zs. Vasáros, 2017.*

This season, we began surveying a probably medieval mosque in Al Mahamid. The village stretches several kilometres along the Luxor-Edfu road. Very interesting buildings with ornamentation not seen elsewhere lined the streets of the village built on a slope. There was a minaret of an old mosque among the houses, the documentation of which, due to its rarity and special design, was included in the program.<sup>65</sup> The minaret was made of clay and crude wooden panels. Its age cannot be determined, but it may be

<sup>65</sup> The primary evaluation of the site research was made by Kata Kovács (student of architecture) with the contribution of the 'National Talent Program' (*Nemzeti Tehetség Program*), 'Scholarship for the Young National Talents' (*Nemzeti Fiatal Tehetségeiért Ösztöndíj NTP-NFTÖ-17*) in 2017-2018.



*Aerial photo of the St. Tawadros Monastery in Deir el Mohareb. Photo: Zs. Vasáros, 2011.*



*Section of a series of domes of the St. Tawadros Monastery (3D pointcloud, SfM). Compiled by B. Miklós based on data captured in 2017-2018.*

of medieval origin; this assumption is based on analogies. The prayer space was expanded several times, and a school wing was added to it. The uncovered streets of the settlement with their organic structure are picturesque and its precious houses are certainly doomed to destruction. It would be worthwhile to create a more detailed photo documentation of the houses, amended by a few surveys, in order to preserve the fragile and transient vernacular world of rural Egypt.<sup>66</sup>

<sup>66</sup> About early mosques and minarets see O'KANE 2016, 25; also BLOOM 1984.

Another interesting building included in the mission program is the Church of the Saint Tawadros Monastery in Deir el-Mohareb.<sup>67</sup> Here we studied the dome system using the 'Structure from Motion' method to capture the exact geometry of the interior and generate an accurate floor plan.<sup>68</sup> We learned the method during our field surveys in Romania and Syria and applied it in almost every survey in Egypt.<sup>69</sup> The long-term goal is a full documentation of the exciting early Coptic monastery's church, and to study in detail the arches of special shapes, which may be the subject of independent research in the future.

## SUMMARY

At the outset of the on-site surveys and research, we were aware that our work fills a gap and is very important. On the one hand, besides the archive data, we will have an accurate picture of the buildings, which is valuable in itself and allows further analysis after publication. On the other hand, Fathy's approach and architectural mindset outlined in his own and others' writings can be deciphered because we do not rely only on information that is partial or prompted by others. In almost all cases, new information or new data was discovered, which was absolutely necessary to create a new image of Fathy and to amend previous views. In this volume we are presenting a diploma project and some short reflections of the participants. The interpretation and description of the objects, sites is not timely yet; the primary experience of personal observation and presence is much more important for the examiner. This is how the field experience and the data capture might turn to a useful knowledge later, which shapes the architectural thought process. Our aim is to provide not only data, i.e. surveys, but also analysis of the documentation; a practical way is virtual modelling of the original plans and the realised outcome, while analysing the differences between the plan alternatives and reality.<sup>70</sup> There is a need for a detailed review of the archive materials, now focused on the specifics and the issues that arise. A direct contribution to this is the agreement signed between our Mission and the 'Hassan Fathy Collection of the Rare Books and the Special Collections Library of the American University in Cairo' in February 2019. Almost all of Fathy's design and photographic materials, as well as his survey notes and library can be researched at this institution, which is exemplarily organized; in return, our survey materials will be deposited here once our research is completed. There are several strands to the study of the oeuvre as a 'big picture.' Fathy is considered an outstanding architect because of the joint design of the New Gurna complex and his professionalism in his subsequent period, and based on the new results, the entire oeuvre should be reconsidered. All this can be seen in a broader context. There is very little scholarly discussion about Fathy's contemporaries, especially Egyptian architect Ramses Wissa Wassef (1911-1974), whose remarkable work is in many respects comparable to Fathy's. There is still considerable hiatus in this field, and it is worth studying architects from an African and Middle Eastern perspective, particularly

67 See LECUYOT 2019, 18-20.

68 The primary evaluation of the site research was made by Bernadett Miklós (student of architecture) with the contribution of the 'National Talent Program' (*Nemzeti Tehetség Program*), 'Scholarship for the Young National Talents' (*Nemzet Fiatal Tehetségeiért Ösztöndíj NTP-NFTÖ-17*) in 2017-2018.

69 Máté Szabó and Bendegúz Takáts trained us to learn to usage of the SfM method, for which I am grateful.

70 I express my gratitude to the students who participated on the postprocessing works: Mr. László Cseresznyés, Ms. Panna Erhardt, Ms. Blanka Viktória Gáspárdi, Ms. Tamara Huszár, Ms. Adrienn Kálmán, Mr. Dávid Kiss, Mr. Ábel Péntes (Students of Architecture)

those who, along Fathy and Wissa Wassef,<sup>71</sup> have been able to truly revolutionise post-colonial architecture by understanding and constructively exploring local roots. The works of a French architect of Hungarian origin, László Mester de Parajd (1949-) in Niger,<sup>72</sup> and Tunisian-French architect Charles Boccara (1940-), as well as an outstanding contemporary architect, Diébédo Francis Kéré (1965-), who, through his plans in Burkina Faso and Mali, prove the relevance of contemporary architecture based on local traditions.<sup>73</sup>

The focus of postmodern architecture, a significant period of Fathy's vernacular architectural work, was to search for shapes and interpret their meanings, while material and structure were secondary. In Fathy's vernacular architecture, material and the related technology form an organic - tectonic - system, and forms are largely derived from it. He was able to express historical forms and archetypal spaces, as well as the architectural world of novel features, through mudbrick architecture, and from that point of view he was absolutely authentic. Fathy's reassessment could be based on the vernacular architectural work described above and its regional and universal outlook. Contemporary understanding of traditional architecture is still an important issue today, and the analysis of relevant and instructive examples may answer our questions.<sup>74</sup> Nowadays, the exciting new issue is the old-new role of materials, although the interpretation of (building) materials is an ongoing debate in contemporary architecture. Few years ago, Prof. Ákos Moravánszky published a book on the 'metamorphosis of materials',<sup>75</sup> which explores the new meaning and application of materials in contemporary architecture, while also exploring the historical and cultural background of the subject. Research considering Fathy's work in this field would be interesting. Thus, further exploration of new insights and their incorporation into new contexts could provide a new research angle.



*Reconstruction works of the Late Period tomb on El-Khokha in the Necropolis of the Noblemen in Luxor West Bank. The tomb was excavated by the Hungarian Archaeological Mission in Thebes under the supervision of Prof. L. Kákósy and Dr. G. Schreiber. Parts of the unique structure were built with Nubian vaults.<sup>76</sup> Photo: Zs. Vasáros, 2004.*

71 See recently ANORVE-TSCHIRGI – ABUSHADI 2020.

72 See in general MESTER de PARAJD – MESTER de PARAJD 1999.

73 See in general LEPIK – BEYGO 2016; KÉRÉ 2018.

74 See in general FREY 2010; LEPIK 2014.

75 See MORAVÁNSZKY 2018.

76 See SCHREIBER – VASÁROS 2005, 1-27.

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### ABBREVIATIONS:

- RBSC , AUC - Rare Books and Special Collections Library, the American University in Cairo  
BUTE - Budapest University of Technology and Economics  
CASAE - Cahiers supplémentaires des ASAE (Cairo)  
IFAO - Institut Français d'Archéologie Orientale  
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HFSM - Hassan Fathy Survey Mission



Members of the Mission in 2016. From the left: I. F. Szűcs, J. Pokol, S. Balázsik, D. Dávid, Zs. Vasáros, G. Nagy, G. Sági, F. Tibai, K. Kovács, E. E. Bandur-Juhász, K. Lovas.



Gamal Ahmed Tawfiq in New Baris during the survey. Photo: Zs. Vasáros, 2015.



Participants of the Workshop in March 2015 in Luxor, and members of the Mission. Photo: Zs. Vasáros.



Members of the Mission in March 2017: D. Dávid, N. Andrásy, A. Lukács, L. Veres, B. Miklós, K. Kovács, A. Somlai, L. Maklári. Photo: V. F. Tibai, 2017.



*A. Somlai, N. Andrásy and V. F. Tibai during the survey work in New Gourna. Photo: L. Veres, 2017.*



*Gamal Ahmed Tawfiq in New Gourna during the survey. Photo: Zs. Vasáros, 2015.*



*The legendary minivan of Gamal Ahmed Tawfiq in Wadi Sebuia and the members of the Mission in January 2017: E. Kosztolányi, A. Vörös, K. Gacsályi, T. Nagy and D. Kalász. Photo: Zs. Vasáros, 2017.*



*Á. Lévy and B. Csenedes during the survey work in the Mosque in New Gourna. Photo: Zs. Vasáros 2015.*



