

Viola Bertini
Learning, building, imagining.
The schools of Hassan Fathy

Abstract

In Egypt, the middle of the last century saw several experiments in the field of traditional craftsmanship. Handing down this knowledge and encouraging creative spontaneity in the applied arts assumed a fundamental value in the process of reinventing national identity. The work of Hassan Fathy fits within this context. The villages he designed always included one or more schools, considered essential for these villages' birth and growth. They were flanked by other buildings dedicated to training in craftwork. The presence of such facilities in his villages highlights the meaningful social and cultural role which Fathy attributed to education and training in such contexts. This essay describes some of these experiences which, although now appearing deeply rooted in a precise historical and cultural moment, still retain a topical value thanks to the underlying ideas.

Keywords

Hassan Fathy — Education — Construction

Along the Saqqara road that leads from Cairo to the archaeological site of Giza, not far from the Pyramids, stands the village of Ḥarrāniyyah. Here, among the houses that have become more closely-packed over time, a polygonal fence delimits a space containing some buildings which make up the Ramses Wissa Wassef Art Centre. This architectural ensemble is the work of the Egyptian architect Ramses Wissa Wassef (1911-1974), its creator and designer. Trained at the École des Beaux-Arts in Paris, from 1936 he taught art and history of architecture at the Faculty of Fine Arts in Cairo, where he met Hassan Fathy and became a colleague and friend of his. Both worked on an attempt to build a language that would be the appropriate expression of a reborn national identity¹.

Wissa Wassef is Habib Gorgui's brother-in-law² and shares his pedagogical theory, according to which each individual has an inherent creative potential which, if properly encouraged from a very young age, can lead to excellent results in the artistic field. Even without any formal constraints and, above all, irrespective of the academic teaching models used. Wissa Wassef wrote about this:

«I had this vague belief that every human being was born an artist, but that this gift could only be brought to light by encouraging artistic creation through the practice of craftwork from early childhood» (Wassef 1972).

Spurred by these ideas, in 1951 he founded the Ramses Wissa Wassef Art Centre, with the aim of providing the children of nearby villages with preliminary knowledge on the technique of weaving, so that through this means and without any external conditioning, they could bring works of art to life.

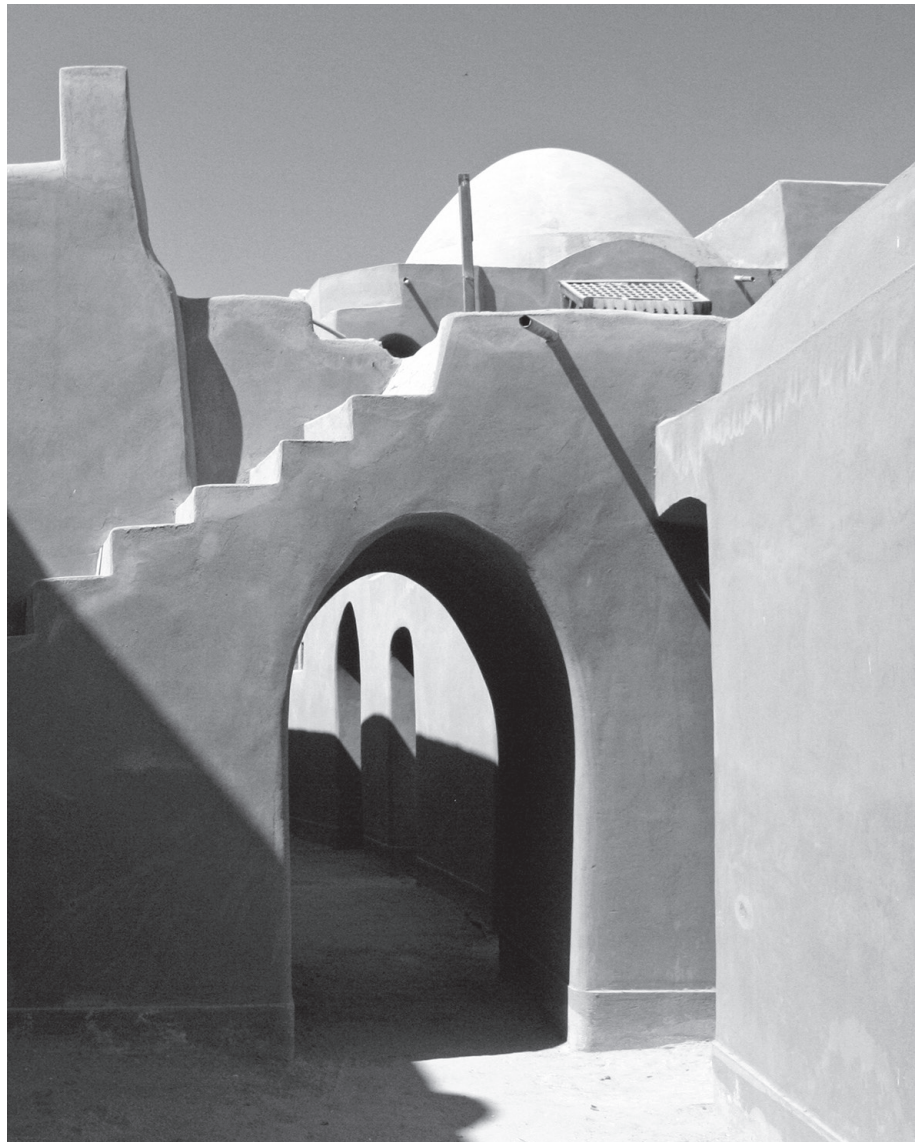


Fig. 1
Ramses Wissa Wassef Art Centre, 1951-1974.
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Over time, other activities were added to the weaving school, such as the production of ceramics and batik, as well as a small museum, also designed by Wissa Wassef and intended to house the sculptures produced by Gorgui's students. The Ḥarrāniyyah Art Centre is conceived as a village, and is laid out as such. The settlement has been built up over time by adding parts which respond, from time to time, to the needs of the moment³. The buildings have been constructed using raw earth as the main building material. Covered with practicable flat roofs, domes and catenary vaults, they have been planned as experiments in the use of shapes and materials and have arisen from the skilful assembly of architectural elements derived from tradition. Many of the exhibition spaces, houses, and workshops that make up the village have been built directly by the students at the school under the architect's supervision⁴. As a result, the architecture itself has become the outcome of an artisan production process in which – wrote Wissa Wassef (Picone 2009) – beauty and utility, form and matter, work and function, people and creativity are inextricably linked.

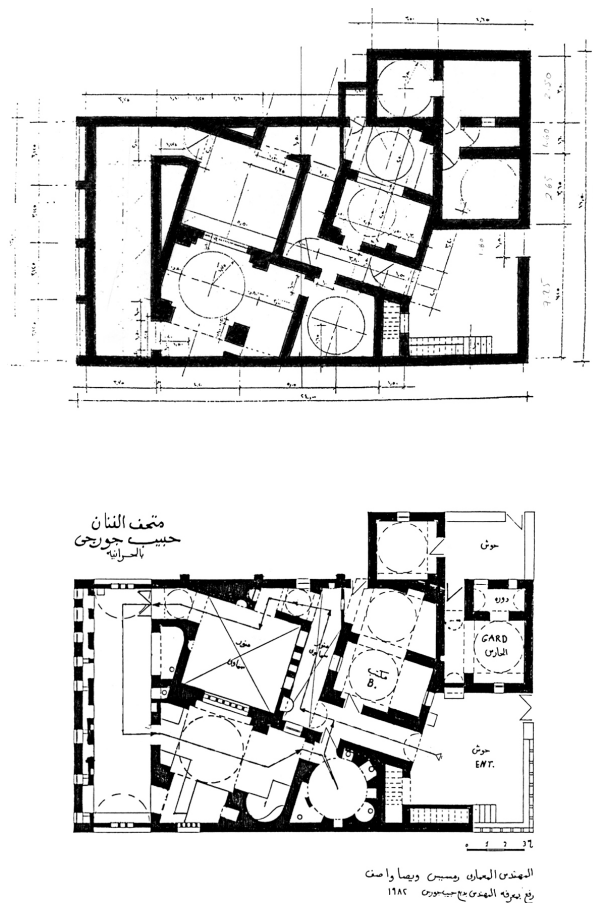
Overall, the Art Centre of Ḥarrāniyyah not only summarizes the thinking of Wissa Wassef, but brilliantly expresses a cultural context, the same one in which Fathy operates, where the transmission of knowledge, also in the field of applied arts, is attributed a founding value in the process of reinventing national identity. Fathy cites the experiment conducted by Wissa

Fig. 2

Habib Gorgui Sculpture Museum, plans, 1972.

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The plan of the Museum, laid out on the Golden Section, is arranged following a double footprint: inside the perimeter envelope, oriented north-south, is a rotated system composed of a courtyard with a shape close to a square, by a Qa'a placed in line with it and the entrance. The latter takes the form of a partially vaulted and partially open-air path, whose non-rectilinear course recalls the bayonet entrance of the traditional Arab house. An exhibition room with a circular plan functions as a pivot of the rotation; aligned with it are two rooms covered by domes which refer to the spatial structure of the Qa'a. Meanwhile, the actual exhibition gallery follows the position of the perimeter envelope, defining its western boundary. This is a large, vaulted room, entirely illuminated by natural light, like the rest of the museum.



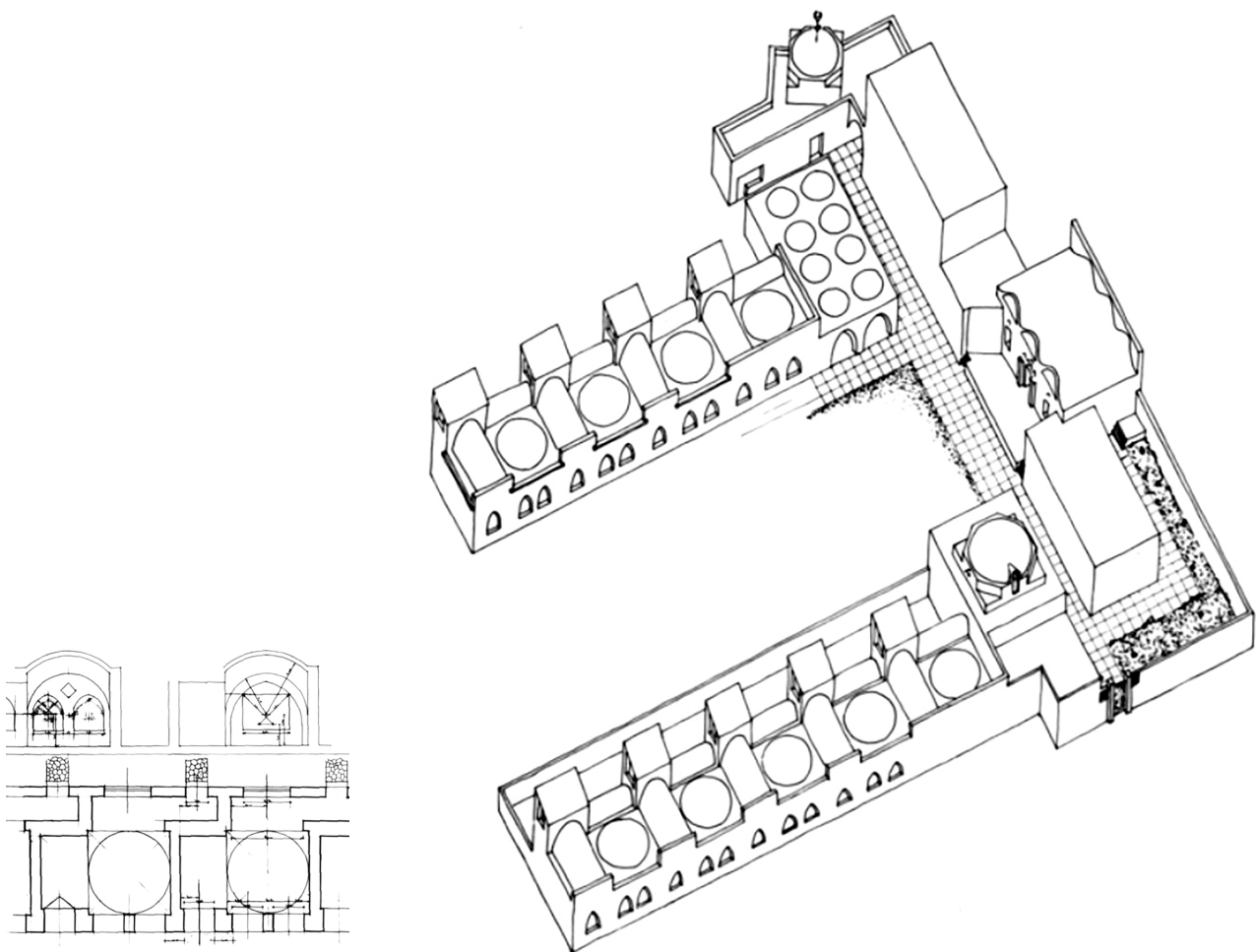
Wassef and Gorgui in his book *Architecture for the poor. An experiment in rural Egypt* (2008) and for the village of Ḥarrāniyyah he too created an urban project, which would remain on paper, however.

What Wissa Wassef did in Ḥarrāniyyah, and the pedagogical methods promoted by Gorgui find an echo in Fathy's work. In fact, the villages the latter created highlight the meaningful role attributed to education in these contexts, whether scholastic or professional.

First and foremost, Fathy's villages always feature one or more schools which, sized according to the size of the villages⁵, represent an institution deemed necessary for the birth and development of these small foundation towns. As Fathy wrote:

«[the architect] must approach the design of his school as he does the design of a church or a mosque, for it is the same sort of building. In the school it is the children's soul that will grow, and the building must invite them to fly [...]. With a few fateful lines on his drawing board, the architect decrees the boundaries of imagination, the peace of mind, the human stature of generations to come» (Fathy 2008, p. 127).

The example of New Gournā (1945) is significant, since the architect created two schools there, one for boys and one for girls, which did not exist in the old village. The choice to introduce this kind of facility in a rural village destined to accommodate around 900 inhabitants was the result of an invention, therefore. The New Gournā schools were among the first projects in which Fathy tackled the theme of the school building. Here he developed several lines of reasoning that would be brought to fruition a few years later in the project of a school for Fares (1956). Both in the schools at New Gournā and in some drawings from 1949 for a school that was

**Figg. 3 a-b**

Fares School, axonometric view,
study of a plan and section of
the classrooms, 1956.

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never built⁶, a courtyard plan was used, open on one side and structured by a repetition of classroom modules, each equipped with a windcatcher. These modules represent the main compositional unit and the space which, before anything else, «should be a home to the children» (Fathy 2008, p. 128). A similar system was used again in the Fares school, where the administrative and collective spaces, such as the mosque, library and meeting room, occupy the eastern side of the enclosure, while the classrooms are arranged north and south of the courtyard. The design of the classrooms is as an assembly, according to a new order, of the constituent elements of the *Qa'a*⁷. A square space roofed with a dome houses the students' desks; this is flanked by a second rectangular vaulted space for the teaching, which was meant to contain a *salsabil*⁸. This climatic device aimed to increase the effectiveness of the natural ventilation which, in the first versions of the project, was made possible by the presence of *malkaf* shafts. These shafts, oriented northwards in the direction of the prevailing wind, were placed at the end of the vaulted space and connected to one another through the entrance areas to the classrooms. This led to a complex ground plan, given by an interlocking linear sequence, rather than a simple juxtaposition of classrooms. Although in the final version, the *salsabil* and the windcatchers were not built, the presence of *claustra* and a series of suitably directed openings still ensures cooling inside the building. The part of the school dedicated to teaching is therefore based on the recurrence of classrooms along two sides of the rectangular courtyard, representing the organizing element of the whole layout, which is open towards the urban landscape. The theme of assembling spatial units on the basis of an orthogonal grid and around one or more courtyards is one of the recurring composition-

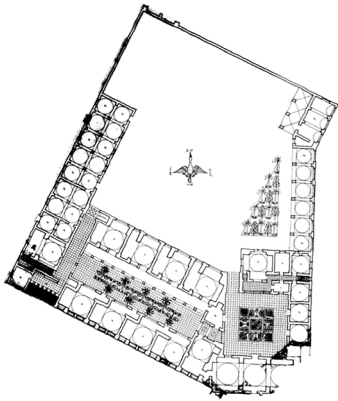


Fig. 4
New Gournā Boys' School, plan,
1945.
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Fig. 5
New Gournā boys' school shortly after construction, 1945.
© Photo by H. Fathy, from the private collection of S. S. Damluji

al principles in Fathy's architecture. In the case of the Fares school, this principle, expressed in relation to the functional programme, allows for a communal open space which the classrooms overlook. Finally, there are the collective spaces, each with its own individuality and recognizably autonomous. Prominent among these is the small mosque, which represents the only element rotated with respect to the orthogonal layout.

The school at Fares codified in Fathy's architecture a possible type for the school building which, already present in New Gournā, was to recur in different ways in other urban projects of his. The courtyard layout, the repetition of classroom modules characterized in their plan and elevation, the use of an orthogonal grid on which the assembly of spatial units is laid out, the presence of collective spaces, among which the mosque emerges as a differently oriented figure, are all elements found in numerous school buildings designed by Fathy and in many of his other works of architecture.

In addition to the schools, in Fathy's villages there are always additional buildings dedicated to education, but of a professional nature. Similar in concept to the Ḥarrāniyyah Centre, these are places where he imagined that the inhabitants could learn to make mud bricks for the construction of villages, or acquire the skills necessary to produce local handicrafts.

In New Baris (1965), one of the first (and the few) buildings built is an Auto Construction Centre, considered a prerequisite for the development of the entire village. This is located on the southern perimeter of the settlement, in an isolated position and adjacent to a stretch of land dedicated to the extraction of mud and the drying of unfired bricks. This is an essential architecture, an enclosure defined on two sides by walls and, on the other two sides by a sequence of vaulted spaces, to which, to the east, a portico has been added that looks out over the abstract space of the desert. A poetic building, like the other buildings at Baris, thanks to being built of the same material as the ground, in which the intense light of the desert collaborates with the architecture to define its spaces. However, in this case, the interest lies not so much in the built work, as in the idea that its function underlies. Auto construction is in fact a recurring theme in Fathy's work. The direct involvement of inhabitants in the construction of villages is not merely a gimmick to obtain low-cost housing, but a means to restore the ancient *trinity of architect, craftsman, client*⁹. This cooperation, which has



Fig. 6

The self-construction centre in the village of New Baris, 1965.

© Photo by V. Bertini

largely been lost, is, in the architect's mind, essential to affirm the «role of architecture in the cultural growth and development of the whole people» (Fathy 2008, p. 78). If, wrote Fathy, «a peasant never talks about art, he makes it» (*ibidem*), it is necessary to transmit to the *fellahin* the knowledge to make mud bricks, build vaults and domes in unfired earth, conceive and construct their own homes. In Fathy's vision (which is not without its utopian aspects), this will make it possible to have houses similar to the inhabitants, villages that grow harmoniously from the landscape and works of architecture rooted in the place; an expression of an «Arab feeling» (Fathy 1968). In Fathy's relentless search for an authentically Egyptian architectural language, the involvement of artisans and inhabitants in the construction process becomes one of the tools through which to hand down (and betray) tradition.

Emblematic in this light is the project for the Islamic community of Dar al-Islam in New Mexico (1981). Here, in fact, the process to build the entire village was conceived as a large open-air school. Fathy designed both the urban project and the individual pieces of architecture, then, together with the master builder Alā' al Dīn Muṣṭafa¹⁰, he taught the local community the necessary techniques to use unfired earth to complete the construction of the village. Although only a few buildings have been built so far, the experiment is interesting since it reaffirms the importance attributed by the architect to the teaching of traditional knowledge, also outside the borders of Egypt. This importance can be traced back to what Fathy defines as a «humanistic attitude» (Fathy 1977), or better, an anthropocentric vision in which his architecture always begins from the people to whom the architecture is addressed.

Often stepping outside his role, Fathy steers every urban project towards a possible economic and social model. This explains the idea of cooperation and self-construction and, at the same time, the reasons which guide the architect in designing not only the built forms for his villages, but also a potential economic and social structure. This approach is particularly evident at New Gurna, where the need to relocate a village also led Fathy to imagine possible new vocations for it. Among these, craftwork played a key role. In fact, facing the main square of the village is the *khān* of the trades, which is partially outlined as a typological rewriting of a caravan-

Fig. 7

The construction of the village of Dar al-Islam, 1981. In the centre of the image, dressed in white, the master builder Alā' al Dīn Muṣṭafa.

© Photo by Nicole Toutoungi, Aga Khan Trust for Culture

Fig. 8

The village of New Gournā, 1945. On the right, the khan of the trades, whose portico overlooks the main square of the village.

© Photo by H. Fathy, from the private collection of S. S. Dam-luji.



serai, whose name it has borrowed – and also its function, to some extent. The building consists of two parts: a rectangular courtyard, bordered by a portico, which houses two types of classrooms and a sequence of four residences that draw a polygonal figure, each of them representing a rewriting of the traditional Arab house. Fathy imagined that some master artisans could temporarily reside in the *khān*, teaching their trades to the local population and selling their products. This was to continue until the knowledge had been handed down and then their place would be left to new artisans with different skills. In addition to the *khān*, Fathy finally designed a professional school dedicated to the weaving and dyeing of fabrics.

The craft schools which Fathy imagined for New Gournā underlay an idea similar to the one that would guide the Ḥarrāniyyah project six years later. In Egypt, which at that moment was moving towards liberation from a colonial past, education became key. The presence of at least one school and a vocational training centre in every village designed by Fathy was therefore essential, even in rural contexts where they had never had any. Educating and training the young inhabitants, teaching traditional craft and construction techniques, and encouraging spontaneity in the applied arts

were all actions which took on a social and cultural significance. Social, because a possible development model was envisaged which, despite being far from reality at times, staked a claim for a civil value for architecture. Cultural, because the handing down of ancient knowledge to the new generations was an attempt to build a renewed identity.

Even if, in hindsight, the experiences described appear deeply rooted in a precise historical-geographical context, the underlying ideas nonetheless retain a topical value. The fact is that the learning spaces designed by Fathy have the ability to embrace multiple issues, coagulating content, form and place. The court type appears in various forms and is constantly rewritten, both in relation to the context in which it is inserted, and to its educational function. The classroom and the workshop are the minimum compositional units sized according to usership – children or young artisans – which, when repeated and assembled, together with the collective spaces can configure a part of a town. And it is in the public and urban role of these buildings that perhaps the most significant contribution of these experiences to the contemporary architectural debate lies. In fact, Fathy's schools propose a sociocultural model and contextually define the parts of the city for which they have been designed. By deforming, reaching into the fabric through arcades, opening up courtyards, defining public spaces, or drawing a sign on the horizon, these buildings have the ability to compose whole urban areas, to the point of transforming the entire construction of the settlement into a school, as in the case of Dar al-Islam. There is a continuous exchange between the internal landscape of the schools and the urban landscape that they help to build, both in its material aspects and in its social and cultural components. The formal response to a functional program, which is as generic as it is specific, thus escapes from a self-referential logic to «aspiring to be architecture. Educational architecture» (Pezzetti 2012).

Notes

¹ Regarding his relationship with Wissa Wassef at the Faculty of Fine Arts in Cairo, Fathy said: «When I became director of the Architecture department, I did not allow the students to work on designing any projects except those that were on Egypt. And I stopped any foreign magazines or journals they used as sources to copy from. The French professors left, and only Egyptian teachers remained, but they were all 'Franco-Arab', except for Ramses Wissa Wassef. Only he supported me in the discussions on the importance of culture, identity, philosophy, architecture and education. No one else was interested, and the rest of the professors would walk away from our discussions. They were not aware of the problem, in architecture or in education then. As far as they were concerned there was no problem». In: Damluji S.S.D. and Bertini V. (2018) – *Hassan Fathy. Earth & Utopia*. Laurence King Publishing, London.

² Habib Gorgui (1892-1965), pedagogue and chief inspector of the Art department of the Ministry of Education, founded the Folk Art School in 1938. A staunch supporter of Jung's theories, he experimented in his school with a method aimed at encouraging free expression among the students who were entrusted with materials, clay or fabrics, to be worked on without the imposition of any technique, letting each child spontaneously develop his or her own creativity. The experiment conducted by Gorgui was not an isolated case, but one shared by other educators of the time, including Husayn

Yusuf Amin (1904-1984). Both rejected the canonical rules of art teaching to develop their line of reasoning regarding the relationship between the national identity issue and creative freedom, finding in the latter a tool to create authentically Egyptian art. See Karnouk L. (2005) – *Modern Egyptian Art 1910-2003*. The American University Cairo Press, Cairo-New York.

³ Construction of the Ramses Wissa Wassef Art Centre ended in 1974, when the complex had more or less reached its current conformation. Some other buildings have been added over time, including a museum dedicated to textiles designed by Badye Habib Gorgui. In 1983, the project was awarded the Aga Khan Award for Architecture. The Centre is still in use today.

⁴ On this project see Cantacuzino S. (1985) – “Ramses Wissa Wasser Arts Centre”. In: S. Cantacuzino (edited by), *Architecture in Continuity*. Aperture, New York.

⁵ See Fathy H. (1974) – “Planning and Building in the Arab Tradition: The Village Experiment at Gournā”. In: M. Berger (edited by), *The New Metropolis in the Arab World*. Octagon Books, New York.

⁶ The drawings are kept at the Rare Books and Special Collection Library, Hassan Fathy Architectural Archives, American University of Cairo. Ref. 49.04.

⁷ The *Qa'a* was originally a reception room for guests in Cairo's medieval palaces. It consists of two parts and has a precise ground plan, matched by a codified section. It is one of the main elements of the tradition which Fathy transposed, rewriting it in his own language. On the use of the *Qa'a* layout in Fathy's architecture, see Fathy H. (1972) – “The *Qa'a* of the Cairene Arab House, Its Development and Some New Usages For its Design Concepts”. In: *Colloque international sur l'histoire du Caire, 27 mars- 5 avril 1969*. Ministry of Culture of the Arab Republic of Egypt, Cairo.

⁸ «The *salsabil* is a vertical fountain [...] consisting of an inlaid marble slab worked in bas-relief, with ornamental motifs which evoke water and wind. This slab is placed in a slightly oblique position, in order to facilitate the flow of water across the surface». In: Picone A. (2009), *Op. cit.*, 129.

⁹ See, on the concept, Fathy H. (1973), *Op. cit.* and Fathy H. (1974), *Op. cit.*

¹⁰ Alā' al Dīn Muṣṭafa first worked with Fathy in 1945 on the construction of the village of New Gournā. From then on, he would collaborate regularly with the Egyptian architect. An interview with Alā' al Dīn Muṣṭafa can be found in Damluji S. S. D. and Bertini V. (2018), *Op. cit.*

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