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Anne-Marie Willis & Eman Elbana

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## Socially engaged design: a critical discussion with reference to an Egyptian Village

Anne-Marie Willis<sup>a</sup> and Eman Elbana<sup>b</sup>

<sup>a</sup>Faculty of Applied Sciences and Arts, German University in Cairo, New Cairo, Egypt; <sup>b</sup>Faculty of Applied Arts, Helwan University, Cairo, Egypt

### ABSTRACT

Designers are often impatient to get down to ‘designing solutions’ before the fundamental problem is actually identified and the situation sufficiently explored. In this paper, we do not approach ‘socially engaged design’ by asking ‘what should be designed?’ Instead, we argue for the necessity for designers to spend time gaining an understanding of the circumstances in which they seek to design and that bear upon the possibility of taking action. The aim is to contribute to more effective modes of socially engaged design by attempting to better understand its contexts and challenges. This is done via a ‘problem-finding’ exercise related to a village in Egypt’s Nile River delta, interwoven with critical discussion of certain forms of socially engaged design and the theories of economic and social development that frame it.

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## Introduction

There is a long tradition, going back at least to Victor Papanek’s *Design for the Real World* (1972) of designers seeking to work with disadvantaged communities on significant social and economic problems. Over the last 20 years, this has gained a higher profile and become more diverse, this is evidenced in the variety of descriptions: Socially Responsible Design, Socially Responsive Design (Armstrong et al. 2014, 29) Humanitarian Design (Johnson 2011), Design for Sustainable Development, Social Design, Design for Social Change, Design Activism (Armstrong et al. 2014, 29), and, then the emergence of more comprehensive nominations such as Transition Design (*Design Philosophy Papers* 2015). This has occurred largely within the context of design education shifting from technical colleges to universities, moving away from technique and the Applied Arts model and towards research and critical enquiry, with more of an emphasis on how design can contribute in more substantial ways to human well-being.

More recently, in the wake of emergencies such as climate-change related events like earthquakes, hurricanes and floods, as well as increasing numbers of refugees on the move from political conflicts and economic crises, designers and architects have mobilized to provide practical assistance. At the other end of the spectrum, there are designers working

on social welfare and economic development projects in communities with long-term problems such as poverty, over-crowded housing, lack of infrastructure and services.

One could trace a design history of this kind of activity, and if this was to be done systematically, it would probably be found that socially engaged design over the last decade is characterized by a small number of organizations led by individuals with a passion to 'do good' (such as Cameron Sinclair and Design for Humanity or Emily Pilton's Project H)<sup>1</sup> and that socially engaged design is most practiced and most visible in design education: as student projects, in Master courses, as thesis topics, as papers in academic conferences and journals. However, constructing a narrative about socially engaged design from a design perspective tells only a partial story. This story needs to be embedded in the bigger story of developmentalism,<sup>2</sup> the post-second world war idea that all nations should follow the Western model of economic development, an idea powerfully enacted through the aid programs of industrial nations via the United Nations, and in more recent times through large philanthropic foundations and non-government organizations (NGOs). It is the economic and social development theories of this sector that frame and over-determine design activity in these contexts. Aid agencies, designers working with them, as well as designers working directly with 'under-served communities' – all are operating with fundamental assumptions about poverty and its causes; basic human needs; the workings of the economy; the role of the state; social structures and cultural change. These assumptions and pre-suppositions are rarely expressed directly, yet they underpin the pragmatic, instrumental questions asked in setting up, implementing, monitoring and assessing aid projects, questions such as: What is lacking in this situation? What are the priorities? What kind of assistance is most effective? How to measure effectiveness of an intervention? Individuals – as researchers, project officers, designers, fund-raisers, volunteers – are aware or not aware to varying degrees of their own underlying assumptions and the presuppositions of those with whom they are working.<sup>3</sup>

## Part 1

### *Aim and scope*

Designers are often impatient to get down to 'designing solutions' before the fundamental problem is actually identified and the situation sufficiently explored. In this paper, we do not approach 'socially engaged design' by asking 'what should be designed?' Instead we argue for the necessity for designers to spend time in gaining an understanding of the circumstances in which they seek to design, which bear upon the possibility of taking action. Our aim is to contribute to more effective modes of socially engaged design by attempting to better understand its contexts and challenges. We do this via a 'problem-finding' exercise related to a village in Egypt's Nile River delta, interwoven with critical discussion of certain forms of socially engaged design and the theories of economic and social development that frame it.

### *Structure of the paper*

In Part 1 we explain the context and methods of our research, and the problems of defining social design and related terms, and in Part 2 we introduce the Nile delta village of Al

Khawatra and its obvious problems of lacking or inadequate infrastructure and high levels of unemployment. Before considering the types of design interventions that could respond to the village's problems, Part 3 steps back to explain the 'developmental discourse' underlying design interventions in such situations. Part 4 critically reviews three typical design interventions or 'focus areas of socially engaged design': (i) craft and small scale production; (ii) alternative technologies to meet local needs; and (iii) provision of public facilities. Such design interventions have been criticized for dealing with symptoms rather than causes. Therefore, in Part 5, we return to the village but widen the scope to reconsider the problems outlined in Part 2 as symptoms of larger, structural problems. Finally, Part 6 brings the foregoing analysis together with the three typical design interventions discussed in Part 4, to explain the design thinking approaches used during a workshop that focused on the village, and to critically examine the proposed solutions that emerged from the process.

### ***Context and method***

This paper builds on research initially done as a case study and field trip for a design workshop (the 'Cairo Design Futures Hothouse'<sup>4</sup>) of Egyptian and non-Egyptian designers and researchers seeking new design approaches to urban and rural problems. The leaders of the workshop, who were from Australia, followed an unconventional approach of presenting two hypothetical projects as the content to be explored and developed over the four days of the workshop. To gain some local knowledge in a short time, they needed to find points of entry or 'gates' – actual places and communities as the subject of research and design. Therefore, they selected two entry points for exploring urban and rural issues in Egypt, and the relation between them: (1) a study of the village of Al Khawatra to identify problems and pathways for engaging them; and (2) a concept for a proposed cultural center for New Cairo (not discussed in this paper). The places are real, but the projects were conceptual. This workshop put an emphasis on pre-designing.<sup>5</sup> The village, Al Khawatra, was selected through the family connections of one of the workshop's Cairo organizers. It is a two hour drive from New Cairo and is similar to hundreds of other Nile Delta villages. Background information about Al Khawatra and its region was obtained through local government sources and personal communications. This was supplemented by research on general trends likely to affect the Nile delta in coming decades (especially climate change and its associated effects), followed by observations and informal interviews during a field trip.

### ***A note on definitions***

With regard to the terms mentioned above – Socially Responsible Design, Socially Responsive Design, Humanitarian Design, Design for Sustainable Development, Social Design, Design for Social Change, Design Activism, and so on – it needs to be acknowledged that these descriptions are frequently strategic nominations generated by designers and their supporters to differentiate and promote what they are doing, hence the proliferation of names. On that basis, we do not believe it is appropriate to undertake a hair-splitting exercise of trying to define the various terms to discover what each is 'really about'. Throughout this paper we will therefore use a general term – 'socially engaged design'. Social Design, in particular, is a vague term.<sup>6</sup>

Social design is a set of concepts and activities that exist across many fields of application including local and central government and policy areas such as healthcare and international development. It is associated with professional designers, students, staff and researchers in design HEIs (Higher education Institutions) and also promoted and practiced by some public sector bodies, funders, activists and non-profit and commercial service providers. (Armstrong et al. 2014, 15)

The authors of a recent report describe it not as a discipline but as ‘a discursive moment resulting from the confluence of several factors ... including the increasing visibility of strategic design or design thinking, social innovation and entrepreneurship, austerity politics ...’ (Armstrong et al. 2014, 31). Ezio Manzini explains how the term ‘social’ entered the design debate several decades ago:

Although, strictly speaking, ‘social’ refers to ties between people and organizational forms that characterize a society, it is frequently used to connote particularly problematic situations, such as extreme poverty, illness or exclusion, and circumstances after catastrophic events. In other words, when used in this way, ‘social’ becomes a synonym for ‘highly problematic condition’, which poses ..... the need for urgent intervention ... (Armstrong, 35)

## Part 2. Problem-finding in a village

Problem-finding is not straightforward. Problems are perspectival. So, for instance, a middle class visitor to one of Cairo’s *ashwa’iyyat* (informal area or slum) might see rubbish in the streets and ‘overcrowded housing’ as the major problems, someone who lives there might be much more concerned by the lack of both street lighting and a local school.

Instead of taking a predefined needy population, what if we chose a community at random in order to find problems and explore how they might be engaged by design? This partly describes how the organizers of the ‘Cairo Design Futures Hothouse’ chose Al Khawatra – via fortuitous personal connections. Al Khawatra is an agricultural village in the heart of the Nile delta, similar to hundreds of other Nile Delta villages: compact, with narrow unpaved lanes, about 200 houses, population approximately 1200 (Figures 1(a)–(d)). It is a two hour drive from New Cairo, and not a place that tourists or weekend leisure travelers would go.

Problems as directly observed at a micro-level or experienced as part of everyday life are symptoms of larger, structural problems at a macro level. Therefore, the challenge is to be able to make connections between (i) problems at a micro-level as they might be observed by outsiders, and experienced by members of the community and (ii) the macro forces that have shaped the village up to now, and the known macro forces acting on the future of village life and the problems that might be created by those forces.

Al Khawatra is one of 26 villages that make up a ‘local unit’ within the hierarchical administrative structure of the Egyptian state (Figure 2). Most of the surrounding land – some 200 *faddān* (one *faddān* is roughly equivalent to 0.42 hectares<sup>7</sup>) has been owned and cultivated by one family for three generations, with cotton the main crop until about the year 2000. Across the ‘26 villages’ there is a similar pattern of land ownership.<sup>8</sup>

From the background research and information gathered on the field trip (Field Trip Notes 2014), problems can be grouped under the following headings:

- Lacking and inadequate infrastructure;
- Government services not fully functional;
- Limited employment opportunities;
- Illegal construction on agricultural land.



**Figure 1.** Al Khawatra. Photos by Eman Elbana.

### ***Lacking and inadequate infrastructure***

Al Khawatra (and the other 26 villages) has no managed sewerage system, sewage is discharged directly into canals; there is no solid waste collection service, so household waste is placed on canal edges and burnt. This is the normal condition of Egyptian rural villages.

*Drinking water* is mostly piped to homes from a pumping station in Zagazig (the capital of Sharqiya). Supply is limited, often for only several hours a day.

*Electricity* is supplied to the 26 villages via 23 sub-stations; there are frequent power cuts.

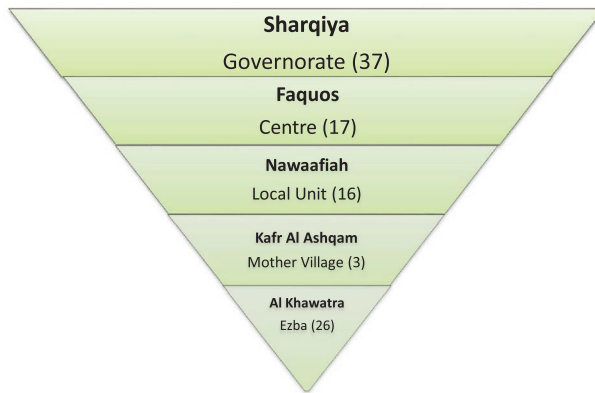
*Mobility:* the nearest town to Al Khawatra is Faquos, about 25 km, but the journey there takes nearly an hour because roads are in poor condition; there is no public transport; privately-owned, open-tray utility trucks fill the gap; there are some tuk-tuks in the villages. Lack of mobility negatively effects young people's educational and employment opportunities.

### ***Government services are not fully functional***

The 26 villages are supposed to be served by two primary schools, one prep school, a clinic, a social welfare office, a vet clinic for farm animals, and a farmer's co-op that sells seeds and pesticides at subsidized prices. The reality is different. Here are some stories collected during the field trip.<sup>9</sup>

#### ***Health service***

'The clinic is closed due to lack of staff'



**Figure 2.** Egypt is divided into 27 Governorates. The Governorate of Sharqiya (population 6.5 million) has 17 centres; one of these is Faquos which has 16 Local Units. Each Local Unit contains mother villages plus smaller villages. The local unit of Nawaafiah has 3 mother villages. One of them is Kafr Al Ashqam under which there are 26 Ezba (very small villages): one of these is Al Khawatra. (Thanks to Mohammed Radwan for this explanation.)

### **Educational resources are unused**

'In the school I saw 20 computers, four data projectors, an online conference facility – all from Aid projects – locked away, unused and covered in dust because the staff said their responsibility is to make sure the equipment isn't damaged or stolen.'

### **Social welfare office**

'Not very effective – people just sit and cook and talk.'

### **Drinking water**

'There are problems with drinking water ... Seventy percent of liver problems of people in Egypt are caused by unclean water.' (Video recording [2014](#))

### **Funding**

'The main problems are financial. Lack of money to develop infrastructure... For example, Ismailia has one million inhabitants and the amount of money the government is investing is more than here for nine million inhabitants.' (Video recording [2014](#))

### **Limited employment opportunities**

Ninety percent of the population of the 26 villages are farmers and farm laborers, and the work is seasonal; thus, many people are unemployed for extended periods of time. Large numbers of men leave the village to seek employment in Cairo, leaving behind wives and children, and some do not send back money. The village culture is traditional, with women not expected to work outside their homes (Figures 1, 6, 7 and 11). Government is the next largest employer, followed by small businesses: Al Khawatra, the second largest of the 26 villages, has a flour mill (Figure 3), a bakery, and a carpentry workshop employing 12 men (Figure 10); two 'front room' family-run grocery shops (Figure 4) and a pharmacy of the same size. At the edge of the village, on the main road, a land-owner recently built a line of five



**Figure 3.** Flour mill, Al Khawatra. Photo by Eman Elbana.



**Figure 4.** Family-run grocery shop, Al Khawatra. Photo by Eman Elbana.

small shops: a coffee shop, a car-wash, grocery store, auto-electrician, car accessories. While this could be viewed as a successful example of local entrepreneurship it has caused division in the village because the landholder did not get permission to build. As the buildings are legal, he was refused an electricity connection by the government-owned power authority, so he obtained it by other means at a much higher cost. Figure 6. Irrigation canal and rice field. Photo by Waleed el Ghamry. Figure 7. Al Khawatra residents. Photo by Eman Elbana. Figure 8. Al Khawatra residents. Photo by Eman Elbana. Figure 9. Traditional and red brick housing in Al Khawatra. Photos by Eman Elbana. Figure 10. Interactions between Al Khawatra residents and Cairo workshop participants. Photos by Waleed el Ghamry. Figure 11. Wood furniture workshop Al Khawatra. Photo by Tony Fry. Figure 12. Family, Al Khawatra. Photo by Tony Fry.





**Figure 5.** Sugar beet cultivation.



**Figure 6.** Irrigation canal and rice field. Photo by Waleed el Ghamry.

### ***Illegal construction***

(After the Revolution) ‘The owners of the land are building in a forbidden way, they are not allowed to build in the green [cropping] areas, and the question is, are there any places to build or is there is no place where people could build for their children? They would like to be near their places so they build on the same land, the green land.’

### ***Summary of the critical questions***

What is the appropriate approach to these problems? What is most likely to be effective? Within the community *who* considers *what* to be a problem, or the most important problem?



**Figure 7.** Al Khawatra residents. Photo by Eman Elbana.



**Figure 8.** Al Khawatra residents. Photo by Eman Elbana.

And our main question: can the problems of Al Khawatra be solved by design? We will seek to answer this first by reviewing some of the typical approaches of socially engaged design, and how they are framed by developmental discourse.



**Figure 9.** Traditional and red brick housing in Al Khawatra. Photos by Eman Elbana.

### Part 3. Developmental discourse and poverty

There is no neutral position from which to view the problems that socially engaged designers aspire to resolve by design. Thus, there is a need to expose underlying assumptions, and to critically examine the discourses operating in particular situations.

In non-Western countries, socially engaged design usually happens as part of economic and social development projects sponsored by international and local NGOs or by international agencies such as the United Nations. As such, the design activity is framed by ‘development discourse’, which itself is not unified but based on different analyses of the nature of the problem and appropriate solutions.<sup>10</sup> Historically, the development agenda has been driven by the United Nations. Doaa El Aidi, discussing socially engaged design in the Egyptian context, refers to the three UN Development Decades since the 1960s in which the paradigm shifted ‘from strengthening industrialization, through improving quality of life, to combating poverty through merging the social and economic aspects of development, and finally focusing on human development.’ She continues:

... since the UN development decades were launched, the scale of global poverty and inequity has grown massively, indicating an equally massive ‘failure of development’. This failure instigated a radical rethinking of the notion of development, which ended up in the 1990s and the subsequent two decades with the concept of sustainable development as a strategy to give development a last chance to survive. (El Aidi 2015, 46)

Designers arrive in a situation in which international development agencies and NGOs have already identified ‘a population in need’ – of housing, training, educations, facilities – according to however the organization defines need and poverty. Johnson makes the point that humanitarian design has emerged in the context of ‘the rise of nongovernmental organizations as a principal means of social service delivery in the Global South’. In the wake of the withdrawal of ‘the welfare safety-net in one nation after another’ what he refers to as the ‘global humanitarian–corporate complexes – those networks of nongovernmental organizations (NGOs); transnational corporations; philanthropic foundations and private donors; and international governing bodies’ have become ‘the preeminent means for addressing human need and emergency’.<sup>11</sup>

What constitutes poverty is a major point of debate within developmental discourse. Definitions of poverty have shifted away from an income measure (‘living on less than a dollar a day’) to wider indicators of potential for well-being ‘promoting human welfare in accordance with one’s own culture, in order to obtain a life worth living’, meaning more than just material well-being (El Aidi 2015, 23).



**Figure 10.** Interactions between Al Khawatra residents and Cairo workshop participants. Photos by Waleed el Ghamry.

As long ago as 1908 Georg Simmel made the point that poverty is not defined by lack of money, rather poverty is defined by a social relationship of giving and receiving obligations 'being aided by other people or at least having the right to aid.'<sup>12</sup> This is institutionalized in religious customs; for example, the requirement, within Islam, to donate a prescribed percentage of one's income to the poor at particular times of the year (such as Ramadan). Poverty as a social relation takes on a problematic form when an NGO becomes entrenched in a poor community, and people living there becoming adept at 'playing the system' and learning the scripts that aid workers want to hear, with this in turn leading the NGO to implement detailed, intrusive assessment criteria and monitoring, such as compiling inventories on household possessions and gathering financial and medical data on residents.<sup>13</sup>



**Figure 11.** Wood furniture workshop Al Khawatra. Photo by Tony Fry.

#### **Part 4. Socially engaged design: some typical approaches**

Design interventions are framed by humanitarian and developmental discourses, with varying emphasis on the role of designers and expected design outputs. Here, we discuss three types of focus, and some of the problematic assumptions on which they are based. We characterize them thus:

- Focus 1: Craft and small-scale production.
- Focus 2: Alternative technologies to meet local needs.
- Focus 3: Public facilities.

##### ***Focus 1. Craft and small-scale production***

A common form of intervention by NGOs working at a local level is to sponsor craft production to boost the incomes of poor people, especially women. Items produced are targeted for tourist or export markets and include textiles, clothing, jewelry, accessories, and toys. According to Thomas 'Design input often comes from the producers, themselves, who have an indigenous knowledge of their particular kind of production. But for continuing marketing success, especially for the export markets, external design input is needed.' This especially because 'this market is precarious, since it largely is fashion-driven and dependent on the sale of ornamental or other nonessential goods. Therefore, it is vulnerable to wide market fluctuations' (Thomas 2006, 55). The more comprehensive programs seek also to transfer design knowledge and provide training in business and marketing skills, with varying degrees of success (Thomas 2006).

Such projects sit in the developmental discourse of poverty alleviation via localized economic development, often supported by micro-loans for small business development. This approach was adopted after the United Nations and other influential agencies began to recognize the failure of a universalized western model of industrial development for all nations (El Aidi 2015). While this can be seen as a positive step, it has also been criticized as an extension of the neo-liberalist ethos (Johnson 2011) that 'everybody can become an entrepreneur and thus be self-reliant' that has accompanied the hollowing out of the public

sector (the gradual withdrawal of state funding of health, education, infrastructure and social services) and the enforcement by the IMF and World Bank of 'structural adjustment' (which means the withdrawal of subsidies that benefit farmers and poor people).

### ***Focus 2. Alternative technologies to meet local needs***

Where the problem is defined as lack of basic infrastructure such as water supply and sewerage systems, designers may seek creative solutions by improving on existing practices. For example, in Upper Egypt and rural Africa (and other parts of the world) women and children walk long distances every day for many hours to collect water for basic needs. This has prompted design responses that focus on more efficient, less labor intensive ways of transporting water. The Hippo Roller is a much discussed and criticized example.<sup>14</sup> It is a 90 liter capacity plastic barrel with a handle that allows it to be pushed or pulled over long distances. It allows larger quantities of water to be transported with less effort. But it has disadvantages: the cost of production made it too expensive for the low-income people it was meant to benefit, and it has only been possible to manufacture and distribute in large quantities through the subsidies of several NGOs. A more significant criticism can be made, which is that such a solution leaves unchallenged the assumption that some communities will never be provided with piped water. The ancestry of the Hippo Roller is the Appropriate Technology and Intermediate Technology movements of the 1970s, advocating context-sensitive, modified modernization of underdeveloped economies based on simple production techniques to make basic products for local use. This involved redesigning traditional technologies for improved efficiency, as well as the design of simplified, cheaper 'modern' products for poorer communities.<sup>15</sup> On the one hand, this can be seen as validation of local practices rather than substituting them with universalized western solutions; furthermore, the low-tech nature of many such products is good from an environmental sustainability perspective. But from a social justice perspective they can be criticized as discriminatory: creating 'products for poor people'. The problem here is that even if the thing designed is functionally better, it may be rejected by those it is meant to benefit because they want 'the same as everyone else' not a low-tech substitute that will be a sign of their poverty. Good intentions plus functional(ist) rationality are not sufficient. Social context and sign value need just as much attention. This is not to say that good product ideas cannot be generated out of conditions of necessity, but if they are good, they will appeal to a much wider segment than just 'the poor'. Unless socially engaged design is underpinned by a commitment to equity and social justice, the outcome, no matter how good the intentions, will be unwittingly condescending.

Johnson has criticized 'champions of humanitarian design (who) offer a technological fix (e.g., life straws, paper log houses, and hippo rollers) for problems rooted in imperial histories and neoliberal restructuring' and that they are 'creating and circulating micro-social technologies as solutions to structural inequality.'

### ***Focus 3. Public facilities***

How and where people are housed, and the quality of the built environment are major concerns of socially engaged design. Worldwide, there are many cities in which the majority of the population lives in self-built, unregulated and unplanned housing; in planning

discourse these are called 'informal areas' or 'informal housing'.<sup>16</sup> In Egypt, these areas are known as 'ashway'iyat – which roughly translates as 'disorganized'. In 2009, 64 percent of greater Cairo's population of 17.3 million inhabitants lived in 'ashway'iyat, which adds up to 11 million people (Sims 2012, 96). For more than 50 years architects, urban designers and planners have debated the issue of the self-built housing of the poor of Africa, Asia and Latin America, with the preferred solution shifting away from slum clearance and re-housing to that of improving what's there – making the informal formal by providing proper services.<sup>17</sup> However, implementation lags behind good intentions, populations expand and informal communities grow, so too does unregulated construction. From a planning perspective, key issues in informal areas are the structural safety of buildings, the lack of infrastructure, open space and community facilities; these lacks are linked to further problems such as public health (disease, air quality, access for emergency services, rubbish removal). These needs have led many university-based architects and their students to design and build schools, clinics and community centers. These range from large-scale, multi-partner projects extending over several years in which design and construction of buildings is integrated with community development through to one-off charity projects in which all the effort goes into building a school or clinic with little thought on how it will operate and be staffed. Funding bodies and donors may tend to prioritize material outcomes such as buildings that can be photographed and promoted, yet unless people in the communities have the means to take ownership of such projects, make them meaningful to them, through active involvement in concept-generation, planning and execution, the benefits will be short-term. Another point of criticism is that this approach ignores or conceals the structural socio-economic problems: government neglect of poor communities; exploitation of workers in the informal economy; and in some parts of the world, the power of criminal gangs.

### **Summary and critique**

In making these observations, we have strayed into the inevitable issue of the politics of social engaged design. There is a key question to ask. Is the design action based on a charity model of the privileged 'helping the poor'? Or is it about facilitated community-generated action? The latter would be based on a social justice model of providing access to resources, knowledge and skills so that individuals, families and communities are empowered to be able to make their own decisions about what kinds of futures they want.

Development agencies are asking the wrong question according to Kirk et al. (2015) They ask 'how can we eradicate poverty' and then list its aspects – lack of health care, education, income etc. These are just symptoms, and the more fundamental question to ask is 'why does mass poverty exist?' This will 'will guide you to understand the processes that have created poverty over the past few centuries and continue to create it today ... like slavery, colonialism, resource plunder, structural adjustment programs, and financial crisis ...'. Reading this statement, a designer might throw up their hands in despair, and say 'well, what can I possibly do about such things?' Yet there is even more complexity than Kirk et al. describe if the definition of poverty is taken further than just a measure of income.

Designers seeking to work with poor communities (such as the village of Al Khawatra) need to resist becoming enframed by humanitarian discourse in which 'the global poor are construed as objects of elite benevolence and non-profit largesse rather than as historical subjects possessing their own unique worldviews, interests, and notions of progress'. (Johnson 2011).

## Part 5. The village: macro-problems

The problems directly observed close-up at a micro-level or experienced as part of everyday life (as discussed in Part 2 above) are symptoms of larger, structural problems at a macro level. We now turn to the macro-problems related to Al Khawatra and the other 26 villages.

In doing this, we wish to keep in mind three points: (i) that this village, by Egyptian standards is not especially poor; (ii) that there are no NGOs operating there; and (iii), reiterating Johnson, that the people who live there are regarded 'as historical subjects possessing their own unique worldviews, interests, and notions of progress' (even though in this brief study it was not possible to fully explore these).

### *Declining viability of agriculture*

How far nevertheless, can one speak of the fading away of the 'traditional' village, if these plantations, together with their hamlets, were only given birth to in the late nineteenth century? (Abaza 2013: 62)

Despite the problems described in Part 2, an urban visitor to Al Khawatra may gain a romanticized impression of timeless simplicity of the village way of life: fields with water buffalo; hand tools for cultivation; donkey carts; the absence of cars; small houses grouped closely together; and the lack of shops filled with consumer goods (Figures 1, 4, 5, and 11). They might also marvel at the food on the table: chicken, duck, pigeon, beef, rice, vegetables, bread, cheese, all locally grown and produced. All of this can evoke the historical continuity of Nile delta cultivation over 5000 years, the longest lasting irrigation-based society in the world (Postel 1999, 35). While many of the cultivation and food production practices have been relatively unchanged for hundreds, if not thousands of years, the mode of settlement is relatively new. Satellite images of the Nile Delta, show a pattern of villages scattered across the landscape – large ('Mother Villages') and small hamlets (Ezba).

The Nile Delta has been cultivated continuously since Pharaonic times, but the pattern of land use seen today of many little villages scattered across the landscape is of more recent origin – they were established by large landholders, the owners of cotton plantations, to house the peasants who worked for them as permanent laborers.

Cotton cultivation, which is the reason for the establishment of the village, was made possible by the expansion of irrigation systems in the late 19th century. The distribution of land ownership across the 26 villages is also related this history: the largest farms, 30 faddān plus, are owned by five families. Cotton production has declined over the last two decades because of reducing prices paid by government to farmers, responding to global competition as other nations started growing cotton.<sup>18</sup> Today, in the '26 villages' cotton has been displaced by wheat, rice, corn, beans, sugar beet, and melons for edible seeds. These are not high value crops. At the same time, mechanization of agriculture is increasing, so prospects for agricultural labor are not good. A common story told by people from Al Khawatra, is that the young people don't want to be farmers. Such stories are not unique to Egypt.

There is considerable national pride in the fame of Egyptian cotton as a synonym for best quality, and many Egyptians who grew up in the delta are sad about the recent decline of the cotton industry. At the same time, it needs to be remembered that cotton cultivation was introduced into Egypt in the 19th century to serve British colonial interests, and the



system of production of cotton even when it became owned by Egyptians was highly exploitive and paternalistic with a small number of families controlling large estates worked by landless peasants and low-paid seasonal workers, a system that Mona Abaza, in her sociological memoir, describes as 'feudalistic capitalism' (Abaza 2013). Although the population of Al Khawatra and similar ezba are no longer landless peasants locked into low-paid work for the owner of a cotton plantation, the social relations of dependency and obligation between the people of the village and the Umda and his family persist.

### ***Increasing population***

Egypt's population, currently at 91 million is projected to increase up to 117 million by 2030; and up to 162 million by 2060 (Smith 2014: 18). The fertility rate (number of children per woman) is consistently higher in rural areas, thus driving increased demand for basic resources: food, water and housing, resulting in the urbanization of the countryside. How this population increase will be played out spatially, in terms of movement, dispersal and concentrations of people is not known, although the next factor, climate change, will undoubtedly be significant.

### ***Climate change***

Further pressures on Egyptian agriculture are happening due to climate change. Land in the northern delta is becoming salinated due to rising sea levels and IPCC projections for sea level rises across a range of scenarios show significant inundation of the coastal cities of Alexandria and Port Said. Reduced flows of the Nile, higher temperatures and increased evaporation will significantly reduce agricultural production in the delta. This, combined with increased population will mean there will be larger numbers of poor and malnourished people.<sup>19</sup>

Agricultural production (the total amount of food produced) decreases in all scenarios, even when water supplies are projected to increase. This is apparently because crop yields (how much is grown per feddan) are lower in all of the scenarios, which must outweigh the gains from increased water supplies. When Nile flow decreases 12%, production drops by more than one fourth; when flow decreases by one-third, production is cut in half. Total welfare is reduced by tens of billions of EGP by 2030 and by tens to hundreds of billions of EGP by 2060. By 2060, the change in welfare is quite sensitive to changes in Nile flow and baseline socioeconomic conditions (with the optimistic socioeconomic scenario resulting in a much lower reduction in welfare than under the pessimistic scenario). Employment in agriculture also drops, even when the Nile flow increases; it decreases by more than one-third in the driest scenario. Prices increase by a greater percentage than the reduction in production. The model allows imports to increase up to five times current levels. Without increased imports, prices would rise even more. With higher prices and decreased employment, the number of people with insufficient food is likely to increase. (Smith 2013, 22)

### ***Rural–urban convergence***

Nile delta villages manifest many of the same problems of Cairo's ashway'iyat: lack of infrastructure, lack of employment opportunities and unregulated building of housing on agricultural plots.

The problems of the '26 villages' are not specifically rural, rather they go to the changing nature of the relationship between the rural and the urban that has unfolded over the last 30 years. Socially engaged design needs to be informed by this – it requires an historical understanding. Solutions cannot be built on outdated and uninformed generalizations, especially the persistence, in the minds of many urban dwellers, of the city/countryside binary: the city as a place of noise, chaos, and pollution, and the countryside as natural and peaceful where people live a more simple way of life. City and country have always been intertwined and interdependent. In the pre-modern era, the countryside was a hinterland supplying the city with food, while in the modern and postmodern eras the relationship became more complex as agriculture was industrialized and globalized, and farmers became wage-laborers. Railways, motor vehicles and road networks reduced the spatial distance gap between city and country, while nowadays the internet and communication technologies reduce the knowledge gaps between rural and the urban populations while at the same time making urban trends and lifestyles highly visible and desirable and the local way of life deficient by comparison, especially for young people. These are global trends, but they are played out differently in different places.

In Egypt the urban–rural divide is also blurred because there is high connectivity between Cairo and the delta villages, with more than two thirds of Egypt's population being within a three-hour drive of Cairo (Sims 2012, 29). Many men who fill the low-paid jobs in Cairo's wealthy suburbs – the laborers, security staff, gardeners, drivers are from the villages; they either commute daily or return once a month.

This is linked also to a trend, over the last three of four decades, of massive immigration of rural people to Cairo bringing with them subsistence practices such as raising poultry in their houses. In parallel with this 'ruralization of the city' has been an 'urbanization of the countryside' as the red-brick multi-level constructions of Cairo's *ashway'iyat* spread to villages (Abaza 2013, 261) (Figure 8). In both peri-urban and Greater Cairo as well as in the delta villages, these buildings are constructed illegally and often on agricultural land. Why this occurred in the villages is explained by Abaza as an outcome of President Sadat's Open Door policy that saw huge numbers of impoverished Egyptians going to work in the oil-producing Arab states, Jordan and Iraq. Not only was this the first time 'peasants acquired passport and experienced air travel' but they earned wages and thus could purchase consumer goods and small parcels of land on which they built, when they returned to their villages after many years absence (Abaza 2013, 243).

## Part 6. Design solutions for a village?

Bringing the foregoing analysis together with the three design approaches discussed earlier in the paper, we will now explain the design thinking approaches used during the 'Cairo Design Futures Hothouse' and critically examine the proposed design solutions that emerged from the process. The 30 participants came from a variety of cultural and design backgrounds. They ranged from young Egyptian Teaching Assistants to experienced design educators (European, Australian and Egyptian) to Egyptian architects working on projects in Cairo's *ashway'iyat*. Knowledge of rural Egypt was unevenly spread: it was not only the Europeans and Australians who had never visited a Nile delta farm, but it was also the first time for many of the Cairenes (Figure 9).

### ***The field trip***

This group of people travelled to Al Khawatra at the invitation of the Umda (the ‘mayor’<sup>20</sup>). The purpose of the field trip was to observe and to talk to people in the community in a conversational way, to hear their stories rather than interviewing them. This was made easy by the hospitality and friendliness of the community. The visitors didn’t fit the usual categories of strangers – they were not politicians, officials or NGO workers, but guests of the Umda’s family. They were welcomed in his house with a feast of fresh farm produce; they were taken on a tour of the farm: the fields, cow yards, chicken houses, irrigation systems, and when they walked through the village, people came out of their houses to observe them and to talk (Figures 5 to 11). Local government officials were invited to brief the visitors at a meeting held on the verandah of the Umda’s house. During the meeting some young men from the village arrived and started to interrupt, saying that nothing is getting better, everything is becoming worse day after day – the transportation, education, water electricity, rubbish problems. The meeting erupted into heated debate, the government officials defending their actions and making accusations against local people for misusing grant funds (Video recording 2014). The foreigners and Cairenes could not participate, yet it was their presence that had brought the officials to the village and provided the opportunity for this to occur. This event illustrated an inevitable feature: that any community consists of different interest groups and that change or the prospects of change can spark conflict (such as a visit of experts or the prospects of funding). More significantly, there are always formal and informal power structures within a community and beyond it with links to more powerful forces of government and business.

### ***After the field trip***

Observations and stories collected were shared and reflected upon, with regard to problem-finding and exploring. The idea was to stay longer in this ‘pre-design’ phase – to better understand problems rather than leaping to the cure of symptoms. This goes against the grain for many designers attuned to noticing functional problems and eager to start working out technical solutions (cf. the Hippo Roller discussed above). Yet this pre-designing is not meant to stifle creativity and generating ideas, but to frame or direct the practical activity.

### ***Assets and potentials***

The village’s problems are described above. After the field visit the workshop participants focused on (i) identifying the village’s assets and potentials; (ii) linking the assets and potentialities with the problems, to generate new ideas. This was done via mind-mapping, brainstorming, ‘silent brainstorming’, clustering and diagramming.<sup>21</sup>

The assets noted were the skills and knowledge of the people, the variety of crops grown in the area, the existing businesses, and the fact that contrary to the stereotype many younger people didn’t want to leave and move to Cairo. However, there are few employment opportunities in Al Khawatra and the other 26 villages; additionally, some women want to be able to work at home because their husbands work in Cairo but do not send them money, which makes such women dependent on their in-laws (Workshop Notes 2014).

This prompted proposals to develop new products for existing businesses, as follows.

- The bakery makes and sells subsidized bread and is open for only four hours per day. *Proposal: expand product range using local produce e.g. date-filled biscuits.*
- The flour mill (Figure 3) manufactures bulk wheat flour. *Proposal: Manufacture rice flour – package and brand – sell in Cairo.*
- The wood workshop manufactures household furniture (Figure 10). *Proposal: expand product range, for example, (i) utilize waste rice-straw (it is usually burnt) to manufacture rice-straw board for shelving, etc.; (ii) design small wood products that women can finish at home.*
- Women expressed a desire for home work to improve incomes. *Proposal: conduct an audit of the women's skills, e.g. sewing, weaving, cooking, then develop product ideas to match capabilities, and provide training to enhance them.*
- A diversity of crops are grown: rice, wheat, sugar beets, beans, edible seeds, many different kinds of vegetables and fruits, plus animal products (poultry, cheese). *Proposal: add value to local crops rather than just growing for subsistence and for bulk selling. Examples: packaged rice; pickled peppers, tomato salsa, this linked to developing a branding and marketing strategy for village products.*

### **Social development**

Most of these proposals are 'Craft and small-scale production' as discussed in Part 4. However, the idea is not to replicate craft production done by other communities, or to 'pick out of the hat' a craft – like pottery or weaving and train local people. The idea is to discover the skills and interests within a community and build on them. Each proposed product would require more research, for example, on market gaps and competitors in regard to food products. But crucially, no matter how technically or commercially feasible, none would be initiated unless local entrepreneurs were convinced of their value and became involved. Even then, some proposals might benefit just one business without flow-on benefits to the wider community. This raises the question of how such enterprises could be organized to achieve the flow-on effects. One way would be by the formation of a co-operative. Currently, the only economic and social mechanisms available for improvement of the villages are government (which, as described above, is failing), local entrepreneurs (who may be in conflict with each other) and the unofficial power of the Umda. Some of the foreign workshop participants made another proposal – which may well be culturally unacceptable by this community – to form a *community consultative council (men's and women's group) to assess, prioritize and monitor local improvement and development projects. The community consultative council would provide support for the Umda and local entrepreneurs in negotiating with local government.*

Linked to the absence of such a political mechanism is the lack of public places. There is only the mosque and a small coffee shop frequented by men. There are no public gathering spaces for women and youth. This prompted a proposal to create a women's meeting place in the room next to the Mosque and to use the school after hours for a youth club and as a venue for offering short training courses.



**Figure 12.** Family, Al Khawatra. Photo by Tony Fry.

### ***Putting micro and macro views together***

These tentative proposals just mentioned link to other questions. How can people become informed of the large-scale, longer term forces that will affect and are already affecting what kind of futures are possible for them? How can they know, so they can make choices? How can young people become aware of other possibilities for having ‘a life worth living’ beyond the limited range of possibilities offered by their immediate community of their life-world? Elaborating on what was said before: the challenge in considering the village of Al Khawatra is to be able to make connections between: (i) problems at a micro-level as they might be observed by outsiders, and (ii) problems as experienced and named by members of the community and (iii) the macro forces that have shaped the village up to now, and (iv) macro forces likely to affect the future of village life. There are some methods that were used in the workshop that go towards this ambition. They are storytelling, scenario creation and ‘designing back from the future’.

### ***Storytelling and scenario creation***

Stories told by villagers were used to create characters and scenarios (Workshop Notes 2014). This has some similarities but is not quite the same as the personas and user journeys used in design research. To explain: during the research phase of product and service design, ‘personas’ and ‘user scenarios’ are sometimes created to help designers understand motivations, goals and expectations of the people for whom they are designing (Martin and Hannington 2012). Personas are not fantasy characters, but plausible, hybrid characters based on data from interviews and the target market. User scenarios are developed by imagining the persona doing an activity in a particular setting; scenarios usually have a storyline involving the user encountering a problem and seeking to overcome it. In this context, personas and scenarios are tied closely and related to a product/service in the process of development. In our case, we were also attempting to create plausible, composite ‘characters’ based on research, but for a different purpose: the characters and story-telling were a way of connecting small details and everyday life with bigger forces – environmental,

social, economic – so as to understand lives unfolding in time, and this as means toward imagining future possibilities.

An example: in telling a story about ‘Mr. Moustache’ (a local entrepreneur) and another story about the ‘Motorcycle Boys’ (dissatisfied youth) it was realized that perhaps ten years ago Mr. Moustache was himself a motorcycle boy.<sup>22</sup> This connected with stories of young men who left the village for what they thought would be a better life in Cairo, were disappointed and returned a few years later, not so much out of desperation but because they had discovered that they preferred the place they had left (Workshop Notes 2014). The value of such stories is that they show social situations to be more nuanced than the outdated stereotypes that still circulate in the media of Cairo over-run with unemployed rural people.<sup>23</sup> Knowing such stories could help in planning less destructive modes of village growth and the ‘urbanization of the countryside’ – designing ways to integrate housing construction and food cropping/production areas rather than assuming it is ‘either/or’.

### ***Designing back from the future***

Stories and scenarios can be extended by constructing a timeline: visualizing the village ‘travelling towards the future’ as ‘the future’ – global, national and regional trends – travels towards it. Here, story-telling and visualization are ways of making vivid future trends and directions usually expressed in the professional languages of reports, statistics and graphs (Fry 2009; Willis 2014). For example, by extrapolating from national population projections, likely population scenarios for the village could be created for the year 2050, with this followed by asking and answering questions such as ‘how and where will the increased number of people be housed?’ Then the climate change factors could be added: considering the effects of higher temperatures, more evaporation and less water available for irrigation what, if any, crops could be grown? How will people be making a living? Characters and stories, based on actual people and their stories collected by researchers, can be built up and inserted into the timeline to create plausible positive and negative scenarios. These techniques have the potential to be a means whereby people can imagine short and long-term futures. Optimally, such an exercise would be undertaken collaboratively between designers, researchers and community members. For various reasons, not least timing, it was not possible to do this; the Hothouse was held just before the start of Ramadan – a month when people are preoccupied with religious and family obligations, so it was not possible for the Hothouse participants to make a return visit to Al Khawatra. It also needs to be acknowledged that it was difficult to induct the designers and architects into creating scenarios and ‘designing back from the future’. These methods proved to be too unfamiliar, and unrelated to the designing of products, images, spaces and buildings – which is the comfort zone of most designers.

### **Conclusion**

This paper has sought to understand the problematic nature of socially engaged design, of projects in which Western and Western-trained designers seek to intervene to improve situations in (usually non-Western) communities-in -need. We approached this by describing the problems of a typical Nile delta village and the design solutions proposed by the ‘Cairo Design Futures Hothouse’. We contextualized this by explaining the developmental discourse in which socially engaged design is embedded, drawing on the critiques of Johnson, Kirk and others, that point to the tendency to focus on symptoms not causes, and the failure to

see poverty and inequality as structural. This adds up to not being able to see connections between highly visible everyday problems and the larger forces that create them, leading to design interventions (craft production, alternative technologies, and one-off public facilities) that are either inappropriate, ineffective or both. We argued that designers need to acquire a nuanced understanding of the context in which they seek to intervene, and we demonstrated this by exposing the complexity of the social and economic problems of an agricultural village in Egypt. What is clear is the necessity to see problems in time, to see how the past and present (the cotton production system and its social relations, dysfunctional government, increasing population, the effects of climate change on agriculture) travel towards the future – closing off some possibilities, opening up others. At one level the challenge then becomes how to effectively expose, communicate and respond to the structural causes of the problems of everyday life in these agricultural villages (or wherever a designer is seeking to intervene). Story-telling, scenario-creation and ‘designing back from the future’ have been put forward as means towards this. Nevertheless, these and similar methods must not be regarded as ‘magic bullets’. The problem that needs direct confrontation is not so much ‘out there’ and clearly visible in poor communities, but in the modes of thinking of aid workers, designers and the like, of how they define problems, and of their attachment to solutions that have more to do with maintaining certain kinds of professional practice than responding appropriately to the needs of the situation at hand.

### **Postscript**

This last point is illustrated via a delayed outcome of the ‘Cairo Design Futures Hothouse’. The organizer with family connections to the village further investigated some of the product and business development ideas discussed above (specifically, rice-straw products and value-adding agricultural produce) and discussed them with family members who could potentially fund them. She found the ideas to be unfeasible or that they generated little interest. Some family members stated that because she is an artist and designer she should be able to design something ‘that the women can make at home that can be sold and exported’. She knew this was not a simple process. One day at Al Khawatra, observing children climbing trees, it struck her that many of them have talents that will never be discovered, such as a talent for a sport they have never even heard of. This gave her the idea of a Sports Talent School that would introduce rural children to a variety of sports and provide free tuition to those with talent. She realized, ‘it’s not about art or design or making something’; here was a project that would focus on youth and therefore the future; it would benefit not just the talented ones but also the others by introducing them to the pleasures and health advantages of sport. It would provide rural youth with the kind of experiences that wealthy children of Cairo have in their sporting clubs. It’s an idea that requires much planning and support but, most importantly, it’s an idea that people are excited about.

### **Notes**

1. Johnson (2011) describes: ‘Architecture for Humanity, Project H, the Humanitarian International Design Organization, the International Design Clinic, and the Seattle-based media organization, Worldchanging, form principal nodes of this emergent movement comprised of architects, engineers, industrial designers, development professionals, grassroots activists, and the residents of underdeveloped communities and neighborhoods.’

2. For a critical account of development discourse see Arturo Escobar (1995) *Encountering Development: the Making and Unmaking of the Third World*, and Escobar (2005) 'Economics and the Space of Modernity: Tales of Market, Production and Labour'.
3. In saying this, we are not advocating a value-free stance, for this is not possible. As philosopher Georg Gadamer pointed out, the literal meaning of prejudice is 'pre-judgment' which is not a bad thing but inevitable: 'Prejudices are our biases of our openness to the world ... They are simply the conditions whereby we experience something – whereby what we encounter says something to us' (Gadamer 1996, 9).
4. Thirty Australian and Egyptian designers, educators, architects and planners participated in the 'Cairo Design Futures Hothouse' in June 2014. The initiative came from Tony Fry and staff of the Design Futures program at Griffith University, Australia who had led previous 'HotHouses' in Brisbane, Paris and Thessaloniki. The description 'HotHouse' is intended to evoke a pressured, intensive situation. The two Cairo organizers are the authors of this paper.
5. It needs to be acknowledged that a disadvantage of this approach was that for many participants it created the expectation that it would be a practical design workshop.
6. There are many definitions of Social Design. For example, 'new models, strategies and products that can play a decisive role in the development and transformation of society' is how the Design Academy, Eindhoven defines it in their description of a Master program in Social Design [www.designacademy.nl/Study/Master/General/SocialDesign.aspx](http://www.designacademy.nl/Study/Master/General/SocialDesign.aspx). A UK report states:
7. Faddān فادان in Arabic refers to 'yoke of oxen' and it was not a measure of land area but of land share varying according to fertility of the land and ability to work it with an animal.
8. One faddān is approximately 0.42 hectare. 2402 faddān s is the total cropping area of the 26 villages and is owned by 1513 people: 30 faddān plus – 5 people; 10–20 faddān – 50 people; 5–10 faddān – 175 people; 3–5 faddān– 260 people; 1–3 faddān – 420 people; less than 1 faddān – 503 people. (Q&A 2014).
9. Participants of the Cairo Design Futures Hothouse' made a field trip to Al Khawatra on 23 June 2014, this was arranged by one of the Cairo organizers through family connections. The quoted statements are from conversations with residents, and from government officials who met with the participants on the same day.
10. 'From the very beginning, development was not a process which involved only the material conditions of living, the upgrading of living standards and the modernization of the productive apparatus. More than that, development was, inevitably and perhaps more significantly, a mechanism through which a whole rationality was to be learned. For development to occur, the rationality of "Economic Man"/orientation towards profit and the market, individual behaviour and forms of production, rational economic choice in the sense of maximizing one's goals given scarce resources, etc. / had to be brought to the peoples of the Third World' (Arturo Escobar 2005).
11. He states that they 'coordinate, finance, and execute economic development, aid, and post-disaster relief and reconstruction projects worldwide.'
12. Quoted in Ritzer (2007, 70) discussing Simmel's essay 'The Poor'.
13. Personal communications from a project worker and a student volunteer in an Egyptian NGO, March 2015.
14. See Bruce Nussbaum, 'Is Humanitarian Design the New Imperialism?' <http://www.fastcodesign.com/1661859/is-humanitarian-design-the-new-imperialism> and the responses.
15. The term, Intermediate Technology, was first used by economist and founder of the Intermediate Technology Development Group, E.F. Scumacher, and it was intended to address the social and cultural, not just economic aspects of development; this was later elaborated in his book *Small is Beautiful: A Study of Economics As If People Mattered* (1973). Intermediate technology was seen by some development economists of the time as superior to the aid strategy of Technological Transfer, which was criticized for ignoring local conditions and mainly benefiting the First World transferees. Later, the term Appropriate Technology came to be more widely used, and it moved beyond the Development sector. Intermediate technology was criticized at the time for complicity in maintaining unequal power relations between industrialized and non-industrialized nations, see David Dickson (1974), *Alternative Technology and the Politics of Technical Change*.



16. About one quarter of the world's population live in informal areas or slums, and this is likely to increase because over 90 percent of urban growth is occurring in developing countries, with the population of the world's two poorest regions – South Asia and Sub-Saharan Africa – expected to double over the next two decades, suggesting a dramatic growth in numbers of people living in informal settlements (UN-Habitat 2015, 3).
17. An influential proponent of this view was British architect John Turner who worked in squatter settlements in Peru in the late 1950 to early 1960s, an experience that led him to advocate for the self-building and self-management of housing. See *Housing By People: Towards Autonomy in Building Environments*, Marion Boyars, London, 1976, New York 1977.
18. Since the early 1990s, when the government finally allowed the price of Egyptian cotton to be dictated by global markets, the sector has been in slow decline. Two decades ago, Egyptian growers produced up to 400,000 tonnes of cotton lint; last year, that figure had dropped to 127,000 (Kingsley 2015).
19. From the UNDP report, based mainly on 2007 IPCC data:
20. Umda – mayor of the 26 villages. 'Mayor' is a poor translation. Throughout the delta the Umdas are not elected representatives but the owners of large agricultural estates. Prior to the land reforms of the Nasser era, they exercised considerable power such as administering justice and settling disputes among the workers on their estates (Joseph P. Nahas quoted by Abaza 2013, 77). Although their legal authority diminished over time as large estates were divided and sold off in smaller parcels, the Umda remains influential in many rural communities.
21. These and related techniques are described in detail in, for example, Martin and Hannington (2012).
22. This was an observation by Australian participant, Tristan Schultz.
23. David Sims (2012) challenges this, noting that the influx of the rural poor to Cairo was more a phenomenon of the 1970s and 1980s and is no longer significant.

## Notes on contributors

**Anne-Marie Willis** is professor of Design Theory at the Faculty of Applied Sciences and Arts, German University in Cairo. She has published several books, most recently, editing the *Design Philosophy Reader* to be published by Bloomsbury during 2017.

**Eman Elbana** is assistant professor in the Department of Environmental Design at the Faculty of Applied Arts, Helwan University, Cairo. She is an artist and photographer who has held solo exhibitions in Egypt and Germany.

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