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Crafting futures in Lebanese refugee camps

The case of Burj El Barajneh Palestinian camp

Abstract

The initiative at the Burj El Barajneh camp is run by a network of local associations and aims at improving living conditions, services, infrastructure and livelihoods for the inhabitants. Burj El Barajneh has a large number of active associations and many highly educated professionals. However, in this complex hyperdense context, any kind of change needs to be carefully considered; there are no simple recipes, and existing professional expertise does not necessarily match the specific conditions of the locality. By working with collective design and collaboration between the camp's inhabitants, it becomes possible to envisage larger coordinated efforts and to solve issues that remain blocked at an individual level.

Keywords: research, architecture, systemic design, refugee camps, social environment, sustainable models

Systemic design as situated and socially positioned practice

In an early discussion of what design is and what it can be, Buchanan (1992) contrasts theoretical approaches with practical approaches to design. The former tends to pursue a particular idea systematically in order to clarify the ultimate implications of different models or stances. Practical approaches, Buchanan argues, instead tend to be more pragmatic and open to contributions from various sources, since they are action-oriented and, above all, interested in finding concrete solutions that work in the real world. Following Buchanan, we here consider design as a practice, but additionally as a practice that is situated. We further argue that design work in communities differs from other types of design approaches in several ways. Design professionals typically receive tasks from companies or public institutions. The mission is limited in time and framed as a 'project' (cf. Dorst, 2017). Costs are covered, and modes of implementation are assured by the entity that employs the design professional. Additionally, in commissioned design projects, the 'problem' is already formulated and framed (although it may be complex and fuzzy, lacking clarity and completeness, or impossible to disentangle and 'solve'). The design professional can develop professionalism over time across different projects and can additionally draw on an extensive body of relevant experience from the profession (cf. Dorst, 2017).

In community settings, by contrast, nothing is given in advance. The design process must therefore not only work on improving conditions for a particular situation that is perceived as problematic in the community, but in parallel consider strategies to continually mobilise resources, maintain momentum in the processes, build a body of relevant experience, and develop capacity in the community itself (designing design). Only with time can such processes become self-sustaining, if a local culture of design develops. Professional expertise is, in this case, not located primarily in the individual practitioner but is distributed. Developing professional expertise involves gradually expanding the number of people interested in systemic design who live in the community and finding ways to strengthen capacity for collaboration and initiative.

The Burj El Barajneh initiative draws on existing associations and networks as a platform for action to enable community engagement. However, in a turbulent environment like

Lebanon, associations are constantly forced to reassess priorities as new emergencies appear. Particular strategies, therefore, need to be developed to work with this inherent instability. Developing methods of working with collective design in the context of the Burj El Barajneh refugee camp can contribute not only to similar contexts in Lebanon but also help to address crises in other Middle Eastern countries. It is important to bear in mind, however, the differences that exist between the various national environments and how they impact the scope for community-based action. The various armed conflicts in the region have, on the one hand, created a climate of deep distrust between religious, ethnic and political factions and on the other hand have promoted strong mechanisms of military and political control. Governments support religious organisations that advocate resignation and submission, maintaining the status quo rather than mobilisation for change. These factors limit opportunities for collaboration across wider groups and instead enhance defensive reactions. A succession of failed attempts for political reform coupled with economic dysfunction has also generated a general climate of hopelessness and fatalism.

Action-oriented design approaches in community settings

The open nature of design thinking and systemic design compared to more conventional systems approaches have been discussed in the literature as both an asset and a potential weakness. Dorst (2003) talks about design as oriented towards problems that are not completely defined from the outset and which necessitate (objective or subjective) interpretation by the designer. Working with problems that are not fully defined or understood carries the risk of reaching solutions that are limited to an immediate or partial understanding of issues. Also, design solutions do not pretend to represent absolute qualities of reality but rather constitute concrete suggestions for possible ways to deal with a reality that cannot be grasped in its totality, and which is experienced differently from various positions. Sevaldson (2013) thus underlines the advantages design thinking has in working holistically and openly with complex issues. Any particular way of framing problems in a situation is informed by the values and interests of the stakeholders and must be negotiated. A process of investigation is required to gain a better understanding of both material aspects and stakeholder perceptions. Such aspects are particularly important in community settings, such as the Burj El Barajneh camp. At the same time, Sevaldson argues for drawing from both design and engineering traditions for gaining stronger vantage points, since in focusing a problem at hand, systemic qualities and the longer-term developments may be backgrounded. Systemic design thus has the advantage of making it possible to combine a holistic view of the dynamics of the larger context involved, an explorative open-ended approach, and concrete work with a particular issue.

Synthesising much of the work in the field, Jones (2014) points to some of the fundamental assumptions that underlie design, and conventional systems approaches, respectively and theorises on how the two families of traditions relate to each other. He mentions that a potential weakness in design thinking is that, through its orientation towards action and producing 'solutions', such approaches may neglect a more analytical or deeper understanding of causalities. Jones concludes, however, that addressing major challenges in our societies requires social methods at the overall level, rather than as a detached add-on at the stage of applying solutions emerging from natural science. Much of the theoretical work on transitions to sustainability also points to the intrinsically social and value-based nature of societal shifts (see, e.g., Waddock et al., 2015). This stress on the integrative function of design, together with the potential to negotiate diverging interests and perceptions, appears as one of the most fundamental strengths of the approach.

Besides the question of how to relate or integrate the holistic and analytical qualities of design and systems thinking, various objections can be raised from a theoretical standpoint towards uncritical 'social engineering' approaches, including issues of uncertainty, the ways systems modelling is used as a representation of reality, and the consequences the use of simplified representations can have in decision-making. However, with respect to the concerns

of the present study and the issue of developing livelihoods and infrastructure in local communities, the main arguments for systemic design relate to democracy, locus of control and the destructive impacts that mainstream policies may have on local communities.

The case of Burj El Barajneh

For the past few years, Lebanon has been strongly affected by the crisis in neighbouring Syria. Faced with hopeless conditions in the countryside, many try to find jobs in the cities (Sanyal, 2017). The arrival of Syrian refugees has added to the strain on infrastructure and services (Boustani et al., 2016; Fawaz, 2017) in low income neighbourhoods of Beirut. In areas like Burj El Barajneh, the high cost of materials for repairs, the practice of building additional floors to house the influx of Syrians, and pressures on infrastructure that was overtaxed already before the arrival of the newest refugees, have all led to rapidly deteriorating conditions for the camp inhabitants.

Like the other inhabitants of Beirut, people in Burj El Barajneh suffer from the effects of economic forces at the societal level, over which they have no influence (cf. Fawaz, 2009). Local production is outcompeted by cheap imports from China and other Asian countries, which reduces available jobs (Said, 2017). The large number of Syrian refugees desperate to find work has pushed wages down even further, particularly for the already poorly paid occasional jobs in service or construction. Both the influx of people hoping for a better future in the city and the housing speculation driven by financial and political logic, combine to push rents up and increase the cost of living (Sakr-Tierney, 2017). Local authorities strive to make the city attractive to the wealthiest and to entice investors. Speculation affects newly constructed apartment blocks, as well as older buildings in attractive central locations. At the same time, not only housing, but also prices for many services and commodities are driven up by rich visitors from the Gulf, as well as by Lebanese from other countries, who can pay with stronger currencies. These tendencies create vulnerable conditions for large segments of the Lebanese population. As in other countries, refugees and undocumented migrants are even more exposed. Unfortunately, also, the crisis which affects poor Lebanese is fuelling resentment towards the even weaker groups, who are ready to work for wages far below subsistence levels.

Another, less obvious effect of the economic disparities in Beirut is how it affects the competence profile of professionals in design, architecture and engineering. Since it is less rewarding to serve the needs of the poor than to cater to the tastes of the richest, educated professionals will typically aspire to find employment in activities oriented towards the very rich. Their professional qualifications and specialisations, therefore, tend to be oriented in this direction. Since these are the qualifications with which educated young people can hope to find employment, the higher education institutions and the teachers who teach there will also have such profiles. The large income disparities and the reliance on foreign capital have not only affected the kind of education that is available: it also has effects on the policies of policy makers, concerning infrastructure, public services or urban planning (Nucho, 2016; Verdeil, 2017). Many types of municipal services are lacking or inadequate (Mourad & Piron, 2016).

The economic and social dynamics of the city have thus created a situation where professionals with university degrees simply do not have the skills needed to address the needs of poorer segments of the population. At the same time, very few employment opportunities exist in sectors of public interest. Since young people are driven by the hope that they will succeed and find jobs, the combined effect is that there are many highly educated professionals in the city, including in the Burj El Barajneh camp, who are unemployed or employed in jobs that do not match their qualifications (see Khazaal, 2015, January 04).

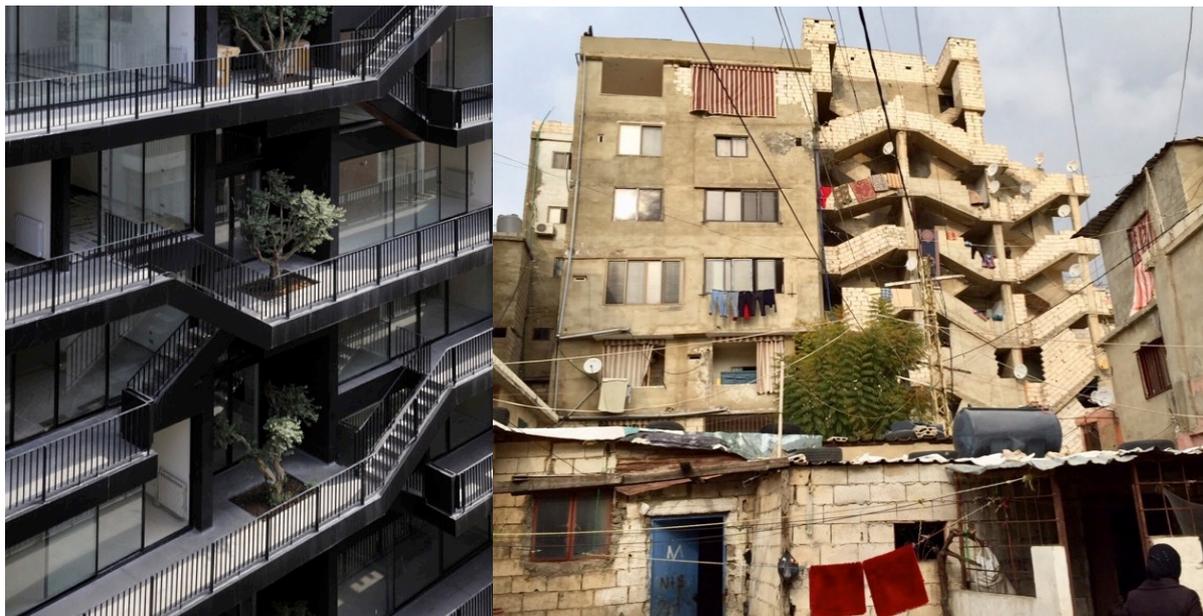


Figure 1. Left: Residential building by Bernard Khoury Architects versus right; a residential building in Shatila Palestinian camp. A comparison of professional market versus the needs market. All photos and illustrations in this article are by Nihal Halimeh.

One of the starting points for this project is that these young people could potentially be a valuable resource for their communities if only their competence better matched the needs of the inhabitants. The situation in Beirut described above is just an extreme case of a more general tendency. Across a variety of contexts worldwide, we can observe that urban planning and infrastructure choices, as well as the orientation of higher education, are generally managed and conceptualised by the larger actors and are consequently structured by considerations of governance and markets. Professional qualifications, policies and planning practices are therefore not primarily oriented to serve the needs of neglected communities or informal settlements, and often policies are instead directed towards containing and controlling the negative effects of social disparities. While negative social impacts may be mitigated by welfare policies in countries of the global north, welfare in Lebanon is, to a large extent, left to charities and non-government organisations (NGOs). Also, in Lebanon, the cost of university drives students to opt for the most profitable career options. Structural factors thus combine to shape cities like Beirut into socially partitioned segments with sharp divides and chronic inadequacies in infrastructure.

Even potentially positive planning initiatives, such as attempts to green the cities, are not always adapted to local social conditions (cf. Makhzoumi, 2015; see also Verdeil 2010 for a history of Beirut's urban development and social tensions leading to the war). The mismatch between available professional knowledge and existing needs is aggravated by the fact that neighbourhoods like Burj El Barajneh have specific conditions and features that make it difficult to apply standardised solutions. Finding workable practices to address challenges in such contexts is not easy to achieve for outsiders, who would have difficulties perceiving the multiple layers of signification, the complexities of social relationships, and the unspoken functions of various features in the built, organisational and technical structures (cf. Halimeh, 2014; Halimeh & El-Daccache, 2014).

Palestinian camps in Lebanon

The lives of Palestinians in Lebanon are regulated by special laws, which restrict their lives in many ways (Al-Natour, 1997; Hanafi & Long, 2010). For instance, Palestinians are prohibited by law from working in 78 professions. Similarly, an array of restrictions applies to Syrian

refugees, intending to prevent a permanent settlement of the displaced (Sanyal, 2017). Syrians need a sponsor to be allowed to work. Work and residence permits are expensive, wages are low and employers sometimes exploit the extreme vulnerability of the refugees to refuse payment altogether.

Many neighbourhoods in Beirut are built in conditions of informality (Fawaz, 2009; Sanyal, 2017) or semi-formality, which exposes them to demolition. Compared to the newer settlements, the old Palestinian camps like Burj El Barajneh are relatively privileged in this respect since the land is officially allocated for the establishment of these camps, although the residents do not own it. The United Nations agency for Palestinian refugees (UNRWA) is responsible for the Palestinian camps and provides a wide array of services to the inhabitants (McLoughlin, 2016; Hammoud, 2017). Nevertheless, these services and social projects do not suffice to meet actual needs. The scope and applications of measures organised by UNRWA are further limited by government policies aiming to 'contain' the refugee populations.

On the other hand, Burj El Barajneh is home to numerous NGOs and community associations. The number of associations operating in the camp could be a very valuable asset to the community, but coordination is lacking. Importantly, each association focuses on a limited goal while insufficient attention is given to the overarching questions, such as infrastructure or the structural and systemic aspects of the local economy. Crucial issues are the electricity grid (cf. Ghanem, 2017) and water (Yamout & El-Fadel, 2005; Khoury, Graczyk, Burnham, Jurdi, & Goldman, 2016), but also underlying conditions for livelihoods. Infrastructure is therefore here understood in the wider sense given by Edwards (2003), not only as elements of the built environment but as underlying structures enabling other activities. Infrastructure in this sense includes developments in technology and the social structures that develop to match a particular technical system.

The Palestinian presence in Lebanon dates from the Nakba in 1948. The community is best described as one of protracted (long-term) refugees rather than refugees fleeing from recent conflict. Despite their longstanding presence in Lebanon, Palestine refugees remain excluded from key aspects of social, political and economic life in the country. Indeed, they are barred from owning property or practising in numerous professions, of which many are liberal professions. Recent changes in labour regulations have yet done little to change this. Chaker Khazaal, a journalist originally from Burj El Barajneh, writes: 'Disillusioned with the system, most young people drop out of school, supporting themselves and their family any way they can ... All free-lance jobs were perfect, construction, plastering, painting, tiling, polishing and pouring concrete, mechanics. Everything is easy to be done by hand, but it was only for the purpose of surviving, and not to create and build success' (Khazaal, 2015, January 04). By contrast, Palestine refugees residing in Syria and Jordan can work in all professions and own property. Additional tension is created by the fact that the Lebanese army controls access to Palestine refugee camps, restricting refugees' mobility. This social exclusion physically extends to camps, the space inhabited by about two thirds of Palestinian refugees.

Camps are enclaves which lie outside the responsibility of the Lebanese state. However, the surface area of the camps has not increased with the population, and many have become cramped shantytowns, offering little privacy to residents and exposing them to health hazards. Although a total of 46 Arab organisations and 20 foreign NGOs assist Palestine refugees in Lebanon, the volume and scope of their assistance pales in comparison to services delivered by UNRWA. Within camps, UNRWA provides housing, water and electricity. These services do not extend to gatherings and camp surroundings, also mostly inhabited by Palestinians, and which suffer from irregular waste disposal and water and electricity supply since these are officially the responsibility of the Lebanese Government outside the enclaves. UNRWA also provides education, health care services as well as some additional welfare services to Palestinians living in camps as well as those living in 'gatherings' (neighbourhoods with a high density of Palestinians, but without camp status).

The current situation is changing, however, and funding for services provided by UNRWA is shrinking due to global political changes. In 2018, the US government initiated a series of cuts to UNRWA funding (Aljazeera News, 2018, 17 January). In a letter, the State Department said that additional US donations would be contingent on ‘major changes’ by UNRWA. Unfortunately, the UNRWA has always been the lifeline for all registered Palestinian refugees in the occupied territories and Jordan, Lebanon and Syria. In the case of the Burj El Barajneh camp, many basic services are in danger, not just because of the reduction in funding but also due to the lack of other sources of expertise and know-how relevant to the refugees’ life situation. Against this background, empowering networks in the camp on educational, health and economic levels appears more urgent than ever.

Networks and structures in the Burj El Barajneh camp

The camp corresponds to a unique structure that has evolved according to the everyday needs of its community through vernacular adaptation to political and social constraints.



Figure 2. Visual representation of Burj El Barajneh camp.

Being limited within less than 1 square kilometre, more than 30,000 refugees are hosted in a compound virtually bounded and physically limited by the surrounding context (Figure 1) (as a point of comparison, see Rae, 2018, March 22, for an overview of the morphology of the densest European city areas). Understanding the ways people live at a micro scale leads us to discover a hidden network at the scale of the camp as a whole. Mapping the various networks, their interconnections, and physical distribution over the area provides a better understanding of core issues for the camp: dead spaces versus a lack of space, poverty versus limiting laws and existing skills but with a lack of know-how.

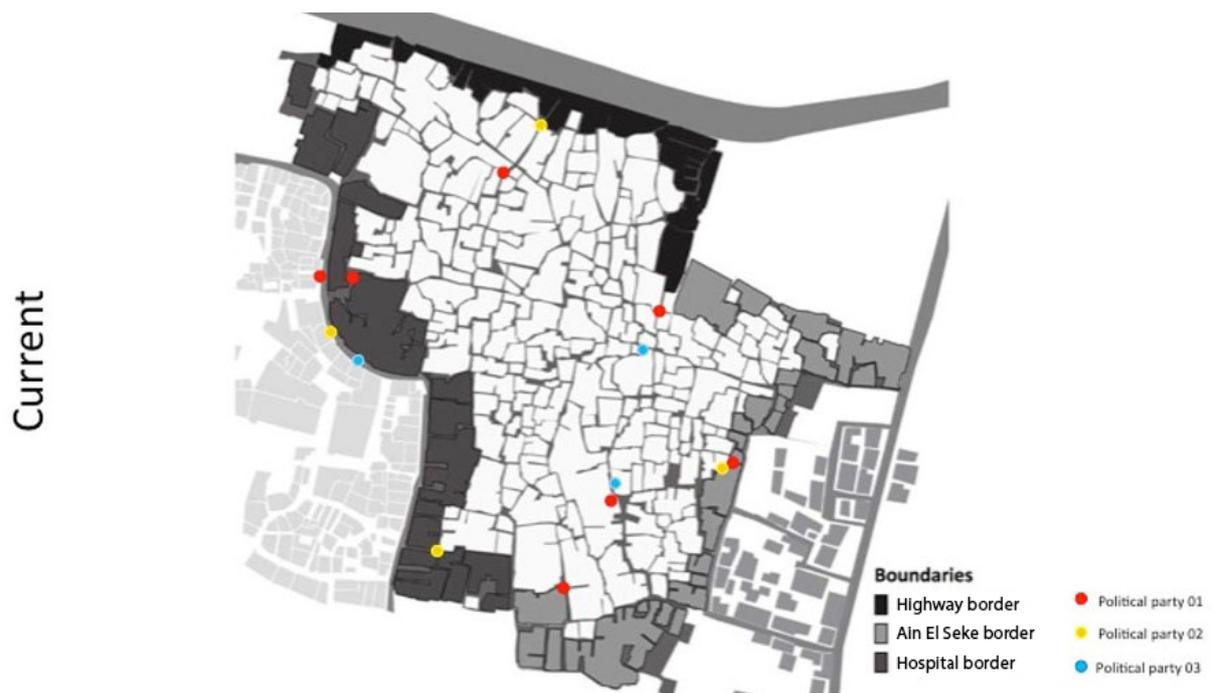


Figure 3. Camp boundaries and distribution of political parties.



Figure 4. Saha and commercial market network.

Many generations of the same family live in the same building or, more commonly, in a cluster of buildings, forming a private courtyard for the buildings bounding it. As ground level space is used up, stories are added to accommodate the growing family.

Observed weaknesses are largely a result of fragmentation: lack of connectivity between certain programmes of the same kind within the camp as well as limited connections between the camp and its surroundings. Lack of coordination and lack of connecting structures keep these programmes from reaching their full potential. In instances where they are connected more efficiently, such as the case of Sahat Palestine (where the souk in it has a connection to the neighbouring souk), the marketplace is strengthened to become an integral part of the city's souks.

There is an extreme lack of space within the camp, with most rooms shared by three people or more. There is also a lack of public space. The only spaces in which people could gather are the residual spaces around markets and between buildings. These Sahat (open squares) are scattered around the camp and include spaces created by a souk on the periphery of the camp and spaces adjacent to institutional buildings. The average size of a Saha is not more than 16 sqm (that is, corresponding to 4X4 metres).

Other breathing spaces are 'dead spaces' within the building blocks that are left unused or used for technical reasons since elevating them to the roofs is rather challenging. These spaces could be transformed into more usable spaces since open space is so scarce, and could serve the communities around them (Figure 4).

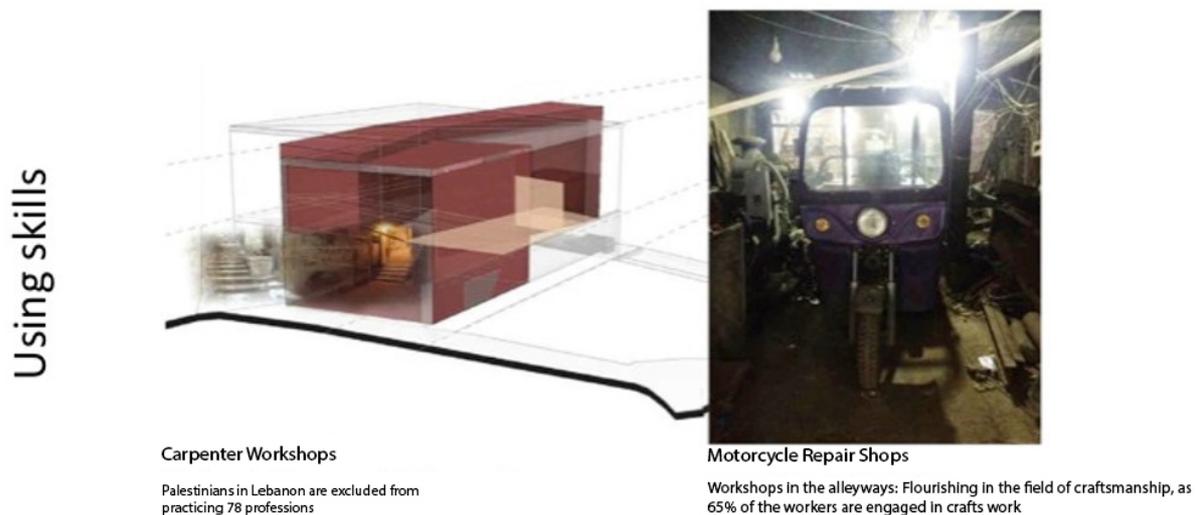


Figure 5. Metal and wrought-iron workshop exploring the creation of a motorcycle out of a Ferris wheel cabin and other elements in the Burj El Barajneh camp.

The principal strength and resources of the camp derive from trust, a strong social fabric and solidarity. However, physical structures do not always support coordination and necessary connections. For example, the commercial streets that are ample in and around the camp are strong in their immediate locations, yet are disconnected on an urban level. Disconnection and fragmentation become a bottleneck, preventing existing programmes from developing further for instance, by networking with other organisations and receiving positive impulses (Figure 5).

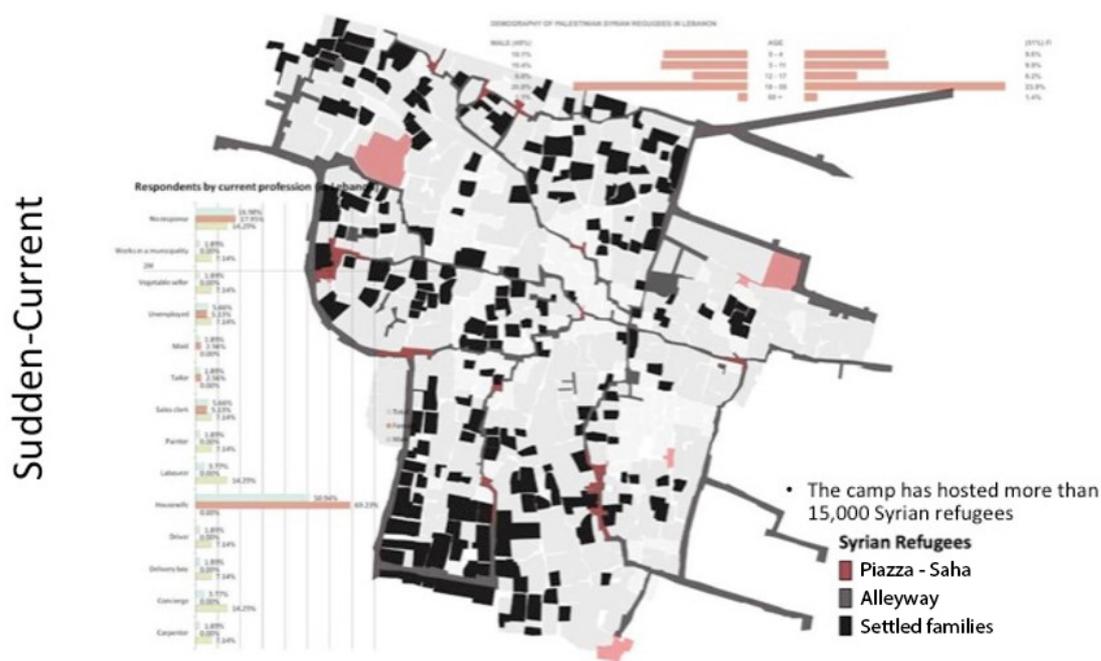


Figure 6. Syrian spread in Burj El Barajneh camp.

With the influx of Syrian refugees, the camp population has more than doubled, placing a huge strain on infrastructure. The strain is not only social, also the rising structures piercing through the urban fabric are negatively affecting the area. The spread of the Syrian refugee residency is found most notably on the peripheral areas. Most housing used by Syrians in the more interior areas of the camp has seemingly followed the area around a path leading to a Saha.

The mechanism has created a piece of the city born out of the functional needs of everyday life and developed from elements that are part of images and memories. These memories are there, hidden in the narrow alleys, between the walls and tiny glints of soft lights that define their type of public passages and make way to a very active and economic market, that is however only limitedly connected to the city of Beirut.

The Burj El Barajneh Souk Project

The Souk project aims to empower an existing network of talent and craftsmanship among the camp inhabitants, thereby creating a metaphorical bridge that connects and brings together segregated divisions on the political, social and urban levels. Based on an ethnographic and spatial mapping of existing networks, flows and structures within the Burj El Barajneh Palestinian camp, the Souk project aims to use architectural methods to address the economic and social relationships within the enclosed city and its surrounding neighbourhoods (Figure 7). By working together with artisans and other residents on the Souk project, professionals from the camp are developing skills relevant to the context. A new kind of knowledge is created through collective design processes. At the same time, by connecting academic environments in Lebanon and abroad with different professionals, as well as with some of the other camps locally, the group can share experiences and draw on new techniques and ideas.

In hyperdense urban contexts like Burj El Barajneh, space does not function as a neutral or open empty expanse within which new structures can be freely imagined and constructed. Each microspace already serves and negotiates multiple functions, affecting social relationships, livelihoods, health and wellbeing. Even small modifications will, therefore, have multiple impacts on vital aspects of society. The vision for transforming the current Souk is to renovate it into a space that connects the camp to research circles in Lebanon for collective design and socially oriented urban planning. The initiative will mobilise and utilise the camp's

local talent while developing and expanding on the current knowledge and concepts needed to support a sustainable economy (Figure 8).

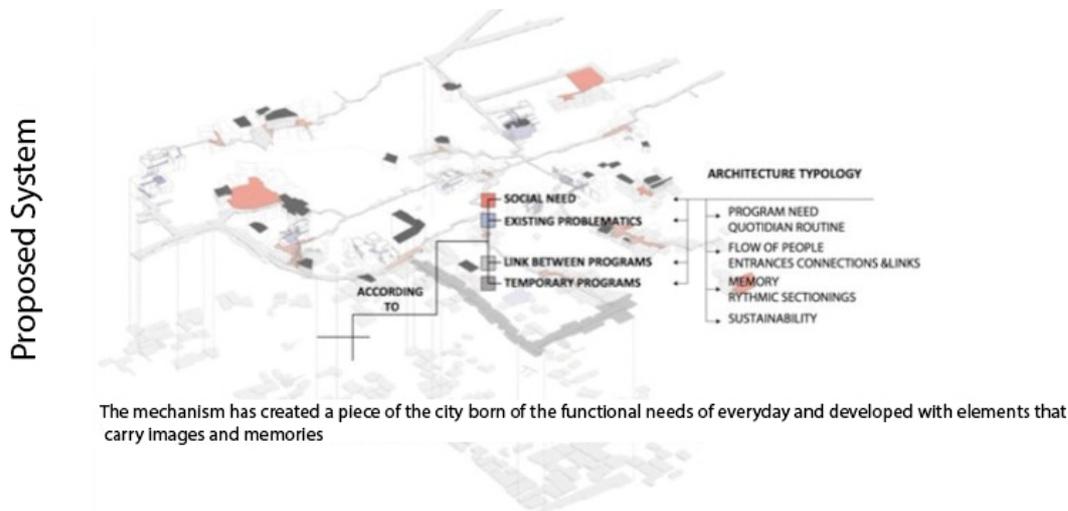


Figure 7. Using the city elements drawing on the systemic analysis of Burj El Barajneh camp.

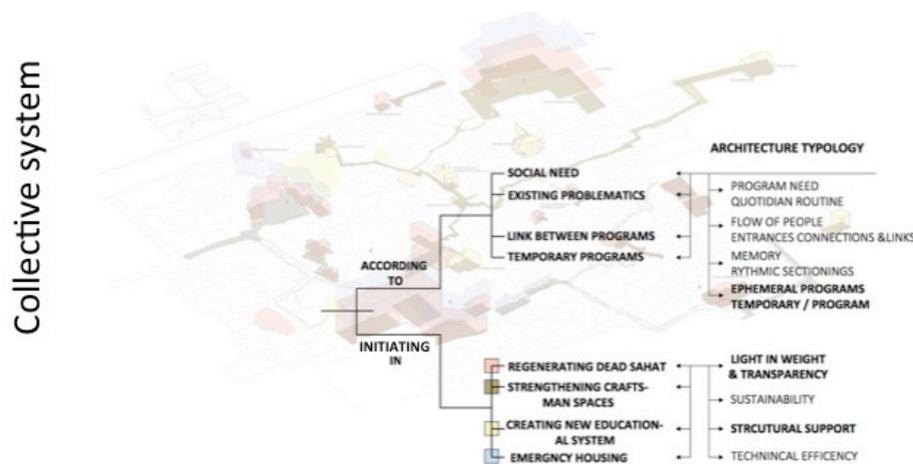


Figure 8. Collective system strategy.

Change as risk and opportunity

Strategies for innovation and development regularly frame change as something positive. ‘Interventions’ are made to achieve ‘improvements’. Typically, such initiatives start at policy levels, to be implemented and applied in different settings. Even when the interventions are based on needs assessments or comprise a participatory element, key aspects of the processes and agenda-setting are driven by people who are not themselves part of the concerned communities. However, in hyperdense urban settings, such as Burj El Barajneh, any intervention is more likely to produce disruption than empower transformation. There are several reasons for this. Even under the most favourable circumstances, any innovation is a risk since the short- and long-term impacts are not entirely foreseeable. However, poor communities do not have margins to operate within. With residents living at or under subsistence levels, even minor losses can lead to the collapse of entire families or trigger a breakdown in systems of dependence and interdependence. Fragile balances between groups are destabilised. The surroundings are no longer comprehensible, predictable and safe. Changing the place can be

lived as place destruction, with loss of identity (cf. Dixon & Durrheim, 2000; Bevan, 2016) as well as loss of sense of coherence, resilience and agency. When the setting is hyperdense, two additional risks arise: first, every space is already multifunctional, enabling highly complex networks of social relationships, supporting vital activities, shaping physical flows or protective boundaries. Spaces are so tightly interlocked and enmeshed that any act is likely to impact the camp as a system. There is no open space to 'move into' if anything is built or demolished. Waste or disruptions cannot be easily evacuated or externalised. The camp thus functions like a living organism, where changes affect homeostasis and the integrity of vital functions.

The second risk is that since indoor and outdoor spaces have been collapsed into an ambiguous in- and outdooriness, boundaries between the private/intimate/ personal and the collective/neighbourly/public are also at stake. Interventions cut right into the intimacy of residents' lives, and there is no protective personal home-space available to cushion the shocks. A final risk is that the larger the scale of the intervention, the more likely it is to be accompanied by corruption. Involving large sums of money will typically increase the divide between the haves and the have-nots, further weakening the position of the weakest. The complexity of the ways every element of space interrelates and functions make it vital to understand the implications of any change fully. Even more importantly, all changes need to be coordinated within the community. Processes have to be negotiated, but also controlled by the community, so that any necessary micro-adjustments or reversals can be made. Expertise needs to be developed from within the concerned community itself (cf. Lindhult, 2016).

Crafting the future for flourishing communities

Design as a profession has to a great extent been shaped by an industrial paradigm (cf. Skjerven, & Reitan, 2017, p. 20 ff). Concerning contexts such as Burj El Barajneh; however, there could be arguments for new forms of craftsmanship. Craftsmanship in this sense is not a question of reverting to earlier modes of production, but rather of exploring how to use contemporary economic systems and technologies in more empowering ways.

It is frequently maintained that industrial paradigm lowers costs, and thereby gives the poor access to commodities that they could not otherwise afford. However, in the context of Burj El Barajneh, we observe needs that are not met, coupled with unsatisfactory employment conditions. Some inhabitants have multiple jobs, struggling to make ends meet, but no longer have the time or energy to take care of children or the elderly. Many inhabitants have emigrated or aspire to do so since their present living conditions appear hopeless. Other inhabitants are unemployed and lose motivation and sense of self.

Hornberg (2016) has argued that technologies as well as the corresponding artefacts co-construct social relationships, power structures and economic paradigms. Within the industrial paradigm, the enormous investment required to establish competitive industries creates insurmountable thresholds, so the technologies and modes of production determine not only the flow of profits and accumulation of capital, but also the ability to do the work that needs to be done – or even work at all. Authors, such as Miriam Glucksmann (2014), have discussed how the division of labour can shift in various economic configurations, moving between paid and unpaid work. She also points out the shift from *making* to *buying*, giving the example of food preparation. Revalorising craftsmanship would instead lower initial investments and enable shifts from buying to making. In a context where gaining any income entails disproportionate sacrifice, such shifts become significant.

Industry is based on economies of scale, mass-production and technologies that place the locus of strategic control in the hands of the large commercial actors (Hornborg, 2001). Craftsmanship is instead characterised by adaptability, creativity and sensitivity to the specific characteristics of the client. This is why craftsmanship can provide a better quality of life for the people benefitting from the craftsman or woman's work, but also a sense of agency and accomplishment for the craftsman him- or herself. By placing the locus of strategic control in a relational space where dialogue is possible, within the community itself, a crafts-based mode

of designing and producing can also empower the community as a whole. Importantly, it allows collective reflection and decision-making on the larger issues. While both consumers and sub-contractors in an industrial model are reduced to accepting or rejecting the commodities or services that they are offered, developing designing capacity within the community opens possibilities to coordinate actions, envisioning and putting into action ideas for better structures.

Finally, the industrial paradigm is geared to the production of goods, and people are drawn from the sphere of 'reproduction' – including caring and nurturing – to be placed at the disposal of the labour market. Even caring becomes part of the formal economy when services are bought. Thus, paradoxically, services become 'expensive'. People need to leave the camp to earn money to pay for the work they no longer have time to do. Older adults are left alone while their children emigrate.

Meanwhile, other camp inhabitants are unemployed and become dependent on charities or remittances for survival. Here, Khazaal points to the potential of new technologies, changing possible forms of work: 'As another generation of Palestinian refugees succumb to personal and academic dead ends, we must explore alternate options, with a view to leveraging our resources with "like minded" business models.' With the rapid growth of technology in the digital landscape, 'remote' employment is a lucrative alternative. Advertised positions in medical billing and coding, textbook writing and editing, project management, fashion, web design or virtual instructors, present a vast array of options" (Khazaal, 2015, January 04). However, even such emerging forms of work are affected by the limitations in available space, infrastructure and constant power outages. Internet connection is adequate for social media and snatching pieces of entertainment but does not provide a reliable basis for work.

The area of research and as well as practice of systemic design has produced a wide array of powerful tools, such as Gigamaps (cf. Sevaldson, 2015), that allow groups of people to collectively vision, solve complex issues, negotiate and reach meaningful agreements, reframe problems and collaborate across professional or other boundaries. For the context of Burj El Barajneh, key aspects are that effective teams can be rapidly formed, that the complexity of issues and causal relationships can be taken into account and that creativity is supported. To be able to search for more fulfilling and dignified life opportunities, an overview is needed of the intricate systemic relationships involved. Systemic design can here play a catalysing role.

In the context of collective design work in settings such as Burj El Barajneh, the fluid, open and holistic aspects of systemic design compared to 'hard' systems approaches, are not only valuable features in terms of creativity for problem-solving but indispensable characteristics. There are several reasons for this. Firstly, the purpose is not to provide models or elaborate forecasts that can be used by decision-makers who already can implement choices in governance or strategy but to provide lightweight tools that enable local inhabitants to improve their conditions of life. The action-oriented dimension of design thinking is therefore central to the purpose.

Second, conventional modelling approaches depend on a vast and costly apparatus for collecting data. However, harvesting data on inhabitants' lives in this manner is intrusive and places the locus of control far outside the reach of ordinary citizens. The large scale of systemic solutions that tend to be proposed in such planning approaches creates a lock-in effect, inertia, rigidity and commitment to particular solutions and pathways, that often also are sponsored by large actors. Such tendencies in planning are illustrated by several of the climate engineering solutions currently under discussion, as well as being visible in in the area of transport systems, water management or energy systems for instance. Such large-scale choices engage entire systems and tend to preclude alternative options. They are risky, difficult to reverse and the large scale and complex entanglements make piece-by-piece remediation or adjustment difficult. Uncertainties concerning alternatives, lack of capital for sudden massive change, and difficulties in mobilising consensus for change can turn such commitments into costly dead ends.

Third, and importantly, optimisation seen from the vantage point of large actors may not correspond to the interests of the communities, even in the general orientation of interventions and in long-term goals. Supposing that decision-makers are well-intentioned, in their concrete realisations, large-scale optimised solutions will still not match the specific needs of the individuals. This mismatch arises because effectiveness in governance (perceived from the vantage point of decision-makers) involves structurally tightly coupling (cf. Orton & Weick, 1990) sets of dependencies, thus rendering structures less responsive, malleable or permeable to action and initiatives at individual or community levels. The large scale of interventions will also socially and geographically distance points of action and the places where effects are felt, systematically evacuating issues of empathy (Sustar & Mattelmäki, 2017) and caring from the considerations. When faced with major changes in society, groups with wider margins of action can adapt or even profit from the new situation, changing location or means of earning their living. By contrast, vulnerable groups have a limited set of options. They are already balancing multiple constraints to survive, and even minor changes and unexpected events may lead to the destruction of the basis of existence.

Structural pressures also affect the individuals involved in design projects, forcing them to fragment their time and respond to various demands that cannot be foreseen or integrated into conventional planning. Working with communities living with these pressures, arranging meetings of several people becomes difficult. Methodologies, therefore, need to be organised in ways so they can be used “in the moment”. It has been argued that facilitation and the creation of shared open, but ‘safe’, environments for negotiation, visioning and coordination offers pathways to catalyse collective action and begin to address the challenges inherent in contexts with numerous stakeholders and sometimes conflicting interests. Clearly, drawing on experiences of guided bottom-up development has relevance for the dynamics of processes in contexts such as Burj El Barajneh, although it requires a delicate balancing within existing relationships of power. Allowing sufficient time for negotiations and navigating tensions with sensitivity are therefore crucial elements in building capacity and education for design.

Conclusion

The territoriality of domains of influence of associations, groups and families within the camp provides physical localised points of departure as well as the personal and relational basis for any action. At the same time, territoriality generates resistance towards coordination across larger areas. Starting points, therefore, must respect boundaries and use various spaces already allocated for communal action (schools, senior citizen activity centre, clubs), or build on existing ownership. Places for action include the craftsmens’ workshops in the Souk, parts of family-owned buildings facing towards the alleyways, ‘dead space’ between buildings and the connections between family properties (electrical lines, lighting of the alleyways, waterpipes and flowing water). A key aspect is to build on the property owners’ immediate interests, as well as engaging visible public space. Making repairs and adding features to the built environment is already a source of employment for young people. Introducing a collective design approach serves to give these activities a direction: widening available skills, strengthening synergies, building new relationships, providing continuity and vision.

Which associations are involved in particular actions depends above all on the precise location and existing territorialities, but also on technical considerations, such as the expertise of UNRWA engineers. The network, therefore, works with shifting and fluid alliances, depending on the action. An important feature is networking between camps, to learn from experiences with similar challenges.

Creating bridging artefacts and visual support through work on infrastructure is not only a way to coordinate joint reflection in ad hoc teams or construct new vantage points but can serve to maintain continuity in reflection and continuity of action in fragmented settings. Scales of action need to be adapted to the local needs. Simple elements of methodologies should be conceived and organised so they can be quickly learned and applied in practice from the outset

to widen the circle of inhabitants who acquire design skills. Actions thus need to be structured in a step-by-step fashion, at the same time that each step has to ensure sufficient functionality in itself so that it does not require disproportionate maintenance efforts. Each step needs to be perceived as a success in some sense so that it can motivate further steps later on.

Considering minimal actions and changes that are easily reversed is also important from other points of view. Maintaining a status quo has many functions in vulnerable environments exposed to turbulent surroundings. Reversibility of action is, therefore, a way to experiment carefully with changes that might have disruptive effects. Small-scale actions have the further advantage of demanding less coordination to be initiated, and therefore also lower the threshold of action. At the same time, introducing a systemic perspective makes it easier to think about questions before proceeding to action, which is crucial in environments where the community cannot afford to make mistakes.

Thus, work can be undertaken with the maintenance of infrastructure while also looking for new and more sustainable solutions to serve the needs of the camp as a whole. Knowledge and know-how can be developed that are better suited to the context. Beyond technical problem-solving, the lives and aspirations of the inhabitants become central to the way issues are addressed. At the same time, networking with other camps as well as with academics, professionals and organisations in Lebanon and abroad creates opportunities to share experiences, thereby opening up alternative ways to approach the local issues. Systemic design methodologies can provide powerful tools for collective reflection and action, involving multiple actors. Not only do these methodologies allow participants from diverse backgrounds to grasp interconnections between issues and identify points of entry, but they accelerate processes towards developing new ideas and evaluating possible consequences.

While the approach that has been initiated in Burj El Barajneh is promising, considerable challenges remain. Actions have to operate at micro-scales, and sufficient time is therefore needed for negotiations with all concerned parties to effect changes that are perceived as legitimate and relevant by inhabitants of the camp. However, action has to gain credibility through visible action and to acquire momentum for structural change at larger scales. Therefore, action has to lead to quick and tangible results. There is thus a tension between responsiveness and efficacy. Additionally, differences in vision exist concerning what is desirable and possible for the Palestinian camps in the long-term, and no agreement can be reached within current discourses concerning such divergent ambitions.

Further research is therefore required on issues of time-lines, horizons and sequencing actions, to support capacity-building as well as agility. An additional challenge is how to maintain sufficient continuity, focus and operational resources to maintain the viability of the network as a functional initiative. Sponsoring could compromise independence and credibility, but without resources, little impact can be achieved. More reflection and empirical studies are consequently called for concerning possible modalities for guided bottom-up approaches in community settings.

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