and offer the best value for money, even though the question of durability has not yet been comprehensively answered.

The One Room Shelter strategy introduced a low-cost construction model to communities in rural Sindh who were previously unaware of flood protection measures, and using cash enabled them to ‘learn by doing’. When evaluated, the programme was said to have “met its objectives in general and [to be] universally appreciated by beneficiaries […] especially women who are the traditional builders in southern Sindh”.1 Interestingly, in addition to the programme’s achievements, there were a few anecdotal cases of women later complementing their incomes using masonry skills learnt during construction. In addition, beneficiaries talked about multiple DRR features that they had learnt about and applied during the construction process. However, evidence of, for example, copying of the techniques of the One Room Shelter by people not receiving assistance remains limited. Nevertheless, this apparently successful ‘occupier-driven’ reconstruction process helped maximise coverage of the most vulnerable households; and similar implementation strategies continue to inform shelter recovery programming in 2017.

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Pre-fabricated or freely fabricated?
Irit Katz

The architectural forms of emergency shelters and the ways they are created play a significant role in the ability of their inhabitants to deal with their displacement and to perhaps feel, even temporarily, at home.

The human need to dwell involves a form of feeling ‘at home’ in inhabiting, even for a short time, a place which we feel belongs to us and in which we belong. This feeling is fractured by displacement. First it is fractured by the urgent necessity to leave home and homeland, accompanied by the fear that what is left behind will be changed forever. It is then damaged again by the uncertainty of the temporary shelters along the way. In this troubled situation the meaning of shelter is often stripped down to its basic function of physical protection while its more complex roles in security and belonging are suspended. Emergency shelters cannot compensate for this rupture and for the multiple uncertainties in the lives of forced migrants; however, their architectural differences and the distinct spaces they create significantly influence their dwellers.

The multiple forms of emergency shelters can be broadly divided into two main types, involving different actors and creating distinct spatial forms. The first type could be defined as the pre-fabricated, or ‘pre-fab’, shelter, created from industrially manufactured components which can be easily transported and quickly assembled on site. The second type is a shelter which is often built by the displaced people themselves with the use of available materials and building techniques, a shelter which we can call ‘free-fab’, freely fabricated not according to a specific design and specification but relying on the improvisational skills and available resources of the forced migrants. Architectural debates are often concerned with the relations between form and function. However the importance in the identification of these two shelter types is not
only in understanding their more obvious architectural characteristics but also in identifying the relation between their mode of inhabitation and their mode of production, which has important effects on people’s lives.

**Pre-fabricated shelter**

The history of the pre-fabricated shelter goes back to the period of early modernity when industrially manufactured tents and huts were used for colonial expansion and rapid military deployment. More recently, timber, canvas or steel huts were transported across the globe to house soldiers or resettle civilian populations, a method which was later adopted by humanitarian agencies in the creation of the first displaced persons camps. This method continues today with other pre-fab shelters such as re-purposed shipping containers or the refugee housing unit flat-pack. While there is huge variety in the design of these humanitarian shelters, they tend to respond to a very basic architectural brief. They need to shelter the bodies of a certain number of individuals in varied weather conditions for a temporary period; they need to be fairly cheap; and they should be easily transportable to different parts of the world. For these reasons these shelters are usually designed as pre-fabricated kits which can be rapidly erected, often by unskilled labour.

While these pre-fab shelters are sometimes ‘state of the art’ building technology, they are designed to answer general needs in no particular location and for no particular people. The materials used are often suitable to some climates better than to others; their methods of construction often resist alteration and appropriation by their users and cannot be easily adjusted to particular human needs and habits; and their deployment on site in large numbers, often in a grid which is easy to create, control and manage, usually produces repetitive and low-quality spaces which serve a particular purpose but are alienating to their inhabitants. The idea that these pre-fab shelters could be folded back into their original kits and be reused as the perfect sustainable solution for displacement is also erroneous; they are damaged quite quickly when they are lived in and cannot
be reused later. All of these difficulties are not coincidental but symptomatic of the very way these shelters are designed.

While these shelters are helpful in protecting displaced people from the sun and rain and provide minimal privacy, they often form impersonal spaces which are easily created, managed and later erased but cannot be easily adapted to provide a sense of belonging. This impersonal nature is not necessarily a result of poor design or architectural ignorance but often goes together with the objectives of those who purchase and deploy them but will not live in them.

**Freely fabricated**

Often created by their own inhabitants and by others who assist them, freely fabricated emergency shelters not only form very different environments but their mode of creation has a different influence on the forced migrants who inhabit them. These shelters are created from any available material or resource which can be found close to the site, using inventive construction methods to hold them together. The free-fab shelters usually look very different from one another as they are produced by different people according to the everyday needs, customs and habits of their residents.

In the Calais ‘Jungle’, the Darfuri communities created compounds similar to their traditional ones in Darfur, while the shelters created by Afghans in the Jungle’s high street became grocery stores, restaurants and barber shops by day, allowing the refugees to earn a living. The Jungle had a very strong ‘sense of place’ in which the shelters were constructed in different forms and sizes. They created a site-specific and community-specific architectural environment in which many of the forced migrants developed a less impersonal sense of place and identity.

The ability of forced migrants to produce their own spaces challenges, and sometimes changes, the rules that control them and their resources; it empowers them and allows them to begin to re-establish themselves as autonomous subjects in their new circumstances. The new places that they create not only protect them from the elements but also support them in regaining a sense of agency in their new spaces of refuge, enabling them in some cases to develop relations of solidarity with host communities that assist them in constructing these spaces, and to influence their new environments while negotiating change.

**Evolving architecture of emergency shelters**

It is also the case that pre-fab units may evolve over time into free-fab shelters through processes of informalisation and participatory architecture when they are changed and appropriated by their dwellers. This possibility is dependent on two main factors: first, the pre-fab shelters themselves, including their form and the materials used, and second, the mode of governance in the camp, if it encourages the shelters’ appropriation. The way in which shelters are informalised often combines the advantages of the pre-fabricated and the freely fabricated types; this reality could assist architects and designers in rethinking shelters not only as rigid solutions but also to be more flexible and adaptable. Shelters that are produced so as to allow for their rapid deployment could also be designed as structures which could be easily changed, moved, and re-appropriated by their residents over time according to their specific needs and preferences. These emergency shelters could also be units that can become part of urban environments, which are themselves constantly evolving, or become the nucleus of permanent settlements in cases of protracted displacement. As such they may function as the nuclei of more elaborate housing units which develop over time, forming, even temporarily, home-like spaces of identity and belonging.

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1. See article in this issue by Märta Terne, Johan Karlsson and Christian Gustafsson.