

End User Engagement in Refugee Shelter Design: Attending to the Impact of Context

Hart J; Albadra D; Paszkiewicz N, Adeyeye K; Copping A

Abstract

Debate about participatory design (PD) has focussed considerably upon process. Factors such as facilitation skills and commitment to a participatory ethos have been highlighted as factors mediating stakeholder engagement. Discussion has been driven overwhelmingly by experience of PD in the global North with citizens who enjoy full rights. This article considers engagement with encamped refugees in the global South. Here context has a significant impact upon engagement. Drawing on a four-year research project concerning shelter design we discuss dimensions of context that bear particularly upon PD efforts. As we illustrate, despite contextual constraint, it is possible to produce valuable knowledge about design together with residents. Moreover, attention to context can help achieve a more nuanced approach to the evaluation of PD initiatives.

Highlights

Pursuit of PD in refugee camps reveals the impact of context upon end-user engagement.

Evaluation of end-user engagement in PD initiatives might productively embrace consideration of context.

PD efforts benefit greatly from a multi-disciplinary approach employing diverse methods.

Keywords

Participatory Design, Research Methods, Interdisciplinarity, Human Factors,
Humanitarianism

In the latter decades of the 20th Century, numerous disciplines and fields experienced the so-called ‘participatory turn’ (Harder, et. al., 2013). In ways that vary by discipline and context, this has entailed focus upon processes in which knowledge is co-produced by a range of stakeholders all of whom are deemed ‘experts’ in some respect (Henwood et. al. 2019). Two broad arguments for a participatory approach have been made. The first of these is utilitarian and derives from the conviction that bringing stakeholders together and creating the space for discussion will help achieve a better outcome: increasing efficiency and efficacy, and reducing the risk of costly errors (e.g., ADB, 2004). The second argument is rooted in a moral-philosophical outlook informed by ideas about democracy, sustainability, accountability, and equity (e.g., Hall, 1992; Park, 1992). According to this school of thought, in any change

initiative people should be treated as subjects with rights rather than as objects whose needs are assumed and addressed by others.

The emergence of Participatory Design (PD) may be seen as part of the ‘participatory turn’. It has been pursued by researchers and practitioners within fields that range from architectural practice (Luck, 2018a) to language learning (Zaphiris and Constantinou, 2007) to information technology (Carroll and Rosson, 2007). Such work has been undertaken principally in settings of the global North. It is here that PD gained traction amidst the social and political upheavals of the 1960s and 1970s (Robertson and Simonsen, 2013: 1). In recent years, however, PD initiatives in the global South have grown in number and range of focus.

Much of the body of writing on PD – in both the global North and South – offers insight into process. The shortcomings of projects are commonly attributed to the manner in which they were conducted. Elements seen to determine the success of efforts, such as commitment to a participatory ethos, facilitation skills, cultural sensitivity, and design of methods, have been considered at length. The implication is that with greater effort, capacity or understanding the process and, thus the outcomes, could be improved.

By contrast to the focus on *process*, the effects of *context* have rarely been considered within the PD and wider participation literature (Hussain et. al, 2012 is a valuable exception). From the perspective of the effort to decolonise knowledge production, this is unfortunate. Focus on process alone blinds us to the particular challenges of participation in settings beyond the wealthy western democracies in which PD emerged and where its leading thinkers are predominantly based. The potentially profound differences in the socio-cultural, economic and political conditions between, say, Copenhagen and Cox’s Bazaar, and the impact of those differences on process and outcomes have, hitherto, been largely ignored.

In this article we seek to contribute to debate about PD by highlighting the importance of attending to context when conducting and evaluating efforts to engage end-users in design initiatives. In pursuit of this aim we consider the impact of context on PD efforts with populations displaced due to armed conflict and disaster. In particular, we draw upon a multi-country study focused on the design of shelter in displacement camps in which all the authors were involved. This four-year research project - *Healthy Housing for the Displaced* – was conducted in diverse settings of displacement around the world engaging, by different means, the residents of camps in discussion of shelter design.

There are three dimensions of context that this paper will consider. These we have labelled (1) humanitarian; (2) host government; (3) social & psychological. Consideration of each dimension, in turn, will lead into a brief account of the benefits to the *Healthy Housing* project of engaging camp residents, notwithstanding the considerable contextual challenges. Noting such benefits sets the scene for discussion of the framework by which participatory endeavours are assessed. If valuable knowledge and insight can be generated by engaging people living in the marginal and controlled conditions of a refugee camp, then it would seem prudent to move beyond a simplistic employment of the notion of ‘genuine’ participation in evaluating efforts (Luck, 2018b). In order to give flesh to this argument we then employ a typology suggested by Harder et. al. (2013) centred on the areas of ‘scale’, ‘depth’ and ‘breadth’. From indicating how this might apply to our own research project we then suggest how it might be adapted for other initiatives in order to bring into view the actual or anticipated constraints posed by context. To begin with, however, we offer a brief account of this project itself, attending to the composition of the research team, the focus and intended contribution of the work, and the methodological approach pursued.

1. The Research: *Healthy Housing for the Displaced*

“We currently live in a sardine tin. We suffer from rain and wind noise. Electrical safety is a concern. A timber shelter would be better.”

Resident of Azraq Camp

1.1. Team, Focus and Intended Contribution

The team working on *Healthy Housing for the Displaced* included researchers with backgrounds in civil engineering, architecture, building physics and social anthropology. Important to our approach was concern for socio-cultural context and the ways that this might shape ideas about the different elements of shelter design. Such concern was inherent to the disciplinary training of the two anthropologists. However, the attention to cultural difference was also driven by the diversity of backgrounds of the team as a whole – including members from Afghanistan, Syria, India, Brazil, Nigeria, Poland, as well as the UK. The challenge lay in achieving a sufficient understanding of each specific context in order to engage meaningfully with our interlocutors. In some cases, engagement with the displaced community was conducted directly by team members who spoke the same language. In others, we relied on interpreters or partnered with researchers from local universities.



Figure 1: Langtang, Nepal: Local researcher (on the left) acted as our interpreter and point of contact with displaced communities.

Community-level study was conducted in seven countries to or within which people had been displaced by conflict or disaster. In Jordan, Ethiopia, Bangladesh, and Djibouti our work focussed on people displaced by armed conflict who now resided in camps. In Turkey we spent some time with Syrian refugees who had built their own dwellings. Fieldwork in Peru and Nepal focussed on nationals displaced by disaster – in both cases earthquake.

In some settings we sought to identify practical measures that might immediately enhance shelter – for example, how to strengthen the capacity of dwellings in the Rohingya camps of Bangladesh to withstand monsoon rains and typhoons. However, our overarching goal was to strengthen processes of shelter design so that the best possible solution might be found for each distinct location. To that end, we worked to develop a tool, available online, that could be used by practitioners to assess the merits and suitability of different designs.¹ That tool would include questions to prompt thinking across several domains across the span from the technical to the sociological. Our engagement with displaced populations was, in large part, intended to identify social, cultural and political themes that designers should consider or enquire about when seeking a shelter solution in any given location. Furthermore, as the project progressed, realisation grew of the importance of attending to and documenting the process by which we might learn from displaced populations.

¹ Shelter Assessment Matrix (SAM). For further details and link to download the tool, See <https://researchdata.bath.ac.uk/937/>

Notwithstanding specific modifications to certain existing shelters, we did not set out to produce complete designs for any of the locations in which we worked. Therefore, our project already limited the stages of decision-making that camp residents might engage in, even as we sought ways to promote discussion of layout, construction materials and location. We were honest about this with all involved in our project, pointing out that participants could, at most, experience some adjustment to their existing shelter as a result of our interaction but not new shelters: at least not in the immediate or medium-term.

1.2. Methodology

The methods we used to engage camp residents varied to some extent by location. Table 1 summarises the methods used in each location where we pursued our project.

Method	Total no. of participants	Locations
Thermal comfort surveys	1000+	Jordan, Peru, Bangladesh, Ethiopia, Djibouti
Design & social surveys	80 in Jordan 80 in Peru 44 in Bangladesh 102 in Ethiopia 63 in Djibouti	All locations
Participatory design workshops	200	Jordan and Ethiopia
Participant observation	N/A	All locations

Table 1: summary of methods

On average, social survey interviews lasted for about an hour. This was composed of a mix of closed and open-ended questions. The questions were partly adapted to each context – informed by our own knowledge of that setting, research into the ethnographic literature and input from local partners. Discussion typically opened out to issues of health, wellbeing, memories and aspirations.



Figure 2: Azraq camp, Jordan 2016, in-shelter interviews (and sorting exercise) often involved the whole family. Social surveys and more open-ended semi-structured interviews, visits to people’s dwellings and around their neighbourhoods all helped us to check our evolving understanding and, where necessary, re-focus. However, we were aware that people were being asked to respond to the questions that we brought to them. Confusion around abstract questions that we posed heightened our sense of the need for an approach that could enable participants to articulate their shelter requirements in terms that they chose.



Figure 3: A PD workshop in Hitsats Camp, Ethiopia. Discussion prompted by presentation of a model shelter based on a traditional African structure.

Initial visits to camps entailed discussion with individuals and households. Over time, we became keen to pursue group-based enquiry, specifically through experimentation with participatory design workshops. One aim of this endeavour was to learn about the benefits and limitations of different tools and techniques such as sketching, physical models, and virtual reality. We also sought to gain insight that would help in the task of defining shelter design metrics and typologies that might lead to a more holistic and setting-specific approach to the design of transitional shelter solutions in displacement camps. Our findings from these workshops, together with a detailed account of the methodology, were published in Albadra et al., 2020. Due to relatively easy access and our own degree of familiarity, we chose to undertake this work in Jordan and Ethiopia. Different tools were piloted and comparative benefits and drawbacks of each noted.

An obvious challenge for group-based activity in many camps is the lack of suitable space in which to work. Displacement camps are rarely built with communal spaces that afford quiet and privacy, and that may be accessed easily by outsiders. In Zaatari and Azraq camps in Jordan such space did exist, and our use of the space was facilitated by an INGO working in both locations. In Hitsats camp in Ethiopia space was found on an ad hoc basis, in either communal rooms belonging to the government's Agency for Refugees and Returnees Affairs (ARRA), or in the kitchen/ restaurant area for that organisation's workers.



Figure 4: left: workshop venue in Zaatari camp, a meeting and storage tent used by INGOs, a fan was provided but the venue remained hot; right: a library space in Azraq camp was used for our workshops. It was air conditioned.

2. Three Dimensions of Context

2.1. The Humanitarian Context

Our study was pursued primarily in displacement camps where, typically, numerous agencies seek to meet the basic needs of displaced populations. The overall aims of the project were refined through dialogue with humanitarian organisations that work particularly on the provision and enhancement of shelter. It was largely through the support of these organisations that we were able to access camps and organise research activities with residents, and it was through humanitarians that the project sought to achieve its ultimate goal: significant improvement in the housing of displaced people.

As an institutionalised domain of human activity, the field of humanitarianism has its own, fairly brief, history of interest in participatory initiatives with intended ‘beneficiaries’ of projects and programmes. Building on early efforts in the field of international development, humanitarians began to pursue participatory approaches in the late 1990s, with specific attention paid to project effectiveness. An early example is the effort by Oxfam to engage conflict-affected people in northern Sri Lanka, over three consecutive years (1996 -1998). An account of the initiative was published under the title *Listening to the Displaced*. The author explains that this endeavour to attend to displaced populations sought to provide:

...a rapid means of finding out what people needed, of ascertaining the social and political trends, and of giving the displaced an opportunity to be heard amidst the chaos of the immediate emergency. (Demusz, 2000: p.15)

For donors, government officers and policy makers such engagement might “provide them with useful data to inform their decisions.” (p.16). Humanitarian workers would be assisted “to design better programmes.” (p.17). As these comments suggest, displaced populations may have been listened to in the early stages of programme development, but decision-making remained firmly in the hands of professionals.

Notwithstanding this and other noteworthy initiatives over the last two decades, the extent to which humanitarians seek to work in a participatory manner should not be overstated. The uptake has not been comparable to that seen in the adjoined field of international development where participatory approaches have been championed for decades. In part the relative lack of uptake may be attributed to the disposition of humanitarianism with its focus on ‘emergency’-conventionally understood in terms of an acute, short-lived situation of crisis when lives are on the line. Humanitarian organisations commonly maintain a roster of dedicated personnel who

deploy quickly and bring their expertise of specific sectors such as water and sanitation, shelter, and nutrition to the task of establishing basic provision using tried-and-tested models and technologies, all within a narrow time frame. The following quote illustrates the mindset that often accompanies this aspect of humanitarian work.

Humanitarians (particularly internationals) do not see themselves as community organisers, facilitators, and brokers, but as doers who are there to solve problems deploying solutions that have largely been predetermined... many aid workers feel that their intentions and efforts to save lives should not be questioned, and that this takes priority over their attempts to be participatory.

Core Humanitarian Standard Alliance (CHS), 2018: pp.33-34

The conviction that humanitarian emergency necessarily requires swift decision-making and implementation can be witnessed in one of the few articles on PD in humanitarian contexts. In their 2015 piece, Haines-Gadd and colleagues describe an eight-week project to develop “an urban emergency low-tech toilet” (p.246). The authors lead us through the stages of this very rapid process from “design brief to pre-production” (Ibid). The clients (Oxfam) alone are identified as stakeholders, and the expertise consulted was all professional. The authors describe the project as a success in that a prototype was created within this tight timeframe. They recommend the engagement of end-users in a subsequent “field-testing” phase required for “future development”, raising questions about the urgent nature of the project. A further question is prompted by the assertion that one of the requisite characteristics of the toilet is that it should ensure the “dignity of the end user” (p.255). Given the subjective and culturally informed nature of ‘dignity’ it might be argued that end-user engagement should have been fundamental to the design process. However, in this project it would appear that the assumed need for speed, familiar across much of the humanitarian field, outweighed the need to involve those who would use the toilets. Outside (technical) expertise appears to have been deemed adequate to develop the prototype.

In our empirical research we encountered a mixture of responses from humanitarian actors. A few key individuals working at country and field levels were important champions for the project. To varying extents, they engaged with us in discussion of local conditions and the shelter solutions that might address the problems they saw as most pressing. These staff members helped to facilitate research activities, were eager to input ideas and keen to build on the insights coming from our work.

At the other end of the scale were senior humanitarians typically working out of the global HQ of their organisation, primarily in Western Europe. A number of these individuals expressed unease, even opposition, to discussion of shelter design happening at country level, beyond their immediate control. Some made it clear that they saw dialogue as an inefficient use of staff time. Fortunately, due to their distance from the countries in which we were working their lack of enthusiasm did not have much direct effect on our day-to-day activities. However, with the exception of some staunch supporters, these senior figures did not offer the engagement with findings that we had hoped for.

2.2. The Host Government Context

Commonly overlooked by populist and exclusionary politicians in nations of the global North is the fact that the vast majority of people who flee find refuge in a neighbouring country in the global South.² Thus the burden for hosting large populations of vulnerable displacees has disproportionality fallen upon countries likely to be struggling with poverty in regions beset by political instability. Lebanon, Kenya, and Bangladesh are a few obvious examples. Moreover, many of the world's largest displaced populations have been residing in neighbouring countries for decades on end, waiting for a solution to their situation of limbo.

Governments of countries hosting large, displaced populations have the opportunity to attract foreign aid. However, the scale and range of challenges are invariably immense. In some locations, such as Pakistan (Lischer, 2005), Zaire (later DRC), and Tanzania (MSF, 1994), refugee camps have functioned as recruiting and training grounds from which military activities are undertaken. This is an extreme situation not generalisable to most other locations. Nonetheless, camps are commonly viewed by host governments as settings from which some form of security threat may issue. Surveillance and close control of camp residents are therefore commonly pursued.

Refugee camps are overwhelmingly located in countries where many citizens live in poverty, unemployment is high and public services inadequate. Consequently, there are frequent fears that encamped populations will stoke resentment amongst local citizens. Keeping displacees away from the local job market and public services is thus a further motivation for maintaining tight control over movement in and out of the camp. The ability to exercise such control and reduce the risk of fuelling resentment amongst the citizenry is partly addressed by siting camps

² See the database of UNHCR <https://www.unhcr.org/refugee-statistics/> accessed 27.2.22

far from urban centres, often in areas experiencing extreme climatic conditions where few citizens with resources choose to live. We might think of the Sahrawi camps in the desert of Southern Algeria, and the Rohingya camps in the Cox's Bazaar region of Bangladesh routinely exposed to monsoon rains and typhoons.

The concerns of host governments to manage large and longstanding displaced populations within camps were evident in the obstacles that the research team commonly encountered in accessing camps. In preparing the funding application we identified four locations across the globe for our research. Together, these four provided diversity in socio-cultural, topographical, political and climatic terms. Each of the locations was familiar to at least one team member and strong partners in local universities were available for collaboration. However, by the time the project began, three of the proposed research sites had become inaccessible and several on our back-up list were also no longer viable. Due to rapidly changing political circumstances, some camps were to be closed by host government fiat, others had been placed off-limits by the authorities, and in a couple of countries obtaining visas to conduct research on any subject had become significantly more difficult. Such measures by host governments constituted an immediate barrier to the possibility of engagement and of hearing the voices of certain camp-dwelling populations.

For those countries in which there was, in principle, a possibility to conduct research, the process to gain clearance to enter the camps was often complex, time-consuming and expensive. Permit systems for the conduct of research of any kind by non-citizens have been strengthened in many countries of the global South over recent decades (Hopgood, 2019). Our experience in setting-up fieldwork in Ethiopia serves as an example. At the time of research (prior to the outbreak of hostilities in the region where Hitsats camp is located), the Ethiopian authorities required involvement of a local partner to obtain a one-month visa. The University of Aksum applied for our visas to the Ministry of Interior Affairs in Addis Ababa on our behalf. Once authorised, they had to be collected from the Ethiopian Embassy in London. Permits to visit the camp then had to be arranged upon arrival in the country. These needed to be issued in Addis Ababa, then presented to the Agency for Refugees and Returnees Affairs (ARRA) office in Shire, the regional capital, and finally in Hitsats Camp: the intended site of our research. Typically, team members spent 3-4 working days in Addis Ababa sorting out the paperwork before flying 600km to Aksum or Shire and then travelling overland to Hitsats. On the occasion that we took equipment there were additional, complex, bureaucratic procedures. All together these tasks easily took up the first week of a month-long visa.

In general, long journeys to reach the region of the camp were often the precursor to lengthy commutes each day from the research team's accommodation to the camp itself. This is one consequence of siting camps in remote locations, as noted above. For example, in Bangladesh, the daily commute from Cox's Bazar to and from Rohingya camps took between 5 and 6 hours, depending on the situation on the roads. This meant leaving the hotel at 7am in order to arrive at the camps around 9.30 am.

Once in the camp, the possibility for engagement was typically limited by host government directives. For example, in Jordan we had to leave the Zaatari and Azraq camps by 3-4pm. In Hitsats camp in Ethiopia it was 5pm. In Markazi camp in Djibouti, the researchers were allowed to stay until 5-6pm, and in Bangladesh leaving time was 2.30-3pm. Even when such restrictions were not rigorously enforced, the frequent lack of electricity in some camps meant that we would have to leave by sunset in any event

Such time considerations not only limit the amount of interaction that can be undertaken in a single day but also, in some settings, influence the make-up of the sample. Children who are at school, people working either inside or outside the camp – most often men – and others who are busy during the working day, were less accessible. It is invariably in the evenings that all household members gather in the home. However, constraints imposed by the authorities, commonly render interaction at this lively part of the day impossible.

The constraints on time required careful calibration of the balance between quantity and quality. Mindful of the need to obtain a meaningful sample in numerical terms, we often felt obliged to avoid straying too far from the focus of our research and thereby allowing for new themes and wider concerns to come into discussion. For reasons of time, we generally had to decline invitations to share a meal and benefit from the informal exchange that this might allow. Invitations to drink coffee or tea together we tried as much as possible to accept. Repeat visits allowed time for conversation to flow more freely. When this happened our respondents sometimes offered views that challenged our assumptions or that pushed us to think about shelter in a wider context. We discuss this further below.

In some locations, government officers influenced the quality of exchange by virtue of their presence. Generally framed in terms of the need for security, police or other personnel accompanied our research team on some occasions, attending to the conversations taking place. It is hard to estimate with precision the extent to which this affected the flow and content of discussion. However, it often made for unease amongst the researchers at least. One likely

effect of this would be to limit the depth of discussion around sensitive issues, particularly those related to the host government and the role of its representatives in their lives. As security personnel became familiar with the focus of our research their insistence on accompanying us throughout the day ceased or their attention to the content of our activities became minimal.

Our work in Nepal and Peru with citizens displaced by disaster was added to the project due to some additional funding. These two cases – both countries that coincidentally had experienced violent civil conflict in recent decades – underlined the particularity of challenges of research in countries hosting populations who had fled nations in which political violence continued. In both Nepal and Peru, the work proceeded with a minimum of bureaucracy or governmental oversight.

2.3. The Social & Psychological Context

Typically constructed to address a pressing emergency, displacement camps frequently endure for years or decades. In some cases, they even blend into the urban landscape as cities expand and encircle them. This has happened, for example, to many Palestinian camps in the Levant region. Yet, the continued existence of a camp serves as a marker of liminality for the population that resides within its actual or assumed boundaries and as a reminder that the long-term fate of these residents and the national community to which they belong has yet to be resolved. In such a situation, the inevitable development of dwellings and infrastructure sits in tension with the symbolism of the camp as a place of temporariness and dispossession for whose residents just remedy is required. From this perspective we should appreciate the potential sensitivities of displacees in talking about enhancement of their housing insofar as this may signal acceptance of the status quo (Hart, J. et. al., 2018).

As with all our interactions, in group-based work, we had to address residents' expectations of individual or collective benefit. This is frequently an issue in research amongst poor and marginalised populations. However, for refugees the opportunities to improve their situation by their own efforts are often especially few. Lack of work permits, constraints on mobility, inadequate knowledge of local language and culture are some of the common issues that render the displaced particularly marginal and thus particularly focused on the possible benefits that outsiders might bring. Given the limited influence we might have on the policy and practices of agencies directly responsible for the welfare of camp residents, we could not promise any appreciable and direct benefit in return for participation in our workshops. Transparency and

repeated statements of our own inability to ensure benefit were essential. All we could offer for certain was the chance for interaction, the possibility of being heard and the sharing of refreshments.

Displacement camps commonly bring into close proximity people torn from familiar social surroundings where established norms and relationships once prevailed. Compelled to live amongst strangers, trust can be hard to build. This is particularly likely when civil war gives rise to the mass exodus of people associated with different and opposing factions. Such has been the case for Syrian refugees who have fled their country since 2011. For this reason, we were concerned that the team member leading on our group-based work in the Jordanian camps, due to her Syrian nationality, might engender suspicion about her loyalties and cause participants to hesitate to share their thoughts freely in our discussions. As it transpired, this proved an issue only on one occasion. Nonetheless, this is a highly likely scenario that illustrates the complexities of such work. While facilitation by co-nationals brings many advantages, there may also be attendant challenges. Possibly we did not encounter such challenges due to the diversity of our group of researchers and the fact that participants were familiar with the international organisations that introduced us to them.

3. Benefits of Engagement

In the foregoing discussion we have pointed to contextual factors that had bearing on the efforts of the research team on the *Healthy Housing* project to engage end-users in consideration of shelter design. We grouped these factors under three broad headings: ‘humanitarian’, ‘host government’ and ‘social & psychological’. Notwithstanding the challenges encountered, there was much that we discovered through these efforts that caused us to rethink our assumptions, to expand our lines of enquiry, and to deepen our appreciation of the importance of attending to context. In other words, while contextual factors created undeniable limitations there was still considerable value in engagement. Providing that some access was possible we were able to have dialogue with and learn from displaced people. And participants often expressed that they found the engagement a positive experience. Feedback commonly heard included:

“We have really enjoyed today”

“We are glad our opinions are being considered”

“We were inspired by these ideas”

“You’ve given us something to do in our day”

In the following section we consider the means by which PD processes are conventionally evaluated. We highlight the importance for that task of embracing context and its impacts on the form and extent of participation. As we argue, the benefits of knowledge produced even under limiting circumstances encourages a more nuanced approach to evaluation of PD, particularly in settings beset by considerable challenges. In preparation of that discussion we share some brief examples of the insights gained through efforts to engage camp residents notwithstanding the constraints.

Firstly, there were priorities that we did not fully anticipate. For example, in Peru, we learned about the importance of shelter arrangements allowing space for animals. In Jordan, the value attached to space in which to offer hospitality was conveyed to us explicitly on innumerable occasions and evident in the ways that some residents had arranged the layout of their shelters (see Hart J. et. al. 2018).

Secondly, residents frequently challenged our assumptions. Examples include incorrect attribution of a particular design preference to social conservatism (as in Bangladesh) rather than, as we learned, physical constraint due to the material used for shelter construction. A basic assumption that residents would prefer to have a private bathroom within their shelter was borne out in Jordan but contradicted by camp residents in Djibouti.

Our sense that the conceptualisation of shelter design was an issue separable from the spatial arrangement of the camp was confounded by residents in Jordan. They made it clear that feeling comfortable in their dwellings depended on the relationship between design and the way in which shelters were laid out in relation to each other. In Hitsats camp in Ethiopia, we came to appreciate that the actual shelter - its construction, layout and ventilation - was an issue of relatively little importance. Of greater concern for wellbeing was insufficient food supplies, theft/ robbery, the wider social environment of the camp and the availability of space for socialising.

Finally, our engagement with displaced populations enabled us to gain appreciation of the specific socio-cultural factors that influence the acceptability of certain designs and construction materials. Materials that might offer better insulation in locations with extremes of temperature, or that might ensure greater stability or privacy, were not always welcomed. For example, in the Syrian camps in Jordan we encountered great resistance to the idea of shelters constructed using mud despite the great benefits this material yielded in terms of thermal comfort. Participants articulated concerns about the intrusion of insects, about

cleanliness, and structural safety, as well as their negative associations of mud with the ‘primitive’ dwellings of their grandparents’ generation. As residents of Azraq Camp told us in response to the suggestion that mud was an ideal material:

“You want to take us back a thousand years!”

“This type brings stigma with it: ‘Here live the refugees’.”

While our engagement with camp residents taught us a great deal, there are no guarantees that the insights we gained will result in more comfortable and healthier dwellings. In our work to develop the Shelter Assessment Matrix (SAM) (Kuchai et. al., 2020), we sought to incorporate all the key lessons learned. More than that, we also looked for ways to provoke the reflection of SAM users about the extent and nature of their engagement with the residents of the shelters being designed or evaluated: in this way encouraging them to consider the importance of such communication. For the team involved in the *Healthy Housing for the Displaced* project, the work to bring humanitarians and the designers of shelter into discussion as fellow stakeholders alongside displaced populations is ongoing through fresh initiatives.

4. Evaluating Engagement

4.1. Evaluation in Practice

According to its advocates, a PD initiative should encourage participants to engage as co-creators and collaborative partners (Harrington et al. 2020). End-users should be involved in all stages in the process: leading from the initial exploration and definition of the design problem, through the ideas stage, to development, evaluation and implementation stages (Simonsen & Robertson, 2012). Eschewing a ‘detached’ and ‘neutral’ approach, participation should ground the work of the designer within the lived experience of populations in specific contexts (Pink et al. 2018). An effective process would enable participants to articulate problems that might otherwise remain unforeseen by the designers (Luck, 2012). The label of ‘genuine’ (or, sometimes, ‘authentic’) has been applied to endeavours that meet these various criteria.

Efforts that are not deemed ‘genuine’ have been dismissed as ‘tokenistic’. Such failure is commonly attributed to factors internal to the process undertaken. These include the skills and local knowledge of facilitators; and the ability to overcome participants’ unfamiliarity with the tools and technology used (Heiskanen and Lovio, 2010; Tweed et.al., 1992). The acknowledged challenges for PD initiatives in settings of the global South include the need of

instigators to eliminate Eurocentric assumptions in the design framework (Escobar-Tello et. al. 2021: 2).

Our concerns here are two-fold. Firstly, we are troubled by the reductive consequences of labelling of participatory efforts according to the crude binary of ‘genuine’ or ‘tokenistic’. Secondly, our experience on the *Healthy Housing for the Displaced* project indicated the importance of context, and not just internal process, when identifying the obstacles to fuller and more profound engagement with end-users. In order to address these two issues, we examined the literature to identify a model that might be used as the basis for a more nuanced and complex evaluation of PD initiatives.

Numerous models have been developed and employed to evaluate the extent of participation across diverse initiative. One of the earliest of these was the so-called ‘Ladder of Participation’ originally designed by Arnstein (1969) and subsequently popularised by R. Hart through his application of the typology to children’s participation (1992). This model has been quite widely critiqued as simplistic.

Amongst the more recent innovations is the typology proposed by Smith and Iverson (2018). The authors indicate three “dimensions of engagement” that they label “scoping”, “developing” and “scaling”. Their focus is upon long-term engagement, holism and sustainability. In consequence, their approach was not ideal for contexts of humanitarian action. Despite encampment often lasting many years if not decades, long-term sustainability is a politically loaded notion for populations caught in limbo and striving for a decent long-term solution elsewhere.

Harder, Burford and Hoover (2013) use the term ‘scope’ to denote the extent to which participants are involved across the different stages of an initiative. For example, is there opportunity to participate only at the stage of initial inception or is there involvement at all other stages as well? To ‘scope’ the authors add a further two dimensions: ‘depth’ and ‘breadth’. The former refers to “the extent of control over decision-making by the stakeholders” and the latter to “the diversity of stakeholders invited to participate.” (p.44)

We found that the dimensions of ‘breadth’, ‘depth’ and ‘scope’ suggested by Harder and colleagues resonated with our work. However, in one important respect we diverge from these authors. Their suggested model is to be deployed in evaluating participatory initiatives as if these are activities occurring in isolation. The focus is overwhelmingly upon the relationships

between actors within an initiative, particularly the relationship between those with more power (typically the instigators) and those with less. Where initiatives are deemed to achieve a low level of participation morally loaded labels are then employed in evaluation, such as ‘denigration’, ‘neglect’, ‘tokenism’, ‘placation’, and ‘manipulation’, particularly in relation to the ‘depth’ of engagement. (Harder et. al, p.46). In that sense, their model shares the shortcomings of Arnstein / R. Hart’s ‘Ladder of Participation’ with its one-dimensional set of levels. However, in the place of a ladder, they offer a grid that intersects the domains of ‘process’, ‘attitudes’, ‘assumptions’, and ‘actions’ with six levels of participation.

Drawing attention to the attitudes and behaviour of those instigating initiatives is clearly important to the decolonisation of knowledge production. However, attending to the constraints of context is necessary to ensure that structural factors and the positionality (including vulnerabilities) of all participants aren’t overlooked, leaving the instigators of participatory initiatives to take the blame for limited participation according to the areas of ‘scope’, ‘depth’ and ‘breadth’ .

4.2 Mapping Constraints According to ‘Scope’, ‘Depth’ and ‘Breadth’

In order to demonstrate the impact of context upon the level of participation we bring together the dimensions already discussed – humanitarian, host government and social & psychological – in a table. This is intended to be indicative rather than exhaustive. We draw upon experience of our *Healthy Housing for the Displaced* project to inform the completion of the table.

AREAS	Scope	Depth	Breadth
DIMENSIONS	(Engagement in the stages of an initiative)	(Extent of control over decision-making)	(Diversity of participants invited to engage)
Humanitarian	Bias towards ‘professional expertise’ → participants’ engagement limited to only some stages (e.g. testing prototype for the sake of minor modification).	Decisions about shelter design typically taken at HQ level in dialogue with host governments and donors.	Stakeholdership conceptualised in a narrow manner leaving out some actors with important stakes (e.g. local citizen population whose environment, resources and economic condition may be affected by decisions taken about shelter design in camps close by.)
Host Government	Constraints on access limits time available to conduct all stages with camp residents.	Opposition to camp residents being encouraged to develop sense of ownership or investment in their dwellings.	Rules on hours of access to camps limits the range of potential participants (e.g. absence of (male) workers during daytime) with whom outsiders can engage.
Social & Psychological	In some camps the resident population is highly transient and thus not available to engage through all stages. Elsewhere, irregularity of employment – legal or otherwise – creating dropout or patchy attendance.	Reluctance to be seen as willing participants in a process that entails improvement to shelter, thereby potentially signalling acceptance of long-term life in limbo and abandonment of the claim for resettlement or return.	The most vulnerable members of a camp population are typically less likely to be invited or able to participate (e.g. child-headed households, people with disabilities, victims of domestic violence). These are people who may have particular need for adaptation of shelter.

Table 2: Constraints on Engagement across the Areas of ‘Scope’, ‘Depth’ & ‘Breadth’

This table has been populated with dimensions relevant to the *Healthy Housing* project. However, it could be adapted to other projects. For example, an initiative to engage long-stay patients in a hospital around the design of recreational space might identify the contextual dimensions of (1) health providers; (2) government (law, policy); (3) medical condition of participants as particularly relevant. The table would then be used to prompt thinking about the impact of these dimensions upon either the prospects for end user engagement or as a means of reflecting upon the impact of those dimensions as part of an evaluation of the PD initiative.

5. Conclusion:

In this article we have sought to situate engagement with end-users amidst contexts shaped by the dimensions of ‘humanitarian’, ‘host government’, and ‘social-psychological’. In so doing

we made the case that attending to context needs to be placed alongside the focus on process. It has not been our intention to downplay the importance of examining factors internal to process, such as the quality of facilitation, commitment to a participatory ethos and the relevance of methods and tools. Rather we see that a focus on context might provide a more nuanced means of evaluating the participatory character of PD initiatives. Moreover, considering context as well as process may enable a broader view on the outcome of initiatives: balancing the value created against the conditions in which activities were conducted.

In a piece reflecting upon the ‘Ladder of Participation’ that he had adapted decades earlier for specific use in initiatives with children, R. Hart states that

...the ladder metaphor may be a problem in that it seems to some to suggest that in all cases the higher rungs of the ladder are superior to the ones beneath...Adult facilitators of projects should not be made to feel that they must always support their child participants to operate on the ‘highest’ rungs of the ladder.... 2007: pp.23-24

This view is echoed by Harder and colleagues (2013: p.46) and numerous other authors. However, while there is common repudiation of the idea that there could be a simple hierarchy of participation, there has been scant attention to the means of ensuring that end-user engagement is conducted in the manner most appropriate to the setting. Provoked by the experience of research with people living in a situation of extreme marginality, we hope to have highlighted the need to move ‘genuineness’ from an abstract concept to a quality of action embedded in specific physical, political and socio-cultural contexts. From there we can move more confidently towards the identification of processes and aims appropriate to each given setting in which end-user engagement is sought.

References

- ADB (2004) *Effectiveness of Participatory Approaches: Do the New Approaches Offer an Effective Solution to the Conventional Problems in Rural Development Projects?* Asian Development Bank
- Albadra, D., Elamin, Z., Adeyeye, K., Polychronaki, E., Coley, D.A., Holley, J., & Copping, A. (2020). ‘Participatory design in refugee camps: comparison of different methods and visualization tools’ *Building Research & Information* 49(2): 248-264
- Arnstein. S. (1969). ‘A Ladder of Citizen Participation’ *Journal of the American Planning Association*. 35(4): 216-224
- Carroll, J. and Rosson, M. (2007). ‘Participatory design in community informatics.’ *Design Studies* 28(3): 243-261

CHS Alliance (2018). *How Change Happens in the Humanitarian Sector: Humanitarian Accountability Report Edition 2018*. Core Humanitarian Standard Alliance Report. Geneva: CHS Alliance, pp. 33-34.

Demusz, K. (2000). *Listening to the Displaced: Action Research in the Conflict Zones of Sri Lanka* Rugby: Practical Action Publishing

Escobar-Tello, M.C., Ruetten-Orihuela, K., Gough, K., Fayad-Sierra, J., Velez-Torres, I., (2021). 'Decolonising design in peacebuilding contexts' *Design Studies* 73: 1-24

Haines-Gadd, M., Hasegawa, A., Hooper, R., Huck, Q., Pabian, M., Portillo, C., Zheng L., Williams, L., & McBride, A. (2015) 'Cut the crap; design brief to pre-production in eight weeks: Rapid development of an urban emergency low-tech toilet for Oxfam' *Design Studies* 40: 246-268

Hall, B. (1992) 'From margins to center? The development and purpose of participatory research' *The American Sociologist* 23, 5–28

Harder, S., Burford, M., and Hoover, E. (2013) 'What Is Participation? Design Leads the Way to a Cross-Disciplinary Framework' *Design Issues* 29(4): 41-57

Harrington, C., Erete, S., & Piper, A. M. (2019) 'Deconstructing community-based collaborative design: Towards more equitable participatory design engagements.' *Proceedings of the ACM on Human-Computer Interaction*, 3(CSCW), 1-25.

Hart, J., Paszkiewicz, N., and Albadra, D. (2018). 'Shelter as Home: Syrian Home-making in Jordanian Camps.' *Human Organisation* 77(4): 371-380

Hart, R. (1992). *Children's Participation: From Tokenism to Citizenship* Florence: UNICEF

Hart, R. (2007) 'Stepping Back from 'The Ladder': Reflections on a Model of Participatory Work with Children' in Reid, A., Jensen, B., Nikel, J., and Simovska, V. (eds) *Participation and Learning: Perspectives on Education and the Environment, Health and Sustainability*. Netherlands: Springer

Heiskanen, E. and Lovio, R. (2010). 'User–Producer Interaction in Housing Energy Innovations: Energy Innovation as a Communication Challenge.' *Journal of Industrial Ecology*, 14(1): 191-102, January/February

Hopgood, S. (2019). 'When the Music Stops: Humanitarianism in a Post-Liberal World Order' *Journal of Humanitarian Affairs* 1(1): 4-14

Hussain, S., Sanders, E., & Steinert, M. (2012). 'Participatory Design with Marginalized People in Developing Countries: Challenges and Opportunities Experienced in a Field Study in Cambodia'. *International Journal of Design* 6(2): 91-109

Kuchai, N., Lo, S., Albadra, D., Coley, D., Natarajan, S., Hart, J., Paszkiewicz, N., Adeyeye, K., Moran, F., Ball, R., Holley, J., Orr, J., de Castro, M., (2020). *Shelter Assessment Matrix (SAM)*. Bath: University of Bath Research Data Archive. Available from: <https://doi.org/10.15125/BATH-00937>.

Lischer, S.K.(2005). *Dangerous Sanctuaries: Refugee Camps, Civil War and the Dilemmas of Humanitarian Aid* Ithaca: Cornell University Press

Luck, R. (2012). 'Kinds of seeing and spatial reasoning: Examining user participation at an architectural design event'. *Design Studies*, 33(6): 557-588

Luck, R. (2018a). 'Participatory design in architectural practice: Changing practices in future making in uncertain times.' *Design Studies*, 59: 139-157

Luck, R. (2018b). 'What is it that makes participation in design participatory design?' *Design Studies*, 59: 1-5

Mayer, M. (2020). 'The Promise and Limits of Participatory Discourses and Practices.' In: *Doing Tolerance: Urban Interventions and Forms of Participation*, Castro Varela, M., & Ülker, B. (Eds) Berlin: Verlag Barbara Budrich GmbH

MSF (1994). 'Breaking the Cycle: Calls for Action in the Rwandese Refugee Camps in Zaire and Tanzania'

<https://www.doctorswithoutborders.org/what-we-do/news-stories/research/breaking-cycle-calls-action-rwandese-refugee-camps-tanzania-and> (Accessed: 31.8.21)

Park, P. (1992). 'The discovery of participatory research as a new scientific paradigm: Personal and intellectual accounts' *The American Sociologist* 23, 29–42

Pink, S., Akama, Y., & Sumartojo, S. (2018). *Uncertainty and possibility: New approaches to future making in design anthropology*. Bloomsbury Publishing.

Smith, R., and Iverson, O. (2018). 'Participatory design for sustainable social change' *Design Studies* 59: 9-36

Tweed, C., Woolley, T., Bevast, B. T., & Ireland, N. (1992). 'User participation in design; Techniques for dialogue.' *Arch. Comport./Arch. Behav*, 8, 253–264

van Manen, S., Avard, G., & Mart, M. (2015) 'Co-ideation of disaster preparedness strategies through a participatory design approach: Challenges and opportunities experienced at Turrialba volcano, Costa Rica.' *Design Studies* 218-245

Zaphiris, P. and Constantinou, P. (2007). 'Using participatory design in the development of a language learning tool.' *Interactive Technology and Smart Education* 4(2): 79-90

Disclosure Statement: No potential conflict of interest was reported by the authors.

Funding: The research upon which this article is based was funded by the Engineering and Physical Sciences Research Council of the UK (EPSRC) under grant EPSRC/GCRF (EP/P029175/1).