

## **THE REFLECTIVE DESIGNER: A DISCUSSION ON ETHICS BASED ON END-USER INVOLVEMENT IN KEBRI BEYAH REFUGEE CAMP**

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### **1. Introduction**

During fall 2013, a design team from the Department of Product Design at the Norwegian University of Science and Technology (NTNU) travelled to the Somali region of Eastern Ethiopia. The group consisted of one senior researcher, three master students and the author who was both supervisor and researcher. The group had scheduled to meet with refugee women and other stakeholders in a refugee camp. The purpose of the visit was to develop basic contextual understanding of the everyday realities of a refugee, and the resource dynamics of a humanitarian refugee camp and the host population surrounding a refugee settlement. This contextual understanding was regarded as relevant in order to design a product service system to increase energy access for refugees in the Somali region of Ethiopia.

Design for development projects commonly recommend a participatory or empathic design approach. User-centered designers emphasize the techniques of empathic design-gathering, analyzing, and applying information gleaned from observations in the field [Stubbs et al. 2006]. Empathic design as well as the derived design capability approach [Robeyns 2005], [Oosterlaken 2009] requires a point of view that can only be learned through longitudinal, personal understanding of the individuals that are going to be designed for. From an empathic or user-centered design perspective, designers must endeavor to understand the culture and society of their intended users and grasp the framework within which their products will be interpreted [Freire 1993]. Design for empowerment theory also embraces participatory methods that require longitudinal field visits and extensive comparisons [Ike 1998].

Designers, who focus on the humanitarian market, for example by supplying humanitarian customers in refugee camps and trying to fill the needs of people in the aftermath of disaster, are hindered from satisfactorily applying these approaches. Within the humanitarian relief market, where cultural adaptability may be the most needed, insights about the end-user and specific end-user contexts are currently not considered during the design process [Nielsen and Santos 2013a,b]. Humanitarian aid organizations are reluctant, for practical, security, financial and ethical reasons, to let product developers close to the end-user or let product development take place in areas under their supervision. It is therefore important to gather empirical research examples of how end-user insights can be accessed and to explore to which extent and how they are relevant in order to propose an appropriate product or product service system solution. Conducting sufficient research in the product development phase for the humanitarian market is also often avoided due to the economic burden for the product developer, particularly for SMEs.

Ethics or moral philosophy involves systematizing, defending and recommending concepts of right and wrong conduct [MacIntyre 1998]. Ethics can typically be divided into meta-ethics and normative ethics [Garner and Rosen 1967], in other words the understanding of *why* people do right or wrong as well as ethical *behaviour*. Modern research ethics however build upon newer historical background in

the development of human rights and democracy, and writings within bio medics during and following the Second World War. The “Universal Declaration of Human Rights” and the “Geneva Declaration” by the World Medical Association, both in 1948, were preceded by the foundation of the United Nations in New York (1945), the World Medical Association in London (1946) and the World Health Organization in Geneva (1948) that lead up the emergence of academic writing focusing on research ethics. Ethics within medical research continues to pioneer the discussion on ethics in research. Regarding research on vulnerable user groups, there is currently a draft of the commonly referred to Helsinki Declaration suggesting that research should not be conducted on vulnerable user groups in any respect [Canadian Medical Association or its licensors CMAJ 2013]. This latest trend exemplifies the relevance of identifying which research on vulnerable user groups is vital and which alternatives exist in accordance with the design objectives.

This paper explores the ethical aspects of design approaches based on the interpretations of designers involved in a design project aiming at improving energy access and cooking stove design for a refugee camp in Ethiopia.

## 2. Relevant literature

The value of end-user research and contextual insight is a central theme in design literature and methodology in design for development projects. Participatory design methods are commonly referred to as appropriate tools within ‘ethnographic design’ or ‘empathic design’ and are commonly applied when designers aim at understanding and solving problems with poor and marginalized societies [Mambrey et al. 1996], [Crabtree 1998], [Visser et al. 2007], [Buur and Matthews 2008], [Hussain 2011], [Hussain et al. 2012], [Sanders et al. 2012]. Still, even studies that directly approach the topic of ‘ethical design’ for designers and engineers [Cummings 2006] predominantly emphasize the *objective* of the end-user research and the idea of participatory processes, as empowering, without paying significant attention to the ethical aspects of involving vulnerable end-users in research. Designing for vulnerable user groups would benefit from examples on how to conduct the design process in a more sensitive and respectful manner from the initial data gathering phase and onward. Refugee and disaster anthropology can provide us with some advice on doing research in a refugee camp.. For example, it is advised to make sure the interview topic does not touch upon issues that may provoke traumatic memories [Oliver-Smith 1996] and to conduct interviews in a safe setting, as seen from the interviewee’s side. As Leaning argues, “the ethical requirements for field research in these populations are higher than in populations who are less vulnerable to manipulation and exploitation. As Leaning points out, “Although the knowledge gained might be very useful, it is apparent to the humanitarian community that doing research on people who are desperately poor and frightened raises many issues about the ethics that support and constrain such studies” [Leaning 2001]. Leaning explains that research studies within refugee settings can be divided into prevalence studies, assessments of operations or systems, or clinical intervention research [Leaning 2001]. However, the end-user research typically required to design a product or a system may not fall within any of these categories. Further, designers’ approaches often include more interactive methods than the conventional interview addressed within refugee studies. It is important to understand how and if these methods are applicable and useful within the ethical and practical restrictions of a humanitarian operation.

### 2.1 Research approach

As mentioned, a central finding in ([Nielsen and Santos 2013a,b] (see above)), is that the end-user is currently not considered during the design process [Nielsen and Santos 2013] and no part of the design process takes place ‘in context’, in other words informed by a concrete end-user setting or in this case a refugee camp in Eastern Ethiopia. The aspect of design that is discussed within this article is therefore related to the discussion on the following question:

*How is the ethical reflection of the designer influenced by the end-user and context where the design process takes place and by which the design is informed.*

## 2.2 Method and scope

Due to the reflection and interpretation aspect of applied ethics, and since designers often operate in teams, it was decided that a discussion would be the preferred way to address the topic of how designers deal with ethical dilemmas. A discussion was facilitated centered on ethical challenges, one month after returning with the design team from Kebri Beyah refugee camp in Ethiopia. The discussion lasted for approximately 90 minutes. A list of bullet points that the author wanted the group to touch upon during the discussion included: *roles, expectations, interview framing, documentation, purpose of visit, unpredictability, planning, language, body language, culture, time, gender, power structure* was identified from literature on qualitative research methods and reflective practice [Schön 1983], [Halvorsen 1987], [Krulfeld and MacDonald 1998] and from the researcher's own field notes. The facilitation of the discussion encouraged the emergence of topics from the participant's recollection of the field visit, while ensuring that the designers had touched upon the central issues within literature ensconced in the bullet points.

## 3. Findings

Kebri Beyah, also spelled *Kebribeyah, Qebri Beyah, Gabribagia, Gabribaja, Qabribayah* and *Qabribayax* comprises a number of smaller villages in the Somali region in Eastern Ethiopia. In this paper, Kebri Beyah will refer to the site of a refugee camp that was constructed in 1988 following a civil war in Somalia, under supervision of the United Nations High Commissionaire for Refugees (UNHCR). Today the refugee camp site has a population of almost 16,000 Somali refugees who have fled war, persecution and famine. During September and October 2013 the design group made two short trips to the refugee camps Kebri Beyah, Shedder and Awarre, however, this paper will be limited to describing the two visits made to the Kebri Beyah camp. Reflections made by the designers will be described in relation to the context and description of tasks.

### 3.1 Access and restrictions

The field visit to the camps was hosted by the Gaia Ethanol Stove distribution project. The Gaia Association distributes ethanol cooking stoves and supports the production of locally distilled ethanol [Debebe 2008]. The plan was to use this project as a case study to further explore the challenges of energy access in the refugee camp context. In a country where 95 % of the energy consumption is related to household cooking based on biomass, refugee settlements present a major environmental threat in arid lands.. Moreover, extreme pressure on natural resources such as firewood leads to conflicts between refugees and host communities. Humanitarian refugee camps are run under the management of the United Nations High Commissionaire for Refugees (UNHCR), who in Ethiopia operate alongside the Ethiopian counterpart, African Refugee and Returnee Association (ARRA). In order to gain access to the refugee camp, the group needed authorized letters from both UNHCR and ARRA, first in Addis Ababa, and later in Jijiga, which is the town connected to the three refugee camps and where the operating offices of UNHCR and ARRA are located. These institutions have offices both in Jijiga and inside the camps. In addition, there are restrictions on how long one can stay in a camp. One has to leave the camp by 4 pm and cannot stay in the camp at night.

### 3.2 Validity

After visiting both ARRA and UNHCR officials in Addis Ababa, Jijiga and within the camps, the group was granted access. Approval from UNHCR and ARRA to enter the camps required the determination of an exact number of interview participants as well as limitations to interview topics. Gaia association were to choose the participants for the studies and during the two, two days visits, the designers were accompanied by between two and six officials, all male, from Gaia, UNHCR and ARRA. The group was expected to enter and leave the camp together with the Gaia and they came with us to all interviews. This represented a validity challenge since the presence of UNHCR, ARRA and Gaia officials during the interviews is likely to have put pressure on the participants to answer in a certain manner. It is also unknown whether everything the women told us was translated since the group had been told not to investigate topics beyond technical ones. For the purpose of gaining a broad

understanding of motivations, the author had planned for open-ended unstructured interviews. The intention was to retrieve insights about the everyday happenings of women in the camp, through participatory observation and ethnographic approaches. However, topics that could ‘start political or historical issues’ were not allowed (quoting the sub officer).

### 3.3 Hierarchy and ethical behaviour

The design group was welcomed into the homes of six families, who lived in small huts, on a tiny piece of land separated from the next family by rather tall fences created by branches as described by Kennedy [2008]. Of the six families visited, it was perceived that the oldest women were the authority inside the land within the branch fences. The hierarchical structure and large power distance observed structure and Somali culture which is frequently described as a vertical hierarchy [Gundel 2006], amplified by the structure of a refugee camp supervised by two governing organizations, the UNHCR and ARRA side by side. As one design student put it; *‘When entering her house, she seemed very uncomfortable with us being there. But in a way it was because we from our natural side wanted to be a bit more cautious than those interpreters were, they were very on it, they kind of marched in and asked us to follow and said it wasn’t a problem, come into the kitchen. And it seemed like the kitchen was a place that men normally didn’t entered. We marched in, a bunch of people into someone’s house, and both me and you and the UNHCR representative from Geneva seemed uncomfortable with the situation’*. According to the students, this hierarchy affected the ethical behaviour and mind-set of the students during the visit. This was especially evident during the second visit, when they were also accompanied by a UNHCR official from Geneva headquarters. The second visit was scheduled in order to conduct participatory observation research. Instead of the previous highly managed interviews, the designers wanted mainly to observe how women were living and cooking. When the NGO participants, all men, entered the huts, they did not seem to pay attention to the women’s body language that seemed to show that they were uncomfortable with the idea of letting a group of people walk into their tiny kitchen huts. This experience generated a discussion on whether one should have followed the behaviour of the people who were guiding us, or use ‘instincts’ that the designers said ‘we bring with us from home’. After a long discussion on what should be the correct behaviour in such settings, it was agreed that it is difficult for us to interpret and discuss these types of ethical dilemmas during a field-visit, because of the many communication challenges. One solution could be to discuss ethical standpoints with the interpreters prior to the interviews. Since the designers depended upon assistance to understand the participants, the interpreters could both help us understand the unwritten rules and to let them know that it is important to us not to make any of the participants uncomfortable or insulted.

### 3.4 Data gathering methods and appropriateness

Due to the time and topic restrictions the group faced, the group decided to focus on the interview as a main method of retrieving insights about a satisfactory number (n=6) of families. Even though the group was prevented from spending a longer time period with a family in order to map an entire day of activities, some advantages of using semi-structured interviews as a data gathering method appeared. For example, the women seemed very familiar with answering this type of questions in the set-up that was chosen. With a household of 12 to 15 people to cook for, which took six hours a day, and the additional shores of cleaning and gathering of food and fuel that they told us kept them busy, they welcomed a time restricted data gathering approach. The group did however also ask the women to show us a cooking procedure in a participatory observation attempt, and one group discussion was also set up at the end of the second day in Kebri Beyah that will be discussed briefly.

*Interviewing at home:* Ethnographic, open-ended interviewing is suggested by Katner, Sova et al. as one of the alternatives to extensive field studies. This approach also finds support in disaster anthropology: ” [...] of research in crisis situations [...] more dialogic, open-ended methods are suggested as both ethically more appropriate and methodologically more effective” [Hussain et al. 2012]. Ethnographic interview is further suitable to “understand the complex behavior of members of society without imposing any a priori categorization that may limit the field of inquiry.” [Leon et al. 2009]. The aim was to make sure the interview technique did not limit the outcome, since an empathic

approach means one has to be open minded to really understand the other's perspective. Hence, the ethnographic interview is more compatible with the empathic/user-centered design approach, where the aim is to understand the person one is to design for. However, due to the limited time available and since restrictions had been given by ARRA as to what could be the topic of the interview, the interviews were changed to semi-structured with a list of questions available related to the use of the ethanol stove distributed by the Gaia Association. During the first visit, we focused on interviewing the mothers in a home (see Figure 1 and 2).



**Figure 1. Interview setup at home**



**Figure 2. Interview and participatory observation in kitchen hut**

*As noted: 'One of the women in the household placed a mat under the largest tree, so that we could sit in the shadow. We were given flattened jerry cans to sit on. They were surprisingly comfortable. The interpreters sat down next to the woman in focus. She sat in the middle, often with her mother on her side and always surrounded by between five and twelve family members. Her sons would stand behind her. Sometimes large numbers of children would enter the courtyard to watch as we were*

*interviewing. They were giggling in the background and pushing each other towards us. The temperature under the tree was pleasant and occasionally a woman would walk through the courtyard to hang up laundry, or a goat would stroll through the yard with a toddler chasing it.* During the discussion, one of the designers in the team expressed that it would have been better if we had arranged the interviews so that the group would not have been surrounded by so many family members. Halvorsen [1987] agrees with her that the greatest source of error in interviews is that the conversation gets affected by the context it takes place in. When interviewing a person at their home, they can be affected by the presence of other family members. Still, the photo documentation can illustrate arguments in favour of conducting interviews in a setting that the participant chose, rather than us selecting it. The same woman looks relaxed when sitting by her family, and when she is alone with us in her tent she looks much more uncomfortable (Figure 1 and 2). This was even more evident when the camera was on. Having the participant have the dual role of also being our hosts as in Figure 1 and let them set up a comfortable position also made the author feel more equal to them and less invasive. Despite it being tempting for the purpose of a one-to-one interview to separate the participant to create a separate question-answer scenario, it may on the other hand be more appropriate to respect the cultural hierarchy in order for the interview participant to feel on an equal level as the researchers (Figure 1).

*Participatory observation:* Participatory observation is a commonly used method for designers who wish to understand the usability aspects of a product and the context it fits within. It is also regarded as a way to get to know the end-user and, by using an activity to ask the questions related to, is intended to ease the conversation. In Kebri Beyah however, the designers found that the dependency on interpreters as well as the restrictions on the research made this method inappropriate. The women seemed very uncomfortable when being in the hut by themselves and with the number of participants from different associations it became nearly impossible to create a confident setting that is needed in order for this method to be beneficial for the research. The woman was also very uncomfortable compared to when she was being interviewed with her family. If this method is going to be appropriately used, one would need to be able to spend a lot of time with one family and gain confidence. In contrast, the women seemed very familiar with the interview setting and from an ethical perspective that seems like a better solution provided the time and resource limitations one has to deal with when conducting research in a humanitarian relief setting.

*Focus group discussion:* Eight women were invited for a focus group discussion but only three showed up. It was difficult to generate a discussion among the three in comparison to the ease of conversation it was possible to generate when speaking to one woman at the time in her home. It would have been interesting to see if the situation would have been different if had been possible to acquire female interpreters; however the design team did not perceive this as a gender issue but rather a power relations issue and strong hierarchy between roles independently of gender. Despite this two ways were found for initiating some debate. First, by having one of the students simulate a cooking process on the ethanol stove. By making mistakes and over-acting certain procedures such as pouring too much ethanol into the stove, the women became enthusiastic and took on a role as supervisors of the process. Further, post-it notes were used that the women could arrange on a sheet to discuss their priorities and view on the current energy solutions. It seemed like these two tools made the women feel a bit more included and interested and even take on an advisory position that stimulated their participation in the discussion. It also seemed like the women were more comfortable in the group than when alone, despite the lack of conversation. This indicates that it may be more appropriate to conduct research on refugees in 'collective' cultures in a group setting rather than following one person to observe their behaviours, as was attempted in the participatory process.

### **3.5 Audio-visual documentation**

*'The grandmother would sit with a strong, self-confident figure next to her daughter as to approve of what she was saying to us. As one from our group lifted out the camera and asked to take a picture, it appeared as if the grandmother told her daughter that she should put on a prettier scarf, and she started arguing with her young daughter so that she could have the bright yellow one. Quickly, without letting a single hair show, she managed to neatly put the yellow scarf on her head and the*

*other, darker one was perfectly placed on her young daughter. She signalled that we could take our picture. We later followed the same woman into her hut as she was going to illustrate to us how she used the ethanol stove. She hunched down on the floor to light it and we were observing, asking questions. As soon as someone from our group lifted up the camera again, the expression on her face changed and the conversation became less fluent.*

“When designers create new products for people whom they do not know, they need to engage in activities that render the use context visible to design. This can be done with video studies of users, where the video camera is employed as a tool to construct relevant material that both informs and inspires design” [Ylirisku and Buur 2007]. It was decided to bring impressions from the camp with us home through audio-visual means. A GoPro camera was brought, with a chest-mount, two SLR cameras and used cell phones for audio recording. Since only 4 days of access to the camps had been allowed, this added to the necessity of bringing as much data about the context home as possible. This short time span is obviously in conflict with the ‘ethnographic video’ ideal [Ylirisku and Buur 2007]. In order to retrieve ethnographic insights from a context it would have been necessary to stay months or years within a setting in order to gain trust and retrieve deep insights about these refugee’s lives. On the other hand the four day time frame may reflect a reality closer to that available for most designers who want to design for a humanitarian relief context. The request to take photos of the user scenario was first refused by ARRA. However, the Gaia Association also wished to take some photos for their own documentation process and when they asked again for authorization, ARRA changed their minds. After receiving authorization the group was left with only two hours of the visit. In the excitement of finally receiving authorization, the design team was so eager to document the experience that the designers did not seem to pay enough attention to the consent of the participants.

Ideally, a short break should have been arranged after receiving the authorization from ARRA, to discuss how it was best to do the photo documenting. But due to the strict time available in the camp, and with only one hour left until the camp closed, the designers also felt stressed by the fact that there was still a focus group discussion to conduct, and did not find time to discuss these issues. This again highlights the importance of discussing this, with all the local assistants and partners, prior to the visit. Further, regarding the issue about what the photos will be used for, this is an ethical question that only the students and the researcher have direct power over. The refugees are a vulnerable group and it may be important to question whether their photos should be used in the context of the design project, to bring attention to a problem, or purely for illustrating a completed experience. Student A: ‘Well, it comes down to something like, that the photo will not be used for something illegal and it will be used in a nice connotation all the way. But there is also something in thinking that “Oh but they are so far away”. And that when we return home it just becomes some photo of a little boy, in a way. And that he will never know that it exists.

### **3.6 Roles and expectations**

The expectations and agendas of the end-users both affect the results of the research. They also contributed to some topics raised by the designers when discussing ethical dilemmas. It was clear that their basic needs were more urgent than the issues that we were there to solve. *As we enter one family’s courtyard together with interpreters and officials; a little girl, perhaps two or three years old, starts crying at the sight of us. She looks at us white girls with horror, and she clearly finds us scary. Perhaps we are tall, perhaps we are too white. Still, we cannot take our eyes of this little girl. She is in rags and looks like she has not had a bath for years. Her hair is full of sand. But the reason we can’t stop looking is to her feet, she cannot walk properly and is having a hard time balancing on her feet that seem to bring her great pain. There is a wound on the top of her foot, and it looks like there is one under her foot as well. We remember that we brought some first aid equipment and decide that we have to at least try to disinfect the wound and protect it before leaving. In the same camp, they asked us: ‘Why are you coming here and asking us about stoves? She said. Tell them that we need water. We only have three jerry cans for a family of 15, to last for three weeks! And tell them that my son is sick with diabetes, he is lying in his bed all day and they are doing nothing. ‘Even though Kebri Beyah has existed for decades, people still face challenges that to them are much more urgent than the issues we were there to explore. Environmental sustainability is far from relevant in their minds. This is one of*

the dilemmas of conducting research in these circumstances; even though it was considered important for the design process to understand who the end-users are, it may be ethically questionable and disrespectful in some circumstances. In the refugee camp the designers were several times met with expectations that were expressed subtly or directly, and the needs that the refugees were expressing were sometimes beyond the designers' power or influence. However, it still provides some important insight into answering the question of whether there is something particular about the end-user needs and motivations necessary for the solution proposed.

### 3.7 Interpretation, interview topic and sensitivity

During an interview with a refugee woman, a woman started talking about her family members being massacred. Still it took a rather long time before the team understood that she was telling a terrible story and therefore the designers didn't feel that their body language reacted appropriately to her story. It is important to be aware that using an interpreter makes it difficult to be sufficiently sensitive to the responses and reactions from the people being interviewed. Even though one is aware that one should take into consideration if it is okay to touch upon topics that may provoke traumatic memories [Oliver-Smith 1996], this may be difficult to supervise when using interpreters. Another issue brought up during the discussion on ethics, was that perhaps the long time period these refugees have been in a refugee camp meant that this refugee was used to and even benefited from telling her story. In refugee settings in more urgent emergency scenarios, it will be important to be very sensitive to avoid bring up issues which are not vital to the project. Lessons from recent experiences from research in conflict emphasise that it is better to abandon a project than to harm participants [El-Khani et al. 2013].

### 3.8 Responsibilities and design objectives

Many anthropologists emphasize the need to give something to the informants in a study [Leach 1976] as an appreciation of their time and hospitality. It is however unclear what this return 'favour' can or should be. In Kebri Beyah the NGOs told us it was very important that it did not seem 'as if we were paying for answers'. During the visit to Kebri Beyah, it had been decided to give the children in the family some pencils and paper as a way to show gratitude, and we were told that it was a very timely and appropriate gift due to the school starting in September.

Another ethical dilemma discussed by the designers is whether a research phase as a part of a design project is ethically defensible if the solution it contributes to does not directly target the involved participants and improve their lives somewhere down the road. This is also related to the discussion on expectations:

*'A: But if the project results in a good product service system or a message, does that mean that our conduct in the camp is ethically defensible? B: In a way... it is more defensible that we took their time and entered their homes and took pictures, if we actually end up developing our project in that specific camp. Instead of just contributing to our school project. If it is only a student project, it feels like we have exploited their input to our own benefit'.*

It was further discovered that the three students had a different view on what it was important to protect within the project. Student C expressed that for her, it is more important to protect the trees in Ethiopia than protect the populations there: *C: I feel that I care more about the trees than people and that's the kind of thing that is really wrong to think but that's what I care about more.* Due to her overarching emphasis on protecting the environment, student C saw it as more important to bring a message about the importance of local fuel access on a higher level. Student D, who says it is more important to protect the communities at stake, thinks it is ethically indefensible if the end product doesn't target the participants in Kebri Beyah. This shows that the value basis upon which the designer or researcher place their justifications determines their ethical perspective in a project. It is interesting to see and points to the subjectivity of ethics. The different standpoints found within this small design group suggests that clear rules for ethical behaviour would not be sufficient for designers or others to behave in an 'ethical way'.

## 4. Recommendations

The aim of a design project may seem to collide with the first point of Leaning [2001], of only undertaking studies that are urgent and vital. However, the experiences of this group revealed that there are certain motivations and system relations present in refugee settlements that may be relevant to which energy solutions can contribute to a sustainable future for the region. The relationship between environmental sustainability and socio-cultural sustainability is crucial in regions such as the Somali region where the research was conducted. Insights about safety issues and lack of fuel in the camps were gained, in addition to cultural nuances and preferences, which could not have been discovered without hands-on experience and visits to the camps. If energy technologies for development projects are going to meet the challenges of designing functioning systems for refugee camps settings, these are essential insights. The insights retrieved regarding hierarchy, and the research conducted on energy systems and technologies in the host community Jijiga, showed that there are existing solutions that can be redesigned to provide the refugee camp with fuel. These are insights that design enterprises could not have retrieved through the humanitarian customer UNHCR. If left unsolved, fuel scarcity leads to arrests and assaults [Lyytinen 2009] in the Somali region as well as many other areas of Sub-Saharan. The protection and health of refugee settlements is hence dependent on local sustainability; even though technical solutions to energy access today is limited by short term funding, it will be necessary to design solutions that are based upon knowledge about the local community and the challenges it faces.

The 'reflective practitioner' approach from sociology [Schön 1983] may be useful in this context, as it provides overarching advice on the role of awareness and sensitivity that can be applied in a practically demanding context. More than rules of conduct, it could be of benefit to designers to keep in mind the starting point of ethical research; namely dignity and human rights. Design methods have, according to the participants, in general put too little focus on ethics in contrast to the emphasis on the practical elements of tools and applications when extracting end-user understanding. The value of achieving end-user insights does not necessarily justify insensitive use of data gathering methods.

Rules of conduct for ethical behaviour are not necessarily the most flexible manner to deal with ethical considerations, as ethical conduct depends upon constant self-reflection and discussion among participants, which are themselves influenced by unpredictable dilemmas that will emerge during a design project. However the list below are some concrete suggestions made by the designers:

*Consent:* use empathy when in doubt (Would you like if someone took a photo of you on the subway without your consent?). Remember that consent (or the opposite) can be given in many ways: pay attention to body language in addition to what is being said, reflect upon what *dignity* may mean to the participants in your study. If the culture is different from your own; look at power dynamics and body language within the setting for indications on this. If in doubt, discuss with interpreters and your team members.

*Expectations and ethical responsibilities:* reflect upon the balance between input and output, expectations and honesty in your design project. What can be done before and outside the context, and which information do you not need the participant to know (Restrict studies to those questions that cannot be addressed in any other context [Leaning 2001]).

*Identify alternatives and complimenting factors to end-user research:* In a design process it is sometimes difficult to predict which parts of a context are relevant if it is a context that is not easily accessible or commonly described, such as the refugee camp setting. If extensive data gathering is regarded as necessary, make sure this is done in a respectful manner. In the presented context, it could have been beneficial to conduct a few days of investigating the culture within Jijiga among participants in less vulnerable situations, and provide compensation for their time. In this case, it was important to visit the camp in order to understand the motivations of the refugee as well as the hierarchy, dependency and the relationship between the host and the refugee community.

*Prepare to avoid ethical dilemmas:* Discuss with interpreters and partners who are familiar with the culture, prior to and during the research, in order to understand the unwritten rules of the individuals or the community.

*Being sensitive to power structures:* Find out who is the highest authority in the setting/household and pay attention to their reactions, verbal or body language.

Finally, it was agreed that data gathering is not more important than respect and sensitivity. "Field researchers might find themselves in a situation where they must quickly modify an aspect of the procedure approved by the ethical board or abandon the research without completing data collection to avoid breaching an approved protocol" [El-Khani et al. 2013].

## 5. Conclusion

The dilemmas experienced by the designers were according to them that they had not been equipped with tools or approaches to deal with the ethical dilemmas in their design education. Moreover, they found that it was easier to understand and act ethically appropriately when face-to-face with the people affected by the design and that they found it less relevant when geographically removed from the situation. This is a central finding that answers the core of the question asked within this paper. This explains that in order to keep an ethical stance towards a research process, some sort of in-context experience is needed, not only in order to design appropriate solutions but to design ethically defensible products and services. This leads us back to the understanding by Levinas that ethics is based on an understanding and acknowledgment of "the other" and that ethics as a concept becomes less clear when abstracted and once the designer is removed. In other words, place (*context*) matters in order to conduct ethically aware design projects and reflective design practises, and in order to feel responsibility for the impact of their designs as well as for designers to become reflective within their design endeavours.

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