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Connectedness in mobile families

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Abstract. Family life is no longer confined to geographically shared spaces. More often, families are separated. Technology offers countless means of keeping families connected, which has been subject of extensive research. Yet, connection between families goes beyond interpersonal communication. Being separated from extended family means to be separated from familiar rituals, habits, and values. In this paper we present an ethnographic study of mobile families to understand how families are dealing with this kind of separation in their everyday life. We analyze situated practices and discuss how these families create a sense of connectedness to their country of origin. Our observations show that design for connectedness should address practices and materialities that are part of the family home. Furthermore, we argue that there should be more consideration for what the family connects to: Instead of connecting between people, connectedness can also be seen as staying in touch with familiar routines, customs, and environments.

1. Introduction

Social interactions within families rely increasingly on digital technologies. Urbanization, globalization, ICT, and modern economics lead families to relocate to a new or temporary home, often in distant and foreign environments. And the past two years of the global COVID-19 pandemic have shown how resourceful

families can be in maintaining the social fabric of modern family life – even when forced to social distancing. Digital technologies open a wide range of opportunities for families to stay connected, however, the applications and devices used have remained remarkably static. Connectedness between families is still mostly limited to different forms of communication, mainly through sound and video transmission. But families that are separated from their extended family and close friends are also experiencing a separation from familiar values, rituals, and habits. Often, families are challenged to create a sense of connectedness while at the same time making a home.

There is a wide body of research on ways to support emotionally rich distant communication between family members. Yet especially design-led inquiries are mostly focused on inter-personal instances of connection. Less attention is paid to the role of connectedness as a continuous experience, present in the many everyday practices in family life. In this paper we argue that it is necessary to revisit and expand existing research on interpersonal connectedness. Hence, we scrutinize connectedness not just in terms of concrete instances of communication but as embedded in the rich practices of everyday life. Thus, we are seeking to explore how families are creating this particular experience in their everyday, for instance, through the use of objects, through arranging spaces or by maintaining ritualized routines. We argue that both, practices as well as the artefacts that are part of these practices, play a crucial role in the emergence of connectedness. And to understand these experiences we must dissect the practices and the material culture behind them.

To make the practices of connectedness more visible we decided to study an extreme group: We focused on families that are often months or years separated from their originate home, through country or even continent borders. We report on an ethnographic study that was conducted before the outbreak of the Covid-19 pandemic. We studied the everyday life of ten families that live outside of their home countries – we call them here ‘mobile families’. For the researcher in the field, the contrast between local and foreign artefacts and practices facilitated identifying and tracing practices of connectedness throughout the family’s everyday life. Yet, we argue that, while the families presented here must overcome quite high obstacles, the challenges they are dealing with, also give insights into practices of all families that have to deal with any kind of spatial and social distances.

In this paper we want to make three contributions: First, we want to show the variety of ways in which families integrate the sense or experience of connectedness into everyday practices. Second, we show some of the elements and mechanisms around these instances of connectedness. Lastly, we show the implications of this experiential view on connectedness for the design of new technologies that can enhance socially distanced family life.

2. Background

Connectedness, in particular in regard to families, is a well-researched topic in HCI. While earlier work has been dealing mostly with connectedness at the workplace, the recent decade has seen increased interest into connectedness at home and among families. Here, the term has found reflection mainly in its definition as “interpersonal connectedness” and the relationship between social contacts (Van Bel et al. 2008). Research in this field has thus mainly focused on the communication between people, for instance in long-distance relationships (Alsheikh et al. 2011) or in a migration context (Wyche and Chetty 2013).

We want to introduce the most relevant strands of research on connectedness, beginning with some of the conceptual discussions around presence followed by a review over research and design on families and connectedness.

2.1 Presence and awareness

Presence and awareness have become prominent terms in order to describe the experiential dimension of interpersonal connectedness. The work done in this area illustrates the challenges of grasping connectedness on a conceptual level. The emerging expanded understanding of connectedness has influenced designs that aim to bridge the distance for instance between couples in long-distance relationships (Mueller et al. 2005; Lottridge et al. 2009; Hassenzahl et al. 2012) or between older people and their children and grand-children (Mynatt et al. 2001; Durrant et al. 2009; Wallbaum et al. 2018). Several design studies have focused on the experiential qualities of connectedness and go beyond verbal communication but instead create connection through bio-signals (Min and Nam 2014), connected lighting (Morris et al. 2017) or the transmission of pressure (Mueller et al. 2005) Others focus on shared activities, such as meals (Grevet et al. 2012) or watching TV (Harboe et al. 2008). There exist many interesting design explorations in this area, for instance Tibeau et. al.’s ‘Family Song Box’ (Tibau et al. 2019).

Early on in the design of different communication technologies, such as video displays, the concept of presence served as theoretical foundation e.g. (Bly et al. 1993). Originating from the field of social psychology (Short et al. 1976) it emphasizes the importance of non-verbal communication, i.e. communication not expressed merely verbally. A wide range of design explorations have since aimed at created this sense of presence with the help of technology (Bly et al. 1993; Kuwabara et al. 2002; IJsselsteijn et al. 2003).

But with technology entering the home, HCI research turned towards a more complex understanding of connectedness. Rettie (2003) argues that connectedness does not necessarily require direct social contact but that the focus should instead lie on the overall experience. While presence might describe an experience during

a specific instance of communication, several studies and design explorations focus on a more implicit form of connectedness that is not temporally limited but continuously present. For instance, Bales et al. (2011) designed a system that automatically shares the location between couples with the help of rather unobtrusive cues. Others have integrated subtle forms of information exchange into everyday objects (Dey and Guzman 2006), connect households by transmitting traces of touch or objects via a table (Dey and Guzman 2006), or allow for digital storytelling between parents and their children (Wong-Villacres and Bardzell 2011; Cheong and Mitchell 2015).

As a term, awareness has emerged as an understanding of connectedness as being aware of each other or “to keep in touch with” (p. 187) others. (Liechti and Ichikawa 1999). This line of research focuses primarily on inter-personal connection. Lynggaard et al. (2010) as well as Ylirisku et al (2016) take a slightly different path and explore connectedness in relation to places. Both studies are conducted by placing particular artefacts into family homes that connect to a different personal place like the family’s summerhouse, through image or video material. Thus, they create what Ylirisku et al refer to as “place-presence”.

2.2 Connectedness and Family life

Families and the family home have emerged as an important subject of HCI research and as target for a variety of design explorations. Here, materiality and practice as analytical stances had a big influence; for instance, in form of research dealing with the importance of material artifacts in supporting a sense of domestic connectedness and family relations (Taylor and Swan 2005; Wakkary and Maestri 2007). Bales & Lindley (2013) look at how particular artifacts in the lives of undergraduate students convey the character of the parental home. And Odom et al. (2010) describe the material infrastructure of possessions and arrangements that characterize the bedroom of children living in divorced homes. A wide range of studies has explored how families can be connected to each other. Some of these studies focus on connectedness between families living apart from each other (Ames et al. 2010; Brown and Grinter 2012) while others consider the connectedness of the nuclear family (Brush et al. 2008; Durrant et al. 2009). These studies are mainly focused on moments of family interaction and communication. Other studies address the family home, awareness and the sensorial connection to place (Dey and Guzman 2006; Brown, et al. 2007; Lynggaard et al. 2010) and have also found reflection in the form of ambient systems (Agamanolis 2005). This line of research shows the importance of digital technologies in interpersonal connectedness and especially because they show how technology enhances family life and contributes to well-being. We want to expand on this research by focusing on connectedness as it is cultivated and maintained in practices.

3. Methodology

The data presented here draws on the results of an ethnographic study carried out in the Netherlands with ten families over the course of two months. Because of our interest in families' individual experience and perception of their everyday life, we chose a phenomenologically informed approach, blending elements of semi-structured interviews with observations. Our main interest were mundane practices and routines that were in some way related to the subjects' home countries.

Within anthropology, there are a variety of methodological approaches that seek to get as close to the individual experience of a participant. We designed this study loosely based on Kusenbach's (Kusenbach 2003) go-along approach. This approach has the researcher walk with the participant and share their experiences (in Kusenbach's case outside) while at the same time reflecting on them together with the participant. Thus, this method addresses a common challenge in studying everyday practices and individual experiences: Any kind of routine or interaction that is part of everyday life is usually taken for granted by participants. Walking along with the families in their homes made it possible to make the apparently mundane visible.

Another important pillar of our research methodology is the concept of practice as an analytical frame for understanding activities and interactions. In the last decade, HCI research has demonstrated a growing interest in social theories of practice (Kuutti and Bannon 2014) and a renewed interest in technology's role in everyday actions. This emerges out of the desire to untangle the increasingly complex and diverse practices that are emerging around digital technologies (Goodman and Rosner 2011).

In this part of the paper, we describe the participants, the overall setup and procedures during our observational interviews as well as our analysis procedures.

3.1 Study setup

Families were visited at home, usually on the weekend at a time when all family members were present. The visits lasted approximately 3 to 4 hours each, during which the ethnographer would also participate actively in a family activity, such as dining or going for a walk. In the beginning of the visit, the researcher explained details about the study and procedures around any collected data and answered participants' questions. This was followed by a detailed tour of the house in which the researcher would repeatedly ask for certain artefacts or practices (e.g. "When was the last time you have used this desk?" "Can you tell me more about this picture?") Keeping the visit informal and interactive was a priority and the researcher would actively engage in different activities, such as

(playing with the children or help with meal preparation. The visits were recorded. Additionally, we took approximately 80-100 photos per family and shot short videos of some families performing certain practices. This material was later used as cues and mementoes during the analysis process.

Table 1: Overview over participating families

Alias	Family Members and countries of origin
Family A	Mother, father and one son (6 months) – from Indonesia
Family B	Mother (Uganda), father (Kenya) and one daughter (2 years)
Family C	Mother, father, one daughter (8), one son (5) - Columbian
Family D	Mother (USA), father (Germany), one son (8) one daughter (4)
Family E	Mother (Brazil), father (Hungary), one son (3)
Family F	Mother (Italy), father (Kenya), one daughter (3)
Family G	Mother (Sweden), father (France), daughter (3), son (1)
Family H	Mother (UK), father (Dutch), son and daughter (both 2)
Family I	Mother (USA), father (German, but grew up in USA), one daughter (3)
Family J	Mother and father, two sons (3 and 1) - Dutch

3.2 Participants

Ten families were enlisted for this study. We recruited nine of these families mainly through Social Media groups related to expat life. Thus, while the participants' personal backgrounds as well as duration and reasons of stay abroad differ, they all do identify themselves as expats or mobile families.

The tenth family was a Dutch family without any migration background, recruited through our personal network. This family served as a control case – in the widest sense of the word. Contrasting our observations with the non-migrant family to our observations in other families helped us in identifying those practices that are primarily related to family life rather than connectedness. All families received compensation for their participation.

The background of the families as well as their socio-economic situation is very diverse. In some cases, both partners were from the same country and had

moved together to the Netherlands (Families A, C and I). Other partners had met in the Netherlands while studying or working and decided to build their family there (Families B and E). And some families had already been living in other countries as expats and had moved from there together to the Netherlands (Families D, F, G and H). The families also differed in their long-term plans as it related to the Netherlands; some families had decided to settle down there, while others were in a more transitional state and were planning to move back to their home countries or to another country soon.

3.3 Data Analysis

In preparation for the analysis, all interview recordings were transcribed and anonymised. Furthermore, the field researcher gave a subjective account of her experiences and described the family's everyday life based on her observations. These thick descriptions of family life were written on the same day that the observation took place. All collected data – audio transcripts, photo- and video material and the family descriptions – were then coded using atlas.ti. The main part of the analysis took part during two workshops. During these workshops, the data was examined by a team of researchers working on this study and through the lens of our interpretive resources. In these workshops we started by identifying as many practices and routines as possible, before clustering them around different themes and scrutinizing their function in relation to connectedness. Throughout several iterations we identified those practices that were directly linked to connectedness, in particular to the participants country of origin. In the following, we will present these practices and their function within the family home.

4. Observations

In our analysis, we found distinct practices emerge around artifacts, demonstrating the variety of different strategies and routines supporting the families' needs for connectedness. We introduce the most important practices that are related specifically to connectedness and exemplify them along moments or vignettes from the field.

4.1 Traveling, communicating and re-creating – bringing the home country to life

Many practices in the family's life were obvious in their connecting function: The long travels back home that come with the arduous coordination around school holidays and work; the calls back home to keep in touch with grand-parents and friends, organized by mobile families through a multitude of channels and

material arrangements. Technology played a large role in this, and it became apparent that it had already enhanced both communication as well as the possibility to receive information, movies or photos from the home country.

Maybe not surprisingly, those practices that stood out in terms of connectedness were those of nostalgia or remembrance. In many households, certain artefacts were presented to the researcher as valued treasures or just plainly as things one would “never throw away”, they were clearly an important pillar of many participants’ connectedness to their home countries:

The mother of family E shows me a special christening towel that she keeps in the drawer with the rest of the regular-use towels, even though she would never use it. The towel played an important part of her son’s christening ceremony in her home country and has been embroidered by her two aunts. The towel is stored in an everyday place thus is a constant reminder for her of this very important religious ritual, while at the same time also connects her to her family members back home and connecting her son to them and his heritage. (As shown in Fig. 1)

Those artifacts did not necessarily exhibit folkloristic elements typical to their home country. Often these were just objects or arrangements they used to have back home:

The mother of family F shows me how she has arranged jewelry cases and cosmetic equipment on the window board of her small bedroom. She has them arranged in the exact same fashion as she has in every bedroom she’s occupied since she was in her childhood bedroom in her home country. She tells me that it gives her the sense of her own place, even when space in the apartment is limited.

These two observations illustrate that many practices of connectedness are not necessarily related to communication but rather to a certain use of artefacts or spaces. The arrangement of things, the way in which certain practices are performed around certain family heirlooms or keepsakes represent other ways of staying in touch with the home country.



Figure 1 and 2: Christening towel and mantelpiece arrangement.

4.2 Storing, arranging and decorating – Making a home

One of the biggest challenges for mobile families seemed to be to make a home, i.e. to create the place they are living in in a way that makes them feel as comfortable as they would be in their home country.

The mother of family C points towards an empty wall in her living room. She tells me that she would like to decorate this wall but that she would never decorate with things acquired in the Netherlands because she does not like the Dutch taste. “I already know I will not like it, I won’t even look for anything here.” Instead, she would go all the way to Colombia in order to acquire decorative objects there.

She proceeds to show the researcher some previously acquired decorations. These items are not directly linked to Colombian heritage. These decorative artifacts are in no way linked to a particular country or region. Yet, for her it is important to express the style that she associated with her home country. Traces of this kind of home-making were among the most obvious ones during our observations. Practices of decorating or storing were often reflecting certain values or ideals and thus were expressing a certain identity. The following example shows this even clearer:

The mother of family D shows me greeting cards that are arranged all over the living room, but in particular over the fireplace. The living room is a very representative place that is seldomly used and the greeting cards have a decorative character. Families sent them from the couple’s respective home countries on special occasions, such as Valentine’s Day or birthdays. She explains to me that arranging these cards is very important to her and that she wishes that her children also value cards like these in the future instead of only focusing on digital devices. [As shown in Fig 2]

In this example the mother expresses a high appreciation not only for her family but also for postcards that represent a certain cultural meaning to her. By arranging the cards and by attempting to pass the cultural significance of them on to her children, she seeks to maintain certain values that are an important part of her connectedness practices.

Digital technologies play a lesser role in these home-making practices. While mobile phone, tablet or laptop were natural parts of the home environment and played a large role in communication, games or entertainment, they were seen as mere tools to procure the necessary materials, such as photos, movies or cooking recipes.

The here described practices stand out in that they at first seem to be singular occurrences, like decorating a mantel piece or storing a precious keepsake. Yet, during our fieldwork it became clear that most of these arrangements also involve constant maintenance. For instance, the arrangement of cards on the mantel piece is constantly changing, due to the addition of new cards. Similarly, decoration in a particular style needs to be adapted to the family’s changing circumstances, interests or tastes. And the beloved christening towel, while safely tucked away in the child’s drawer, repeatedly makes an appearance when clothes need re-arranging.

4.3 Cooking, gathering, playing – everyday family life

A third group of practices we observed were everyday routines that are at the core of each family's daily life. When looking closer at different practices it became clear that in almost every practice, families were adapting previously existing habits and routines to new life circumstances to create a sense of connectedness. While many of these practices appeared to be rather mundane at first, their importance in the families' life must not be under-estimated. For instance, all families that we interviewed had different ways of procuring country-specific toys for their children. In particular, children's' books and TV shows in the parents' native language constituted an important element of raising children in a foreign country. Books are very often procured through relatives as gifts:

The mother of family F points out some books in her daughter's library that were actually her own childhood books that her own mother had sent from Italy. This mother explains that she likes that her daughter also reads the same books she read as a child.

Examples like this were found in every single family. Raising the children according to one's own values is one of the most important elements and challenges of mobile family life. Material and non-material artifacts, like TV-shows, played a crucial role in this. Another example shows the role of digital devices:

The mother and father of family D point out the stereo system that they have installed throughout the whole house that is connected to Internet radio. Both are very enthusiastic about it because it allows them to listen to their favorite radio stations. He would listen to a German station, often using headphones, while she, coming from the US, listens to American stations during everyday activities. "Sometimes when I am in the house, I feel that I am in America. The radio is American, I am cooking American food... Only when I step out of the door, I realize I am in the Netherlands." [Vignette 4]

In this example both, mother, and father, surround themselves with digital technologies this way slightly aligning their home to what they know from their home countries and their preferred taste. The crucial role of digital technologies in the flow of our families' practices becomes also apparent in this example:

The mother of family G has a very special strategy to keep her children occupied. Sometimes, when she has some housework to do, she will call her parents in Sweden over video call. The two children are used to meeting their grandparents this way from very young age so the grandparents can function as 'babysitters' and keep the children occupied. [Vignette 7]

In this example the grandparents – or rather their visual and audio representation on the computer screen – become virtual actors. The mother needs them to watch the children – just like close-by grandparents might do – but because of their remoteness she has to connect to them via the computer. The values at play here are those of parenting strategies and keeping the family members in touch with one another.

5. Discussion

Our observations show that families go through some length in creating a sense of connectedness. And it also becomes apparent that connectedness is not limited to particular moments of connection. Connectedness presents itself as a rather ephemeral sense or feeling that becomes visible through everyday practices. Before we can think about designing for connectedness, we want to discuss the core elements and mechanisms behind the different practices we observed.

5.1 Maintaining the family home

Surrounding oneself with familiar artefacts, teaching children certain values, and celebrating certain family routines - all these practices aim towards constituting and maintaining the family home. Every family strives to maintain a certain set of values that they also seek to pass onto their children and that are an important part of their everyday life. These *practices of maintaining* can happen in tangible forms such as preserving the particular practices of food preparation or the kitchen table as a central element of gathering the family. But in our study, we also often encountered *practices of maintaining* that are more conceptual, such as those related to child rearing and socialization. Here the need to convey certain values from the home country – a certain way of doing things – plays a central part. Values become weaved in with the routines and habits developed at the new place of living. Raising a family is a highly personal and cultural process, which for a migrant in a foreign country can lead to unique challenges in maintaining practices. And earlier studies have pointed out the important role of digital technologies in this context. (Liaqat et al. 2021) Moreover, practices of maintaining and home making are not specific to expat-families (Kirk and Sellen 2010; E. S. Bales and Lindley 2013; Light and Petrelli 2014). And looking into the home as a place in which identity and the self are expressed is not a new concept in HCI research (For instance (Swan et al. 2008; Odom et al. 2010; Ylirisku et al. 2013). Most practices of maintaining, such as the exhibition of family photos or the specific arrangement of decoration and furniture were for instance also observed in the Dutch family maintaining their family and home in their country of origin. But what distinguishes migrant families from those families that are living in their country of origin is that the materials they may require for their unique practices of maintaining may not be readily accessible. Instead, some of the families were constantly *procuring* artifacts.

5.2 Continuous procuring

On the surface the need for practices of procuring seems to be a mere practicality. For instance, because the children grow up bilingual there is a need for books in

their other language. However, examining practices of procuring further shows the deep connection to maintaining family values: The mother of family F got her old childhood books sent by her mother because she likes the idea that her daughter reads the same stories as she did as a child. And this becomes even more apparent when the father of family E expresses his concern that his son might speak the language of his home country fluently but won't understand the, as he calls it "cultural language" such as popular TV-shows or music.

Procuring is essential in order to make a home comfortable, i.e. it allows for a maintaining of values and dispositions. Practices of maintaining and procuring work together in connecting current everyday practices with values, habits, or routines from the home country, thus creating a sense of connectedness. Sometimes the procuring presents itself as a single event, the outcomes of which are then maintained throughout everyday interactions. For instance, a once bought children book will be used regularly for reading to the children.

In many other cases procuring and maintaining are enabled digitally. In the case of Internet radio or movie streaming they are happening simultaneously; the listening or watching is happening instantly. Also procuring is sometimes happening in unexpected ways. When grandparents get to babysit their grandkids via video chat, this can be seen as procuring their presence with the help of network and streaming technology. Here it becomes very apparent which role digital technologies already play in mobile families as well as many other families that creating connections to other places and people.

Above anything, the interplay between maintaining and procuring practices highlights the dynamic and continuous character of connectedness. Connectedness is not just created in brief moments of interaction, but has to be understood as being an on-going experience present in an abundance of everyday mundane practices. People are most of the time their own designers, setting up and creating moments of connectedness throughout their daily routines. What makes this particular design space so difficult, is the existing complex web of routines, habits, values and social interactions that exist in every family home. Any design deployed, will unavoidably be affected by existing practices.

6. Design for Connectedness

There is always a risk that ethnographic insights into complex experiential phenomena cannot lead to more generalisable insights that could inform the design for many. But while every family has their own individual take on how to create connectedness in everyday life, we want to highlight some of the key aspects that they all have in common and that can serve as a point of departure for a design exploration.

6.1 Design for practices of maintaining and procuring

We have already emphasized in length that connectedness should be understood as part of everyday practices instead of a practice in itself. Hence, by identifying important practices and their joints, design of digital technologies can overcome the limitation of isolated experiences and integrate better into everyday life. Here, we suggest for any design to identify and target practices of both maintaining and procuring. Digital technologies can facilitate and expand the interrelationship between these practices, for instance by procuring digital, immaterial artefacts. This is already done for example in the form of streaming music, radio, or video. Yet, we think that design should experiment with creating digital components of many other mundane practices – expected and unexpected ones. Again, we want to emphasize that we do not understand this as pure interpersonal communication. There is already an abundance of design artefacts that allow separated families to exchange mementos such as photos or hand-written notes. Practices of connectedness can also happen on a very individual level, in order to create a sense of familiarity. Hence, we suggest exploring designs targeted at both – collaborative interaction in the family as well as individual activities.

6.2 Connected to what?

The implicit nature of connectedness has been highlighted by many before: Connectedness is not just created through short distinct moments of communication but also through awareness of each other, for example by sharing everyday activities (Romero et al. 2007; E. Bales et al. 2011) or knowing about each other's whereabouts (Brown, et al. 2007). Thus, more recent approaches to connecting people and families have been expanding our understanding of how people connect. Yet, our study shows that we must add another question to our inquiries, that is what people are connecting to. In our study, being connected was not just a form of social encounter. Being connected meant to be connected to a different life, different values, routines, and material culture. Our participants always strived for moments of immersion with certain experiences from their home countries: Listening to the radio, arranging furniture and artefacts, cooking and eating – again this immersion happens through mundane everyday practices. We suggest that the design for practices of maintaining and procuring should allow for this kind of immersion into familiar cultural and social spaces.

6.3 The importance of things and places

Within the design space of the family home, materiality, i.e., the materials and artefacts families surround themselves with, play a prominent role. For instance, Ylirisku et al. (2013) evaluate tactile experiences of artifacts and how they fit into the material landscape of the family home. Studies have also shown the

importance of artefacts in the home for identity and the self (Odom et al. 2009) and how families make their home unique through practices of storing and managing (Swan et al. 2008).

Yet, when it comes to designing for connectedness, the role of existing artefacts as means of connecting is rather neglected. While many designs mimic everyday objects such as picture frames (Mynatt et al. 2001; Romero et al. 2007) or a clock (Brown, et al. 2007), they seldomly relate to existing places and artefacts in the home. Our observations showed that personal artefacts and place within the family home are a vital part of any practice of connectedness. Any design that aims at practices of connectedness should aim to consider and connect to existing artefacts and places that are part of family life.

6.4 Tying together practices, experiences and materiality

Apart from the above-described suggestions, the core of our contribution lies in the particular theoretical lens of our inquiry: One of our aims was to add to the growing design research on interpersonal connectedness, by presenting an ethnographic approach that focuses less on technological opportunities but instead engages with existing practices on a deeper level. Many of the practices that we observed, might at a first glance be regarded as irrelevant or too mundane. But when we really scrutinized these everyday activities, we were able to uncover an experiential dimension to them. Any design needs to be built on an understanding connectedness as an experience tied to practices and materialities already existing in every family.

7. Conclusion

An increasing number of families are living spatially separated from their familiar social and cultural circles. And with the restrictions on travel and human gatherings that became part of the global fight against the Covid19 epidemic, the need for connectedness becomes even more apparent. To scrutinise practices of connectedness we studied families living outside of their country of origin. We wanted to understand how these families create a sense of connectedness with their respective home countries through their everyday interactions. Our observations show that connectedness in these mobile families is not limited to temporally limited interpersonal interactions. Instead, connectedness is also a kind of feeling or sense that needs to be constantly maintained. It describes a connection not to a specific person or social group but rather to the ephemeral sense of familiarity associated to a certain cultural environment - usually the one that one has been brought up in. Our study has shown that the sense of connectedness cannot be reduced to interpersonal connections. In designing

technological tools for connecting families, we need to expand our understanding what people are connecting to and how everyday practices are involved.

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