



Digital Ethnography for Social Design: Challenges and Opportunities in the Pandemic

Krity Gera^(✉) and Peter Hasdell

School of Design, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong
krity.gera@connect.polyu.hk, sdpeterh@polyu.edu.hk

Abstract. The restrictions on mobility and several social distancing rules during the Pandemic have ruled out the possibility of carrying out traditional ethnographic research. This paper discusses various opportunities that the digital medium has to offer in terms of redefining and constructing a social space within an ethnographic field, establishing a connection and trust with the participants and the ethical considerations. This paper also seeks to discuss the challenges faced and highlights the limitations of the digital medium while conducting ethnographic research with socially marginalised group of women during Covid-19 Pandemic. The paper is based on the analysis of the experiences of conducting ethnographic research with marginalized communities and on the expertise of other digital anthropologists to understand and highlight the changing role of ethnographic research in the time of a Pandemic.

Keywords: Digital ethnography · Social design · Digital technologies · Research in Pandemic

1 Introduction

In anthropology, the conventional ethnographic methods focus on relationships that are created by people with respect to specific contexts, experiences and actions. To develop a comprehensive understanding of the particular subject, ethnography has been evolving in different ways and contexts over a period of time. The environment in which we live and research does not remain constant but keeps developing and changing [1]. And thus with technological advancements, conducting research in the context of cyberspace evolved as digital ethnography. The initial phase of digital ethnography included studies with online format (with videos and pictures). However, with communication technologies and social media platforms becoming popular, the scope of digital ethnography expanded to include studies beyond the Internet, such as commonly used instant messaging platforms like WhatsApp.

In the recent times, the restrictions on mobility and social distancing rules during the Pandemic have ruled out the possibility of carrying out traditional ethnographic research. However, these limitations have given way to several innovative methods and techniques within digital ethnography that help reveal critical research insights. This paper is based on the analysis of the experiences of conducting ethnographic research

with marginalized communities along with the expertise of other digital anthropologists to understand the changing role of ethnographic research in the time of a Pandemic. The situation like the Pandemic is very unique and presents new challenges for the qualitative research. Thus, it becomes crucial to document the experiences and possible challenges for the research community and practitioners in the field to explore new methods and opportunities within digital ethnography that can be further developed and expanded upon.

2 Digital Ethnography

With the introduction and advances in new technologies, a new form of ethnographic research within the cyberspace evolved that came to be known by different terminologies such as Virtual Ethnography, Ethnography Network [2], Ethnography Digital [1] and Netnography [3]. It is emphasized that digital ethnography cannot be merely used as a pre-fixed set of methods but instead it focuses on understanding the way ‘digital’ encompasses the various aspects of material, sensory and most importantly social worlds [1]. Duggan clarifies that in the research paradigm, Digital Ethnography has been used under three main categories. First, as digital tools and methods such as digital videos [4–6], use of social media and software analysis. Second, virtual studies or online ethnographies that refers to use of digital environments and space (of practice) with the help of the Internet [7]. This approach has provided the researchers with new methods of data collection such as with smartphone technologies and related applications provide the researchers with a novel way of engaging in ethnographic studies [8]. And third, focusing on nonmedia-centric approaches [7]. Hine highlights that studies that take an online format and are not necessarily Internet-based, such as making of videos for YouTube or sharing photos on platforms like Instagram or WhatsApp, reflect the image of the digital media as a “cultural artifact” [9].

However, according to Burrell, Digital Ethnography is a method that is used to study the societies and cultures in the digital space; without the necessity to travel [10]. Digital ethnography enables the researcher to establish the significance of constructing a field, reflexivity and the acquisition of tools as the critical elements of ethnography which is not limited to digital sphere [11].

3 Method of Study

Since the situation of the Pandemic is very new and unique, there is no or very limited research focusing on the opportunities and challenges posed by digital methods within ethnography. This paper is based on the experience of conducting an ethnographic research with the help of WhatsApp, as an alternate digital method. Because of the limitation of being in two different geographical locations, WhatsApp was used as a tool for conducting ethnographic research that helped conduct the study without any extra cost. Through this study, the paper intends to discuss certain critical aspects of digital ethnography such as redefining the field site as a social space, establishing a connection and trust with the participants and the ethical considerations. This paper seeks to discuss the challenges faced during the study and to highlight the opportunities

offered by the digital medium while conducting ethnographic research with socially marginalised group of women during Covid-19 Pandemic.

4 Research in Pandemic – Challenges and Opportunities

Being present in Hong Kong and conducting ethnographic research focusing on mobility of urban marginalized women in New Delhi seemed impossible with the restrictions imposed on mobility and social gatherings in India and rest of the world in the first quarter of 2020. The ethnographic face-to-face interviews and following the participants along their daily travel routes was no more possible. Thus, it was required to redesign the data collection strategy and make use of alternate approaches to collect qualitative data remotely. For this study, considering the socio-economic status of the participants, using online methods such as emails or online surveys did not seem viable. Thus, it is crucial for the researcher to select the appropriate technology depending on the availability and comfort level of the participants as well as of the researcher herself [11]. Based on this criterion, WhatsApp was selected as research tool to conduct unstructured informal interviews.¹ However, that meant leaving certain women out of the study group either because of their inaccessibility to smartphones or technological handicap or unavailability of Internet data for using WhatsApp.

Along with the fear of getting infected, the Pandemic brought with it other socio-economic and mental health issues affecting people and thus making the situation even more stressful. These issues also posed as a barrier towards establishing new relationships with unknown people through digital communication only. However, it was observed that the researcher was able to establish good connection and rapport with the participants which led towards conducting greater number of interviews within a short period of time. This also meant that at the end of it the researcher may find herself overwhelmed with the amount of empirical data collected. Thus, it becomes important to patiently sort and catalogue this data.² Conducting remote ethnographic survey with marginalized communities through digital means presents other challenges, such as dealing with technology handicap. Depending on the nature of research and type of data to be collected, the researcher may need to explain the participants to use certain functions or share certain data through digital means. For instance, in this study, the researcher was required to educate the participants step-by-step with the help of screenshots along with voice calls on how to turn on GPS location on their smartphones and how to share their current location on WhatsApp.

The digital medium provided the participants more confidence and control over what they wanted to share and talk about. Even if some participants did not feel comfortable using typing function, they had an option to send voice messages, which some of them

¹ During initial research it was found that not all women belonging to the marginalized group (to be studied) owned a smartphone. Hence, only those women were contacted for the study who either owned or had access to smartphone (along with Internet and WhatsApp).

² This process of handling and processing the raw data eventually became very time consuming. The researchers need to be careful not to get lost in the process of collecting data through digital means.

found easy to use and less time consuming.³ In case of text and voice messages, the digital medium provides them with an option to reply at their own pace. These factors that gave them more control and privacy helped in establishing a social bond with the participants and without having any physical meeting with them even once.

5 Redefining Social Space

Within ethnography, field site plays a critical role where interactions take place between the researcher and the participant(s) and as well as among participants themselves. However, in digital sphere, the Internet or other digital media acts both as a field site and as a research tool. In this study, the field site is emphasized within the context of interviews that were conducted through instant messaging platform WhatsApp. While carrying out the study, it was revealed that the virtual space provided by WhatsApp presented itself as a place for social interactions between the researcher and the participant(s).

The fluid nature of digital ethnography provides the researcher flexibility to develop their own strategies to create suitable field sites and constantly keep working on those as one progresses with the research [12, 13]. Considering the complex situation of the Pandemic, the initial aim was only to conduct interviews with the participants through WhatsApp voice calls. However, as the study progressed it was found that the interactions were not limited to interviews, but also brought in diverse social interactions with the participants. After few interactions, the formal research space transformed into an active social space with sharing of pictures, videos and participants' travel patterns (Fig. 1). The WhatsApp window became an enclosed interaction space for the researcher and the respondent. It is argued by several scholars that the nature of the social space is characterized by the interactions and conversations that take place over a period of time rather than the characteristics of the medium where the interactions take place [11]. Thus, it cannot be said that the lack of physical social space or virtual presence of the researcher acted as a barrier to conduct ethnographic research. Many researchers argue that the sociotechnical contexts presented by the digital technologies may put certain communicative restraints [11]. It is revealed through this study that the participants felt more comfortable to communicate within the digital social space where no one could make a judgement about them by looking at their appearance or socio-economic conditions.

The social space acts as a field and provides a platform to the researcher to interact, socialize and build a relationship with the participants. It is a dynamic social space that keeps evolving with time and interactions. The properties of the alternate digital platforms such as, virtuality, spatiality, disintegration and disembodiment [14] appeared to be giving way to new modes of social activity. It is understood that the researcher needs to make effort to construct and mold the ethnographic field by providing for a space for the possibility of relationships to evolve and nurture within various contexts. Thus, it is the reflexive experience of the researcher along with the contextual significance that leads towards a holistic process of ethnographic field work [11].

³ Due to low literacy level of the participants, in some cases, 'typing' function acted as a barrier and thus required multiple rounds of communication using a combination of voice calls and voice messages, screenshots etc.

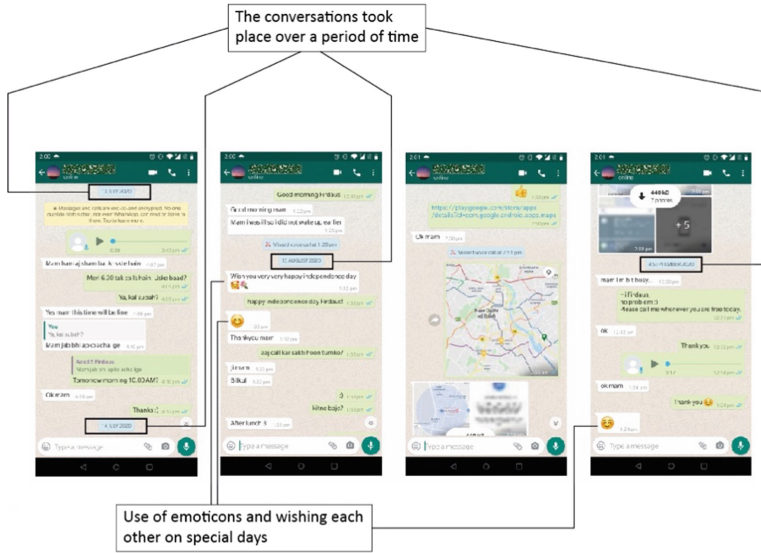


Fig. 1. Virtual social space: the WhatsApp window turned into an interactive social space that was formed over a period of time. Besides sharing of images, videos, maps and voice messages, the exchange of emoticons made it more personal.

6 Establishing a Connection and Trust

Ethnography is about data gathering, which is characterized by conducting various kinds of surveys, interviews etc. and at the same time it is also about the participatory approach which is justified by the social presence of the researcher in physical or digital field. Constructing meaningful relationships forms a crucial step towards a successful fieldwork that is characteristic of its continuity and its results [11].

During the study it was revealed that participants felt more comfortable and open about sharing their experiences with the researcher on sensitive issues such as incidents of sexual harassment faced by them during their daily travel. This was not found to be so during the initial face-to-face interviews, where the participants were hesitant and embarrassed to talk about these issues. The digital medium used in this study gave them more control (since they were using their own mobile device) and privacy (because of voice calls) that helped reveal critical insights. The sense of anonymity balances the power relationship between the researcher and the respondent because of the free questioning ability of the respondent as compared to the case of face-to-face interviews [11, 15]. Participants are allowed to gain control in online interviews depending upon their personal motivations and their engagement with the researcher. At times, the anonymity factor may not exist because generally the researcher has previously established a rapport with the participant [11]. However, in the context of this study, the researcher did not know or meet the participants either before or after the interviews were conducted. The study required to establish contacts with women and gain their trust through an intermediary source (in this case, NGOs) during the informal interviews conducted through WhatsApp. Thus, the role played by the researcher in this situation becomes even more

critical in order to establish a rapport with the respondent within first few minutes into the conversation. It was the medium of the interview that made the participants feel more comfortable talking about sensitive issues. This came with two factors, trust established with the interviewer and more importantly because of being in their own private space (their personal WhatsApp window).

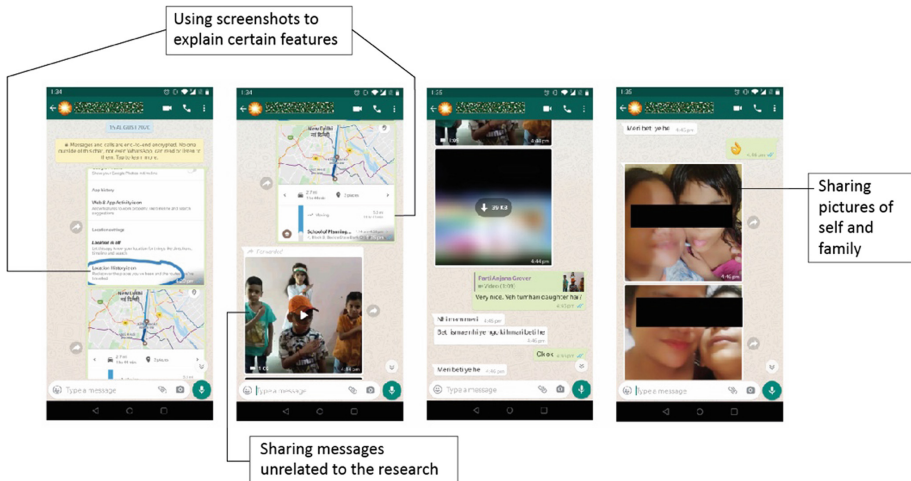


Fig. 2. The digital medium did not act as barrier in establishing trust with the participants. Some of the participants even talked about and shared pictures of their family members.

Rheingold emphasizes that the Internet-based long-term participation in electronic forums helps in the production of shared systems of trust, norms, values and a particular conduct of behavior [16]. Before several detailed ethnographic studies were conducted on the Internet, the computer-mediated interactions were considered to be less real and socially weak and that they did not manage to establish sustainable social bonds and worlds that were culturally significant [17]. However, in this study, the digital medium helped establish a sense of trust and social bonding with the participants in a way that they felt comfortable talking about their family, sharing pictures of their loved ones and even some personal writings on issues that were of personal concern to them (social exclusion) (Fig. 2). It is understood that contacting them through the NGO (with which the participants were associated) along with the social and informal conversations they had with the researcher, played an important role in establishing trust factor between the participants and the researcher.

7 Ethical Considerations

It is emphasized upon the advantages of the using digital mediums for conducting research such as the interactions between the researcher and the participants that take place in digital environments can be recorded [11] and used for further analysis to provide for a holistic approach to the ethnographic study. However, this can also lead towards

issues of privacy and ethics. Thus, it is the responsibility of the researcher to make the participant a part of the research process by maintaining transparency and also ensure to maintain anonymity. The researcher needs to make sure to agree upon negotiating the level of anonymity to be maintained with the participants regarding elaboration of data and presentation of results in different formats. In order to preserve the privacy of the participants, the real names and other traceable information of the participants needs to be changed.

8 Conclusion

The paper provides an understanding of the changing role of ethnographic research in the context of a Pandemic. With the help of theoretical evidence from relevant literature and experience from an empirical study, the paper attempts to reflect upon the opportunities and challenges presented for researchers while conducting ethnographic study remotely. The paper draws attention towards positive aspects of using digital media as a tool and for creating an active field site to carry out a successful ethnographic study.

In the context of this study, WhatsApp proved to be an important research tool while conducting the ethnographic research during the Pandemic. Although digital tools present some kind of limitation in conducting qualitative research, yet it was observed that it was due to popularity of WhatsApp among urban marginalized communities that made it possible to conduct the ethnographic research remotely. This ethnographic study presented some very critical insights about the main research project and at the same time highlighted the possibility of conducting qualitative research without physical presence of the researcher in the field site. The study also reveals that the application of online techniques for conducting digital ethnography helps in scaling up the research to a wider/diverse section of participants in comparatively short period of time (as compared to face-to-face techniques). However, technology can also become a deterrent in certain cases, for instance, inaccessibility of technology to certain marginalized communities can act as a limitation in data collection. The paper highlights that the instruments of conducting research are as much important as the context and content of the research. They form an integral part of research and give shape to the different nature and patterns of data to reveal critical information.

While the Pandemic has disrupted the social life of people and has impacted the ability to conduct qualitative research, yet it has provided the researchers with a unique opportunity to explore and innovate in many ways which would not have been possible otherwise. This paper equips researchers and practitioners engaged in ethnographic studies with some essential touchpoints to consider while considering their research design strategies in the context of constraints imposed due to the situation of a Pandemic. This study sets the groundwork for further research on specific methods of data collection such as participant observation and application of other digital media for the purpose of conducting ethnographic research remotely.

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References

1. Pink, S., et al.: *Digital Ethnography: Principles and Practice*. Sage, Thousand Oaks (2015)
2. Murthy, D.: Digital ethnography: an examination of the use of new technologies for social research. *Sociology* **42**(5), 837–855 (2008)
3. Kozinets, R.V.: Netnography: The marketer’s secret weapon. White paper, pp. 1–13 (2010)
4. Pink, S.: *Doing Visual Ethnography*, 3rd edn. SAGE, Los Angeles (2013)
5. Vannini, P., Stewart, L.M.: The GoPro gaze. *Cult. Geogr.* **24**(1), 149–155 (2017)
6. Anderson, K., et al.: Numbers have qualities too: experiences with ethno-mining. In: *Ethnographic Praxis in Industry Conference Proceedings*. Wiley Online Library (2009)
7. Duggan, M.: Questioning “digital ethnography” in an era of ubiquitous computing. *Geogr. Compass* **11**(5), e12313 (2017)
8. Hine, C.: *Ethnography for the Internet: Embedded, Embodied and Everyday*. Taylor & Francis, London (2015)
9. Hine, C.: *Virtual Ethnography*. Sage, Thousand Oaks (2000)
10. Burrell, J.: The field site as a network: a strategy for locating ethnographic research. *Field Methods* **21**(2), 181–199 (2009)
11. Ardèvol, E., Gómez-Cruz, E.: Digital ethnography and media practices. In: *The International Encyclopedia of Media Studies*, pp. 498–518 (2012)
12. Beaulieu, A.: Mediating ethnography: objectivity and the making of ethnographies of the internet. *Soc. Epistemol.* **18**(2–3), 139–163 (2004)
13. Postill, J.: The diachronic ethnography of media: from social changing to actual social changes. *Moment Dergi* **4**(1), 19–43 (2017)
14. Slater, D.: Social relationships and identity online and offline. In: *Handbook of New Media: Social Shaping and Consequences of ICTs*, pp. 533–546 (2002)
15. Illingworth, N.: The internet matters: exploring the use of the internet as a research tool. *Sociol. Res. Online* **6**(2), 79–90 (2001)
16. Rheingold, H.: *The Virtual Community: Homesteading on the Electronic Frontier*, vol. 32. Addison-Wesley, Reading (1993)
17. Walther, J.B., Burgoon, J.K.: Relational communication in computer-mediated interaction. *Hum. Commun. Res.* **19**(1), 50–88 (1992)