Autoethnography as a user research method

In an autoethnography study the researcher retroactively and selectively describes and analyzes a personal experience for a specific academic purpose (Ellis et al., 2011; Richards, 2008). In doing so, the autoethnographer combines elements of *auto* biography and *ethnography* and is both informant and investigator (Cunningham et al., 2005). As the autobiography consists of both doing and writing, it is both process and product (Ellis et al., 2011).

The method autoethnography relates to self-study which is carried out in HCI already in 1990s in order to gain empathy for the user (Bergman et al., as cited in O'Kane et al., 2014). The method of qualitative self-study and autoethnography arose in social science. In social science, a paradigm change happened when scholars became conscious that the researcher's personal background influences the research and that reporting the complete and universal narratives is impossible. Autoethnographers also acknowledge the influence of the personal experience and communicate openly about the self and its subjective feeling which are situated in a context (Ellis et al, 2011). Thus, autoethnography operates in the paradigm of constructivism and interpretivism as in these paradigms the gained view depends on the life history and the experience of the observer, on the situation, place and context (Creswell, 2003; Mackenzie et al., 2006; Mertens, 2005).

In HCI, autoethnography complements other user research methods and reveals nuances which are difficult to uncover with the help of for instance interviews and occur in contexts where it is difficult to observe test persons (O'Kane et al., 2014). As the method is easy to implement and helps to get a sense for the user's situation, autoethnography is particularly suitable for the first phase of the user research (O'Kane et al., 2014). At the beginning of a whole user study, autoethnography can prepare and inform the following studies such as interviewing phase (Laurie et al., 2016). Good case studies for autoethnography are studies about the user experience of medical devices in non-routine situation (O'Kane et al., 2014) or digital wellbeing interventions such as mindfulness applications in the daily life (Laurie et al., 2016). Autoethnography is also a powerful tool to learn how patients with a certain disease, such as cancer, feel by getting a certain treatment, such as chemotherapy (Greenhalgh, 2017). This kind of information is also helpful when designing technology for people who have a certain medical condition. Besides, autoethnography can function as teaching tool for students in HCI in order to practice ethnography and gain an understanding for the user's perspective (Cunningham et al., 2005).

In contrast to narrative-oriented writing such as autobiography or memoir, the autoethnography is analyzing the cultural relation between self and the society (Chang, 2007). Thus, autoethnographers use methodological tools and research literature to analyse their experiences and consider how others experience similar situations (Ellis et al., 2011). For instance, the researcher who writes about her experienced strangeness of chemotherapy, compared and contrasted her story to other autoethnographies, who reported about the experience of

chemotherapy (Greenhalgh, 2017). Similarly, in the study of using medical devices in non-routines, the researcher compared her experience with the insights of interviewing other users (O'Kane et al., 2014).

For the autoethnography writing varying styles of storytelling, such as poetry and short stories, are used in order to make the text both meaningful and accessible (Ellis et al., 2011; Ellis et al., 2000). The produced data is qualitative. The researcher writes a diary about current events or in the retroperspective about impressive past events. In addition, the autoethnography is often accomplished by identified patterns of cultural experience evidenced by varying data sets such as field notes, interviews and artifacts (Ellis et al., 2011). For instance, in case of autoethnographical study of chemotherapy, the researcher collected the symptom diary, leaflets, cookbook for someone with cancers, emails and photography (Greenhalgh, 2017).

An advantage of autoethnography is that it is easy to conduct and lightweight, but still very powerful compared to other time-consuming user research studies such as observations or conventional ethnography (Cunningham et al., 2005; O'Kane et al., 2014). The powerful element of autoethnography is that it reveals subtleties that otherwise are difficult to uncover (O'Kane et al. 2014). In addition, researchers gain empathy for the user which is important for designing and evaluating technologies (Segal et al., 1997; Wright et al., 2008).

However, the researcher needs to keep in mind that the view on the user experience is very limited and subjective (Krizek, 2003). Some researchers even criticize that the method autoethnography is narcissistic (Roth, 2009). The researcher should be aware that the method can be disruptive and captures only the user experience of one single person, the researcher, and not of a diverse group of users (O'Kane et al., 2014).

In addition, as the autoethnographer is part of a social network and reflects about his or her personal experience, people of his or her social network might be part of this experience and thus part of the autoethnography. Even if the researcher tries to cover the identity of whom he or she writing, persons in his or her social network are highly identifiable to the readers. Thus, the autoethnographer should ask people who are implicated in his or her text for consent, acknowledge their feelings and alters identifying characteristics (Ellis et al., 2010)

A good example for using autoethnography as a user research method is the study by O'Kane et al. (2016). In this case, the researchers used autoethnography in order to deepen the understanding about using medical devices in non-routine situations such as during holidays, conferences, and celebrations. The researchers learned how non-routine situation challenged the regular usage of the medical device, which is important for the personal health. The reason was that the medical device was not designed for using it in public environments, which is needed when traveling. Due to the physical constraints, the researcher struggled with holding the medical device in the right position in order to be able to get correct measures. In addition, the device triggered a lot of attention by its sound and size. Through the autoethnography, the researcher was able to see findings from the user interviews from a different perspective (O'Kane et al., 2016). Thus, autoethnography should not be the sole methods to gain knowledge about the user experience (Cunningham et al., 2005), but is it a powerful tool to complement other methods such as interviewing

References

- Chang, H. (2007). Autoethnography: Raising cultural consciousness of self and others. In *Methodological developments in ethnography* (pp. 207-221). Emerald Group Publishing Limited.
- Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.
- Cunningham, S.J., & Jones, M. (2005). Autoethnography: a tool for practice and education. In *Proceedings of the 6th ACM SIGCHI New Zealand chapter's international conference on Computer-human interaction: making CHI natural* (CHINZ '05) (pp.1-8). ACM.

 DOI=http://dx.doi.org/10.1145/1073943.1073944
- Ellis, C., & Bochner, A. P. (2000). Autoethnography, personal narrative, reflexivity: Researcher as subject.
- Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: an overview. *Historical Social Research/Historische Sozialforschung*, 273-290.
- Greenhalgh, T. (2017). Adjuvant chemotherapy: an autoethnography. Subjectivity, 1-18.
- Krizek, R. (2003). Ethnography as the Excavation of Personal Narrative. In R.P.Clair (Ed.), *Expressions of ethnography: novel approaches to qualitative methods* (pp. 141–152). New York: SUNY Press
- Laurie, J., & Blandford, A. (2016). Making time for mindfulness. International journal of medical informatics, 96, 38-50.
- Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in educational research*, *16*(2), 193-205.
- Mertens, D. M. (2014). Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods. Sage publications.
- O'Kane, A. A., Rogers, Y., & Blandford, A. E. (2014, April). Gaining empathy for non-routine mobile device use through autoethnography.

 In *Proceedings of the 32nd annual ACM conference on Human factors in computing systems* (pp. 987-990). ACM.
- Richards, R. (2008). Writing the othered self: Autoethnography and the problem of objectification in writing about illness and disability. *Qualitative health research*, *18*(12), 1717-1728.
- Roth, W. M. (2009). Auto/ethnography and the question of ethics. In *Forum Qualitative Sozialforschung/Forum: Qualitative Sozial Research* (Vol. 10, No. 1).
- Segal, L. D., & Suri, J. F. (1997). The empathic practitioner: Measurement and interpretation of user experience. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 41, No. 1, pp. 451-454). Sage CA: Los Angeles, CA: SAGE Publications
- Wright, P., & McCarthy, J. (2008). Empathy and experience in HCI. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 637-646). ACM.