The user phenomenological experience; evoking the lived activity with "re-situating" interviews

Beatrice Cahour
C.N.R.S., Telecom ParisTech
Paris, France
Beatrice.cahour@telecom-paristech.fr

Pascal Salembier
University of Technology of Troyes
Troyes, France
Pascal.Salembier@utt.fr

Abstract
Research on user experience is rather recent and mainly oriented towards practical goals of evaluation and design. Taking seriously the question of the theoretical foundations of the concept of user experience requires to root UX in an identified tradition of works that have taken experience as a critical theoretical and empirical object. We propose a theoretical and methodological framework based on psycho-phenomenology and on re-situating interview methods (explicitation and self-confrontation interviews) in order to extend our understanding of users' lived experience of technology.

Author Keywords
Lived experience; psycho-phenomenology; re-situating interviews; explicitation; self-confrontation

Introduction

Taking seriously the question of the theoretical foundations of the concept of user experience requires to root UX in an identified tradition of works that have taken experience as a critical theoretical and empirical object. Many options have been proposed so far: Dewey's pragmaticism and Bakhtin's dialogism [8] theory of qualia [11], phenomenology and psychophenomenology [1, 10]. We agree with McCarthy and Wright's definition of experience [8]: 'experience can be seen as the irreducible totality of people acting, sensing, thinking, feeling and making sense in a setting, including their perception and sensation of their own actions.' (p.54). Even though these authors are more influenced by authors like Dewey and Bakhtin than we are, their holistic perspective is close to our point of view. Our background is in psychology and ergonomics and, as in the French tradition in ergonomics [5], we study work or daily activities through field studies, focusing on how people "really do what they do" when they are in a specific situation. Our main source of inspiration here will be a theoretical and methodological frame developed by Vermersch [12,13], a psychologist inspired by Husserl's phenomenology.

The psycho-phenomenological perspective

Husserl's phenomenology had the global project to study the essential properties of consciousness and the content of conscious experiences. The methodology is based on introspection and one important principle is the phenomenological reduction, also called epoké. It consists in suspending the natural attitude we have in general when engaged in our activities, and in turning back to what just happened without much presupposition. Reusing some of Husserl's principles, Vermersch developed a psychological project focused on studying the lived experience and its different foci of attention, some being in the light of the consciousness and some being "pre-reflected", what we do, think or feel without being attentive to it. For instance when I am reading a book I am focused on the story but maybe not on my physical position which is a bit uncomfortable. We consider the lived experience as a whole constituted of actions, mental activities (or thoughts), sensorial perceptions and emotions which are in continuous interaction with the situation; this lived experience is also based on a background of knowledge and beliefs, values, history of past experiences and interests. The subject is driven by motives and is constantly making sense of the situation and of the persons and objects he encounters. The critical question is how to explore this constant stream of lived experience, reflected and pre-reflected, without too much distorting it? Of course we do not want to cut it into pieces and it is not a systematic questioning which will be adequate to capture the on-going experience of a user. It is rather an open interview, but with an essential feature: to get the subject in a position of "embodied speech", remembering vividly the past experience and being in evocation of the lived situation that she describes. This vivid recollection is a condition for having subjects who produce valid descriptions which move us closer to what they actually lived.

Methodologies: re-situating interviews

To limit the rationalization and reconstruction of the lived experience when the users describe it, we need to be cautious about this vivid recollection and we need to "re-situate" them in the context of the activity. Two types of interviews seem appropriate.

The 'explicitation interview' developed by Vermersch [12] (see also [7, 9]).
The way of questioning the subject helps her to remember the situation, and verbal as non-verbal signs allows us to check if the user is in evocation of the situation. When it is the case, specific modes of questioning are used not to influence the subject and not to induce a certain type of experience. The interviewer follows as much as possible the development of the experience course as it is verbalized by the user. He is actively questioning about what the user did, thought, perceived and felt, but with open questions and always linked to the specific moment of experience that the subject is describing. The questioning is active in order to lead the subject to describe more detailed grain of experience: for instance, "when you saw that, what did you see?" or "when you did that, how did you do it?". This type of interview is very efficient when there is the possibility to interview the subject soon after the activity.

The "video-based interview" (or self-confrontation) which are a widely used technique in ergonomics consists in playing the video or audio recording of his activity to the subject and have him verbalize about it. We use it in a very specific way, in the same phenomenological spirit of the explicitation interview, avoiding the subject to analyze and rationalize, and helping him to be in an embodied position of talk.

Especially when the context is dynamic and is an important focus of attention (e.g. driving situations or communicative activities), the video support is useful. But a risk is that the subject discovers elements he was not attentive to during the situation, and then transforms what he lived at that moment.

Examples of field studies

This theoretical and methodological frame has already been used in different situations for exploring peoples' experience with technology. In the domain of music-making for example, Kim's studies on real-time composition and live performances [6] puts into evidence how a combination of structured observation, explicitation interview and musician diary can be put to work in order 'to collect and assess the multifaceted aspects of the on-going process of composition and performance'. In a research that investigates issues related to the use of mobile social applications, Zouinar and Salembier [14] conducted an empirical study of a mobile service that aims at enhancing the feeling of connectedness and social presence. Self-confrontation interviews were combined to traditional quantitative methods so as to better understand the consequences of extending the number of contextual information provided by the service. In a situation of distant and mediated interaction for a collective choice, Cahour et al. [1] combined videotaping of the behaviour with re-situating interviews; the data put into evidence the uncomfortable dissymmetry involved in the control of visual exploration, difficulties in following unanticipated moves, and the compensation of co-occurring emotional states. Light [7] used the explicitation interview method in order to explore 'how interaction through websites differed from the 'point and click' interactivity of wandering around the Web'. Re-

situating interviews have also been used by Cahour to explore the emotional discomforts experienced during diverse types of driving situations, to specify what were the sources of the negative emotions and how were the uncomfortable situations managed by the drivers [2]. Senior natural driving was also studied [4], especially the different ways they coped with the attentional load which becomes very stressful for them. Also the design of risky situations benefit from a fine-grained understanding of the dynamics of the users' experience, like when using a new cruise control system [3]

Conclusion

The approach described in this paper requires an in-depth understanding of concepts drawn from psycho-phenomenology, and the method requires training and extensive practice. Does it worth the extra pain to apply this time and effort consuming framework in every situation ? The question remains open. As for us, we think that it depends on the phenomenon which is studied (its degree of reflectiveness), on the fine-grain analysis needed, and on the interest of studying the use in close relation to the context.

References

1. Cahour, B., Salembier, P., Vermersch, P., and al. Methodologies for evaluating the affective experience of a mediated interaction. CHI Workshop proceedings 'Evaluating affective interfaces', (2005).

2. Cahour, B. Discomfort, affects and coping strategies in driving activity. *In Proc. of ECCE'08*, Europ.conf. on cogn.ergonomics, (2008), 91-98.

3. Cahour, B., and Forzy, J.-F. Does projection into use improve trust and exploration? The case of a cruise control system. *Safety Science*, *47*(9), (2009).

4. Cahour B., Forzy JF., and Martin C. Feelings and strategies of senior drivers: ways of coping with fear? *In Proc.of ECCE'10*, ACM digital library (2010).

5. De Keyser, V., Decortis, F., and Van Daele, A. The french language school of ergonomics: can it contend with the new technologies? In V. De Keyser, T. Qvale, B. Wilpert & S.A. Ruiz Quintanilla (Eds), *The meaning of work and technology options*, Wiley and Sons, Chichester, (1988).

6. Kim, H. J., Demey, M., & Moelants, D. Performance micro gestures related to musical expressiveness in *Proc. ICMPC-10, (2010)* (827-833).

7. Light, A. Adding Method to Meaning: a technique for exploring peoples' experience with digital products,, Behaviour & Information Technology, 25 (2), (2006), 175-187.

8. McCarthy, J. and Wright, P. *Technology as Experience*. MIT Press, Cambridge Mass, 2004.

9. Maurel M. The Explicitation Interview: Examples and Applications, *Journal of Consciousness Studies*, 16, 10-12, (2009), 58-89.

10. Norros, L., and Savioja, P. User experience in the systems usability approach. In *Proc. of the workshop on Meanningful measures : Valid useful user experience measurement,* (2008), 45-48.

11. Springett, M. Assessing user experiences within interaction : experience as a qualitative state and experience as a causal event. In Proc. of the Workshop on Meanningful measures : Valid useful user experience measurement, (2008), 86-90.

12. Vermersch, P. *L'entretien d'explicitation*. ESF, Paris, France, 1994.

13. Vermersch P. Describing the practice of introspection, *Journal of Consciousness Studies*, 16, (10-12), (2009), 20-57.

14. Zouinar, M., Salembier, P., and Darcy, S. . Etude exploratoire des usages d'une application mobile. In *Proc. IHM 2010,* ACM Press, (2010).