Reflections on Reflection: How Critical Thinking relates to Collecting Accounts of Experience using Explicitation Techniques

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Introduction

Experience as lived is a persistent, endlessly modulating phenomenon; experience as conceived by the CHI community is an incremental, valenced tool for supporting judgements about technology design. Experience as welcomed into the CHI researcher's stable is not a stream of consciousness revealing undigested sensory stimuli. It is a carefully packaged entity, extracted in such a way as to emphasise the act of using, to prioritise affect and aesthetics (see, for instance, Lavie and Tractinsky 2004) and to collect serviceable feelings. In fact, one tendency in 'user experience' research is to produce measurements and metrics (eg Law et al 2008) which seek to make experience calculable so that it can be absorbed neatly into the design process. It is often approached with a questionnaire that requires summative reflective statements: Was it a good experience? Did the interface create pleasure? (Equally often, there is a conspicuous subtext: Will the consumer buy something from this website? Will this visitor think well of the brand as encountered through the interaction design? Will this user be interested in the upgrade?).

In this position paper, we offer an alternative to this methodological orientation and in the process explore how a richer method for investigating experience is able to handle reflective statements of the kind that allow all participants (ie the researcher and the interviewee) to gain insight into the evaluative and contemplative aspects of an interviewee's encounter with the world.

In doing so, we acknowledge that there are many reasons that a researcher might be interested in judgements and values. As noted above, there may be the implicit agenda of supporting the technology industry. Or, indeed, our motives may include making such implicit goals more visible. As Sengers et al (2005) note in discussing reflective design:

> Critical theory argues that our everyday values, practices, perspectives, and sense of agency and self are strongly shaped by forces and agendas of which we are normally unaware, such as the politics of race, gender, and economics. Critical reflection provides a means to gain some awareness of such forces as a first step toward possible change. (Sengers et al 2005: 50)

It is interesting then to explore how one might attempt to bring the shared assumptions and idiosyncratic beliefs and values that are part of experiencing into the research/design process; to consider how "local, 'subjective' differences of evaluation work within a particular, socially-structured way of perceiving the world" (Eagleton 1983). For this, we need to use a more finely-grained tool to collect our data than those that are usually employed, so the following discussion will include an account of how such a tool operates.

Background

HCI researchers often infer users' experience through scales and questionnaires with statistical measures which attempt to objectify their findings; but as soon as we question people on their experience using more open-ended methods, the answer is given from a personal point of view and we can see drawbacks arising from presenting pre-defined items to users to categorise their "lived" during the use of a technology. Lived experience is a very complex and rich phenomenon and asking a subject to enter it into semantic boxes is an abstract cognitive process; such that the construct validity, given what the subject does when filling such a questionnaire, can be questioned. A second drawback is that, if the subject's experience is outside the range of the options offered, if it does not match the boxes, it cannot be expressed appropriately by the subject and the researcher will ignore this new and different experience (Bowker and Star 1999).

Finally, what we miss with these types of quantitative measures of experience is the link of the cognitive, affective or bodily experience (McCarthy and Wright 2004) with the situation and the technology used - though this intersection is crucial for design. For instance, if we as researchers are told that the interaction with a specific technology is "unpleasant", we also need to know the origin of this judgment, which aspect of the technology, which specific situation makes the interaction unpleasant, etc. It is not enough to identify comfort or discomfort, trust or other affective relations, we also need to know the source of these feelings. For that we need a radical change of

methodology – one that gets closer to accessing the users' lived experience - and we need to have users describe freely their very specific experience in its complexity and richness.

One way of doing that is through written narratives, such as diaries. This has the drawback of offering a partial account, both in terms of what is deemed appropriate to record and in terms of the effort made to give an exhaustive version. Furthermore, sometimes the solo activity of writing our own accounts tends to crystallise around just a few events.

Opening up this reporting activity to the dynamics of interview can foster both recall and re-discovery. So, as an alternative, our means of gathering more exhaustive and reliable information on users' experience are based on a psycho-phenomenological perspective and on a technique of interview developed by Vermersch (1994) who has been mainly influenced by Piaget's work on consciousness development and Husserl's phenomenological work. Vermersch termed this interviewing technique the explicitation interview. Cahour has used this as a basis for research into mediated communication and car driving situations (Cahour & al 2007, Cahour 2008). And Light has developed Vermersch's interviewing approach (Light and Wakeman 2001, Light 2006, Light 2008) to investigate people's experience with websites and phones and integrated it with discourse analysis.

Reflection

A word on definitions: There are two related distinctions to make in this context. First, we have to make a distinction between two understandings captured in the term 'reflection' (particularly in its French equivalent, which both Piaget and Sartre note, contains 'réfléchissement' and 'réflexion' in french). Here, we refer to the production of the "reflecting act (acte réfléchissant)" for the "act of becoming aware", after Depraz, Varela & Vermersch (2003); so that we can then distinguish it from "reflection" which is the more abstract contemplation that would include reflecting on values, evaluating and judging. The second distinction is between reflections that take place at the time of the encounter with the phenomenon under investigation (ie part of the experience we seek to investigate) and those that occur as part of giving an account to an interviewer (ie part of the experience of the interview). Here we call the former, 'encounter-time reflection' and the latter 'interview-time reflection' so that we may distinguish the timing of as well as the type of reflection we are discussing.

When acting there is not much reflection (at both levels) in the moment (unless things go unexpectedly…); there are a lot of things that we do without knowing how we do them: without having a reflectice perspective on action. Numerous facets of experience are condensed at every moment of life. This richness of phenomenological experience, inscribed in the rapid flow of action, cannot be recalled without some 'becoming aware'.

At the heart of investigating experience is a paradox: we need to process what we are engaged with in order to 1) become aware that we are doing it and 2) inform others about it, but though some processing has to take place so that we are attending to and making sense of what is happening to us, articulating it is not wholly intrinsic to experiencing it. To inform ourselves or others about what we are/were engaged in requires

a breakdown in that task and an act of looking back at what happened in a different way - Husserl's notion of 'epoke' is particularly relevant (1969)[1]. As noted above, the obligatory change of focus that accounting introduces has implications for the validity of work such as that relying on informants ticking boxes as they ostensibly experience the use of a technology. It calls into question any method that intervenes and yet ignores its own impact, such as using concurrent verbal protocol (see Light 2006 for an example of how fine-grained interviewing can pick up these tensions).

It is worth distinguishing the act of pulling back to become aware of an experience from the better known interruption to awareness, or breakdown, that leads to reflection but which has an external origin. Heidegger, Leont'ev and Dewey held similar views on the role of breakdown or failure as a means of revealing the nature of the world around us. In the literature on design, Schön describes reflection-in-action as a shift that takes the designer to a more conscious mode of analysis, triggered by an unexpected event: "a practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain or unique" (Schön 1993:68). It is a moment that Sengers et al (2005) celebrate as reflective design that is fully engaged interaction rather than a detached assessment, though at the micro- level we are discussing, it is also clearly a change in the focus of awareness with potential implications for what kind of account can be given.

[1] Husserl (1969) calls "epoke" the moment of suspending the natural habit of being involved in the course of action, looking at what is happening from a different perspective and becoming aware of ones' perceptions.

If we turn to the accounts collected with explicitation, we have another set of considerations. We require that the interviewee becomes aware after the encounter, rather than during it. As a retrospective interviewing method, it introduces the risk of having people verbalise on their activity in such a way as to rationalise after the event, as well as reconstruct their experience for their audience. In attempting to collect insightful information for our design research we can acknowledge these drawbacks, evaluate their impact on the work of understanding technology in use and manage them. Specifically, the types of technique we are working with address the risks of reconstruction, and the principles employed aim at grounding the subjects in their past experience and avoiding rationalisations. The explicitation interviewing technique differs from most by stressing the relationship between the interviewee and the experience they are recalling, keeping the interviewer out of immediate competition for attention and using techniques for throwing the interviewee into evocation. This can only be achieved by helping the interviewee keep all judgemental activity from account-giving – ie there is no room for interview-time reflection.

During an explicitation interview (Vermersch 1994, Maurel 2009), first of all the subjects are questioned on a specific moment of activity, not in general terms of evaluation or opinion (how did you like to use the product? What was its drawbacks?) but in a way which is grounded in a very specific situation (can you remember a moment when you used…?); we then help the subject remembering the place, the other participants, and some sensorial perceptions which can embody her again in the past experience (do you remember how was the light?...) and then question him

on what happened to him here and then. People naturally tend to talk about their opinions, their judgments, what they think about what happened with such or such technology but we have to get them back to "what happened? What did you perceive, do, think, feel at this very moment?".

We also avoid generalisations, explanations by the subject because then they are in an analytical position, not just remembering what happened ; their explanations and comments on values, beliefs etc, which are an eventual following step are then grounded in lived events and more authentic because directly connected with actual actions, beyond social convenience and desirable self image. Another basic principle of the explicitation interview is to produce opened questions for not influencing the subject, not inducing a certain kind of response ; the interviewer's interventions are more proposals for exploring the various facets of the experience (for instance "and when you thought that, did you also feel some kind of affects, maybe not?")

The relational positioning of the interviewer is different from a daily conversation; he is not face-to-face with the subject but he is on the side, helping the subject to be in contact with the past activity, remembering the situation and lived experience as vividly as possible. Of course the subject addresses her discourse to the interviewer but he must have a discrete presence, even if he is active by asking questions that keep the subject in contact with his souvenir but that brings him to describe more precisely what happened to him. It is also possible to use these basic principles of the interviews with a trace of the activity to help the remembering (often called "self-confrontation" interview), showing for instance a video recording of the activity, filmed from the point of view of the subject. The help of an objective trace has pros and drawbacks that we will not develop here.

This type of interviews, which try to re-situate the subject in the situation so that s/he can describe the phenomenological experience s/he lived when using a technology, is then focused on the remembering of the perceptual sensations, thoughts, actions and feelings which were lived during the activity.

In most interviewing situations, consistency of context is attempted by control of questioning. This means that standardised concepts, and sometimes also words, are presented to different interviewees for their reaction. Arguably, the difference between different people and between their interpretations of the consistent stimulus immediately works to destroy this consistency. Here, by contrast, consistency of function is being attempted by relinquishing as much control of language and content as possible. ... measures are built in: for instance, the deliberate eschewing of 'why' questions minimising the focus for interviewees on justifying themselves, over and above describing. People's tendency to account for as well as give an account of is acknowledged and suppressed as far as possible. One can argue that, as long as there are no content-leading questions from the interviewer ... then the function that the interviewee is left with, and has agreed to, is more or less to describe their experience as 'evoked' (Light 2006)

Of course, this is not to argue that we are getting a 'true' account of an experience as lived. However, with some caveats about getting a report of what is salient rather than a chronological account, the work that

results bears a useful relation to the experiences of people interviewed. And fit for purpose seems an apposite criterion in the pragmatic discipline of design.

The resulting accounts involve what is significant to recall, not because we have asked a question, which would prioritise our interests and draw their response to these, but because we have encouraged detailed and unconstrained remembering, which allows salience to be firstly a factor of what is recalled, and only thereafter how and why. In other words, we make space for participants to find again the meaningful experience they lived previously. We should highlight the word *meaningful* because the purpose of the method is to give due account to the fact that the experience being recollected is inscribed in a context which makes sense to the interviewee, with a history of past similar experiences and, maybe, with some personal or social stakes at hand; it is not an experience coming from nowhere but charged by the past and by actual motivations and involvements.

From accounts of lived experience to reflections on these accounts

How then might we get at moments of reflection from our interviewees, given that we may also be interested in the values, beliefs, habits, opinions and dreams which sustain the there-and-then experience of the users that we document? After a phase of rendering explicit people's lived experience, we can analyse, comment and compare this situation with others. It is then a different type of interview where the interviewee is in an analytical position.

There are three key means of working with the technique to investigate experience and at the same time explore values:

- First, there are acts of evaluation and appraisal that take place at the time of encounter – as part of the flow of the experience under investigation - which we can gather as part of the interview without encouraging our interviewee out of recalling events. For instance, here is part of an account of someone using a website and deciding what to do next:

> And then I had a wicked thought. I thought 'I wonder if I could look at anybody else's.' (laughs) . . . At one level I thought I didn't think anything, but I remember thinking, um, 'It would be nice to just, sort of, be naughty' – if you like – 'and have a look at other things' but then I thought 'Well, they probably know who's looked at what, so – 'and I just can't be bothered thinking that someone else might know where I'd been. (excerpt from account of having entered text into a website, originally in Light 2006)

As we hear this, we might wonder whether the adjective 'wicked' has been included as a thought at interview-time. If we are concerned about this, we might interrupt immediately to clarifiy: 'when you say 'wicked', was this something you thought at the time or something you are just thinking now?'[2] But as she goes on, it becomes clear that the judgement belongs to the moment of encounter. This naughtiness speaks of an

[2] If the latter, the method involves countering with something like 'Please only tell me what you recall you thought at the time.'

embedded value system that might be fruitfully explored as part of understanding the socio-technical system in which the website is being used. We can focus upon these moments and collect detailed information about them, as long as we keep the account gathering about reflection that happened at encounter-time, rather than stimulating a discussion at interview-time that comments retrospectively on events.

- Second, we can ask our interviewees to reflect on the experience of being interviewed, after the main leg - of recollection - is completed. To extend the example above, now would be the moment to delve into the reasons for the feeling of wickedness, to supplement the account already collected of the feelings, images and ideas that ran through her brain/body at the time. With a recollection of these feelings, images and ideas to hand, the interviewee is able to make a situated and embodied response to the politics of data control in her department and may discover new aspects for herself as well as offer insights to the interviewer.

- Third, we can conduct two or more related interviews that focus on encounter-time experience and then compare them in interview-time reflection. This method was used throughout the study of phones reported in Light (2008). Interviewees were asked to give an account of using a landline, then a mobile phone and then reflect on the two experiences they had just described and comment.

> [The landline] is a bit more like bread and butter and mobile phone is like pudding. ... I suppose our grandparents would have felt like that about the landline. (excerpt from account of comparison of mobile and landline, originally in Light 2008)

The benefit of questioning interviewees about their reflections (on values or beliefs which may be in the background) after they have given accounts is that these subsequent reflections are then grounded in experience. Together, these encourage reflection based on lived situations and not distant from their actions and reactions in real settings. Without this grounding, we are more likely to hear stories about values and desires that are, however unintentionally, far from the values and desires that motivate actual everyday actions.

Apart from such pragmatic gains, we can make a political commitment to discussing the experience of recalling events and associated feelings with the interviewee as part of the interview (ie the second means outlined above). This honours the spirit of reflective research, acknowledging critical reflection by both designers and users is an essential component of socially responsible technology design (Sengers et al 2005).

To extend the point to take in the wider context of critical reflection, let us briefly look at this example of worlds colliding, a reader attempting to look at the online version of a newspaper:

> *And, pressing that button [to send the registration form], how was that?*
>
> That was uneventful, because I'd effectively already submitted to the process at the point

> when I… I'd had to submit to registering earlier on, so I wasn't really bothered about submitting, because I'd.. I'd kind of had my emotional encounter with it.
>
> *Your emotional encounter with it?*
>
> Well, yeah, I didn't want to have to register. … (excerpt from account of having entered text into a website, originally in Light and Wakeman 2001)

Clearly, this indicates that using the term 'submit' on buttons that transmit information (as was common at the time) did not work as a direct synonym for 'send', but played up the arrogance of the design. On one level, this is just poor marketing: many registration forms have been removed or resituated where there is a more ostentatious benefit to users who fill them in. On another level, we have here an example of a complex emotional and intellectual response to power relations of just the kind that form the basis of critical reflection. Not only does the response say something about the design of the site, but it also reflects much broader issues that play out in the design: about control of media, institutional power, the expression of identity (in the shape of data required for registration) and so on. From this small, situated example, it is possible to make apparent, and consider together, many of the forces and agendas of which we are normally unaware.

Concluding remarks

In this paper we presented the case for considering (user) experience in a multi-faceted way, taking a phenomenological perspective. Furthermore, we questioned the construct validity of methods that aim at objective quantification at the expense of openness to people's own accounts of lived experience.

The explicitation interview method was presented as a way to highlight the richness of people's accounts. Moreover, we also proposed a way to integrate these first person reports of experience with more reflective interviewing techniques. It seems to us that this process explores in-depth the connections between accounts of lived experiences and post-reflections on the production of these accounts. We suggest that such stance not only enhances the understanding of people's activities but also facilitates dialogue between users and developers/designers fostering processes of co-creation through the creation of common ground based on lived experiences. Furthermore, we also suggest that such change of stance opens up the possibility of involving users and developers/designers of computational artefacts in a less asymmetrical and more creative dialogue regarding form and function by facilitating the emergence of common ground around actual life encounters. In this way, we offer a means of reconciling an interest in people's experience with concern for more reflective aspects of designing, without encouraging ungrounded and decontextualised evaluation.

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