Vermersch's `explicitation' interviewing technique used in analysing human-computer interaction

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Abstract

Vermersch's work on interviewing methods has been applied in France in the field of ergonomics and within the education system. It has received less attention elsewhere, despite providing a comprehensive technique for eliciting description of cognitive and physical processes that elude simple analysis. As such, it has much to offer the HCI community. This paper summarises the key features of the approach and then describes its use in a study of visitors' responses to entering text into websites.

Introduction

The purpose of the explicitation interview is to elicit a verbalisation of activity (la verbalisation de l'action, Vermersch 1994, p17). It draws on Piaget's theory of how experience is processed into reflection. The technique seeks to help people progress from prereflected to reflected experience (du préréfléchi au réfléchi) and from experience as it was lived (vécu singulier) to experience which is 'represented' and 'verbalised' (vécu représenté, vécu verbalisé, p80). To accomplish this, interviewees are encouraged to enter a state of evocation, so that they are reliving an example of the action under investigation. As they are pressed to give details of the experience, they have an opportunity to explore it. In this way, insights into the process of conducting an activity can be gained, both by researchers and by the individuals being interviewed.

The ability of the interviewer to establish and maintain a state of evocation in the interviewee is essential to the success of the explicitation interview - it is this state that makes the detailed account and the reflection that accompanies it possible. The techniques described below are designed to foster this behaviour and exploit it. But, before embarking on a description of these, a few words on the state of evocation itself will be useful as the term may not be familiar to all readers, though the experience will.

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Stop reading for a moment and imagine the last time that you went upstairs… Do you have a picture of the steps ahead of you in your mind, or are you recalling a series of noises, such as doors closing below you and the scuff of your shoes, or the feel of a handrail? In trying to remember, did you stare up and beyond this page, or down and away? How much effort did you give remembering? Did you take a moment to conjure the memory up? That was a moment of evocation and by prolonging this kind of experience a thorough account of the activity can be collected. You will have noticed that the start of your recollection hinged on a specific sensory memory such as smelling polish or seeing the black strip on the edge of each stair. Vermersch calls the search for this trigger 'cherchez la madeleine' (p97, look for the madeleine), out of acknowledgement to Proust's insights in this area.[2]

So, to summarise, the state of evocation is familiar to most of us, if not from personal experience, then from watching someone else glaze over as they remember something by staring into the space where their mind's eye performs a replay of events.

Once an interviewee is focusing on a previous event in this way as they answer a stream of detailed questions, the kind of account given is qualitatively different from that which one might volunteer on another occasion (see Vermersch 1994, pp176-181 for a summary of the technique's validation). Not only is a fine-grained description of the activity made possible, but the language used to describe it is less tailored for its audience than normal accounts tend to be (Antaki 1988). It is likely to be a description rich in emotional colour and the detail of associations that are not strictly relevant to the action being described. Because the chronology of the event is being relived, rather than just retold, there is little of the post-hoc rationalisation that often accompanies retrospective accounts (Ericsson and Simon, 1984, 2nd edn,1993). These features can become an additional strength of the method, depending on the task being attempted. For the use made of it below, they proved advantageous.

Outline of technique

The first stage of conducting an explicitation interview is to agree a contract between participants. Interviewees are asked whether they accept being interviewed in depth about an event. Assuming they do, the interview goes ahead and the agreement can be referred back to at any time during the interview should it prove useful to do so. The contract is important in securing co-operation from the interviewee, given the rigours of the method.

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[2] A la Recherche du Temps Perdu, a tale told through recollection that starts with an evocative bite into a madeleine cake.

Then the interviewee is encouraged to think of a particular episode involving the activity under investigation and go into a state of evocation so that the episode can be described in detail. If the episode is part of a series of similar events, then one - the first, the last or the most memorable - is chosen for analysis. The adoption of a single occasion to refer to is essential for evocation. And this ensures that what is described is remembered detail, rather than assumptions drawn from some pre-digested conglomerate of memories which offer no new insights.

The interviewee is helped to recollect a particular episode by sensorial questioning:

> *Just put yourself back into the situation. Don't tell me a story, just put yourself back into the situation and tell me exactly what you did. Was it morning or afternoon?*
>
> It would have been afternoon.
>
> *And where were you?*
>
> I was in the lab. It was at that terminal there.
>
> *And was it a hot afternoon? Was it a cold afternoon?*
>
> Um, not so I noticed either way.

(excerpt from RG's account of using a website, 1999)

Certain cues, such as the gaze of the interviewee reveal whether they are in evocation or not. It is helpful if the interviewer does not sit directly opposite the interviewee as this interferes with the ability of the interviewee to stare into space, returning their gaze to the other person and their thoughts to the present. Sometimes evocation is not sustained throughout an interview, but the purpose is to foster an environment where evocation is dominant.

To maintain focus on a single episode, the interviewee is steered away from any generalisations and comments, such as: 'Whenever I…'. If they offer an opinion, it is clarified whether they thought it at the time or are relating it as part of an explanation now - if the latter, it is politely dismissed. The intention is to get an account that, usually chronologically, describes the event as if the interviewee were conducting it again, rather than an account designed for the listener.

Even with the interviewee in a state of evocation, questioning is necessary for guiding the interview. Often, to extract the most relevant information, or just to maintain a flow, prompting is needed. Prompting can take many forms, from echoing, to specifying: 'When you say you did X, what did you do?' to clarifying 'I want to understand. You said X. Have I understood? Was it like this?…'. It does not take the form of a closed or leading question. The interviewer avoids introducing their own presuppositions about the possible form or content: for instance, by using: 'what did you see, or hear, or think, or whatever?' rather than 'what did you see?', acknowledging the huge interpersonal differences in mental processes. Inaccurate assumptions about *how* a person thinks can be more disruptive to the state of evocation than inappropriate assumptions about *what* is being thought. Generally, the style of questioning, in being non-directive, owes a lot to psycho-analytic probing.

Some people do continue to talk in an interesting vein without much prompting and it is important to respect thinking time when recollection is taking place. However, interruption is necessary at some points - as long as it is relevant and non-intrusive - as it is unusual for interviewees to volunteer the fine grain of detail required without help. Interjections while interviewees are talking can actually assist recall by sending them back for some new detail. During evocation, it is not as annoying or alarming as it might appear in other interviewing situations, although the interviewer may challenge almost every utterance to get a detailed and precise account.

But there are many ways of interrupting evocation through intervention by pulling the interviewees out of their present track of thinking. A common failing is to invite them into a judgmental mode, which is hard to move away from as it changes the tenor of the interview. To avoid this, there is no use of questions starting 'why' - which brings on rationalisations and justifications - or language that encourages judgmental conditions, such as abstracts, complex language and language unfamiliar to the interviewee. Using 'but' is also treacherous as it implies criticism. If a reason for an answer is sought, then careful questioning using 'how' and 'what' can be made to cover the same ground as 'why' in a different way: 'How did you know that X?' 'What were you thinking at the moment when X?'. This does not interrupt the recounting process.

If comparisons are needed, which intrinsically involve judgements, these can be approached without direct recourse to questioning. Comparable conditions can be handled in an evocative way and the interviewer can judge - with or without the help of the interviewee - afterwards whether they were different in quality and how.

Sometimes interviewees interrupt themselves with a sudden failure to recall. If this is in response to a question, the question might need rephrasing or

returning to later. Generally, some reassurance is necessary if this happens: 'No problem, just tell me which type of impressions come back' or 'It doesn't matter. Just tell me what you can remember…'. On some occasions, summarising what has gone before allows an interviewee to resume their position and continue.

Another technique for deepening an interviewee's response is to use 'modalities' and 'sub-modalities' in questioning. These concepts, a way of describing how thoughts are represented internally, are taken from neuro-linguistic programming (Bandler and Grindler, 1979). It was found that most people will use a dominant modality for recalling a particular event, such as a visual, audible or kinesthetic sense - rather as was described in the going upstairs exercise above. Modalities can be identified through listening to the language use of the interviewee and through watching gesture, for instance grasping during recounting is indicative of a kinesthetic approach. Once the dominant modality has been recognised, it can be broken down into sub-modalities. For instance, if the dominant mode is visual, there are questions about how the image is being seen in recollection: where, with what clarity, in what intensity, whether in colour, etc - often best asked rapidly and as a set of oppositions: 'In colour or black-and-white?' 'Near or far?' 'Framed or unframed?'. This helps to pin down the memory for the interviewee.

Other neuro-linguistic programming techniques are also useful for this process. Echoing body language is recognised as a more or less conscious way of building sympathy between instigator and companion. This can also be used to manoeuvre interviewees into a more positive state for evocation. For instance, if they persist in looking at the interviewer, the interviewer can stare up at the wall away from them and often the interviewee follows suit.

Vermersch used a theory of how experience is processed into thought to develop the interviewing guidelines described above. The goal of the guidelines is to produce a state of evocation in interviewees and the purpose of achieving this is to progress interviewees from describing their beliefs about what they do in conducting a task, to giving an insightful account of what happens in one particular instance. The critical difference between this interviewing technique and others - that may happen to employ some of the methods described above - is the stress on evocation. Consequently, flexibility is written into the guidelines and interviewers should feel free to try whatever might work with an individual to produce a state of evocation.

Applying Vermersch's explicitation technique

The technique described above can be applied to exploring any task. At one end, it has proved useful with professional sportspeople and chefs to establish

the intricacies of their physical behaviour in situations where they do not normally stop to reflect (Vermersch and Maurel 1997). And at the other, it is used to help students understand their own cognitive processes, particularly in remedial teaching situations, and is effective at clearing 'mental blocks'.

The technique's value to the HCI community is suggested in this range of applications. Since HCI researchers are concerned to understand the use of technologies, and regularly use qualitative research methods to do so, an additional technique that investigates how tasks are conducted will be welcome. The advantage interviewing has always offered over straight observation is that something of users' thoughts can be gleaned to explain why certain actions have been taken. This is true whether the issue is the usability of a product or the interpretability of an icon; however, the more that design acceptability hinges on cognitive or social factors, the more that interviewing comes into its own.

Collecting concurrent verbal protocols is a common form of information gathering, which, in conjunction with a record of what the user is undertaking, can be used to offer insight into internal processes. However, users cannot be expected to give a very detailed account or answer probing questions in this context and simultaneously maintain coherence in carrying out the task that they are attempting to comment on. Therefore this kind of account may not be as thorough as the researcher wishes, or, alternatively, may be prone to distortion.[3]

On the other hand, as mentioned above, it is well recognised that interviews which take place away from the task being discussed are prone to faulty recollection. One approach to overcoming this has been to show users a video recording of their behaviour and ask them to annotate this with a recollection of their thoughts. The explicitation technique can be used in conjunction with this or instead of it. Both approaches have their merits: showing the video may ensure that a chronologically accurate account is produced, but it may also generate a new set of thoughts that interfere with recalling the original performance of the task. A decision on whether to use video will hinge on which kind of details are important. Traditionally, the only prompt has been the interviewer, attempting to keep the integrity of the original experience. But, if the subsequent analysis is handled in terms of extracting typical behaviour, then the influence of the video as a further stimulus will be insignificant.

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[3] Ericsson and Simon (1984, 2nd edn,1993) assert that 'talk aloud' does not interfere with a person's ability to conduct a task so long as there are no additional stipulations that direct the user away from the task. The giving of a detailed account can be seen to direct the user away from the primary task to the performance of a secondary one: account giving.

To conclude, the technique can be used to effect in a range of information gathering contexts relevant to HCI researchers. Its usefulness is determined by the study undertaken and the kind of analysis that is to be conducted on the accounts gathered, rather than by particulars of the task conducted. The technique will offer the most value to an interviewer who seeks considerable depth for purposes of exploration. Others may consider the granularity and quality of detail unnecessary.

The following study required thorough accounts: no detail was considered incidental to the questions being asked.   It is a study of how a group of people responded to carrying out different kinds of task on the Web. Because it was concerned with user perceptions, we were seeking to collect accounts that had not been heavily rationalised in view of subsequent experiences. But, we were also seeking sufficient detail to make the technique of concurrent protocol collection inappropriate.

The Study

When the Web first became a medium of information transmission, much work was conducted into how people interacted with it, yet, despite considerable changes in the use to which websites are now put, there has been little new definition of the interactions taking place.   The study described below was conducted to explore how the increasing use of dynamic pages – and with them, forms for inputting users' requirements – has affected the interactions taking place, and the appropriate design models for developing sites. Therefore, the study (Light and Wakeman, forthcoming) looked at how people respond to entering text into interactive components on websites, such as comment boxes, search fields and order forms.

Vermersch's explicitation technique was used in the study, because we wanted to know:
• What thoughts went through the mind of the users as they approached and started the task of entering text into websites?
• How did these thoughts compare with their thoughts when using other parts of the site?

Since thoughts can only be accessed in mediated form, in the study the thinking under investigation was construed as a series of mental activities stimulated by - but not necessarily directly related to - the experiences users had with websites. It was decided to collect users' accounts of the thinking they did during the period of conducting the task, whether it was closely associated or not with the task of using the website. These accounts would then be analysed to reveal interviewee's interpretations of the activities they had been involved with: moving round the site, reading and entering text.

Clearly, the study required a fine degree of granularity in the accounts of people's thinking if it was to yield any useful data for comparison within and across interviews. As touched on earlier, in pilot studies, this demand was shown to pose problems in collecting the accounts concurrently with use of the websites, as the thoroughness of describing the thoughts and feelings users were engaged in distracted them from the task that was being conducted. It was decided that a retrospective method for gathering accounts of the task would be needed.

However, as mentioned, retrospective accounts are prone to poor and inaccurate recall of detail and post-hoc rationalisations. We decided to use the explicitation interviewing technique, since it appeared to offer a way of collecting considerable detail retrospectively while partially overcoming the problems associated with this.

Its adoption immediately exposed a new methodological issue. In some pilot studies, a common task was set for interviewees so that experimental conditions would enable direct comparisons to be made between accounts. But the unusual quantity and quality of the information gathered using the explicitation interviewing method revealed a weakness with the assumptions made in setting a controlled task.[4]

In the pilot experiment, prior to interviewing a Web user about 'looking' behaviour, the instruction was to look at the front page of a recruitment website as if she were 'going to apply for a job'. In the interview that followed, it emerged that the behaviour of the interviewee had been anything but typical, if she really had been looking at the site as someone 'going to apply for a job'. In evocation, as well as discussing the minutiae of where she had looked, she made references to:
1. wondering if she had looked at the features of the page sufficiently to be able to talk about them afterwards,
2. wondering what she would say afterwards,
3. a slight feeling of anxiety this induced,
4. occasional reminders to herself that she was supposed to be looking at the page as if looking for a job,
5. flashes of concern about what kind of job she should be looking for: her present job, or another,
6. reflecting - at the time - that her present behaviour was completely untypical of her usual behaviour with websites.

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[4] I trust we would have arrived at this conclusion differently, if more slowly, in any case. But it is a good indication of how a method can dictate outcomes.

Interviewees undergoing interviews about completed tasks do occasionally refer to the effect of the task or the task set-up on their performance, but, by and large, they screen this kind of comment out as part of colluding in the experiment, unless specifically asked about it.[5] While they might offer the judgement made in point 6, there are many reasons why most people do not raise points 1-5 in the course of an ordinary interview about 'looking' behaviour. Whether dismissed on appearance during the task, or in the following interview at the point of questioning, these thoughts and feelings are not chosen as appropriate to share. By and large, they are seen to breach the co-operative conversational principle of being relevant (Grice 1959, quoted in Levinson 1987).

However, it is apparent that these thoughts and feelings contribute to the execution of the task. Even had we left her to decide her own motivation for the exercise, it would have been no more 'natural' an account; based as it was on a contrived set of instructions. If the data collected is based on interviews in which such procedural thoughts are expressed, shortcomings in terms of the experiment's general applicability are apparent and cannot be ignored.

Obviously, such extra information is useful in this context to alert the researcher to the inappropriateness of the kind of the task set. In our pilot study, it revealed that users' personal motivations for using websites would be needed if the accounts were to provide meaningful data about their perceptions. Consequently, experimental conditions that would have allowed simple comparison between users' accounts had to be abandoned. Instead, participants in the final study were not manipulated to perform a particular task at a particular time, but asked to give an account of the last time they had entered text into a website of their choice. The interviews became closer to fieldwork. This provided far richer data and made discussion of the relation of behaviour to purpose possible, though initially it seemed to thwart the original intention to compare accounts.

The example above is interesting also in that it indicates the subtlety of the information that can be elicited using this recall technique. As well as demonstrating the abandonment of relevance criteria, it also shows the capture

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[5] And even then they may ignore these factors. My work on 'what were you using?' attempted to gain insight into which levels of the system Web users were aware of while using networked media. In the process, I asked only the following two questions:
'What have you been doing?' and
'What have you been using?'
Though the work had involved extensive filling in of paper questionnaires between looking at different webpages, no one referred to this at all. They did however, answer the question fully with regard to the networked media they were using. This is another example of how accounts in experimental conditions are shaped by users' conceptions of what is required.

of fleeting thoughts, which are not usually recalled at all. The rest of this paper will give further examples of the outcomes of using the technique, drawn from the actual study conducted.

Study methodology

20 Web users were interviewed, being asked to describe as fully as possible the last occasion upon which they had visited a website and, through the course of their visit, entered any text. Interviews lasted on average just more than half an hour and dealt with between a minute and 10 minutes of behaviour and thoughts. They were recorded in audio only. This provided 12 hours of material for transcription and analysis.

Analysis was concerned with variations within accounts and patterns between accounts. We looked for signs of relationships. These did not have to be straightforward statements from interviewees. In fact, interviewees had been given no idea which details were of interest, so that their accounts would not be prepared with our research agenda in mind. Because discourse analysis (Potter and Wetherell 1987) was being used, another researcher - who had not been present at the interviews - was asked to examine the transcripts for signs of leading questions and, subsequently, three colleagues including the interviewer looked at the findings to draw independent conclusions. These concurred.

Participants were picked - through a brief semi-structured interview - who used the Web as part of their everyday life. All interviewees accepted the Web as a practical and even obvious resource, though they were not necessarily enthusiastic about it. This familiarity seemed appropriate for several reasons:
- to get the longer term picture, as more people become experienced and interactive behaviour more central to media,
- to ensure that the accounts did not dwell on teething troubles and the anxieties associated with learning to use a new technology, obscuring other findings,
- to deal with a group that were not easily dismissed as naïve and therefore more prone to confusion.

Otherwise, we attempted to get a balance based on the 'experienced' Web user demographics of age and education as defined in the latest GVU survey (1998). The youngest interviewee was 21 and the eldest, 53 years old. Most had a first degree, but the occupation of interviewees ranged from lighting designer, to personnel officer, to researcher in electronic engineering, while three were studying. Nine participants out of 20 were female; this does not reflect current Web demographics, but, unlike other aspects, the ratio is changing fast. The sample deviated in one other key respect: all the interviewees were European

English speakers, whereas a majority of users - and many surveys - are US based.

Sample findings

In general, the interviews showed:
- that users responded differently at the point where they began to enter text into websites from behaviour with other parts of the site, and
- that there were generalisable patterns between accounts about where changes in perception occurred.

There was an awareness of the interface:

> Yes. Ok. Uh, as I recall there was a big blob of colour in the middle. Uh, I can't remember what was underneath, but the pointer changed to a hand, yeah, and so I didn't bother reading the rest at the bottom.

(excerpt from AC's account of using a website, 1999)

but interestingly - in terms of what was being explored - there was also evidence that people started to think beyond the interface when they began to prepare text for entry:

> *Any images come to mind?*
>
> … Kind of designers, designers, a group, I don't know why. It's more a sense of people having designed that.. Yeh, I had, no, I had. I had more this impression of bizarre, this stuff, it's not done well: this box comes too late. And then something like, how would they, the designers, how would they manage these keywords at the end? - because I could have put anything in the keywords. Then a kind of curiosity about what could happen next. What will they do with this information? How have they programmed.. how will it work?

(excerpt from BL's account of using search on a website, 1999)

The accounts also revealed that interviewees changed the pronoun they were using for describing the site, from 'it' to a mixture of 'it' and 'they' as they switched from talking about moving through the site, looking at it or reading, to talking about entering text into fields.

> …because, you know, they've got to - what do you call it? - check your, this was a debit card so it has to actually go and check whether your funds are available, validate your card.

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(excerpt from LB's account of entering financial details into a booking form on a website, 1999)

There were also explanations of feelings:

> Yeah, and you get back stuff giving you a booking reference and a telephone number and a place to ring if things aren't going well and a suggestion that you print out the page with your itinerary on it and <u>they</u> also email you to confirm the sale.

> *So any more thoughts or feelings as you went through this bit?*

> I think I was rather pleased actually. You know you kind of get it so that you think 'Oh great, yeah.. excellent!'

(excerpt from JL's account of receiving a confirmation after entering travel details into a form on a website, 1999)

and self presentation issues raised:

> I also remember thinking that, I think I put myself down as 'scientist', and I remember thinking 'Well, what am I? Should I be put down as 'student' or what would I like to be known as?' {…} I remember thinking 'What-' {…} 'how, what, how would I be categorised according to <u>them</u>?' Does it matter, do I care?

(excerpt from JF's account of entering occupation into a registration form on a website, 1999)

These two aspects of accounts illustrate social behaviour and were not present in descriptions of using other parts of the site. Consequently, these findings allowed us to conclude that text entering affected users' awareness and type of behaviour.

Before moving on, a couple of further examples of collected data are worth citing. Although of no great consequence for the study above, the following excerpts further demonstrate the detail of thinking processes that the technique elicited. The first is an example of thinking that the interviewee would not normally have bothered to include in an account:

> <u>And then I had a wicked thought</u>. I thought 'I wonder if I could look at anybody else's.' (laughs) {…} <u>At one level I thought I didn't think anything, but I remember thinking</u>, 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. Life's too complicated.

(excerpt from PG's account of having entered text into a website, 1999)

and, here, an interviewee explains how she thinks in chunks when she meets a routine situation, so that the thought is more *referred to* than *developed* on the particular occasion asked about:

I tend to experience my thoughts as a kind of block that I know about, so I already know what the thought is, it's this thought about 'Bloody hell it's another registration, password, security, will I get the mail message, blah'. And that's like a procedure, it's kind of like I know what it is so I'm in this structure that is this thought very briefly, then I'm into another structure which is the second thought, which is 'Oh god, we're getting back in…' like paragraphs, yeah.

(excerpt from CS's account of having to register on a website, 1999)

These extracts indicate the potential of the technique for investigating introspective processes. In fact, a by-product of the interviews was a number of interviewees commenting on how they surprised themselves with recalling thoughts of which they hadn't been fully aware of thinking at the time. Certainly, most were surprised by the level of detail that returned to them in attempting to describe their activities.

Discussion of findings

Before evaluating the use of the technique, I shall dwell briefly on the results of the study. The examples above show that in going about their business these interviewees were aware of two levels of interaction, one with the interface, the other with shadowy figures beyond the interface – an observation that has not been recorded before. The point at which this second awareness develops seems to be during the entering of text and the thinking associated with it, since it is not apparent in using the interactivity of navigational devices or menu selection systems. Interviewees appeared to move swiftly and easily between the two states of reference, suggesting that users might move as easily in their perceptions. There was no sense that having two different states of association affected their competence or enjoyment of the site, but it does raise some interesting questions for developers. In particular, the justification for adopting a communication metaphor is strong when dealing with interactive components on sites. The evidence above suggests that people use communication

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behaviour even when they are not sure of who or what they are interacting with.

There has been little work on Web users' perceptions of text entry mechanisms and the study referred to here is far from exhaustive. But, it is hoped that the findings might encourage designers to experiment with making explicit the metaphor of communication in building functionality into sites, seeing the solicitation of information as an 'invitation' to interact. Producers might also consider how they phrase and present their 'invitations' for maximum effect, both in terms of persuasiveness and in carving an identity.   For more discussion of the implications of these findings in design terms, the reader is referred to the paper devoted to this study (Light and Wakeman, forthcoming).

Conclusion

The result of using this method was that considerable useful information could be elicited during interviews - down to the most incidental details of how the interviewee received impressions - about any aspect of the process under review. No particular effort on the part of the interviewee to remember was required, but a willingness to follow the interviewer and answer questions did show itself to be a prerequisite - hence the need for the contract at the start, and the occasional need to renew it.

From the description of the study above, it is obvious that additional insight was gained by collecting accounts from users in this way. It was possible to identify patterns emerging about perceptions without asking specific questions that might have distorted the results and which, in asking about a peripheral and perhaps unconscious aspect of behaviour, might anyway not have received accurate or informative answers. This study attempted to combine the observations of fieldwork with the control of experimentation. It lacked some of the benefits of each method, but produced material of an appropriate content and granularity to meet its ambitious research agenda without elaborate staging or equipment. While setting out with a fixed procedure and a structured interviewing technique produces a more manageable quantity and kind of data, in this context it would have risked simplifying the relationship between language, thought and behaviour in ways that eliminate much of what was most interesting.

References

Antaki, C. (1988)
'Explanations, Communication and Social Cognition' in
Analysing Everyday Explanation: A Casebook of Methods, ed Antaki, C. pp1-15
Sage Publications, London.

Bandler, R. and Grindler, J (1979)
Frogs into Princes
Real People Press

Ericsson, K. A. and Simon, H. (1984, 2nd edn,1993)
Protocol Analysis: Verbal Reports as Data
MIT, Cambridge, MA.

GVU (1998)
10th survey, GVU WWW User Surveys
http://www.gvu.gatech.edu/user_surveys/

Levinson, S. (1987)
Pragmatics
Cambridge University Press, Cambridge

Light, A. and Wakeman, I. (forthcoming)
'Beyond the Interface: Users' Perceptions of Interaction and Audience on Websites'

Potter, J. and Wetherell, M. (1987)
Discourse and Social Psychology: Beyond Attitudes and Behaviour
London: Sage

Vermersch, P. (1994, in French)
L'entretien d'explicitation
ESF, Paris

Vermersch, P. and Maurel, M. (1997, in French)
Pratiques de l'entretien d'explicitation, eds Vermersch, P. and Maurel, M.
ESF, Paris, 1997