The use of theatre in requirements gathering and usability studies.

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Abstract

This paper discusses the use of theatrical techniques to communicate to designers the user requirements for IT interfaces - particularly those of "extreme users" such as older people. The methodology and processes of producing such material in a video form are described, together with the strengths and weaknesses of this approach. The paper concludes by suggesting the various roles live theatre can play in user centered design. Although the research, on which this paper is based, focuses on the challenges presented by older and disabled users, the techniques described are applicable to a wider range of users.

Keywords: Film/theatre, communicating user requirements, methodology, older people

Introduction.

Successful design requires designers both to achieve an empathy with their potential users, and have access to sufficient relevant human factors knowledge about their needs, wants and capabilities. A range of design techniques have been suggested which assist in this process. This need to be fully informed about the characteristics of users, however, is particularly important when the user group is poorly represented in the design community, such as older and disabled people. This paper is focused on how to facilitate good design for older people, and supported by evidence from this user group, but the suggestions made are relevant to a much wider range of users.

Involving users in the design process

User Centered Design was developed to provide ways in which designers could take more account of the actual characteristics of their user population (Helander et. al., 1997, Preece, 1994, Shneiderman, 1992). Such techniques have proved to be very useful in conventional software design, but, as Nielsen (1993) has commented, "'usability' has no independent meaning: it can only be defined in terms of the specific user group for which the system is being developed". Koskinen et. al. (2003) have addressed this issue in their "empathetic design" model of involving users in product design. Such design techniques, however, can be less successful when the user population is very varied, and Grudin (2006) has commented that: "Whatever their intensions, a team relying on usability studies, for example, is unlikely to inquire very deeply into the diversity of the participants, few or none of whom they might see". This is a particular challenge when older users are involved as they have a much wider spread of characteristics than younger people, including the presence of multiple minor disabilities, and, in many cases, a major disability. Newell and Gregor (1997) have pointed out the increased usability challenges of this group and the difficulties in finding and recruiting 'representative' users. They conclude that traditional methodologies do not cater well for them (Gregor & Newell, 2001).

Obtaining requirements and evaluation data from marginalized groups, such as older people, is not straightforward (Zajicek, 2004), and traditional User Centred Design methods provide little or no guidance about how to design for that user group (Newell, 1993, Newell & Gregor, 1997, Gregor et al 2005). The definition of "older people" is not straightforward, as pure chronological age is not necessarily an appropriate measure, but, when considering users of Information Technology, a useful definition is those people whose physical, sensory and cognitive abilities have been recognized as deceasing due to age (which roughly equates with over 55 years of age), and who have had relatively little personal experience of using computer technology. The inclusion of such groups in User Centred Design, involve significant communication problems between users and designers (Eisma et al., 2004). We have found that older people tend to be very positive about the prototypes which are presented to them, wishing to praise the developers rather than give an objective view, and, if they cannot cope with technology, they tend to blame themselves rather than poor design. The large majority of older people have little knowledge of 'computer' language and concepts, which complicates the communication process between such groups and technology specialists. (We have found, for example, that some did not realise that sending an email involved using the 'internet' and some think the monitor is the 'computer').

Additionally, because of their unfamiliarity and potential fear of computers, older people's confidence in their ability to use technology can be very fragile. A usability flaw could thus have a catastrophic effect on an older person's confidence. It is thus important, from an ethical perspective, not to put older people in a position where any confidence they may have is put under threat. User centered designers thus need to be particularly sensitive not only to the sensory and cognitive abilities of older people, but also to their psychological state and their perceptions of technology. This also applies to

a number of other marginalized groups, such as ethnic minorities, disabled people, and technophobic groups. Newell and Gregor (2000) suggest that a new design paradigm should be developed for these groups of people which they call User Sensitive Inclusive Design.

Participatory Design

Participatory Design is another well established technique for involving users (Muller, 2002, Muller and Kuhn, 1993, Bodker, 1991, Schuler & Namioka, 1993). It has its roots in Scandinavian work with trade unions in the 60's and 70's where it was primarily focused on workplace design. The Utopia project, a collaboration between Swedish and Danish researchers and the Nordic Graphic Workers' Union, developed and applied a work-oriented approach to the design of computer-based tools for skilled workers (Ehn Sjorgren, 1991).   Noting that requirement specifications and systems descriptions based on information from interviews were not very successful, the Utopia researchers invented new methods for achieving mutual understanding, so that they could more fully understand the work of graphics workers. Researchers and practitioners were brought together by a pervasive concern for the knowledge, voices and rights of end users, often within the context of software design and development, or of the institutional settings. {Note that, quite independently, the research in Dundee on involving older users in design was called the UTOPIA project [Usable Technology for Older People: Inclusive and Appropriate] (Dickinson et. al., 2003).} The Participative Design approach has been expanded to include more general design studies, and Kyng and Mathiassen (1997) address both the pragmatic approach of direct collaboration between designers and users,and the more conceptual approach that incorporates complementary perspectives to help designers come up with better solutions .

Kuhn and Winograd (1996) formulated tenets shared by most Participatory Design practitioners and advocates. These included:

- Respect the users of technology, regardless of their status in the workplace, technical know-how, or access to their organization's purse strings. View every participant in a Participative Design project as an expert in what they do, as a stakeholder whose voice needs to be heard.

- Recognize that workers are a prime source of innovation, that design ideas arise in collaboration with participants from diverse backgrounds, and that technology is but one option in addressing emergent problems.

- Understand the organization and the relevant work on its own terms, in its own settings. This is why PD practitioners prefer to spend time with users in their workplaces rather than "test" them in laboratories.

- Be conscious of one's own role in PD processes; try to be a "reflective practitioner."

Although Participative Design is focused on the work place, there would seem to be no reason why parts of methodology could not be applied to retired people, on the

assumption that the "workplace" is the home environment. User Centred, Empathetic and Participative Design all recommend close interaction between designers and users, but, as Sims points out, cost constraints on design projects may prevent designers from accessing 'real' users (Sims, 2003). In addition, monitoring and interacting with retired older people in their home environment, rather than a workplace situation, can provide additional organisational challenges to the research.

Ethnography

Ethnography also involves users within the design process, but, in this case, the ethnographer acts as an intermediary between the users (usually in their own environment) and the designers. The ethnographer's role is to present as full a picture as possible of the user, their culture and their environment, to the designers. This is often in the form of a written report, but Blomberg et. al. (2002) recommends a variety of ways of doing this including "experience models", "opportunity maps", profiles, scenarios, mock-ups and prototypes. She says that "the value of profiles is enhanced by making them visible and dynamically present for development teams (e.g. profile posters, multimedia representations, role playing, walkthroughs)". "Rich and dynamic representations of essential characteristics and experiences of individuals can serve as a common frame of reference and reminder to development teams regarding the people for whom they are designing the system". She gives some examples of such profiles.

Personas and Scenarios

Profiles, or personas, and scenarios are also used as tool by designers without the underpinning of a formal ethnography. "Personas" are fictional characters instantiating an array of qualitative data representing the user group (Cooper, 1999) and scenarios illustrate how users may react to equipment within realistic situations (Benyon & Macaulay, 2002). Personas are regarded as a positive complement to existing techniques such as scenarios and task analysis (Carroll, 1995), and a growing body of literature indicates that these concepts are being taken up with enthusiasm by certain parts of the design community, particularly software and interaction designers (Pruitt & Grudin, 2003, Head, 2003).

It is claimed that personas promote engagement of designers over a period of time, which in turn promotes insights into users' goals and the way in which users might respond to design features, and Grudin (2006) gives a very detailed justification for the use of personas. Nevertheless, Laurel (2003, p 28) comments that "Personas are less effective if the audience is diverse". Some disadvantages of scenarios have also been reported. For example, Blomberg et. al. (2002) notes that: "it is not always possible to know in advance just what aspects of the activity should be included in the scenario to provide generative or evaluative value for design, and Grudin (2006) comments that "the (portrayal of the user) is not engaging…..it is not generative – it provides no handle for thinking about a new situation".

Strom (2003) claims that scenarios often give misleading impressions of how an interface will be used by realistic users in real situations, and that traditional scenarios are very narrow & superficial; commenting that characters in scenarios are the types designers dream about" and "users in scenarios have a patience that is exceptional amongst real users". Gilmore (2002) suggests the use of scenarios and personas is central to producing 'great design' – "the critical element being to ensure that the important characteristics of the real people visited are reflected in the scenarios and personas written. If scenarios are generated using only those aspects of the real world that are favorable to the product concept, then the value of the ethnographic design research is dramatically limited. If the composite and fictional personas are drawn as stereotypes then the research might as well not have been conducted".

Traditional personas and scenarios tend to focus on the practical relationships between the user and the system, and, to the extent that they include emotions, these are usually confined to the emotional characteristics of the users' goals. Greenbaum and Kyng (1991) identified "that we are dealing with human actors, rather than cut-and-dried human factors - systems need to deal with users' concerns, treating them as people, rather than as performers of functions in a defined work role". Norman (2002) also comments that "affect" (emotional impact) can make it easier to do difficult tasks, and negative affect can make it harder to do easy tasks". The emotional attitudes of the users can be as important as their physical and sensory abilities, and we need to explore ways in which this aspect of the users' characteristics can be highlighted.

The use of theatre

When personas and scenarios are presented to designers, rather than when designers are users are jointly involved in the development of scenarios, the persona/ scenarios are normally instantiated as text which contains relatively complete descriptions of potential users and user environments, and a description, or a "walk-through", of the usage of the product or system. Although these are clearly a very valuable design tool, particularly for experienced designers, we wished to examine other techniques which could have a greater impact on designers than a written persona/scenario, and would also provide a wider characterization of users, including an emotional dimension. We believed that the techniques of theatre could be very effective in transmitting important messages about user characteristics to this group. This is supported by Grundin (2006), who made the point that "Data from psychological studies and artistic experience indicate that we naturally and generatively create and engage with detailed representations of people…. Most of us do not naturally reason about extensive statistical summaries, but we do reason effortlessly about people, real or fictional." Grudin also reminds us that "authors and actors devote their professional lives to character representation. They labor to produce convincing fictional representations".

Theatrical methods are beginning to be used in the context of product design. Following previous work by Carroll (1997) on scenario-based design, Howard et. al. (2002) within the GO project at Helsinki University (http://go.cs.hut.fi) used role playing in

participatory design sessions, in which contextual scenarios were acted out. The games were structured so that the participants could play roles, or act as themselves. They report that the players imagined what kind of devices or services could support their mobility and communication, and acted out and discussed their ideas. They commented that interrogating the actors could take the focus away from generalities to specific design issues, such as visibility affordances and feedback. They describe creating a "theatre of innovation". The focus of this research, however, was on exploring the interrelations between technology and situations of use. The actors were asked to put aside their usual concerns for dramatic tension, characterization and emotional integrity. They were asked not take the designers on 'an experience' or convincingly portray a character. Iacucci et. al. (2002), also within the GO project, developed SPES (Situated and Participative Enactment of Scenarios), in which potential users of future products were provided with simple mock-ups, and designers followed users in their normal life for one or two days to provide detailed contextual information for their designs. Users were encouraged to act out their usage of future projects, rather than discussing such usage with designers. This encouraged "co-discovery or co-development of device and service features".

The use of professional actors in design development has been reported by Salvador & Howells (1998), and Sato and Salvador (1999) as a very useful and interesting way of establishing a common, shared, context for audience participants. They commented that "Live performers cast a spell over the room; there was a heightened awareness and tension, and live actors can produce engaging and interactive experience" (they answer questions from audience more effectively and efficiently than a moderator, and can facilitate the session rather than, for example, focussing on technical detail). Dishman (2003) and others have used actors in unscripted live drama to address design requirements for older adults. Dishman calls this "informance design".

Forum Theatre

In the main, these theatrical experiences have used a documentary approach, with actors performing various specified tasks with the technology, and/or designers themselves acting out various scenarios in front of their peers. We, however, wished to encourage dialogue between designers and users, and thus needed a theatrical genre which was designed to encouraging audience participation. We thus studied the ideas of "Forum Theatre" as described by Boal (1995). Boal's work was developed within his "Theatre of the Oppressed" movement in Brazil, and was devised to ensure substantial interaction between the audience and the actors, and to enable the actors to portray the views of the audience about the particular issues which were being addressed by the theatrical presentation.

Forum Theatre was one of the techniques used in the original Nordic "Utopia" participative design studies referred to above, to ensure that the voices of the workers within the print industry was heard. Boal's work is also seen in Brandt and Grunnet (2000), Ehn & Sjogren (1986 & 1991) and Muller et. al. (1994) , but their work has tended to use amateur actors.   Adi et. al. (2004) also describe an empirical study where a

usability specialist and a software developer write scenarios which explore and reach a common understanding of requirements and design ideas.

In order to take full advantages of theatrical techniques, we explored the use of theatre professionals - actors, script writers and directors - who were all very experienced in Forum Theatre techniques.

Foxtrot Theatre (in Education) Company

The Dundee based Foxtrot Theatre [in Education] Company have developed a version of Forum Theatre that uses Boalian techniques extensively within professional training of communication skills (e.g. within palliative care and training medical students), and in community consultation (including with seniors). A script writer conducts detailed research on the subject area and then produces a series of short plays which address the important issues to be discussed, but within a narrative style with the emotional content and tension essential to good drama. In general, these scripts have a 'beginning' and 'middle' but no 'end'. In live Forum Theatre, the play is performed and, when it reaches the end of the scripted section, the audience is encouraged by a trained facilitator to address the issues of the characters' different motivations and emotions. The ideas that the audience - the "forum" – produce are then instantiated by the actors, who extemporize on the basis of suggestions from the audience. In this way, the audience essentially direct the rest of the play, and can see the effects of their suggestions acted out. Live theatre also allows replay of scenes - should the audience change their minds on the basis of what has occurred. Other theatrical techniques are used in this section of the performance, for example, the facilitator may ask the audience to comment on what they believe each character is thinking, or wants to achieve. "Hot seating" can be used, where the character stays in role and replies to questions from the audience. The theatre company has been found this technique to be a very powerful method for facilitating the discussion of sensitive issues and, via dialogue within the audience and between the audience and the actors (who stay in role). This enables the members of the audience to understand the views and motivations of other groups within the audience, and those groups represented on the stage. It does, however, rely on the skills of the script writer, and director, and the improvisational skills of the actors.

Forum Theatre for Requirements Gathering for new technologies for older people

In collaboration with the theatre company, we used a version of this technique within the requirements gathering phase of a project developing a video camera based 'fall' monitor and detector for older people in their homes (McKenna et. al. 2003). We wished to facilitate discussions on the technical and ethical issues of such technology within focus groups containing a range of potential users of such a system. We believed that the use of theatre, rather than a more straightforward technical description of the system, would encourage older people with little or no technical knowledge to partake in realistic and useful discussions concerning a new technological solution. For reasons of cost, we

decided to use video rather than live theatre, but our process followed the main techniques of Forum Theatre.

We followed a professional theatrical approach to the development of the plays/scenarios. We employed a script writer (currently Leverhulme Artist in Residence in Applied Computing at Dundee University), who carried out her research by a series of discussions with the design team of three engineers, and some older people. On the basis of these interviews, the script writer produced four short scenarios; two involving an older person falling, and two which addressed the issues of false alarms. The stories, and characters within the stories, were the product of the creative imagination of the script writer as informed by the data given to her by the designers, and her discussions with older people. Importantly, the scenarios were written in a narrative rather than documentary style. They thus contained 'human interest', humor, and dramatic tension, as well as illustrating how the system may work, the errors which could occur in its use, and the effects of these errors on the participants. Each scenario lasted approximately five minutes. (Previous experience of interactive theatre suggested that five minutes of drama typically leads to about twenty minutes of discussion, and thus the four short scenarios gave just under two hours for a group discussion based on them).

Videos were then produced of various scenarios using professional actors. In the style of Forum Theatre, the videos contained 'stopping points' where the video was stopped and discussion among the audience encouraged. Stills from one these videos, shown in Figure 1, illustrate the style and content of such videos.

Peggy
and the
Fall Detector

Scene 1. Begins with Peggy at Home

1. Peggy sits and wonders

2. Peggy tells the monitor that it is important that it works
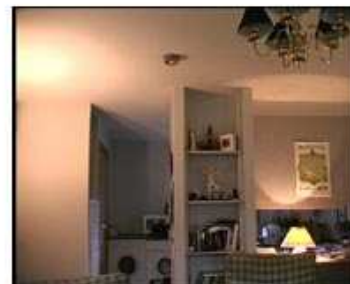
3. Peggy puts on some music

4. Peggy drops a jig-saw

5. Peggy lies down to pick up pieces

6. The fall detector begins to flash

7. Gill receives phone call about her mother

8. Gill rings Peggy to see if she is alright

9. Peggy is busy and does not respond to the phone

10. Peggy hears the phone but it has turned off before she answers

11. Jill assumes an emergency when her mother does not answer

12. Gill hurries to her mother's home and is upset - there is no problem.

13. Peggy and Gill discuss what had happened

14. Peggy is angry with the monitor that has led to a problem.

Figure 1: Example stills from one of the fall detector videos.

The videos were viewed and discussed by a cross-section of older people as well as a group of professional carers. The groups were each shown the four video clips, the presentation of each clip being followed by a discussion period, of approximately 20

minutes, led by a trained facilitator. The results from these discussions, which are fully reported in McKenna et. al. (2003), clearly show that the dramatized scenarios provided an excellent way of setting a shared context for discussions between potential users and designers, focused discussion on specific scenarios of likely system usage, and were very effective in provoking discussion of relevant details, because elderly users could imagine themselves within the scenarios shown in the video. The generic results from the current round of drama-facilitated discussions included:

- Passive monitors are desirable, but should not transmit visual images to anyone else.
- The bathroom and bedroom are the most likely "emergency" sites [which are often in semi darkness], followed by the lobby.
- "Fallers" want to know what the system is doing – they need to be reassured that a system has "seen" them fall and that it has "done something" to get help.
- There could be links with other technologies, such as the security system and other sensors, such as the smoke alarm, bath temperature, or medical/physio support.
- The system should fit in with user expectations, and be as simple as possible to operate.
- False alarms and missed falls should be minimised.

These issues, together with the many anecdotal stories told during meetings, were fed into the development of the system; an example was the second bullet point above which led to the specification of camera sensitive to very low light levels.

Drama was thus found to be an extremely useful method of provoking discussion at the pre-prototyping stage, and provided many insights that we believe would not have been obtained without such techniques being utilized. The potential users found the experience interesting and enjoyable, and this undoubtedly assisted in the elicitation process. These results confirm the comments made by Sato & Salvador (1999) that human centred stories lead to a more detailed discussion, and that the drama provides a point of contact, which makes their evaluative task much easier, and Strom's (2003) comment that human centred stories, which explore problems via conflict, can lead to a more detailed discussion. Strom reports, however, that he found it difficult to combine large or dramatic consequences with the exploration of an interface – which was not an issue with our research.

We used similar techniques as part of the UTOPIA (Usable Technology for Older People: Inclusive and Appropriate) project, whose primary aim was to develop techniques for changing the mind sets of designers concerning the needs of older people. (Dickinson et. al. 2003). This project culminated in the production of the UTOPIA Trilogy, a series of videos addressing issues of older people's use of technology (Carmicheal et. al. 2005).

Overall these videos were found to be a very useful method for provoking discussion and one which potential users find interesting and enjoyable. This ensured that user requirements were explored effectively early in the design cycle.

Live Theatre in Requirements Gathering

We believe the success of these experiments were, large part, due to the videos being narrative based – that is they illustrated how the equipment would work within interesting story lines, with all the characteristics of a good narrative - and to the quality of the actors, who were all professions experienced in Forum Theatre. This confirm the claims made by Grudin (2006) that "(actors) build representations of fictional people whose responses one wishes to anticipate through immersion in realistic detail", that "theatre encourages discussion on a 'what if' basis", that "models of fictional people can be as engaging as models of real people", and that "fictional based on research can communicate useful knowledge".

Further, the fact that the script writer was an experienced theatre and video director, and accomplished in the use of Forum Theatre to encourage discussion on sensitive issues, had a major impact on the success of the project. We also believe that live Forum Theatre could be a very appropriate methodology for a wider range of tasks within user centred design. Video is re-usable, and thus a cost effective way of communicating with a large number of people, but, as Sato & Salvador (1999) comment, video is neither quick nor inexpensive to produce, and live theatre involves a larger part of visual field of the audience. Sato & Salvador also reported that the audience themselves become the authors.

We have thus employed the script writer/director from the Foxtrot Theatre Company as "Artist is Residence" in Applied Computing at Dundee. We are experimenting with live theatre in requirements gathering within a design project addressing the application of Digital, Interactive Television for older people. The requirements gathering stage of such a project addresses the issues of what functionality older people would like to see in Digital Television. This is a particularly difficult issue, as a high proportion of older people have no idea what facilities could be made available through Digital Television and/or Interactive Television, and it has proved difficult to stimulate their imagination. We are thus providing a live theatre presentation which provides glimpses of the lives of older people who are using novel interactive television services. This adopts a Forum Theatre approach to facilitate interaction between the audience and the actors, and to stimulate the creativity of the older users. These sessions are recorded in both sound and vision, and a full transcript of the discussions in the sessions is produced. These transcripts are then used by the designers to inform their design decisions. In this case the audience were able to "hot seat" the characters, and, although the audience did not "replay" any of the scenarios, much of the discussions focused on the changes to the technology which would produce a more acceptable result, not only of the scenarios presented, but others which were mentioned by members of the audience. This technique can also be used to stimulate designers of interactive television services to focus on services which older people want, and to design them in such a way that they are appropriate for older people.

In addition, we are using a combination of film and theatre in two sets of experiments. We are showing the UTOPIA trilogy to an audience, and following this by facilitating a dialogue between the audience and the actors who played parts in the UTOPIA trilogy. The actors will be in role for the whole of piece, and the presentation will involve a combination of "hot seating", with the actors [as older users] confronting the audience of potential designers of equipment with why the systems are unusable by them, and asking them "what they are going to do about it?".

Although the use of actors may not be wholly appropriate for very detailed evaluations of user interface, we believe that it has major advantages when a more holistic approach is required, and for very novel design briefs, where an entirely new technology is being developed. Script writers and actors are trained as professional observers of human behavior, and their skill is presenting that behavior in a way which engages the viewer/audience. A good script writer is skilled at producing a "tight" script in which every word counts towards the narrative, and which provides a very economical method of transmitting information. A good actor knows how to present the relevant characteristics of personalities in an engaging manner, whilst retaining veracity. Both use techniques such as humour, and tension as methods of inserting important points into the narrative. Laurel (2003 p. 273) claims that successful movies have: 30% action, 17% comedy, 13% good versus evil, 12% sex/romance. 10% special effects, 10% plot, and 8% music. Most of these characteristics do not exist within traditional focus groups and usability tests, but we have found that they can be very effective in stimulating responses to design challenges, as well as creating an enjoyable experience.

Encouraging dialogue between the audience and the actors could also be valuable in usability testing. Wixon (2003) notes that "it is no accident that most usability testing involves encouraging entire design teams to watch the test, and it is well known that much of the effectiveness of the test comes from this active participation". In traditional usability laboratories, however, a two way mirror provides a major barrier to any communication between users and designers. Test performed in usability laboratories do not allow any interaction between the designers and the users. The two-way mirror is actually a scientific version of what, in theatre, is called "suspension of disbelief"; the use of actors to replace "real users" is another method of suspending disbelief, with the additional advantage that the ego of the actor/user is not engaged with the process, as it is likely to be with a "real user". Thus, it is possible to envisage a situation where the designers and the users can verbally attack one another as part of addressing the usability issues of a particular system – a situation which would be impossible, and probably unethical, in a traditional usability laboratory. A further advantage of using actors is that they can present a more generic picture of a user, and can change their personas in response to requests from the designers [e.g. what would happen if you were older, if your sight/hearing was impaired, if you were under pressure?]. Actors are also able to observe themselves acting, and thus have been trained to "think aloud" and analyze their behavior, which could be very valuable asset when investigating the usability of complex systems.

Finally, theatre encourages a creative approach to design, involving users as well as designers. This is in contrast to the traditional view of focus groups and usability testing being solely a method of eliciting users views and opinions, and to determine their abilities to use specific interfaces and systems.

The use of theatre professionals clearly involves costs, and these depend upon the amount of research which the script writer has to do, the number of actors used, the number of performances, and whether or not video is used. Within the UK, for example, the minimal costs of employing such professionals is recommended by "Equity", the theatre professional's trade union.

Conclusions

We have shown that the use of theatre [which includes humor and conflict], presented as video performances, can be a very powerful method of requirements gathering and communicating messages between designers and users of technology, particularly when the user group is older people. We have used video as a relatively cost effective way of interacting with large numbers of users, but it is more restricted than using live performances, and may not have the same impact. The design team being part of the audience for such performances is the most effective way of raising the design team's awareness of the needs and wants of the user group, and can be used as a forum for making some design decisions. In addition, a transcript, and an edited version of the discussions, should be produced and integrated into the requirements documentation for the system being developed.

These were initial forays into this approach, and much was learned from the process. It is extremely important to ensure that the researchers, script-writer, director, producer and the actors are all aware of the various agendas involved in producing an effective video. The tension between the artistic requirements of a rich and rewarding story, and the scientific requirement of conveying particular important messages, needs to be carefully managed to ensure that the videos encapsulate a satisfactory balance. There is also a tension between a narrative which primarily raises awareness of issues and questions for discussion, and ones which conveys "information" or other forms of guidance. One video cannot achieve everything, and it is important to use this approach where it is likely to be most effective, and for all the parties to have a clear idea of the particular purpose of the final production.

The live Forum Theatre genre has been shown in other areas to be very effective in stimulating discussion, and thus we will also be investigating the use of this and other 'Boalian' techniques, both in conjunction with videos and in live performances.
We are also investigating ways in which we can more closely link such theatrical presentations to scientific and demographic data about older users, so that the messages in such presentations can be grounded in scientific data, as well as anecdotes, whilst still retaining the impact characterized by this genre.

Acknowledgments

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