Towards a Framework For Evaluating the Sociability of Interactive Television

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Abstract
As new interactive television applications are being developed, little attention is being paid to their sociability, in spite of the evidence that television is a social medium. This paper starts from the statement that a framework is needed for evaluating the sociability of interactive television to explore research into the social uses of television. A typology of the social uses of television is selected as the basis for such a framework, to be enhanced by preliminary and further research into the social uses of new interactive television applications. In further work, this framework will be turned into sociability guidelines for designers.

Key Words
sociability, interactive television, evaluation, guidelines, social use of television

1. Introduction
Interactive television is already introduced in a couple of countries, and being tested in several more. In launching this new technology, more and more attention is being paid to usability. Although this is a necessary aspect, another important aspect is often overlooked. These new interactive services and programs are going to be used on a medium that has been around for several decades in most people’s homes. Ethnographic research has shown that the use of television is inherently social (Lull 1980; Lee and Lee 1995; McQuail 1998). This seems to conflict with the idea of interactivity, where one person interacts with the interactive television set. We think that it is possible, and imperative, for a range of services and programs to support this social use of television. For this purpose it is necessary to not only pay attention to usability during the design process, but also to sociability.

The process of designing a product with usability in mind is widely accepted and well documented, containing many methods in different stages of the development cycle (Mayhew and Mantei 1994). One of these methods that is easy to apply and low-cost is heuristic evaluation, where one or more evaluators can assess the usability of a more or less developed prototype using a set of guidelines (Nielsen and Molich 1990). However, if sociability has to be assessed, there are no guidelines yet for evaluators to follow. Preece and Maloney-Krichmar (2003) argue that sociability needs to be operationalized, like usability already is, and a framework is needed to support designers in designing social applications. The purpose of this article is to define a framework from which guidelines can be developed for evaluating the sociability of interactive television applications. We think a first step towards a framework for evaluating the sociability of interactive television is to look at the way television has been used in a social way in the past.

2. Television as a Social Medium
McQuail (1998) means that media use is as sociable or as solitary as a person wants it to be. Whereas certain media like books are typically solitary, television is typically very sociable. He cites different researchers that have studied the social uses of television (McQuail 1998: 308). One of these studies that is of particular use for setting up an evaluation framework because it leads to a typology, is the ethnographic research of Lull (1980) classifying the social use of television. Lull distinguishes structural and relational uses of television. Structural aspects are concerned with the way television has an impact on the structure of people’s lives. Relational aspects consider the influence television has on relationships between people.

Structural aspects of television are divided into two categories:

1) Environmental aspects, relating to television as background noise, company during other tasks and a source of entertainment for the family.
2) Regulative aspects are the punctuation of time and activities, conversational patterns, external family communication and outdoor activities.

Relational aspects of television are divided into four categories:

1) Communication facilitation: television serves a.o. as a conversation starter, can fill holes in conversations or makes it possible to clarify personal values.

2) Social affiliation or avoidance: television can promote but also prevent physical or verbal contact, strengthen the solidarity in a family or alleviate conflicts.

3) Social learning: television offers possibilities to learn how to behave socially or solve problems, but also to spread information and knowledge about norms and values to others.

4) Social competence or dominance: parents can use their authority to decide when children watch television, role patterns are confirmed or imitated or tv characters can be verbally assaulted or corrected to demonstrate their own competence.

3. Social Use of Interactive Television

Although the typology provided by Lull offers an extensive starting point for setting up an evaluation framework, the innovative character of interactive television adds more possibilities and hence more social aspects to consider. There is little research in this area, although some preliminary research on social aspects of some interactive television applications has been carried out.

Arvola and Holmlid have studied the qualities-in-use needed for it-applications that are meant to socialise, by doing a pilot study of a quiz game on interactive television (Arvola and Holmlid 2000). After this pilot study, Arvola (2003) also analyzed an add-on to a racing broadcast and an on-demand news application. When the qualities-in-use of the three cases were compared, a.o. regarding their social use, the following three common characteristics were detected:

- Laidback interaction
- Togetherness
- Entertainment

Laidback interaction refers to the “lean back” experience of television. Users of interactive television don’t want to be too actively involved. Ease of use is closely related to this aspect. Togetherness is the feeling that viewers are actively engaged with other viewers in the room (immediate togetherness), or that they can talk about the program with friends later (delayed togetherness). Entertainment is also an important quality-in-use according to Arvola, with two aspects: ego challenge is the joy of achieving or knowing something, social challenge is the joy of winning from another person.

4. Discussion

It is already clear that there are services of interactive television that undermine some of the social aspects as mentioned above. The Guardian reports that because of the increased choice of television channels on digital television, the shared experience of discussing a television show that was on the day before is becoming less common (Wells 2004). If on-demand television gets widely spread, that might become an even bigger problem.

On the other hand, interactive television offers a lot of possibilities to support or even enhance the social uses of television. Interactive game shows make it possible to play along more actively than is possible with normal television, even with other households across the country. On-demand programs can help parents in spreading knowledge about norms and values to their children.

5. Further Work

With the typology offered by Lull, enhanced by the qualities-in-use suggested by Arvola, the basis of a useful framework is present to study the social uses of interactive television. In further research, we want to enhance this framework even more by doing user tests on several different interactive television applications. If we test a wide range of applications, we can confirm or reject the social qualities-in-use as detected by Arvola, or add new social aspects of our own. With a framework of the social uses of interactive television in place, we will then turn these social aspects into guidelines for developers of interactive services and programs.

6. Conclusion

Sociability will become an important aspect in the design of interactive television applications, as there is ample evidence of the fact that television is a social medium. Ethnographic research into the social uses of television can offer a basic framework to develop guidelines for designers. The innovative character of some interactive television applications can add some social aspects to this framework, although little research has been carried out in this area. Further research into the applicability of the typology offered by Lull, and the extra social uses of new interactive applications, will lead to a set of guidelines that designers can use to design sociable applications for interactive television.
References:


Arvola, Mattias, 2003: Good to Use!: Use Quality of Multi-User Applications in the Home. Licentiate’s Thesis. Linköping University, Sweden


Lull, James, 1980: "The social uses of television". In: Human Communication Research, Vol. 6(3), Spring


