Is the Social Television Experience Similar to the Social Online Video Experience? Extending Domain-Specific Sociability Heuristics to a New Domain

David Geerts

Centre for User Experience Research (CUO), IBBT / K.U.Leuven
Parkstraat 45 Bus 3605, 3000 Leuven, Belgium
david.geerts@soc.kuleuven.be

Abstract. Online social video applications, combining video watching with social media, are gaining in popularity. However, evaluation tools that focus on optimally supporting social interaction (i.e. sociability) when designing social video applications are still lacking. We have created a list of sociability heuristics for social interactive television applications, but it is unsure if these can be applied to similar applications but on a different platform, the web. In this position paper, we discuss the possibilities and limitations of applying sociability heuristics in a new – but related – domain, and we highlight opportunities for future work in this area.

Keywords: social TV, sociability, heuristics, social media, video, evaluation.

1 Introduction

In recent years, web applications with video content (e.g. YouTube, Current TV, Joost) as well as television sets including network connections offering IPTV services and online widgets (such as Yahoo! Connected TV or Opera for Connected TVs) are becoming increasingly popular. The social nature of watching video and television programs, as well as the success of social media on the web, drives developers of both types of applications to explore the integration of social media with streaming video. This leads to new kinds of services such as integrating twitter updates during live video streaming (e.g. at the inauguration of Barack Obama as president of the USA), Facebook apps that allow chatting while watching video content (e.g. Clipsync) or even applications that are purposefully built to chat around television programs (e.g. CBS Watch & Chat). These kinds of applications can be called social A/V media, allowing remote viewers to interact with each other via the television set or via PC. Features include remote talking or chatting while watching television, sending recommendations, viewing buddy lists with information on which television shows each buddy is watching or sharing video clips, but the range of possibilities is still broader than that.

P. Daras and O. Mayora (Eds.): UCMedia 2009, LNICST 40, pp. 357–360, 2010.

2 Sociability Heuristics for Interactive Television

As is good practice in user-centered design, evaluating these systems early and often is important to design for an optimal user experience. Several guidelines for evaluating the usability of online video and interactive television exist, and heuristic evaluation [1] is a well-known and often practiced technique to perform early in the development process in order to uncover problems as soon as possible and with a relative low-cost. However, for applications being used in a social context offering a shared user experience, such as the applications mentioned above, evaluating only usability is not enough. Even if these applications are evaluated to improve their usability, it doesn't mean that the social interactions they are supposed to enable are well supported. The term 'sociability' is used to indicate these interface aspects that support and enhance social interaction with and through new technologies and applications [2]. Several research areas already focused for quite some time on this phenomenon, such as Computer Mediated Communication (CMC) and Computer Supported Cooperative Work (CSCW). However, specifically evaluating how well these social interactions are supported has become only recently an area of research, e.g. in online communities or groupware. Similar to these last examples, social A/V media applications can benefit from sociability guidelines or heuristics. The specific nature of social television watching, such as enjoying a television program while communicating or using television content as conversation starter [3], warrant the use of domain-specific sociability heuristics for social television. This will help interface developers to design well-functioning applications that support social interaction in a non-work related environment.

We created such a list of sociability heuristics for social television, by testing five social interactive television systems in a lab environment with in total 149 users. The systems that were tested are AmigoTV [4], Windows Media Center, Social TV [5], Communication Systems on Interactive TV (CoSe) and Ambulant Annotator [6]. The results of these user tests were analysed using a grounded theory approach, and were complemented with reports from other lab and field studies of similar systems, in order to increase the ecological validity of the guidelines. This resulted in a list of twelve sociability heuristics that can guide the design as well as the evaluation of social television systems [7]. The list of sociability heuristics includes important aspects to take into account when designing social interactive television systems, such as offering different options for communicating, guaranteeing personal as well as group privacy, or adapting the programs and services to specific television genres. Although the heuristics are aimed at social interactive television in particular, they can also be used to make traditional interactive television services such as Electronic Programme Guides (EPG) more social. Therefore, these sociability heuristics can lead to interactive television programs and services that support the social uses of (interactive) television.

3 Extending Sociability Heuristics to Social Online Video

As social video watching on the web and combining social media with watching online video is gaining popularity, the question remains in how far these sociability

heuristics, created specifically with social television in mind, can be applied to a new, but related, domain. The interactive TV applications that have served as a basis for creating the heuristics are all applications whose main function was to foster social interaction in some way. Some of these systems had a limited range of social features and others a very wide range of those features, but the core functionality remained the same. It is thus clear that the main applicability of the heuristics lays with social interactive television systems. Although there are many similarities with watching video on the web, as for many people this is starting to replace traditional television watching, the platform as well as the viewing experience and social context of Internet based systems are often substantially different from set-top box based systems, e.g. because of the difference in screen size, making it unsure in which degree certain heuristics are applicable or not. As Internet based systems were not included in the analysis, we cannot claim that the heuristics are in any case applicable to these systems as well. However, certain heuristics can be assumed to be as relevant for these systems as for set-top box based systems, for example the heuristic "adapt to appropriate television genres". Other heuristics, such as "support remote as well as co-located sociability" lose part of their meaning as watching television programs on a PC is more often a solitary experience than with a normal television set. It is therefore important to be able to assess which heuristics can be applied directly, which should be discarded or reformulated, or if there is a need for new heuristics which are not needed for social interactive television.

4 Conclusion and Further Work

Although we think that some heuristics have an impact on Internet based systems, we think this is an area where further research is needed. Two main approaches can be taken. One could try to validate the existing set of sociability heuristics using a field-study of Internet based systems, which are easily accessible. For validating the heuristics this way, a long-term field study should first be conducted with one or more online social video applications, including a wide range of features, to detect the sociability problems that actual users have with these applications in a real use situation. At the same time, the same systems should be evaluated by a number of evaluators – with one group using the sociability heuristics and the other group not. The problems found by the evaluators can then be compared with the problems found during the field tests. Although it is not necessary for the heuristics to uncover all problems found in the field – as this is not possible due to the nature of heuristic evaluation – if the evaluators using the sociability heuristics uncover more real problems than the evaluators using no heuristics, we can conclude that the heuristics work at uncovering the sociability issues in online social video applications [8]. However, this would probably lead to the elimination or reformulation of several of the heuristics, while at the same time it would be harder to create new heuristics. A better approach might be to start from scratch and conduct a competitive analysis of several online social video applications in order to create a new set of sociability guidelines, similar to how we created the original sociability heuristics for interactive television. These guidelines can consequently be compared to the sociability guidelines presented here, to see what the similarities are. One of the benefits of

taking this approach is that not only existing heuristics can be confirmed or refuted, but also new sociability heuristics could come up during this analysis.

As we have discussed in the first sections of this position paper, when enhancing video watching with social features, it is important to make sure these social features are well implemented, supporting social interaction between different users as optimally as possible. A heuristic evaluation based on sociability heuristics is a fast and efficient way to detect and repair sociability problems early in the design process. We hope the sociability heuristics created for social interactive television are a starting point for creating heuristics specifically targeted at online social video applications.

References

1. Nielsen, J., Molich, R.: Heuristic evaluation of user interfaces. In: Proc. CHI 1990, pp. 249–256. ACM, New York (1990)
2. Preece, J.: Online Communities: Designing Usability, Supporting Sociability. John Wiley & Sons, Chichester (2000)
3. Lull, J.: The Social Uses of Television. Human Communication Research 6(3), 197–209 (Spring 1980)
4. Coppens, T., Trappeniers, L., Godon, M.: AmigoTV: towards a social TV experience. In: Masthoff, J., Griffiths, R., Pemberton, L. (eds.) Proc. EuroITV 2003, University of Brighton (2004)
5. Harboe, G., Massey, N., Metcalf, C., Wheatley, D., Romano, G.: The uses of social television. ACM Computers in Entertainment (CIE) 6(1) (2008)
6. Cesar, P., Bulterman, D.C.A., Geerts, D., Jansen, A.J., Knoche, H., Seager, W.: Enhancing Social Sharing of Videos: Fragment, Annotate, Enrich, and Share. In: Proc. of ACM MM 2008. ACM, New York (2008)
7. Geerts, D., De Grooff, D.: Supporting the Social Uses of Television: Sociability Heuristics for Social TV. In: Proceeding of the Twenty-Seventh Annual SIGCHI Conference on Human Factors in Computing Systems, CHI 2009, Boston, MA, USA, April 04 - 09. ACM, New York (2009)
8. Hartson, H., Andre, T., Williges, R.: Criteria for evaluating usability evaluation methods. International Journal of Human-Computer Interaction 13(4), 373–410 (2001)