Chapter VI
Sociability Heuristics for Evaluating Social Interactive Television Systems

David Geerts
IBBT / K.U.Leuven, Belgium

ABSTRACT

In this chapter, the author introduces 12 heuristics for evaluating the sociability of social interactive television systems. He first introduces the social uses of television, documented by many scholars in media studies, as well as the relatively new concept of sociability in new technologies. He then explain how the heuristics are based on a thorough analysis of several user studies the author performed with several social interactive television systems, as well as of literature that reports lab studies and field studies with such systems. Finally, each heuristic is presented and explained in more detail, along with some more specific guidelines. Geerts hopes these heuristics will enable designers and evaluators of social interactive television systems to make sure they support the social uses of television and create sociable systems.

INTRODUCTION

Evaluation is a critical part of the user-centered design (UCD) process of new technologies. It is best done as soon as possible – to uncover problems when it is still easy and cheap to fix them – and as often as possible, in an iterative manner. Within Human-Computer Interaction (HCI), the multi-disciplinary field that is concerned with studying how humans use interactive systems and how to design systems to improve this use, a wide range of methods exist to evaluate if a system is adapted to human needs. These methods are usually classified in three categories: user-based methods, model-based methods and expert-based methods (Jacko, 2003). Of all these methods, heuristic
evaluation (part of the expert based methods) is low-cost and easy to perform (Nielsen, 1994), so it is very popular with practitioners. Such a heuristic evaluation is performed by one or more experts that use a number of general usability principles or heuristics to form an opinion on the user friendliness of an application (e.g. Nielsen, 1994, Norman, 1988, Shneidermann & Plaisant, 2005). Most of these heuristics however are meant for computer based applications, and even though some of these guidelines could be transferred to interactive television, they are not always applicable due to the specific nature of television (e.g. being a leanback medium). Thomas & Macredie (2002) have argued that, if there are no specific guidelines, designers for interactive television would be forced to apply existing HCI guidelines. Because of the essential difference between both media, they feared that these designers would create a mix of ad hoc, company specific standards that are mostly incompatible and inconsistent, based on HCI knowledge stemming from an obsolete economical, social and technological environment. They say that to design new guidelines, the general principles of HCI are best taken as a starting point, but adapted to the properties of interactive television and the characteristics of the traditional television viewer.

There are already some guidelines to design user friendly interfaces for interactive television (e.g. Daly-Jones & Carey, 2000, Lu, 2005, Chorianopoulos, 2008), but they usually focus on the usability of interactive television systems, and do not take the social nature of television into account, or only very limited. Another problem with some of these guidelines is that they are tailored to certain applications, e.g. Electronic Program Guides (EPG), which means they are not widely applicable to other interactive TV systems.

As discussed in the previous paragraph, existing guidelines for interactive television are usually related to usability: “The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use.” (ISO 9241-11). However, for applications being used in a social context such as the social television systems that are presented in other chapters throughout this book, 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.

Recently, the term ‘sociability’ is being used to indicate these aspects that support and enhance social interaction with and through new technologies and applications. Having social interactions with new technologies is not new at all. Even before, but especially since the advent of the internet, people have used new technologies to find ways to communicate, discuss and form networks with each other. Several research areas have arisen that focus on this phenomenon such as Computer Mediated Communication (CMC) and Computer Supported Cooperative Work (CSCW) (Grudin, 1994). However, specifically evaluating how well these social interactions are supported is only recently an area of research.

In this chapter, we will first discuss the social nature of watching television and how this impacts interactive television. We will then introduce the concept of sociability, and look at existing sociability heuristics for online communities. Finally, we introduce our own heuristics for evaluating the sociability of social interactive television systems.

**THE SOCIAL USES OF (INTERACTIVE) TELEVISION**

According to McQuail (1998), 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 and summarizes some aspects of the ‘sociability’ of mass media, e.g.