

# Preface

## SOCIAL INTERACTIVE TELEVISION RESEARCH

Television since its invention has been considered a social link between people. People chat and discuss television programs, recommend shows to be watched, and send SMS messages when there is something of interest on. Like previous technologies, the digitalization of the medium imposed a number of technological priorities such as transmission mechanisms or middleware standardization. Once the technology is stable, the second phase of research focused on the immediate interactivity options, such as content navigation and interactive content. The next frontier of research focuses on the actual natural capabilities of the medium: Social Interactive Television. *Social Interactive Television: Immersive Shared Experiences and Perspectives* aims to set the basic research lines of this exciting topic that is social interactive television. The final intention of the book is to provide the reader an easy-to-access compendium of the research around this emergent topic.

## STRUCTURE OF THE BOOK

It is our belief that the future of interactive television, and of interactive digital media for that matter, is to provide experiences and not only services. Television experience is a shared one, thus this book concentrates on systems, interaction design, and evaluation methods that focus on social experiences around digital media both in the living room and beyond.

In order to introduce in detail the topics of the book, the first chapter “Social Television: From Beginning to End” by Gunnar Harboe, surveys social interactive television research with a historic perspective, indicating the challenges ahead. This chapter contextualizes the rest of the contributions of this book and provides the reader with the necessary tools to explore a world yet to be discovered. The book, then, is divided into four sections:

- The Broad Picture. Frameworks and Applications
- Who, What, Why and How? Methodology and Audience Studies
- Making It Work. Social Television Systems
- Thinking Out-of-the-Box. Social TV on large screens, mobile devices and the web

The first section, The Broad Picture, includes contributions on basic human and technological aspects. Stefan Agamonolis gives an overview of the many projects he was involved with during his time at MIT Media Lab Europe and Distance Lab, related to social interactive television. Even though most projects

can not be classified as social television as such, each project includes social and or audiovisual aspects and teaches valuable lessons that can benefit the design of social television systems. Cristian Hesselman and colleagues describe a technological framework for social interactive television, promoting an open infrastructure that includes applications from third-party developers. Tom Gross, Thilo Paul-Stueve, and Mirko Fetter look at the related field of Computer Supported Cooperative Work (CSCW) and encourage us to use the concepts from this research area when creating social interactive television. Finally, Dick Bulterman, Pablo Cesar, Rodrigo Guimarães, and Jack Jansen report on the Ambulant Annotator. The Ambulant Annotator is an extension to Personal Video Recorders that allows the user to enrich and share television content with selected members of his peer group. The chapter explores asynchronous communication mechanisms that enhance the connectedness between people.

As any new topic, there is a need for new methodologies and methods for measuring social systems. The next section, *Who, What, Why and How?*, provides an insight on such new methods. David Geerts presents a list of 12 sociability heuristics that can be used to design and evaluate social interactive television, especially focussed on the social interaction enabled by these systems. Célia Quico describes her detailed studies of younger Portuguese and their families when using cross-media applications on television and the Web, and how that influences audience participation. Regina Bernhaupt, Marianna Obrist, and Manfred Tscheligi explain the different ways that users can be involved in designing and evaluating social interactive television applications, stressing the importance of user involvement for creating usable and engaging designs. They especially focus on the home environment, as this new context has specific characteristics that have to be adequately addressed. Finally, Jenneke Fokker, Huib de Ridder, Piet Westendorp, and Johan Pouwelse detail several psychological theories that explain how users can be motivated to share content with other users.

The following section, *Making It Work*, provides an overview of a number of relevant and innovative systems. Gunnar Harboe, Elaine Huang, Noel Massey, Crysta Metcalf, Ashley Novak, Guy Romano, and Joe Tullio explain in detail the several iterations of the Social TV system by Motorola Labs, including voice and text chat, a buddy list and ambient awareness devices. They present the results of several user studies in the lab and in the field they have conducted, and that have guided the design of their system. Erik Boertjes, Jente Klok, Omar Niamut and Martijn Staal describe the field study they have performed with the ConnecTV system by TNO, and the lessons they learned from that trial. They also draw attention to the business models that could support the introduction of social interactive television systems on the market, and make it a success. Brian Amento, Christopher Harrison, Mukesh Nathan and Loren Terveen introduce the CollaboraTV prototype, specifically focussing on the asynchronous interaction this system provides, and also present results from an extensive field study with users. Finally, Jorge Abreu and Pedro Almeida describe how they designed one of the first social interactive television systems, 2BeOn, and how they consider AV-content on the Internet as an important platform for stimulating social interactions while watching television.

The final section of the book, *Thinking Out-of-the-Box*, studies social television systems out of the set-top box, including social WebTV systems, mobile TV, and big public screens. Konstantinos Chorianopoulos introduces us to mobile social television, and discusses which aspects are specific to the mobile context. Kenton O'Hara and Maxine Glancy take us outside, literally, and explain how people interact with television content on large screens placed in public spaces. David Shamma and Yiming Liu return to more familiar ground, the Web, and link instant messaging with television and video content, showing how this can enhance the chat experience. Finally, Justin Weisz looks at how watching television online while chatting can create a social experience, and at the same time influences distraction, entertainment

and sociability. He draws several conclusions that can help designing more sociable online television applications and systems.

The book tries to cover all the relevant aspects of this emergent topic that is here to improve the lives of the viewers; from technology to business models and without forgetting that the user is the central piece of any computing system.

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