
The Twenty-First Century Television: Interactive, Participatory and Social

Pauliina Tuomi

1 Introduction

Media synergy is on the increase, with media companies releasing their media content across different delivery channels. Nowadays, popular TV programs are multi- and cross-media projects that are not restricted to the television (Simmons, 2009; Tuomi, 2010; Ytreberg, 2009). Television viewing has fragmented to several platforms and the use of web elicits new uses of TV and audience behaviors. Audiences are now combining different mediums and content in order to gather a coherent media experience. This means a lot changes also in the fields of TV and audience research. The focus of the research is no longer on the mass consumption; on the contrary, it has shifted to study audience as individuals. It raises the question whether it is a matter of convergence after all or do these new consumption models rather lead to divergence? (Fig. 1).

This article will cover approximately 10 years of recent Finnish TV history, 2000–2012. It sets up to answer *how does media convergence and the use of second screens affect the TV watching experience (what extra features does it offer) and what is the standpoint on audience convergence/divergence?*

Interactivity, participation and sociality are features that characterize today's TV. At first the TV watching experience is analyzed through interactive elements and the focus is on the **SMS**-based iTV-entertainment. The second analysis elaborates on the features of **Web 2.0** and the dimensions it brought to the TV watching experience concentrating on the participatory online features (basically on different websites, blogs, discussion forums and such) that became more common around the years 2008–2010. The third concentrates purely on **social media** (e.g., Facebook and Twitter), it's features and what this has brought to the TV watching.

P. Tuomi (✉)

Tampere University of Technology, Pohjoisranta 11 A, PO Box 300, 28101 Pori, Finland
e-mail: sptuom@utu.fi

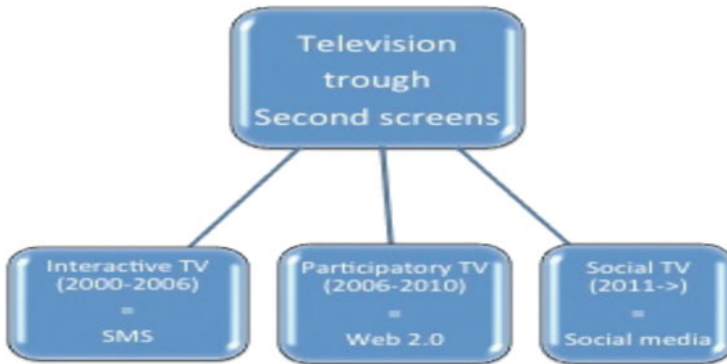


Fig. 1 The main eras of twenty-first century television

2 Literature State of the Art

Television has enlightened people for decades. That warm heart of the living room has both brought families together and given possibilities to consume entertainment individually. It has been seen as a complex medium, at the same time collective and disjunctive (Heinonen, 2008). Television is overall a very versatile broadcast medium (Näränen, 2006, 29). TV means different things to different people and there are several ways how to consume it, especially nowadays. Information- and communication technology differs from other equipment at home by their ability to connect the people and the outside world—either interactively or passively (Silverstone & Hirsch, 1994, 15).

Nowadays television is constantly being developed with new technical and social features that are widely acknowledged and the idea of being interactive comes through a convergence between additional devices and television. Jenkins (2006) has defined convergence by following: *the flow of content across multiple media platforms, the cooperation between multiple media industries, and the migratory behaviour of media audiences.*

Today's interaction, or rather participation, comes from multiplatform formats that combine TV and Web platforms in order to create a wider TV experience (Tuomi, 2010). Since 1990s interactivity has been one of the most significant features of the future media culture. The growth of media culture's playability is one of the results that is triggered by interactivity; cultural products are no longer just products that are watched, read or listened—nowadays products enable active participation as well (Parikka, 2004, 84). "TV meets the internet" is a global expression that characterizes digital and interactive TV (e.g., Jensen & Toscan, 1999). A user can be active in many ways, on various platforms, without breaking the link to a TV program format. Audience involvement has widened to include "passive" ways of using a broadcast platform, "active" uses of Web platforms, and in-between phenomena such as voting via mobiles and participating in net meetings

(Tuomi & Bachmayer, 2011, 55–56). In fact, multiplatform formats seem to stretch the whole somewhat ancient passive/active dichotomy well beyond the breaking point (Ytreberg, 2009, 483).

Previous studies in the field of today's television concentrate heavily on interactive features from the technological point of view (e.g., Bachmayer, Lugmayr, & Kotsis, 2010; Cesar, Bulterman, & Soares, 2008). Television has been the model example of a 'push' media and one-way mass communication. Nevertheless, TV has been interacting with viewers in many different ways for years. Very often, the interactive features of television are seen as a novel phenomenon or something that will happen sometime in the future. In reality, interactive television has a long history—just as long as television itself. Due to the convergence of TV and the internet, several research projects have appeared in the last few years aimed at finding ways of combining TV and web content, with informational or communicational purposes, solely using iTV or being cross media (Prata, Chambel, & Guimarez, 2012, 335; Rodriguez-Alsina & Carrabina, 2012). Participatory TV content has also been studied especially after the triumph of reality TV (e.g., Hill, 2005; Murray & Ouellette, 2008; Von Feilitzen, 2004; Ytreberg, 2009). The different hooks to entice the audience to take part in TV formats have been explored to some extent (e.g., Hautakangas, 2008), as well as the roles of different platforms as part of participatory TV (e.g., Sundet & Ytreberg, 2009; Ytreberg, 2009). The linkage between television and the internet has been widely addressed over the years (e.g., Antonini et al., 2013; Cortez, Shamma, & Cai, 2012; Rautiainen et al., 2013; Tuomi, 2013). Social TV as a theme of its own has been the centre of TV research, especially from the technological aspect, for years (e.g., Cesar, Geerts, & Chorianopoulos, 2009; Harboe et al., 2008). Social networking sites like Facebook and Twitter have been associated with social television since they enable remote viewers to interact socially with each other through television or mobile devices in general, in situations where viewers often are separated in time and/or in space. Since becoming a topical subject, social media and its role in TV production has been widely studied during the past few years as the numbers of users of, for instance, Twitter and Facebook have greatly increased (e.g., Gruzd, Wellman, & Takhteyev, 2011; Highfield, Harrington, & Bruns, 2013; Harrington et al., 2012; Marwick & Boyd, 2010; Weller, 2011; Weller, Bruuns, Puschmann, Burgess, & Mahrt, 2013).

All of these features based on different convergences, have a tremendous impact on audience research as well. The more technologies there are available through which television texts can be consumed, the more different contexts of television consumption there are, and the more difficult audience research in this area becomes (Silverstone & Hirsch, 1994; Simmons, 2011).

3 Methodology and Approach

Television viewing has fragmented to several platforms and the possibilities to connect with TV have expanded greatly during the last 10 years. In this chapter the three most dominate and recent phases of television will be introduced. The three phases of twenty-first century television—interactive, participatory and social—will all be analyzed through three criteria of convergence, which are: *technology and interaction*, *additional value* and *social aspect*. By answering these questions the chapter will elaborate on the actual level of convergence on audience level and making a stand whether these converging steps actually support convergence or divergence instead. The study bases on media convergence, participatory audience theories and TV watching experience. The research material covers for example taped iTV-formats, media observations around Web 2.0 and Tweet-analyses of TV based Twitter conversations. iTV data is taped during the years 2000–2011, the web 2.0 is studied through Internet Archive’s *Wayback Machine*, which is a service that enables users to see archived versions of web pages across time¹ and the Twitter tweets are from the Yle’s website (the tweets that were published on the TV screen) concerning the events “Linnan Juhlat” (2011) and Eurovision Song Contest (2011). The three phases will be represented more or less through different case studies in order to combine both theoretical and actual steps of convergence together.

4 Interactive Television

During the interactive phase of television in the beginning of the year 2000 the technology that provided the interaction were mobile phones and to be more precise SMS messages. The screen of the mobile phone acted as second screen for television. It gave to the TV watching experience more playfulness and playful elements in general. It also brought a huge change into the communication between TV stars and audiences since it offered a real time based communication through the SMS function.

The iTV-experience to take place: the viewer needs in addition to television, a mobile device that supports SMS-function. It is surprisingly difficult to try to define TV mobile games, particularly because of the term *mobile*. We are used to associating different kinds of feelings with this term. Usually *mobile* means something that one can carry and use whenever, and more importantly, wherever one wants to. In these TV mobile games this was not an option because one cannot play games at any time. On the contrary, these games could only be played when they are on the air on television. On the other hand, we really cannot use the term *TV game* either because it suggests that these games are similar to the console-based TV games. Probably the best term is still *TV mobile games* since these games are played using mobile phones and watched from the TV screen (Tuomi, 2008, 68).

¹ Internet Wayback Machine: <http://archive.org/web/web.php>

Interaction is best seen in cross media formats. Cross media entertainment means connection between for example mobile devices, Internet or/and television. Cross media enabled gaming experiences between TV and mobile phones. At first, one could participate in different TV-chats—one could send greetings with a text message (SMS) and almost immediately see his/her text on the TV-screen. This new form of entertainment soon became adopted by SMS game show producers. It could be said that Finland is a forerunner when it comes to interactive, TV-linked, mobile technology. Of course these formats have also spread to Europe and Asia (Tuomi, 2008, 67). From the year 2002 there have been different kinds of TV-mobile games on television. At first they were games one could participate in with a text message—just by choosing the right coordinates to hit a certain target. Games were often based on problem solving and the interaction between the player and the game was limited to text messaging. Later on (2004), games developed further and a live human host stepped onto the playing field. Hosts were now playing against people on their sofas. For example, games were based on getting a football past the host or trying to hit her with a snowball. Since the participation took place via SMS or IVR,² literally all viewers were able to participate (Tuomi, 2008, 68).

The level of interaction grew enormously, especially after the chat-function was added to the games. Now it was possible to play against a live host and talk to him/her—and most importantly: to get a response to one's action! TV was also used daily as marketing place for different mobile accessories—ring tones, backgrounds etc. It was also possible to donate to charity via SMS. This option was advertised on TV after different disasters all over the world. One was also able to get a quick loan with a text-message, but the interest rates were very high. Different kinds of mobile services were advertised on TV. One can order weather information or information on an unknown phone number via SMS. These examples are just the tip of the iceberg. There were multiple choices of how to interact with TV and its contents (Tuomi, 2008, 69).

Interactive TV mobile games were games one could participate in by text messaging on a mobile phone. The mobile phone brought the viewer and the TV screen together. The games were usually based on coordinates that one must choose in order to throw, for example, a snowball towards the host or kick a football past her. It was exciting to participate from one's sofa, with one's own phone, in a live TV show. It is as though the TV had become a game console and the mobile phone a game pad (Tuomi, 2008, 68). For example, in a TV-mobile game called Horse Derby, the player was supposed to press phone buttons one and three as fast as possible in order to make his horse (trotter) run on the screen. There was a clear resemblance to old Commodore 64 sport game Track and Field, in which players were obligated to hit joystick buttons constantly (Tuomi, 2008, 69). In these games, one message/game move cost approximately 1 euro. There were no physical prices

² Interactive voice response is a phone technology that allows a computer to detect voice and touch tones using a normal phone call.

and therefore it is a spiritual battle between the player and the host/other players. It is motivating to get on the TOP 10-list and pursuing to get better results (Hanski & Kankainen, 2004, 75). Every sent message activates the host and the feedback is instant (Tuomi, 2008, 69).

iTV brought a playful experience to TV watching. Playing on the TV screen is however nothing novel. Interactive game shows have appeared on the Finnish TV before such as Hugo the Troll (1993) and Vito—Game Over (1994). Hugo the troll was an international game where viewers were able to make a phone call to the TV-show and play the game via number buttons on a phone (Tuomi, 2009, 16). However, the interaction enabled by the Hugo troll was something spectacular since the viewers were now able to control the happenings on the real-time TV. The viewer was able to guide the animated game world from one's own coach.

In the end, consumers seemed to want true 'power' to have an effect on TV formats and contents.³ In the era of iTV, consumers did not have any effect on significant matters in the society, only, for example, on reality TV formats by voting. iTV entertainment was a huge field that could have been used much more effectively to facilitate people's influence on the important matters of society (Tuomi, 2008, 70).

5 Participatory Television

After the interactive phase (based especially on iTV content and SMS), Finnish television evolved into participatory TV by offering plenty of TV-related material on dedicated websites as well as through online magazines as additional news material. The phase of participatory TV is mainly the era of the coming of Web 2.0. Participatory television exploited the convergence between TV broadcasts and the internet, especially Web 2.0 features. Through this convergence, the audience was able to communicate with each other, create content, and enjoy the material provided by the broadcasters. This, however, led to the situation where audiences could no longer be seen as the masses. This era emphasised the individual by offering the capability of watching TV whenever (online/net TV etc.) and wherever you wish. This era also saw more social TV-related activity amongst the online participants. The time when internet changed to be somewhat more social than before and it started to accept and be based of more and more user generated content. This had an impact on television viewing experience as well. Web 2.0 acted as second screen for television. Internet became an archive for all the TV format's other related material and viewers were able to browse through asynchronous discussions, blog texts and dedicated web pages offered by the TV channel. There were a lot of features and activities that served individuals particularly, but also lots of user-generated content that enabled asynchronous communication

³This was seen from the internet inquiry (<https://www.webropol.com/P.aspx?id=210451&cid=20911803>) answers.

between the viewers. UGC is the term used to describe any form of content such as video, blogs, discussion form posts, digital images, audio files, and other forms of media that was created by consumers or end-users of an online system or service and is publically available to others consumers and end-users (e.g., Kaplan, 2010, 61). Viewer needed in addition to television—not necessary though—internet connection. This could be established of course through mobile devices as well.

What are the ways participatory media, especially different TV and media spectacles, use when activating people to take part? Usually the repetitive features are similar in almost every participatory TV format. Hautakangas (2008) states that there are clear hooks in the interactive TV formats that also live in other mediums as well. These hooks are used to involve people into the narrative of the participatory media spectacle (Hautakangas, 2008). One of the prime features is naturally the referendums aka votings that enable almost every citizen to participate. Another, not so apparent, feature is intermedialism. The whole event is built up in lots of different mediums simultaneously for example in the press, on the net and on TV.

Because of the media convergence there are lots of different intermedial products for sale nowadays, which means that the contents are available in many mediums (Hautakangas, 2008, 161). One essential part of the breakage of the digitalization has been the growth of the internet and mobile media becoming a significant part of the everyday media consumption and—markets. On the other hand, because of the seamless co-operation between the web press and the dedicated web page it is possible to get news feeds and stories in real time. A committed TV format follower can easily dive into the world of different news, extra-material and gallups. Quite often the tabloid magazines actually offer different shadow votes where one can participate in online (Tuomi, 2013, 140).

The participatory nature of convergence between TV and internet before the coming of social media was based purely on combining TV and web-content asynchronously together. First, before the web 2.0, there were simple web pages that offered some background information about the TV format, but these were platforms that were updated by the dedicated people, audiences were not able to affect these sites. After that the webpages turned into web platforms where the users control their own data (O'Reilly, 2005). Usual core features of a Web platform are services, participative architecture (e.g., uploading videos, comment functionality, votes) and availability of social features (e.g., blogs, discussion forums, like/dislike functionality, polls) (Tuomi & Bachmayer, 2011, 58). There are then different types of linkage between TV and internet content, which can be defined on a thematic or technical level. Especially the purpose of the linkage between Web and TV content tells us what is the additional value to the audiences (Tuomi, 2013, 140).

Also there were a possibility given to the audience to influence the Content on TV via webplatforms, but this was really minimum compared to the next step of convergence between television and social media, which will be dealt with in the next chapter. Webplatforms give the viewers the possibility to influence the course and/or characteristics of the TV content (e.g., by a voting mechanism) and to offer viewers the possibility to participate in the show (e.g., by concurrent forum and live TV discussion; the outcome of the forum discussion is introduced to the discussion

on TV). Influence can happen active or passive. However, in contrary to interaction, a participating viewer might not get an immediate feedback about his/her participation. It even might not be clear whether the participation had any effect or not—for example Big Brother and Idols. The webplatforms also supported web transmission of content that is broadcast on TV. For instance, a newscast is offered as a video-on-demand stream after the (live) broadcast on TV (Tuomi & Bachmayer, 2011, 60). Also the webplatforms were used to shift content. The content is broadcast alternate on different platforms (it is shifted from TV to the Web and back again). There are multiple ways how webplatforms were engaging the audiences also outside the television broadcasts. Next the nature of participatory era will be presented through an example.

5.1 Emmerdale Online in 1999: An Example of Participatory Television

As an example we can use Finnish TV channel MTV3's drama/soap opera Emmerdale and analyze how the content on TV programme related websites invited audiences to take part in before the time of social media. The participatory online features, resulting from media convergence between TV and web, can be addressed and analysed also through the use and purposes of websites. As an example, the Finnish TV channel MTV3's website for the British TV programme Emmerdale was retrieved from the Internet Wayback Machine from the year 1999. This is a good example of a website that has been established after the wave of Tim O'Reilly's idea of Web 2.0. The term Web 2.0 became known in 1999 to describe web sites that use technology beyond the static pages of earlier web sites. It is closely associated with Tim O'Reilly because of the O'Reilly Media Web 2.0 conference, which was held in late 2004 (O'Reilly, 2005).

The website material was analysed and features relevant to audience participation were categorised based on the criteria of content and purposes. Overall, the purposes were dealt into (1) Up-to-date info, additional information and extra material (photos, background images, episode descriptions, spoilers, trivia and character presentations etc.), (2) Advertisement (use of site to advertise programme- and channel-related merchandise), (3) Interaction with the audience/ Participation in content (chats, discussions forums, blogs, polls and votes, feedback etc.), and (4) Transmission of content (video clips, online TV application etc.).

The example webplatform of Emmerdale in 1999⁴ is constructed in a way where the upper banner is holding the links to additional information and extra-material. The right side of the site is offering for example polls and shadow votes. From the up left the offering is the following: (1) front page, (2) episodes, (3) characters, (4) trivia and background, (5) the village, (6) background images, (7) Kaarina's

⁴See page at: The Emmerdale weplatform from the year 2009: <http://web.archive.org/web/20090817111252/http://www.mtv3.fi/emmerdale/>

(maintainer) blog, (8) discussion, (9) Katsomo—net TV application and (10) feedback.

This emphasizes lots of the criteria listed before. The webplatform, acting as a second screen, offers additional information such as episode and character information and trivia and background. It also offers a place to viewers create content in discussions and blog-sections + there is a possibility to participate in weekly poll questions and give feedback. Katsomo offers the transmission of content since viewers are able to watch episodes outside the actual broadcast times. Also the aspect of advertisement can be found.

6 Social Media Television

There are different ways audience converge social media and television together. At first, it can be used in a same way webplatforms acted in the era of participatory television. To give viewers the possibility to gain and gather extra-material and synchronous news in particular. If the participatory TV was more asynchronous communication, social media brings the real-time based interaction to the scene. Basically the same way iTV-entertainment did. Secondly, social media can be used in order to enhance the viewing experience by allowing viewers to communicate in real-time during the TV broadcast on TV. In this chapter the focus is in the latter function of combining TV and social media, Twitter in this case.

As known, television is nowadays a part of the big picture of interconnected devices, operating on several platforms. Espen Ytreberg (2009) states that multiplatform formats⁵ are a type of media output that does not seem to fit well with thinking in terms of basic differences between broadcast and digital media (Ytreberg, 2009, 16). This means that the broadcasters are eager to provide new ways to drive viewer engagement. According to the company Twitter itself, Twitter provides a forum for real-time context and commentary that turns watchers into participants. For example, the royal wedding (for example already in the year 1981 when Charles and Diana got married the festivities were televised around the world and again, with Twitter possibility, in 2011 when William and Kate were married) is just one example of how real-time Twitter integration can enhance TV coverage and help drive viewership.

The aim of this section is to elaborate on the connection and linkage between television and social media in 2011. This is done through a case study that focuses on the experiments done by the Finnish national broadcaster YLE. In Finland there is a more innovating way TV content and watching experience can be supported with the assistance of the Web platform on the TV screen itself than just having the Twitter feed on different second screens for example smart phones. In Finland the

⁵ Formats that operate on several platforms e.g., internet, mobile phones, TV being the central cluster.

national broadcaster company YLE has done experiments in creating social TV by combining teletext and social media for a couple of years now.

From the year 2010, YLE (The Finnish Broadcasting Company) has enabled people to watch Eurovision Song Contest and Independence Day celebration (Linnan juhlat) and same time follow the Twitter conversation around it on the teletext (or teletext)—in real time. Teletext as a phenomenon is mostly European and nowadays it is popular for example in Britain (BBC) and Sweden in addition to Finland (Turtiainen, 2010, 33). Teletext is a television information retrieval service and the very first tryouts took place in Britain in the early 1970s. Teletext is a means of sending text and diagrams to a properly equipped television screen by use of one of the vertical blanking interval lines that together form the dark band dividing pictures horizontally on the television screen. It offers different text-based information, typically including news, weather and TV schedules. YLE started regular teletext broadcasts in Finland 7th of October in 1981 and as a curiosity at the end of 1990s, 70 % were using teletext regularly (Turtiainen, 2010, 34). For some reason teletext has not really been studied academically at all (Turtiainen, 2010). Despite the fact that teletext has survived as an existing feature all these years.

There are hundreds of tweets published yearly. YLE's try out of using Twitter tweets on teletext application during the TV show is experimental, it broadens the TV experience and at the same time brings the Web and social media closer to the TV content. What is noticeable is that it is actually done through a quite old medium, Teletext, which emphasizes a level of remediation and the fact that new bridging connections between TV and social media can also be established with the help of the older devices as well (Tuomi & Bachmayer, 2011, 63).

In these experiments Twitter is introduced as a participatory feature to traditional TV broadcast in real-time. The tweets are delivered to audience through an older medium teletext. Tweets are then shown on the TV screen similarly as subtitles do.

7 Example: Teletext Meets Twitter and Social Networking

For this service to take place, viewer needs a television set that supports teletext. Television broadcast and secondary screen with the internet connection. The second screen is acted by social media and by through different mobile and non-mobile devices. Social media sites like Facebook and Twitter have changed the idea of secondary screens totally. Now the TV watching experience is gathered from scattered media field. Lots of extra-material and real-time based/synchronous activity takes place in social media. Facebook- and Twitter threads are also used for viewers to communicate with others—known and unknown people.

Teletext and Twitter-experiment is technologically executed with the appropriate hash tag # for example #euroviisut by which the published tweets end up through the RSS-feed into moderated publishing system. By choosing the teletext page 398, the tweeting of the audience absorbs onto the TV screen as a part of Eurovision TV broadcast viewing the same way as texting does.

Remediation is the incorporation or representation of one medium in another medium. According to Bolter and Grusin, the newer media exploits the older one and justifies its existence (Bolter & Grusin, 2000). Twitter exploits the older medium teletext, but the teletext itself also benefits from this symbiosis; it gives it yet another purpose. The use of teletext could easily carry the un-media sexual label being an old medium but it is actually well accepted medium despite the fact that it is somewhat ancient compared to social media and Twitter. Like mentioned before, teletext has a solid ground in Finnish TV usage, which probably explains the reason why it is so easily adopted and not questioned (even) by the (younger) audience (Tuomi, 2012, 252).

“Linnan Juhlat” is a Finnish yearly event that is held to celebrate and honour the independence of Finland. The president of Finland invites Finnish people that have been noteworthy and have forwarded equality and good values during the present year. This event is one of the most followed TV broadcast in Finland. The Twitter meets Teletext-experiment is also been done during the media spectacle Eurovision Song Contest that is a popular yearly song contest that all the active European Broadcasting Union (EBU) member countries are allowed to participate in (Tuomi, 2012, 249).

After analyzing the 3005 tweets of both of the media spectacles, seven different categories were found in order to emphasize for what the audiences are using the Twitter opportunity for.

The categories are (1) *Eurovision Song Contest artists and performances/Independence Day quests and appearances*, which addresses all the tweets concerning the appearance of the people on TV—the general habitus and clothing. (2) *Nationality* gathers the tweets emphasizing the collective feelings as being a Finn during the media spectacle. (3) *Teletext and Twitter—experience* handles all the content that somehow deals with the experiment—content and/or technical issues. (4) *Interaction and dialogue* analyses the tweets and re-tweets that contain clear dialogue and tweets that appear to sent in order to arise discussion. (5) *Other notions and irrelevant comments* elaborate every tweet inappropriate to other categories. (6) *Hosts and general arrangements of the event* organizes the tweets that contain opinions and statements concerning the overall arrangements and hosts. (7) *Media spectacle and atmosphere* presents the tweets that deal with the traditions and experiences that are clearly connected to media spectacle (Tuomi, 2012, 250).

These results emphasize the usage of this second screen service to social purposes among the audience. In the iTV era, the SMS was limited into 160 characters, which obviously districted what, how and how much audience actually would have wanted to say. Naturally tweets are also short, but they are un-chargeable and provide however more space to express oneself. Also the use of social media like Facebook give more opportunities to act on matters with more space, in real-time and whenever and wherever.

7.1 Viewpoint on Convergence/Divergence Through the Eyes of the Audience

The trend towards converging media environments across devices as TV sets, PCs, smart mobile phones, intelligent gadgets, and tablets is unstoppable. Internet, broadcasting networks, and service ecosystems become more and more a single service space, rather than having strict boundaries between each medium (Lugmayr & Zheng, 2012, 49). The audience does not perceive the TV stream as single medium—the consumed media is a service eco-system actively reacting on implicit or explicit consumer interactions (Ollikainen et al., 2011). The fact that the role of television as a physical object is changing, also influences other aspects of the context of the whole television viewing experience. This can be noticed in the fact that television viewing is becoming more and more individualized (Simmons, 2009). Not only is television viewing evolving into a more individual activity, also the social aspect afterwards is being influenced. A very important part of watching television is the possibility to talk about it the next day. According to Simmons (2009) time-shifting technologies interrupt the temporal flow of television and therefore the feeling of a shared experience might disappear. On the other hand, audience groups might also be reinforced: instead of talking about television programs the next day at work or at school, viewers of internationally successful programs can go online and talk about the episodes with viewers from around the world (Simmons, 2009, 220).

iTV both enabled and disabled social activity on TV screen. At first different TV chats actually offered social activity between the TV viewers through discussions that took place on the TV screen. It also acted as place for seeking company and dating as well as for getting advice from other viewers on different problems viewers had come up with. On the other hand, the connection between the TV stars mentioned before influenced on this social activity between viewers since after this communication with TV persons was possible, the interaction mainly took place between the viewers and the TV hosts. The social activity did not stop, it just changed.

During the participatory phase users/viewers were offered a possibility to socialize and share. From this point of view convergence of TV and internet did empower the social activity among audience. However, like mentioned this also emphasized more individualistic use of television physically, but also at the same time the activity might have been really social between the other online users.

During the social media era, the real-time based communication has boosted the social activity around TV formats. Now it even includes, thanks to Facebook etc., communication between the broadcaster and the audience. Social media has opened the lines to contact broadcasters quickly and the broadcasters are obligated due to the reputational issues to respond to these requests.

The idea of converged audience is not actually occurring through a traditional TV viewing but more taking place in audiences' online activity. Especially important for this gathering TV experience is the convergence between social media and television. It gives the opportunity to viewers to connect TV related in real-time and

also the possibility to contact the TV producers as well. The analyzed tweets reveal that social communication that take place during the actual live broadcast tweeting via teletext is mainly used to express opinions, something one would like to say to the person sitting next to one on sofa. The most valued features tweets on teletext did brought to the audience were the idea of presence, a possibility to ‘take part’ in a new way and the possibility to tweet was seen overall as a positive extra value to more traditional ways of watching TV.

Use of social media combines the interactive and participatory elements wisely. However, use of the second screens in cooperation with the television does not lead to convergence, not technically at least, since there are several different devices to be used and the television cannot offer these features without the help of mobile devices. The idea of smart TV⁶ is however trying to bridge this gap and with the smart TV and internet connection viewer is actually able to go online with the same physical device, television. Still there are features that really do not support functional social communication on smart TV’s either. There is a possibility for example on Samsung to actually use one’s mobile phone as a remote control but basically the use of independent keyboard is required when using online features of the television. This emphasizes that the technology convergence is still defining its limits and possibilities while content and the audiences are converging more painlessly. Also the different temporal changes in consuming TV content affect to that audiences are consuming TV more independently and individually. Online video stores such as Netflix and Viaplay allow people to watch the content whenever, also the recording choices of broadcasted content have developed a lot. Offering audiences the possibility to watch TV broadcasts whenever most suitable.

8 Conclusions

Interactive SMS-based entertainment was based on the convergence between mobile phones and television. This era was mainly entertaining and offered no actual and factual influence to the audiences. The era mainly offered material to play games, take part in quizzes and to the order SMS-material to mobile phones for example. iTV entertainment did not take place in vain, however. On the contrary it was an important phase in the continuity of building interactive television. Nowadays this entertainment phase has mainly vanished mainly due to the problem areas that occurred: high participation prizes, low quality and especially problematic target groups (children and youth). Participatory television exploited the convergence between TV broadcasts and internet, especially web 2.0 features. By this convergence, audience was able to communicate with each other, create content and enjoy

⁶ A smart TV describes a trend of integration of the Internet and Web 2.0 features into television sets and set-top boxes, as well as the technological convergence between computers and these television sets/set-top boxes.

material provided by the broadcasters. This however led to the situation where audiences no longer could be seen as masses. This era emphasized the individual by offering watching TV whenever (online/net TV's etc.) one wishes to and wherever. Although this era also brought more social TV related activity amongst the online participators.

Social media and television convergence offers both social activity between the viewers and the broadcasters, even TV stars. TV broadcasters and—channels are communicating more and more with audience via Facebook and Twitter. The audience is being heard and at the same time they are able to interact in real-time with each other TV content related. Twitter and TV—combination is seen as a very functional way of creating the long wanted form of social TV. One reason is the low costs for tweeting (Zhao & Rosson, 2009, 252). Other one is the fact that Tweets do not need much time to write or read and one has an easy access via PC, notebook or smart phone (Jungnickel & Schweiger, 2011). The coming of the social TV is as anticipated as other forms of activating television. The current reality proves that people cherish the opportunity to communicate with others, expose aspects of their lives in public and even participate in virtual communities (Obrist, 2007). Will it happen through convergence or divergence is yet to be seen. Obviously, convergence is also one of the terms that carry notions of utopia and hype, which is something that should be acknowledged when the term convergence is addressed.

In conclusion, TV-screen has often been defined in relation to other technologies such as mobile devices or game consoles. Often add on devices are created precisely to give extra-value to TV's purposes of use (Hellman, 1988, 165). Nowadays, it can be said that television is actually giving extra-value since watching TV has changed so dramatically after the becoming of web 2.0 and social media. To sum up, TV's role in creating social experiences is not diminishing. It can be said that people feel TV as some kind of a mystical machine, yet in twenty-first century. We are used to idea that TV is a broadcast medium and when being able to step on a flow—whether it is through SMS, real-TV vote, online action or commenting on social media; it feels as we are breaking a magic and public boundary (Tuomi, 2009).

References

- Antonini, A., Pensa, R. G., Sapino, M. L., Schifanella, C., Teraoni Prioletti, R., & Vignaroli, L. (2013). Tracking and analyzing TV content on the web through social and ontological knowledge. In *Proceedings of the 11th European conference on interactive TV and video (EuroITV'13)* (pp. 13–22). New York: ACM. doi:10.1145/2465958.2465978.
- Bachmayer, S., Lugmayr, A., & Kotsis, G. (2010). Convergence of collaborative web approaches and interactive TV program formats. *International Journal of Web Information Systems*, 6(1), 74–94.
- Bolter, J., & Grusin, R. (2000). *Remediation: Understanding new media*. Cambridge ja Lontoo: MIT Press.
- Cesar, P., Bulterman, D. C. A., & Soares, L. F. G. (Eds.). (2008). Human-centered television. *ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP)*, 4(4): 1–7.

- Cesar, P., Geerts, D., & Chorianopoulos, K. (2009). *Social interactive television: Immersive shared experiences and perspectives* (pp. 1–362). Hershey, PA: IGI Global. doi:10.4018/978-1-60566-656-3.
- Cortez, J., Shamma, D. A., & Cai, L. (2012). Device communication: A multi-modal communication platform for internet connected televisions. In *Proceedings of the 10th European conference on interactive TV and video, EuroITV 12* (pp. 19–26). New York: ACM.
- Gruzd, A., Wellman, B., & Takhteyev, Y. (2011). Imagining twitter as an imagined community. *American Behavioral Scientist*, 55(10), 1294–1318.
- Hanski, M.-P., & Kankainen, A. (2004). Pelien laadun kehittäminen käyttäjien näkökulmasta. Teoksessa Marja Kankaanranta, Pekka Neittaanmäki & Päivi Häkkinen (toim.): *Digitaalisten pelien maailmoja*. Jyväskylä: Jyväskylän yliopisto, 67–76.
- Harboe, G., Metcalf, C., Bentley, F., Tullio, J., Massey, N., & Romano, G. (2008). Ambient social TV: Drawing people into a shared experience. In *Proceeding of CHI 2008*, 1–10.
- Harrington, S., Highfield, T., & Bruns, A. (2012). More than a backchannel: Twitter and television. In J. M. Noguera (Ed.), *Audience interactivity and participation* (pp. 13–17). Brussels, Belgium: Transforming Audiences, Transforming Societies.
- Hautakangas, M. (2008). Yleisöä kaikki, tuottajia kaikki: toimijuuden neuvotteluja Suomen Big Brotherissa. In K. Nikunen (toim.), *Fanikirja: tutkimuksia nykykulttuurin fani-ilmiöistä*. Jyväskylä University, Jyväskylä.
- Heinonen, U. (2008). *Sähköinen yhteisöllisyys. Kokemuksia vapaa-ajan, työn ja koulutuksen yhteisöistä verkossa*. Kulttuurituotannon ja maisemantutkimuksen laitoksen julkaisuja 14. Turun yliopisto, Pori.
- Hellman, H. (1988). *Uustelevisiion aika?* Helsinki: Hanki ja jää.
- Highfield, T., Harrington, S., & Bruns, A. (2013). Twitter as a technology for audiencing and fandom: The #Eurovision phenomenon. *Information, Communication & Society*, 16(3), 315–339.
- Hill, A. (2005). *Reality TV – audiences and popular factual television*. Abingdon: Routledge. 231 pp.
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York: New York University Press. 308 pp.
- Jensen, J., & Toscan, C. (1999). *Interactive television: TV of the future or the future of tv?* Aarhus: Aarhus University Press.
- Jungnickel, K., & Schweiger, W. (2011, March 14–16). *Twitter as a television research method*. General Online Research Conference GOR 11, Heinrich Heine University, Düsseldorf.
- Kaplan, A. M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53, 59–68. Elsevier, Indiana University.
- Lugmayr, A., & Zheng, H. (2012). Forecasting the usage of ambient media in TV broadcasting in the year 2016. In *Proceedings of the 5th International Workshop on Semantic Ambient Media Experience (SAME)*.
- Marwick, A., & Boyd, D. (2010). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media and Society*, 13(1), 114–133.
- Murray, S., & Ouellette, L. (2008). *Reality TV: Remaking television culture*. New York: New York University Press.
- Näränen, P. (2006). *Digital television – analyses on history, politics and TV-system*. Doctoral dissertation, University of Tampere, Tampere.
- O'Reilly, T. (2005). *What is Web 2.0? – Design patterns and business models for the next generation software*. <http://oreilly.com/Web2/archive/what-is-Web-20.html>
- Obrist, M. (2007). Finding individuality in the technological complexity: Why people do it themselves? *The International Journal of Interdisciplinary Social Sciences*, 2(1), 203–212.
- Ollikainen, V., Aalto, E., Norros, L., Seisto, A., Lugmayr, A., & Lindqvist, U. (2011). *NELME—Next generation electronic media multiproduction and multicasting processes, services, solutions and tools*. Espoo: VTT Technology.
- Parikka, J. (2004). Interaktiivisuuden kolme kritiikkiä. *Lähikuva*, 2004(2–3), 83–97.
- Prata, A., Chambel, T., & Guimarez, N. (2012). Personalized content access in interactive TV-based cross media environments. In Y. Kompatsiaris, B. Merialdo, & S. Lian (Eds.), *TV*

- content analysis: Techniques and applications series: Multimedia computing, communication and intelligence*. Boca Raton, FL: CRC Press/Taylor & Francis group. ISBN 9781439855607.
- Rautiainen, M., Heikkinen, A., Sarvanko, J., Chorianopoulos, K., Kostakos, V., & Ylianttila, M. (2013). Time shifting patterns in browsing and search behavior for catch-up TV on the web. *EuroITV, 2013*, 117–120.
- Rodriguez-Alsina, A., & Carrabina, J. (2012). Analysis of the TV interactive content convergence and cross-platform adaptation. In Y. Kompatsiaris, B. Merialdo, & S. Lian (Eds.), *TV content analysis: Techniques and applications series: Multimedia computing, communication and intelligence*. Boca Raton, FL: CRC Press/Taylor & Francis group. ISBN 9781439855607.
- Silverstone, R., & Hirsch, E. (Eds.). (1994). *Consuming technologies. Media information in domestic spaces*. New York: Routledge.
- Simmons, N. (2009, June 3–5). *Me TV: Towards changing TV viewing practices?* Euroitv09, Leuven. ACM 978-1-60558-340-2/09(06).
- Simmons, N. (2011, June 29–July 1). Television audience research in the age of convergence: Challenges and difficulties. In *Proceedings of the 9th International Interactive Conference on Interactive Television* (pp. 101–104). Lisbon, Portugal.
- Sundet, V., & Ytreberg, E. (2009). Working notions of active audiences: Further research on the active participant in convergent media industries. *Convergence, 15*(4), 383–390.
- Tuomi, P. (2008). SMS-based human-hosted interactive TV in Finland. In *ACM international conference proceeding series: Vol. 291 archive* (pp. 67–70). UxTV, Silicon Valley, CA.
- Tuomi, P. (2009). Television interaktiivinen pelihetki – Television pelillisyyden ja merkityksen pelikokemusten tuottamisessa. Teoksessa: J. Suominen, R. Koskimaa, F. Mäyrä, & O. Sotamaa (toim.), *Pelitutkimuksen vuosikirja 2009* (s. 34–48). Tampere: Tampereen yliopisto.
- Tuomi, P. (2010, June 9–11). The role of the traditional TV in the age of intermedial media spectacles. In *Proceedings of the 8th international interactive conference on interactive TV & video 2010* (pp. 5–14). Tampere, Finland.
- Tuomi, P. (2012). *Teletext + Twitter = a new form of social TV? MindTrek'12 Proceeding of the 16th international academic MindTrek conference* (pp. 249–254). New York: ACM. ISBN: 978-1-4503-1637-8. doi:10.1145/2393132.2393188.
- Tuomi, P. (2013). TV-related content online: A brief history of the use of webplatforms. *Euroitv '13 Proceedings of the 11th European conference on interactive TV and video* (pp. 139–142). New York: ACM. ISBN: 978-1-4503-1951-5. <http://dl.acm.org/citation.cfm?doid=2465958.2465974>
- Tuomi, P., & Bachmayer, S. (2011, June 29–July 1). The convergence of TV and Web (2.0) in Austria and Finland. In *Proceedings of the 9th international interactive conference on interactive television* (pp. 55–64). New York: ACM.
- Turtiainen, R. (2010). Tulos ei päässyt edes teksti-TV:lle. Miksi vanhanaikainen teknologia on säilyttänyt asemansa digitalisoituneessa mediaurheiluympäristössä? *Tekniikan Waiheita* 4/2010. 32–48.
- von Feilitzen, C. (Ed.). (2004). *Young people, soap operas and reality TV*. International Clearinghouse on Children, Youth & the Media, Gothenburg University, Nordicom, Yearbook 2004.
- Weller, K. (2011, June 28). *Approaches to analyzing scientific communication on twitter*. The World According to Twitter Workshop, Brisbane, Australia. <http://www.slideshare.net/katrinweller>
- Weller, K., Bruuns, A., Puschmann, C., Burgess, J., & Mahrt, M. (2013). *Twitter and society*. New York: Peter Lang.
- Ytreberg, E. (2009). Extended liveness and eventfulness in multiplatform reality formats. *New Media and Society, 11*(4), 467–485.
- Zhao, D., & Rosson, M. B. (2009). *How and why people twitter: The role that micro-blogging plays in informal communication at work*. Proceedings of the ACM 2009 International Conference on Supporting Group Work. Retrieved March 4, 2012, from <http://www.personal.psu.edu/duz108/blogs/publications/group09%20-%20twitter%20study.pdf>