The Social TV Phenomenon:
New Technologies Look to Enhance Television’s Role as an Enabler of Social Interaction

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Abstract

This paper provides a historical perspective of television’s role in engaging social interaction, and looks at how a new era of fragmented consumption and time-shifted viewing has altered this role. This perspective is applied to the technological evolution of Social TV and the emergence of Second Screen, which refers to the current trend in development of online and mobile applications that aim to increase viewers’ social interaction and engagement while watching TV. Research of past prototypes is examined to define the primary components needed to create a successful Social TV application like ambient display and viewer connectedness. Finally, this framework is applied to an analysis of the new iterations of Social TV applications like GetGlue, Miso, IntoNow and TVplus.
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Introduction

Television has received an unfair assessment in the realm of interactive media. It is often considered anti-social, escapist, and only “quasi-interactive,” meaning it is limited in how much users, or in TV’s case viewers, can contribute (Thompson, 1995). Television as a medium has been cast as a tool for one-way conversation, where the networks and creators provide content and the audience passively accepts. However, studies of television history have shown that the TV set has a way of bringing people together and creating quality social and interactive engagement. From the idea of the “electronic hearth” in the 1950s to the development of the “water-cooler-effect” in 21st century office settings, television has invited conversation and contributed to the development and maintenance of interpersonal relationships throughout the decades (Nathan, Harrison, Yarosh, & Terveen, 2008). The level of social engagement has changed with the implementation of new technologies like interactive-program guides, digital video recorders (DVRs), internet-enabled screens, and online video streaming.

The latest addition to the TV experience is viewers’ use of web-enabled devices, like laptops, smartphones and tablets, while watching television. In its latest survey report, Nielsen Wire (2011, October 13) found that more than 40 percent of smartphone and tablet owners reported using their devices during the time they watched television. The industry has labeled this new phenomenon as “Second Screen,” and in an attempt to capitalize on the growing trend networks and developers are scrambling to create new applications and interfaces to facilitate
online conversations and interaction that corresponds to the programming. The foundation of this trend lies in the concept of Social TV – which means leveraging the already established relationship tendencies of television viewers and looks for ways to satisfying viewers’ needs for social gratification online.

This paper conducts a literature review to provide historical context of the evolution of television as a social medium. The ongoing trend of Social TV is considered within this historical perspective to evaluate TV’s role as an enabler of social interaction. Conclusions derived from the examination of Social TV prototypes is used to analyze the current state of Social TV and Second Screen development and establish the principal aspects needed to foster successful social interaction. This analysis is used to look at the potential futures of the ever-changing Social TV industry and predict what new adaptations will be implemented to engage and facilitate viewer relationships.

**Literature Review**

**Historical Perspective**

More than just another household appliance, the television set was represented as a kind of “electronic hearth” as early as the 1940s (Tichi, 1991). It was something for friends, family and neighbors to gather around for a shared experience. In a short amount of time, television began to play a central role in American homes (Huston et al., 1992). As its popularity increased the shared viewing experience grew from close-relationship circles like family and neighbors to include wider circles like coworkers, communities and even entire countries. Last night’s television programming became a regular topic of conversation around the office water-cooler (Nathan et al., 1991). Big historical events brought the whole country together through television
sets. When President John F. Kennedy was assassinated in 1963 television coverage captured the attention of an estimated 93 percent of viewers (Doherty, 2011). Since TV became a mainstay in society, people have been sharing experiences by watching them at the same time even though geographically they might be far apart. Television serves as “social grease” – an agent for enabling interpersonal communications (Lee & Lee, 1995). Knowing others are watching creates the feeling of connectivity and new opportunities for further conversation and social interaction.

Despite its ability to facilitate social interactions, television has historically not been represented as an interactive interface. A decade ago, television viewing was described as “quasi-interaction,” because it predominantly served as a one-way flow of information and lacked face-to-face interaction (Thompson, 1995). At the time, television provided no way for an audience to contribute to the programming, and the only choices a viewer could make were whether to turn it on, choose a channel, pay attention, or turn it off (Thompson, 1995). An increase in available programming and the introduction of features like on-screen program guides began to change how people interacted with television and alter viewers’ habits. By putting the entire scope of available programming present at the touch of the remote, viewers began to take a more active role in choosing their programming (Kang, 2002). These program-guides were the first widely adopted instance of television as an interactive technological interface and opened the doors for the on-going development of new interactive platforms.

Some of the greatest contributions to enhance TV interaction occurred within the programming itself. Shows like American Idol began to alter the idea of television as just a one-way flow with the introduction of elements like audience voting. Allowing the audience to contribute in this way created the perception of immediate response and fostered a feeling of connectedness and control from viewers that had not previously been experienced (Nightingale
& Dwyer, 2006). The technique proved to strike a chord with viewers as *American Idol*, which recently completed its 10th season, is still one of the highest rated programs on TV. News programs, awards shows and other real-time programs have continued to create more of a two-way conversation with viewers by utilizing social media tools like Facebook and Twitter. By asking questions, providing commentary and voting on content, these online tools allow users to participate in the actual creation and presentation of television programs. These tools not only create an interaction between viewer and television program, they also expand viewers’ interpersonal relationships by opening social circles wider to include an online community that spans worldwide.

In the last decade, new developments in television interactivity threatened to deride TV’s role as a facilitator of social engagement. Increased programming, on-demand viewing, digital video recorders, and online video streaming all hinder TV from acting as a social lubricant. A wide-variety of programming means viewers may end up watching content that others in their real-life social networks aren’t. The use of recording devices or online streaming to watch television outside of the regular viewing schedule - called time-shifted viewing - has dramatically altered the social impact of television. Last year, The Nielsen Company (2010) reported that nearly 94 million of U.S viewers were using DVRs and online streaming, an 18 percent growth of the previous year. By doing so these viewers are increasingly less likely to make time to view a program with others, which makes them unable to participate in social interaction. The social ties created by office “water-cooler” conversations and the feeling of connectivity in knowing others are watching simultaneously are erased as more and more people watch television alone (Nathan et al., 2008). The TV viewing experience, which previously served as an “electronic hearth” that brought people together, has actually begun to devolve into
a more secluded experience as these new technologies alter and fragment viewer habits. This is when the maintenance and use of online interpersonal interactions become more important for TV viewers.

What is Social TV?

In an attempt to bring the social involvement back to isolated TV viewers, new interfaces are being implemented within the television itself as well as using secondary web platforms. Observations derived from research established two distinct goals for websites, smartphone and tablet applications, and embedded TV devices:

1) To encourage people to watch television live so they can participate in a specific social experience.

Or

2) To provide a viewing experience that connects viewers to others whenever they watch.

Whichever aim the overall purpose is the same: to create new ways for television viewers to engage socially. It is about making TV social again, but not just in the “electronic hearth” or “water-cooler” contexts of the past. These new platforms are incorporating the views of social ties and interpersonal communication cultivated by the new media era, where the Internet has become a primary way for many to maintain relationships and keep in contact with an extended social network. The term “hypertelevision” was coined to describe this new phase of television viewing (Scolari, 2009). In a world of fragmented and non-sequential viewing, it takes extraordinary platforms to consistently bring people together and a strong feeling of loyalty and connectivity to the programs themselves is crucial to keeping viewers engaged. The following segment will analyze this concept of Social TV and explore the research and process of Second
Screen and Interactive TV development to see how these devices are fostering viewer relationships in this new world of web-enabled interpersonal connection.

**Evolution of Social TV Development**

One of the earliest examples of Social TV was called “Inhabited TV” and it proposed combining virtual environments with broadcast TV to create a new medium where “an on-line audience can socially participate in a TV show that is staged within a shared virtual world” (Benford et al., 1999). It was a kind of virtual theater experience where the users operate within a producer’s framework to directly participate in the creation of the show. This is a format that has not found solid grounding in modern-day TV consumption, but Benford et al.’s experiments resulted in a key finding for Social TV. One of the main goals of Inhabited TV was to utilize virtual social interaction between participants to expand their collaboration efforts. The experiments discovered that by making this social interactivity visible it fostered a stronger connection and engagement among the users. In other words when people are aware of fellow participants they are more likely to become more involved in the interaction. Benford et al. (1999) concluded, “the idea of deliberately capturing and making collaborative activity visible and engaging to others might also have a broader applicability” (p.197). In fact, this is one of the foundations of Social TV. To create feelings of connectivity and open the doors for social interaction, viewers first need to be aware that other people are watching with them.

Studies have found that the physical presence of a fellow TV watcher isn’t necessary to create a strong sense of sociable viewing. In a series of studies that observed how people interacted while watching television in a group setting, researchers found that even when surrounded by others the interactions that occurred were visually peripheral (Ducheneaut,
Moore, Oehlberg, Thornton & Nickell, 2008). The television was the primary visual focus and at times participants were nearly blind to the physical actions of those around them. Ducheneaut et al. (2008) also experimented by separating groups into different rooms and allowing them to continue to communicate via audio channels. It found that participants were adept at communicating in this way, and still had a valuable exchange despite their physical separation. The study concluded that this kind of audio communication could be implemented to create a sociable television viewing experience despite the geographic distance of viewers. However, research has shown that viewers can be very mobile while watching TV (doing dishes, moving from room to room, trips to the kitchen) and the study noted an issue as to how people would communicate through an audio channel if they were moving away from the TV: “If these were the dominant patterns of use, Social TV would need to find a way to ‘follow its users around the house’” (Ducheneaut et al., 2008, p.12). This issue of mobility is another key component in the development of Social TV, especially with the additional modernization of viewers now watching TV on computers and mobile devices. It is not necessarily enough to have an interactive platform that works only within or around a television screen.

Audiovisual communication systems were the primary focus of Social TV designs in the mid-2000s. Chorianopoulos (2007) defined a Social TV application as “part of an audio-video system which allows distant viewers to communicate with each other using several interpersonal communication modalities, such as open audio channel, instant messaging, emoticons, etc.”

What isn’t accounted for in these earlier iterations is the boom of social media outlets like Facebook and Twitter post 2007. Audiovisual communication has given way to primarily text-based online conversation. People are interacting online by posting status updates, writing on their friends’ walls and participating in web chats and forums. Despite the difference in mode of
communication, the philosophy of these older Social TV tools is still the same. Chorianopoulos defines three rules to creating a successful sociable experience:

1. Encouraging user participation
2. Supporting social interaction components
3. Promoting visibility of people and their activities.

There is the continued emphasis on creating the impression of watching TV alongside a group of friends, along with a new call for viewers to be able to choose different levels of user engagement depending on their mood.

User customization and program flexibility is another important component of Social TV applications. In a field trial of text chat in Social TV prototypes, researchers limited users to “lightweight communication” in the form of pre-written messages and emoticons (Metcalf et al., 2008). The study discovered that users felt a sense of connectedness and were drawn into the experience by the presence and awareness features that allowed them to see what their friends were watching, but limitation in communication forms quickly deterred future use. “The closer we got to free-form, real-time communication, the more our participants realized that it was missing, and the lack of support for rich communication (such as IM-like text messaging and voice calls) limited our participants’ enthusiasm for the system as a whole” (Metcalf et al., 2008, p.3). The richness of communication is key to creating an authentic social experience. Viewers don’t just want to know that their friends are there; they also need to be able to engage in a meaningful exchange. However, the field trials did reveal that the mere ability to know others are watching, called ambient display, had a strong effect on creating a sense of connection. The idea of ambient display was further explored in AmigoTV, a Social TV prototype that used social network devices like a buddy list, calendar and invite a friend functions to enhance user
connection (Coppens & Trappeniers, 2004). Metcalf et al. (2008) found that even if users weren’t given specifics of whom else was watching with them, the knowledge that others were sharing the experience encouraged them to take further action to enhance their level of connectedness. The desire to engage was amplified when users were given additional information like friends’ recommendations and watch history.

With the implementation of a buddy list it is also important to take into account how viewers’ real-life relationships affect their viewing and interaction habits. In a study of interpersonal relationships relative to TV viewing, researchers found that, like in real-life, users classify social circles and choose to interact with them differently depending on the situation (Dezfuli, Khalilbeigi, Mühlhäuser, & Geerts, 2011). The study found that certain TV genres have a strong correlation between specific relationships. People use television as a facilitator for creating a shared social experience and so are more likely to want to interact with associate friends – people who share a common activity or hobby – over close friends or family when they watch TV (Dezfuli et al., 2011). It was concluded that being able to customize buddy lists depending on genre, show, and real-life relationship status would improve the communication opportunities and quality of social interaction. Genre specific customization has been recommended for consideration in overall Social TV design as well (Lamont, 2003). Certain genres like Animation, Sports, Documentaries, Action-Adventure and Reality Television have been found to engage more sociability (Ducheneaut et al., 2008). A deeper experience could be created if the platform was tailored to incorporate the additional opportunities in social interaction sparked by these conversation-generating programs.

The final key element in Social TV development is the establishment of connectedness with the television program itself. Viewers won’t use a platform that fosters social interaction if
there isn’t compelling content to encourage them to participate. For a show to generate significant comment and engagement it must establish a “prolonged relationship” with its viewers (Jenkins, 2003). Social TV depends on engaged viewers and so must serve as a tool to nurture viewers’ relationships with the shows in addition to its main role of facilitating users interpersonal interaction. Russell, Norman & Heckler (2004) studied TV connectedness in regards to consumer research, but also found that the deeper a bond is to a television program then the more opportunities for social interaction. Strong bonds can create intense fandoms and subcultures that create communities and establish viewers’ social identity and social interactions, “as connectedness increases, so will (a) the frequency of show-related social interaction with others, (b) the relationships within the community of co-viewers, and (c) the size of the viewer’s social network of co-consumers, even when controlling for attitude toward the show, involvement, or overall TV viewing” (Russell et al., 2004, p.156). Social TV utilizes this strategy by implementing features that reward fan loyalty and provide space for niche interests.

The research conclusions of these Social TV prototypes establish the technological foundation for the current boom in Social TV development. While audio communication hasn’t found a strong footing during the evolution of Social TV, the concepts of ambient display, customized experience, recreation of group viewing atmospheres, free-form communication, and viewer connectedness are all being implemented into the designs entering the marketplace today. Any one of these constructs does not equal Social TV individually. It is not enough for viewers to only know that others are also watching or to only be able to speak freely in a forum. Social TV must combine all of these techniques to fully recreate the shared TV watching experience in a digital world. Social TV is about finding connection in a reality of increasingly fragmented consumption by not only maintaining but also creating interpersonal relationships through social
interaction. It is about making television a hearth again, a central focal point to bring people together. This deeper level of social interaction is not sparked by a 140-character status update, but instead produced from conversation, customizable connection, and viewers’ feeling of loyalty and prolonged relationship. With this context and the deductions gathered from these previous Social TV experimentations, the following section will examine the current state of Social TV.

Analysis

What Social TV Looks Like Today

Surveys found that 59 percent of Americans surf the Internet while watching TV (Kastelein & Rempt, 2010). While this paper focuses on specifically Social TV development, the impact of general social media advancement cannot be ignored. Instances of a digital water-cooler began in forums, blogs and comment pages. But this phenomenon has evolved as marquee events, like The Academy Awards, and the introduction of stream technology, like Facebook and Twitter, sparked desire and possibility for real-time conversation in a large scale (Helweh, 2011). Twitter has set the standard in engaging synchronized viewer interaction by spawning conversations about shows that peak at more than 100,000 tweets per hour (Twitter Developers, 2011). This trend toward real-time conversation started to combat the fragmentation and isolation of time-shifted viewing by initiating changes in TV viewing habits. Although social media can enable conversations about television, the main purpose is not to generate a true sense of connectivity around watching TV. Unlike what was studied with the Social TV prototypes, social media alone does not succeed in recreating a shared group watching experience. This is what the now flourishing Social TV development industry is striving for by working in tandem
with the streaming social movement and establishing a more niche network focused on interactions around television.

There has been a drastic increase in the number of startup companies entering the industry as broadcast networks and web developers realize the impact these applications can have in the new phase of hypertelevision. The main trends in new Social TV iterations involve leveraging users already existing social networks and friends lists, providing virtual check-in systems that allow users to broadcast what show they are watching, rewards systems for loyal viewers, and live conversation platforms that offer viewers a real-time online chat setting. GetGlue, i.TV, TVplus, IntoNow and Miso are some of the companies leading the way in the Social TV frontier. All offer web-browser based platforms, but there is increasing focus put into developing mobile applications for smartphones and tablets. This latest arena in Social TV utilizes the mobile technology to create a hand-held Second Screen experience during TV viewing.

Since launching in 2009, GetGlue (www.getglue.com) has grown to become one of the leaders in entertainment social networking and now boasts more than 1.5 million users. The GetGlue system works by rewarding viewers that check-in to a TV show with virtual stickers. It also allows users to post a status update to join in on a running conversation about the programs and encourages users to sync their GetGlue updates with other social network sites: Facebook, Twitter and Tumblr. Users can establish a friends list and see a running wall of commentary of what their friends are watching and liking. The success of GetGlue’s platform comes mainly from its partnerships with more than 50 of the largest entertainment companies like DirectTV, Fox, TBS, NBC and HBO. With this access to exclusive content, GetGlue can encourage TV viewers to participate by offering strong bonds of connectedness between the viewers and the
shows themselves. The company has also begun partnering with advertisers and publications to offer more tangible rewards for check-ins to specific programs, like 40 percent off coupons to the Gap for viewers that checked in to Entertainment Weekly magazine’s recommended fall TV shows (Delo, 2011).

GetGlue does not focus exclusively on television as it allows users to check-in to other forms of entertainment as well including books, movies, music and games. The Social TV constructs employed by GetGlue include its utilization of ambient display and ability to create a strong connection between viewer and show. The rewarding sticker system also creates an addictive quality according to many users; however, the longevity of GetGlue is questionable. The software lacks a solid establishment of a group setting and allowance for free-form communication. While users can post and reply to updates there is not a concrete platform for open conversation or more evolved social interaction. It raises the question of what happens to viewer participation when the novelty of stickers looses its adhesiveness? GetGlue must also face competition from emerging software with strong similarities. Other websites like Miso (www.miso.com) and Comcast’s Tunerfish (www.tunerfish.com) use nearly identical platforms as GetGlue, but have not yet found as strong a user base. Besides offering a rewards system, these check-in sites do not go far enough to separate themselves from already established social media sites. Social TV startups face an additional challenge as they look to find a foothold in the “global water cooler conversation around TV;” they must compete with Twitter, which is still the dominating online tool used by TV viewers to converse about television (Roettgers, 2011).

To offer better platforms for open conversation and forming the experience of group viewing, other companies have put a focus on developing applications for synchronized TV viewing. Yahoo! recently acquired IntoNow (www.intonow.com), which uses a technology
called SoundPrint that can sync users to a television show by analyzing the audio. Once connected users will be able to see timed content, find other viewers and participate in real-time conversation. As of October 2011, SoundPrint promoted an impressive index with 266 years of video content made from more than 2.6 million individual airings. TVplus (www.tvplus.com) is an iPad application that uses similar sound technology. Currently, TVplus is limiting its synchronized interactive content to during primetime hours and is only available for shows on ABC, NBC, FOX, CBS and the CW. The implementation of synchronized viewing experiences is in direct combat to the time-shifted habits spawned by technology like DVRs and online streaming. These applications encourage users to make time for TV again by offering bonus materials synced with their viewing experience and opportunities for quality real-time group interaction. These synchronized sites are focusing development efforts on creating applications for mobile devices and tablets to provide viewers with streamed content on a second screen. These sites get closer to recreating the shared viewing experience, but hindrances in technology and widespread availability prevent them from creating full social gratification for viewers.

Technology in regards to Social TV is advancing as quickly as the role of TV as a social enabler is changing. Each new entrepreneurial endeavor offers innovation in the realm of creating social interaction. The shear rapidity in development makes it difficult to concretely surmise the extent of influence Social TV has, but it is clear that the phenomenon is making a profound impact. The TV industry as a whole is poised for a major upheaval as these huge leaps in Social TV advancement begin to become commonplace tools for the average viewer.

**Future of TV as a Social Enabler**

A world where TV is considered as only a “quasi-interactive” medium is quickly vanishing. While television has had to play catch-up to the hyperactive Internet, the line between
the two is beginning to blur. Some speculate that as Social TV’s prevalence in viewing habits continue to evolve, the future potential of the medium actually lies with the broadcasters. Viewers will eventually need more than check-in systems and online chats, and will want to become a part of the TV story. Kastelein (2011) asserts that it is essential for TV to start thinking of new ways of story telling, like “social stories that can be consumed and shared, joined and influenced – on mobile devices, on the Big Screen – or in parallel” (p.22). This idea of user-driven contribution harkens back to the early demonstration of Inhabited TV, when researchers designed programs that put viewers in the driver’s seat of producing television programming (Benford et al., 1999). This creation of an active viewing audience is part of the “lean-forward” approach to television viewing. This philosophy stresses synchronized viewing and connected users, and is being utilized in applications like IntoNow and TVplus.

However, other research has countered this need with more of a traditional “lean-back” approach. One of the surprising developments in the rise of Social TV is that unlike other social media it is not being dominated by the younger generations, who are more inclined to be active and participate in “lean-forward” opportunities. More than 50 percent of users talking about TV on social sites are age 35 and older while only 12 percent of participating users are under 18 (Nielsen Wire, 2011 October 11). In a study that focused on the use of Social TV devices with elderly individuals in a senior housing community, researchers questioned if making viewers into participants was necessary to create deeper social interaction (Svensson & Sokoler, 2008). Instead of looking as TV as a medium for direct, synchronized interpersonal communication, Svensson & Sokoler discussed whether Social TV could become more of a natural component in the daily lives of people. The study looked at Social TV “as a resource that when part of a larger socio-material fabric can help accommodate the circumstantial nature of social interactions as
they emerge and play out on a moment-to-moment basis throughout everyday life beyond the TV screens” (p.334). The study found that using ambient display awareness created a “ticket-to-talk” – an invitation for the seniors to start a conversation with another friend in the community about the TV show. This is the concept that GetGlue and Miso are currently using in their platforms.

This “lean-back” approach says that TV doesn’t need to create an army of active user-producers. It is enough for Social TV to simply bring television back to its traditional role as a conversation starter, and continue bringing people together around the common experience of shared viewing.

The fundamental difference between the “lean back” versus “lean forward” approach to interactivity lies within the relationship between the viewer and the television program. In regards to fostering social interactivity both approaches serve an equal purpose and depend on a strong level of social engagement among users. Whichever option viewers’ choose, both approaches need to establish a solid platform for developing social interaction.

**Conclusion**

The key in success for Social TV development lies in forming clear separation from conventional social media constructs. Status updates and show “likes” are not enough to establish television as a hearth for online social connection. At the same time, synchronized viewing platforms and Second Screen applications risks the chance of creating too much distraction from television itself thereby hindering the viewer loyalty it aims to enhance. A decade ago the idea of Social TV was barely formalized. In the past few years the phenomenon has exploded. What could occur in the industry during the next few years is nearly impossible to predict. Second Screen could become irrelevant as Social TV takes over the actual television or television viewing could shift entirely to exist primarily on mobile devices. GetGlue could rise to
become the next Twitter and control the TV check-in market or it could disappear completely as Twitter maintains its dominance of the TV conversation. It is most likely that a completely new development, which can’t yet be imagined, will emerge to set a new standard for online social interaction. The current state of Social TV is in such a manic phase of rapid growth that only time will reveal the full potential of the industry. While the future is unknown of what Social TV applications will become and whether the current implementations will succeed or fail; this paper has established that television and social interactivity are a life-long pair. Despite the increased fragmentation of content and consumption in our new world of hypertelevision, viewers will still need the internet to achieve social fulfillment wherever, whenever and however they watch.
References


