

# Understanding Television as a Social Experience

This research was conducted as part of the MIT Mobile Experience Lab [NextTV project](#), under the direction of Federico Casalegno and Marco Susani. The team consists of Federico Casalegno (PI), Marco Susani, Alberto Frigo, Colleen Kaman, and Nicholas Wallen.

## **ABSTRACT:**

Defining the future of television continues to be a subject of intense interest. In theory, the convergence of television with the Internet makes an increasing amount of content available to viewers, when they want it – any program, any time, on any device – and can make television a participatory experience. Attempts to realize this goal involve design research that focuses on balancing multiple forms of engagement, ranging from so-called passive consumption to intensely social behaviors, against the growing need to simplify the discovery of content itself. Through analysis of both consumers’ observations and the “journey” of a piece of content, this study considers how various forms of curation and annotation are shaping the television experience. Aside from presenting the general methodology used in this research, this study examines patterns of exchange around popular TV series and considers how the related ergonomic and interaction design implications might inform the interface of the next-generation of television.

## **INTRODUCTION:**

The ubiquity of social media has re-kindled excitement about “social television” and the promise of the personalized delivery of the kinds of television we most desire, how we’re most interested in receiving it. Although it was recently named one of the ten most important emerging technologies of the decade, it has also proved exceedingly tricky to get right. Google TV rapidly failed in the marketplace. The future of Apple TV appears nearly as uncertain with only few thousand units sold after its debut. Despite the mixed market response, telecommunication companies continue the race to define the future of television. For viewers, television content is becoming increasingly pervasive and integrated into users’ lives. A growing number are watching television programs on multiple devices, across computers, mobile phones, and tablets. These devices also indicate *how* viewers are watching television. Studies suggest that increasing numbers watch programs while multi-tasking, often through mobile phones, and while engaging with social media. Viewers are also able to watch television asynchronously, long after it was first broadcast. This not only provides viewers with multiple opportunities to engage with a particular piece of content, it also makes it possible for content to accumulate meaning (as well as tags and annotations) in a much different manner.

These emerging patterns of engagement underscores the need consider how social media will be incorporated into the functionalities and services of the next-generation of television. Through observation studies and the content analysis of six different television experiences, this study will consider how the design of media interfaces might better reflect these practices. Based on key findings, this study will also offer some design interventions that might inform the future design of the television experience. This is accomplished through a use-case scenario and the design of a “TV guide” prototype that consider the interplay between users and media devices might better reflect the emerging television ecosystem. This study will explores and evaluate how this marriage of TV watching and social networking is occurring and may occur with the aid of a specially designed interface.

### **METHODOLOGY:**

To develop key insights about audience behaviors and content flows that might inform designers envisioning the future of television, this study employed a hybrid design methodology that included an ethnographic analysis of the viewing behaviors of young media consumers, with a particular focus on the ways that individuals navigate between linear, professionally produced “television” content and social media such as Facebook and YouTube. This project also explored the “journey” of the content that might be watched by these individuals, meaning the production, tagging, and social annotation of the content from the initial source to its distribution via multiple channels and formats. By combining observational studies of individual behaviors with analyses of broader content flows, the research team set out to develop key insights about the interplay between audiences, devices, and media content. These insights informed next-stage research that included use scenarios and prototype interfaces that considered how the networked practices of young television viewers might become incorporated into the emerging functionalities and services of the next-generation of television.

### **ETHNOGRAPHIC AND SPATIAL ANALYSIS**

The main goal of this ethnographic research was to understand the relationships that each subject had to tradition professionally-produced television content, a so-called obsolete medium that once appeared to be heading for obsolescence, only to become increasingly popular through alternative distribution mechanisms such as web-based video-streaming services like Netflix and Hulu. This relationship was examined alongside their participants’ social networking practices with services such as Facebook, YouTube, and Skype. By using a set of specific questions and observations, the studies aimed to better understand the emerging relationship between social networks and televised content, in part through the largely unsupported activities that young users commonly undertake across them [this isn’t very clear to me]. By focusing on this intersection, these studies were able to understand the perceived limitations of existing platforms and ad-hoc “work arounds” to identify the kinds of interactions that young subjects were most eager to have developed in future platform & devices. Aside from observing the subjects as they consumed certain pieces of television content, alone or in concert with others, the studies aimed to understand the actual scenarios where television consumption and social networking-related activities actually occurred.

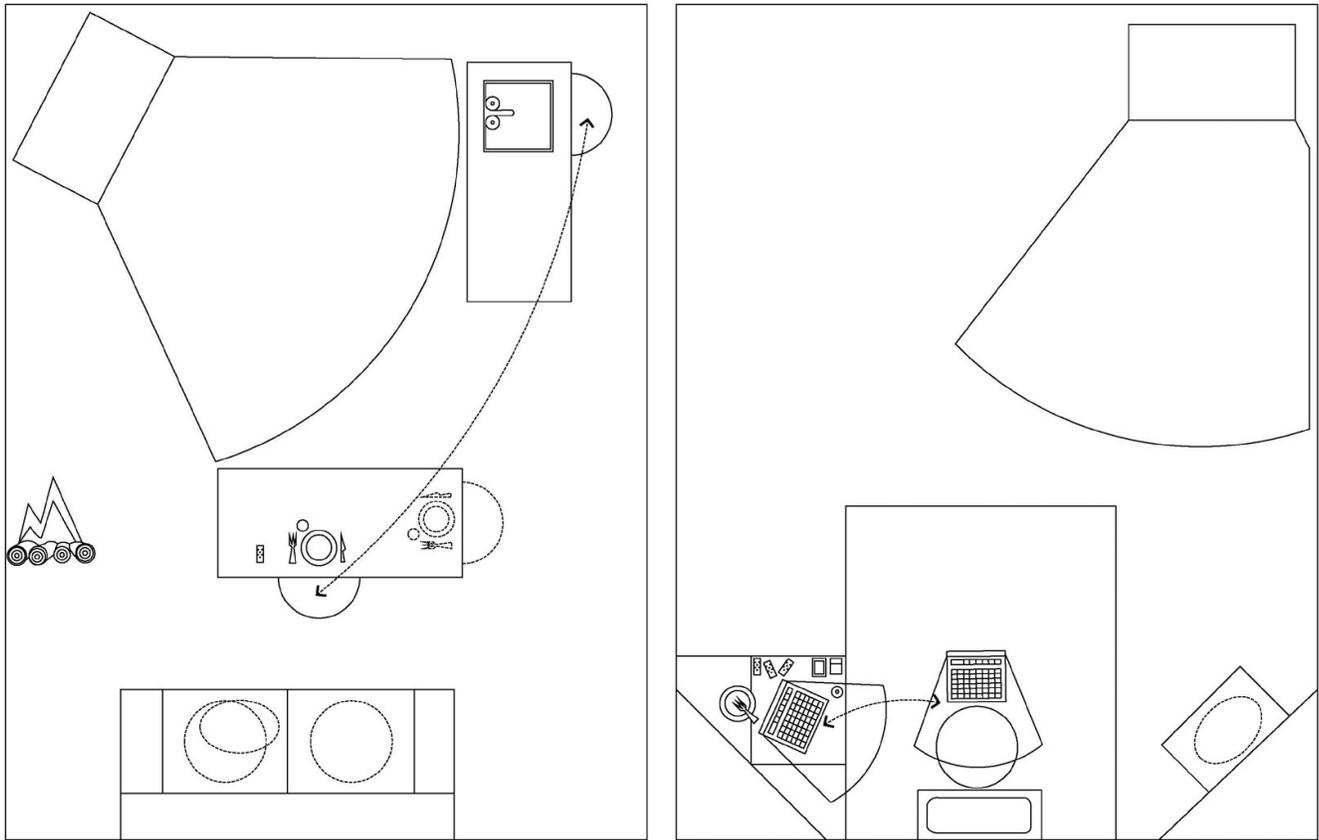


Figure 1: These images illustrate the type of spatial analysis that was conducted for each of the ethnographic subjects.

The qualitative research was conducted with six Boston-based participants, aged 16 to 28. These observational studies and in-person interviews began in November 2010, and were conducted over the next 4 weeks. The selected participants included students as well as working professionals. Each watched at least one hour of television a week and actively participated in the consumption and, in certain cases, the production, of remixed television content.

The research was divided into two stages. The first period focused on three female participants: a 24-year-old Indonesian student, a 19-year-old South Korean tourist and a 27-year-old American nurse. These participants were instructed to install video screen capturing software (AutoScreenRecorder) and record their Facebook-related activities for two hours while watching particular television programs. Directly after watching these programs, the participants were interviewed in their homes. Each was asked general questions so that the research team could better understand background details as well as that individual's relationship to Facebook and selected television content. Next, each participant was asked to log onto her Facebook account and explain to the interviewer how postings on her wall related to her television consumption habits. During this time, a series of follow-up questions were asked to better understand how she shares, view and comment TV content.

The second period of research focused on three additional participants, all male students at an international high school in greater Boston. These users were interviewed in the same fashion as the previous users. In addition, this research included observational studies of the participants watching particular television content in their homes. This was conducted in order to better understand the interplay between participant behaviors and physical location of

devices such as mobile phones, laptop computers, iPads, televisions, and television controllers. Research generated from this visit included photographs as well as spatial diagrams (see Figure 1) that captured the relationship between participants and these various media devices. Two participants from the first stage of research were also observed in their homes in this fashion.

**CONTENT ANALYSIS**

The content analysis was conducted at the same time as the ethnographic research. This research focused on the journey of a piece of content as it was produced, tagged, and distributed, and then further annotated as it moved from its initial source through multiple channels and formats. This analysis begins with Ryan Shaw’s ecology of media metadata on the web (2005), which provides a useful diagram of the architecture of participation around media. This diagram attempts to map the complex mix of creators, enthusiasts, re-mixers, and consumers in relation to metadata flows. Although this diagram obscures the degree to which people take on multiple roles simultaneously, consuming and producing at the same time, it is useful in that it highlights the importance of consumers as active cultural participants. To this end, the diagram also offers a way to underscore how “attention” might function as metadata operating alongside technical annotations, such as tags, and the production of remixed content.

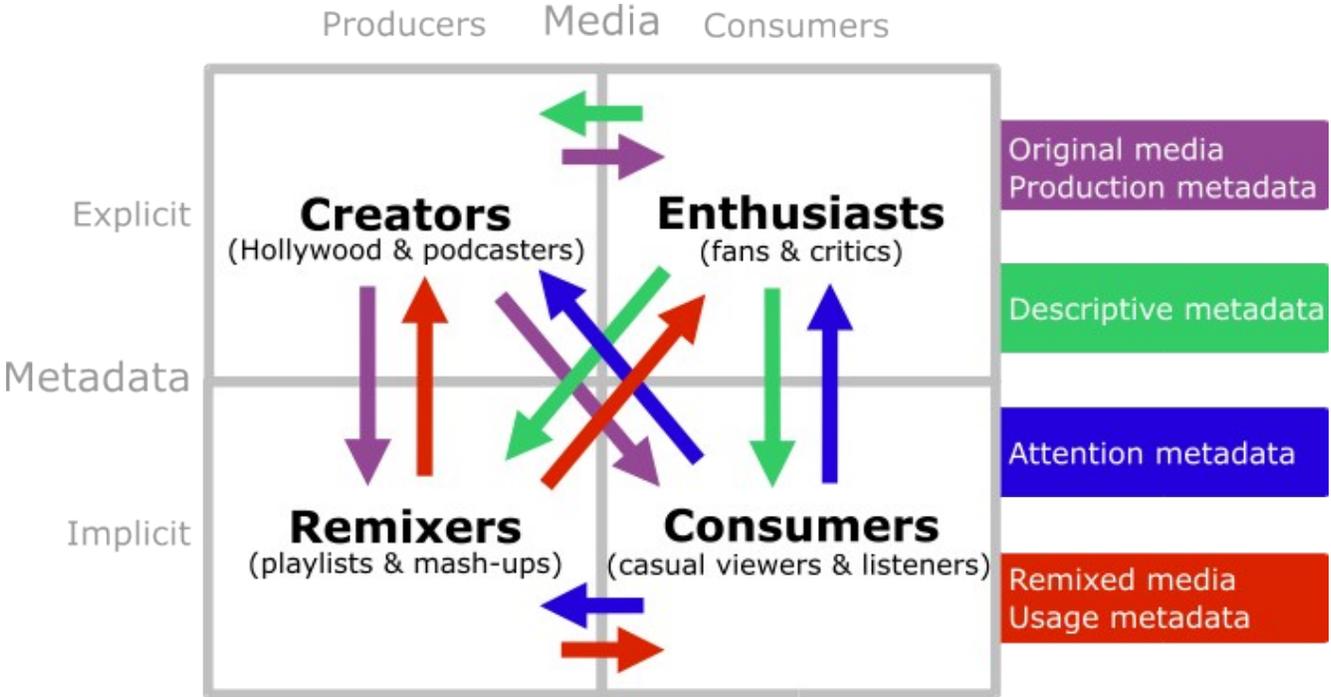


Figure 2: A diagram of the ecology of media metadata, which illustrates how media and metadata flow to and from different activities around media on the web.

The content to be analyzed was chosen based on two main criteria. First, the range of content examined needed to be diverse enough to reflect the distinct patterns of production, consumption, and exchange. Second, the content needed to reflect, at least in part, the consumption patterns of participants in the ethnographic studies. Next,

television content was divided into five common media types—sports, feature films, serial drama, news, and sitcoms. Representative examples were chosen from each type. This included: the FIFA 2010 World Cup, the Disney film *Tron Legacy*, and the long-running CBS sitcom “How I Met Your Mother” as well as AMC serial dramas “Mad Men” and “The Walking Dead.”

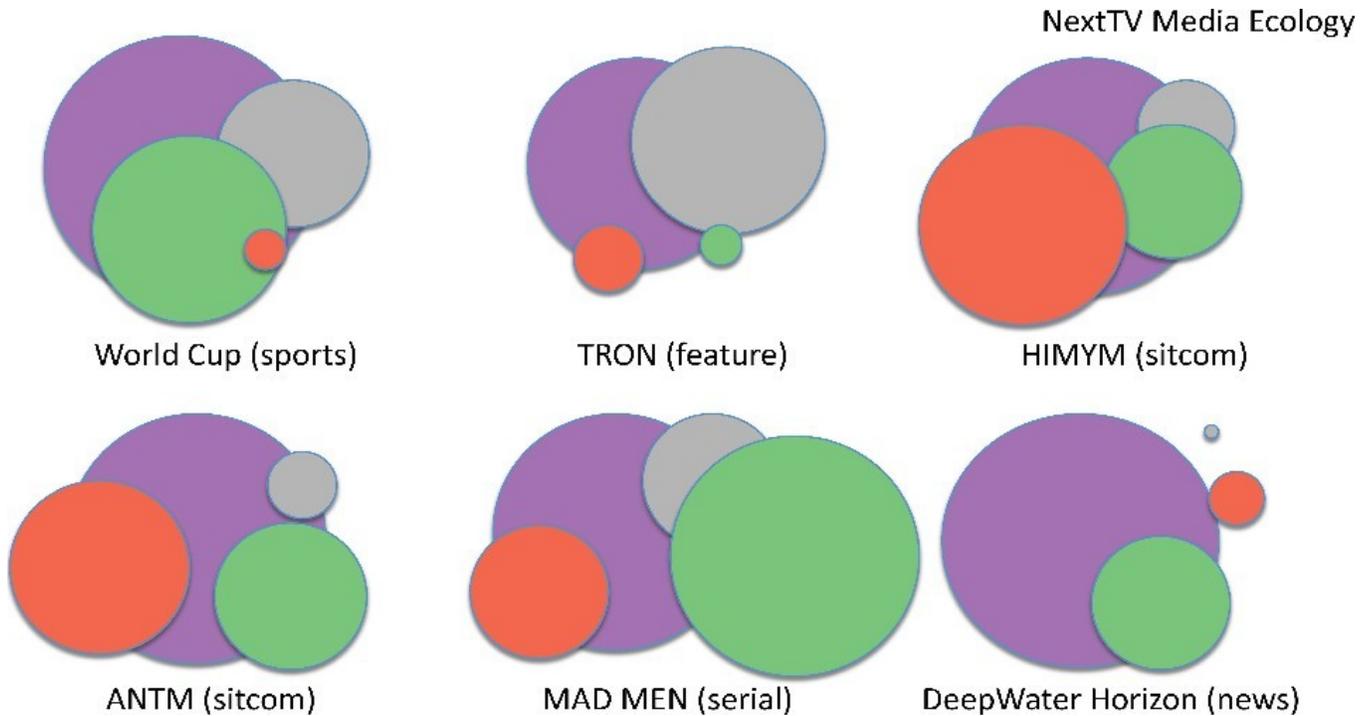


Figure 3: These graphs roughly illustrate the distinct media ecosystems of different media properties. Here, the purple: original content (professionally produced material across platforms); gray: partnerships; lime: ancillary content (blogs and analysis); and red: remixed content (parody, mash-ups, and fan fiction).

The analysis of each media type was conducted in several stages. First, the ecosystem of each media property was quickly mapped, depicting the relative relationships between original, professionally produced media, including related marketing and coverage of the media content as well as social exchanges and remixed content. This exercise (Figure 3) revealed the degree to which successful media brands extend beyond “original” content—and beyond specific platforms—to provide multiple opportunities for attention flow between fans and more casual audience. It also revealed the degree to which media ecosystems and common modes of participation varied by content type.

**COMBINING ANALYSES**

Next, the team began to harmonize these two research approaches to better understand the critical need for media devices that allow for the asynchronous migration of content, attention, and intimate conversations between platforms. This next-stage analysis made it possible to imagine the possible models engagements of one type of consumer, a single

man in his 30s, and to respond to the content of a particular program, in this example with AMC's award-winning series *Mad Men*.

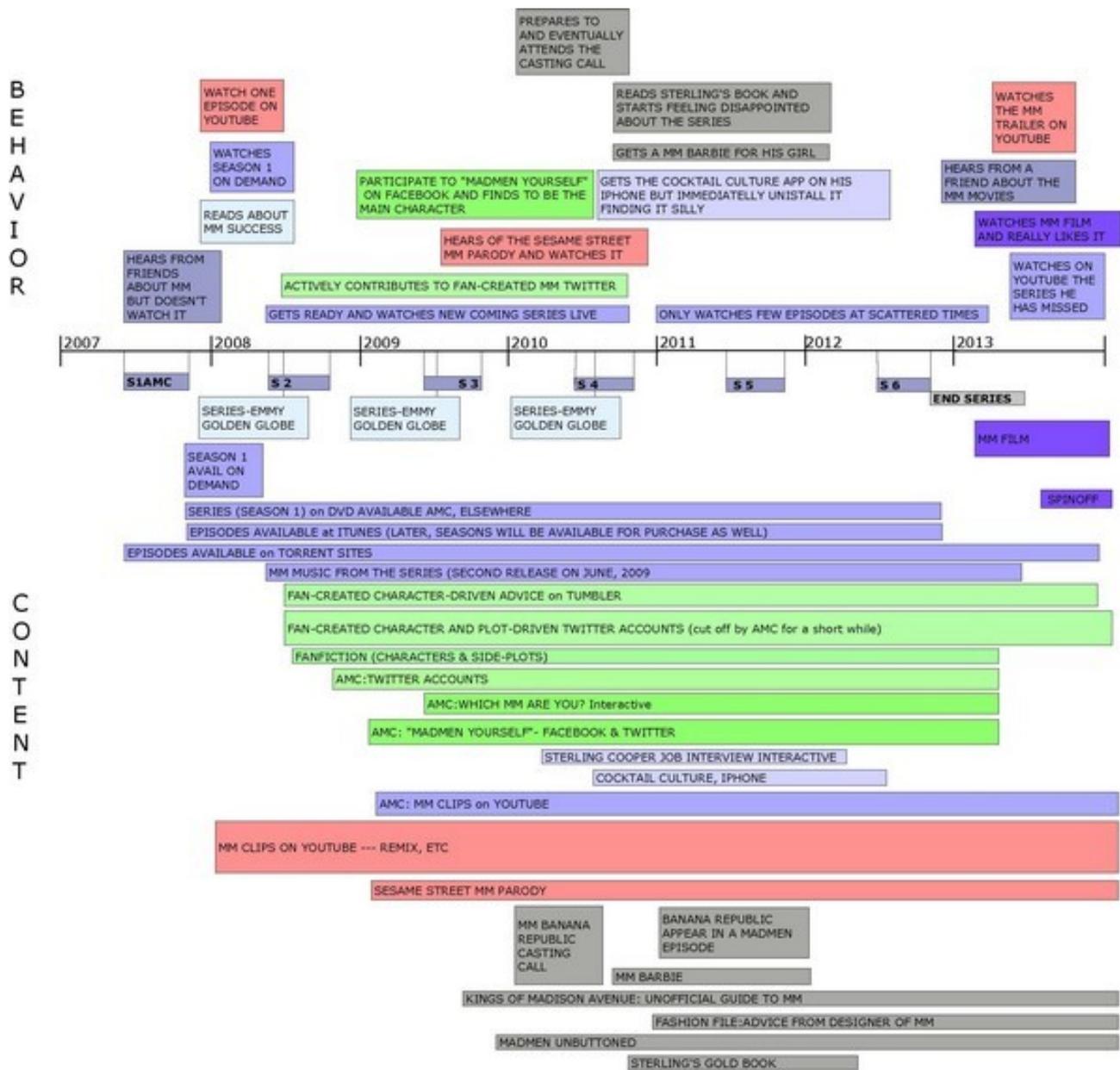


Figure 4: This diagram illustrates one effort to marry the world of *Mad Men* and documented patterns of audience engagement with possible user scenarios

Combining observations of users' media practices and content flow also made it possible to identify some key ergonomic and interaction design implications.

## **CONCLUSION:**

### **1. Users watch television in a variety of ways, and through a variety of devices and platforms.**

The introduction of mobile devices that stream television content has created has made it possible for viewers to engage in a variety of practices and spatial configurations. The traditional configuration of a viewer watching television on his/her couch is more articulated now that this same user can lie on her bed watching this same program on her laptop while posting videos and comments on Facebook wall and eating lasagna. These practices have implications for efforts for designers consider the ergonomic implications for participants who multi-task while actively participating in consuming both television content and food.

Observation research illustrated the complex, fluid relationship between devices, places, and consumption patterns. For example, one participant (Figure 5) watched television while sitting on a couch in the living room. She was watching a re-run of *How I Met your Mother* on a Monday night in her apartment. While viewing she is also searching for information a Harry Potter film that she watched a day earlier. Here, she is searching for more information about an actor who appeared in the film and previously played the role of a Nazi general in another film.

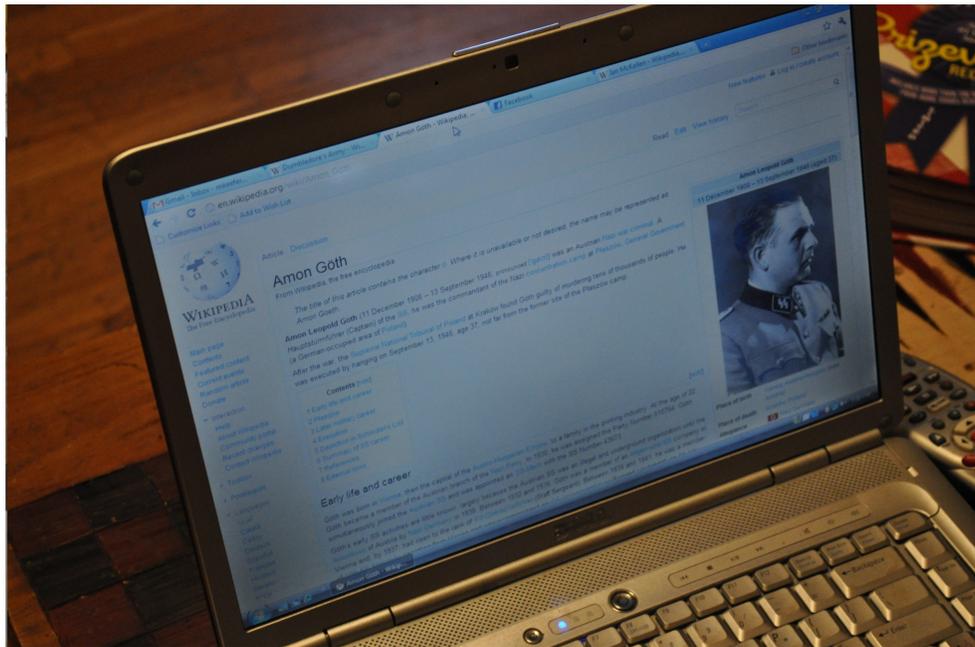


Figure 5: One television viewing habits of one participant reveals the complexity of the interactions – and illustrates to the need for a design of a more flexible and adaptable User Interface.

Similarly, a quick scan of the media ecosystems suggests that successful television content travels easily across media platforms and different formats and into offline exchanges. This analysis underscores what the ethnographic evidence suggests: that engaging with television isn't just a matter of passively watching the professionally produced content but involves more active modes of consumption. For example, *Mad Men* show creators made it easier for fans (and casual viewers) to also pull content into their personal lives. They did this through an application called "Mad Men Yourself," which allowed show enthusiasts to personalize graphic versions of show characters and use them as avatars on Facebook and Twitter accounts. This provided a mechanism for users to signal their

affiliation with a popular show, beyond the conventional strictures of television and directly through popular social media. Unlike more immersive forms of fan activity, such as fanlib, which requires specialized knowledge and commitment to a piece of content, the application made it possible for casual fans to easily become more engaged with the show across platforms. In short, “Mad Men Yourself” helped ensure that users could engage with television across a variety of devices and platforms.



Figure 6: In early 2009, AMC made it easy for viewers to create their own avatars in the style of Mad Men characters, and post them to Facebook and Twitter.

## 2. Engagement over television content is often an intimate exchange between friends. Less often, it is a public act.

Recent media research that reveals the degree to which interacting with media is most often a highly personalized, friendship-driven, and relatively private activity. In *Hanging out, Messing Around, and Geeking Out* (2009), Mimi Ito writes that the rich social exchanges between young people and around media usually occur in private (in person, instant messaging, or mobile phone) and that it almost always happens with people that are already known offline. Her research has also suggested that youth do not have stable media identities but rather craft multiple media identities that are mobilized selectively depending on context. These identities operate across (as opposed to within) particular media platforms. Our observational research supported this research, as the young participants showed a distinct inclination to create more intimate networks within social media outlets to discuss TV content rather than use public discussion threads. For example, the male high school participants used E-mail threads on Facebook to create post comments

between themselves about the zombie drama, “The Walking Dead.” These same users demonstrated greater interest in subject matter that was demonstrably part of community practices and not broadly (or commercially) available. More generally, these observations have also suggested that young viewers tend to use TV content to reply to TV content. Also, the observations have further revealed that the actual migration of one TV content from a social network to another is not fluent and discourages these kind of exchanges.

Less often, media engagement becomes a public act. According to Ito, public exchanges tend to be play-oriented, assuming characters or exploring the bounds of the “world” of the media content. Building on this research, this analysis reveals that rich content interaction requires a blend of fixed content elements as well as flexible elements that support participation and opportunities for engagement. For example, the long-running sitcom *How I Met Your Mother* (HIMYM) has a robust fan community. The Barney character is a critical element of fan engagement. In 2008, show producers decided to make the show more “syndication friendly” by reducing plot elements and making Barney, a key character played by Neil Patrick Harris, less outlandish. Barney is a womanizer who has devised a “Bro Code,” a series of rules designed to meet women and sleep with them. Fans of the sitcom responded in online forums, demanding that producers “Keep Barney ‘Barney.’” The next season (in 2009), show producers responded to the outcry from fans and brought back many elements of the show, including the more colorful elements of Barney’s character.

This “Bro Code” list of life rules provides an opportunity for fans to signal their affiliation with the show by playfully pulling aspects of the HIMYM character’s “life rules” into their own lives. This allows fans to explore the bounds of their own world through television media.

The Barney character is a critical to fan engagement in other ways. For example, many fans have memorized, written down, and otherwise memorialized Barney’s “The Bro Code.” This list has been posted multiple places and fans point out when rules are explored in particular episodes. Users also (playfully) incorporate these same rules into their own lives, sometimes with resulting in conflict within the group. For example, a fan-created Facebook group dedicated to the “Bro Code” (Figure 7) allowed fans to explore social norms through the exploration of the bounds of the HIMYM world. In one instance, members of this grappled with issues of inclusion when one of the members suggested that the Bro Code’s Rule 1: “Bros before Hos” meant that women couldn’t be part of the group. After some discussion, the majority of the members participating in the discussion agreed that the edict had less to do with gender than the importance of loyalty to one’s friends.



Figure 7: A fan group affiliated with *How I Met Your Mother*, and in particular with the Barney character’s “Bro Code” rules for life.

### 3. Users Comments and Content Consumption Tend to be Asynchronous

Although multi-tasking while watching television was very common, we did not observe a consistent relationship between the program being watched and the type of multi-tasking. Our observational research suggested that participants were most often using mobile devices, smartphones or laptops, to look for personalized content such as a new post on Facebook. We saw little evidence that users were using digital means to interact with the same television content they were watching. This included discussing the program with friends as well as searching the internet to deepen their knowledge about the program’s content.

In fact, our observations suggest that users engage in discussions about particular television content shown that the comments regarding particular TV content are actually occurring after the content has been shown and most likely within a day. This is also the case for any type of research that the observed subjects has conducted on particular things related to the viewed TV content, as envisioned in the one day of a user scenario below. In this respect, our ethnographic studies can tentatively conclude that the social TV of the coming future should allow users to annotate backward recently viewed content.

The exception appears to be news content, which is both time-sensitive and public-facing. Given the degree that reputation and legitimacy are tied to the consumption and exchange of news, it is more likely that content will be publicly annotated as it is occurring. In other words, news content is not as “friendship-driven” as narrative content but instead relies on participants that possess outside or community-earned legitimacy and reputation. Similarly, real-time or near real-time engagement is critical as media quickly becomes outdated. Perhaps because of the need to analyze and define news events, this kind of media also appears to be closely tied to reputation, perhaps emphasizing the performative aspects of media consumption and exchange. Conversely, a particular episode of a serial drama like *Mad Men* might resonate several times, first as a “live event” during the broadcast premiere, again with the DVD or streaming release, and then sometimes later as critical scenes were rehashed among fans as well as more casual

enthusiasts. This made it possible for hardcore show enthusiasts as well as more casual consumers to participate in the consumption and exchange of the show.

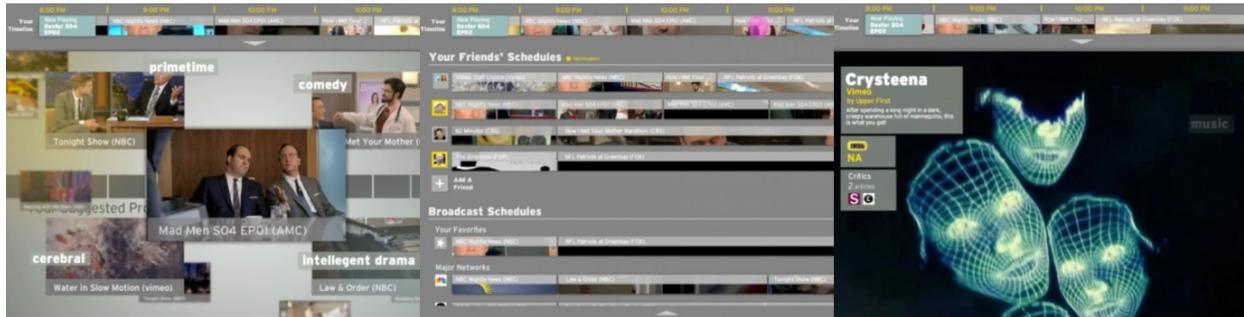


Figure 8: Three screen-shots of the prototype of the NextTV interface

Along with the actual analysis of TV content and consumers, we constructed a day in the life of an ideal fan of *The Walking Dead* TV-series. This construction has been based on actual ethnographic studies we conducted on high school students, and has helped us to identify possible implications related to the consumption and sharing of the series.

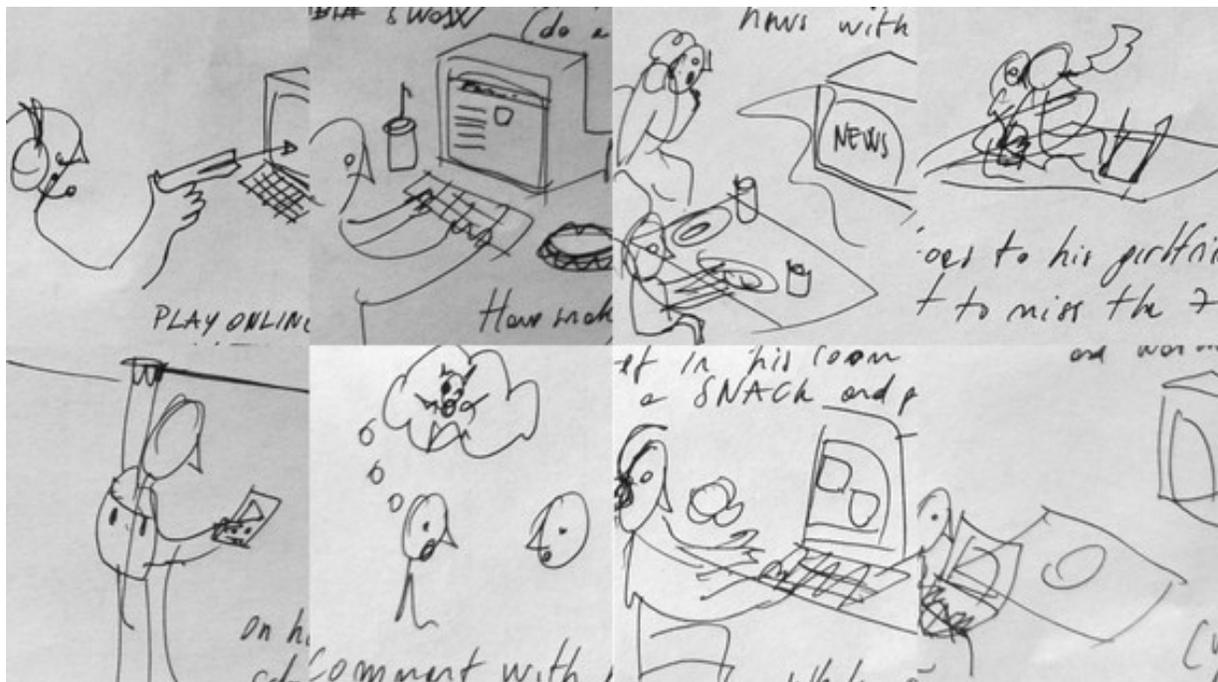


Figure 8: Sequential sketches representing different events in a day of a *Walking Dead* fan.

Based on our mixed methods research, the analysis made it possible to create a scenario of the activities and practices of an idealized fan consuming a range of media from Sunday afternoon to Monday afternoon. In our scenario, our fan is a high-school teenager spending his Sunday afternoon playing an online video multi-player game such as *Dead Frontier* with his friends. He is playing with his friends, who connect to one another through Skype, for better audio

quality and the improved communication between them. Most likely, this character is home alone with his mother while his father is working on a business trip abroad.

After watching some television, he will spend some time on Facebook and contributing to the private thread he started a year earlier with his three closest friends. The thread was initially about Paintball related matters but had signed turned into zombie-related materials. The thread is an intimate exchange between the four of them, including one former high school colleague who had already graduated high school and go onto college in Europe, where he is originally from. In addition to posting content on Facebook, this character will likely spend an hour in his room surfing the internet in search of cool new Zombie stuff and posting links on this friend's Facebook page. As he searches, he quickly eats sandwich and drinks a soda.

When evening approaches our fan joins his mother for dinner. They would sit together on the sofa and eat the meal the mother cooked while watching his mother's favorite news program. Once the news is over, our fan will scan a few television channels and consult the "on Demand" guide to see what's on television. Soon, he gets ready to watch the new *Walking Dead* episode at his girlfriend's house. She is older than he is, and has already graduated from high school and now works as a nurse. They lie in bed and watch the episode on her new LCD TV. He borrows her laptop to comment on the episode with his friends as they watch the same episode elsewhere in the city. They have something light to drink and have a cigarette. Later in the evening, our ideal fan makes it home, as he promised his mother, and works to catch up with his homework.

In the morning, he has hard time walking up and almost misses the bus. Once on the bus, he begins to check his Facebook account and posts some public comments about the last night's *Walking Dead* episode. Once at school, he sees his three closest friends. They begin to chat about the best scenes from the episode, and teasing each other about zombies.

Once back home later in the afternoon, this conversation will continue. Once again, our ideal fan is in his room alone, eating a snack and live chatting with his friends through Facebook, and then via Skype when they decide to work together on a homework assignment. Off and on he would look around YouTube for clips related to his many discussions about zombies and the television version of the *Walking Dead*. Later, before going to bed, he will come down to the living room to watch an old Zombie film on the large television. It is the original *Night of the Living Dead* that that his friend recommended to him in a post several months earlier.

The above presented scenario illustrates the actual occurrences experienced by an ideal fan. It is now the mission of designers to enrich and facilitate such a mission.

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