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AUTHOR'S DRAFT

Media and the Imaginary in History: The Role of the Fantastic in Different Stages of Media Change

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Abstract

This paper discusses how media theory and history should approach specimens of evidence about the cultural reception of media pertaining to the realms of the fantastic, such as speculations, predictions, dreams, and other forms of fantasy regarding media. It argues that the role of the imaginary in the history of media can be fully comprehended only by employing a perspective which is dynamic in time. In different phases of a medium's evolution, in fact, we find different fantasies; it follows that we need specific approaches to study them. The article discusses fantasies which are specific to three stages in media change: those preceding the actual invention of a medium; those accompanying the earliest period after the introduction of a new medium; and those connected to old media.

Keywords: media history, imagination, media change, predictions, old and new media, media future, media theory, technological sublime

Media and the Imaginary in History: The Role of the Fantastic in Different Stages of Media Change

Studying the way a technology is perceived within the public sphere means considering a broad range of elements, including popular fears and enthusiasms for innovation and progress, as well as political, economic, cultural, and social issues. While many of these aspects might appear relatively straightforward, there is a class of evidence about the reception of media which are particularly complicated to deal with: that of evidence which pertains to the realms of the fantastic, such as speculations, imaginary narratives, predictions, and other forms of fantasies regarding media technologies. Media scholars are often tempted to regard them as irrelevant to historical analysis. However, as Carolyn Marvin noted in her now classic work *When Old Technologies Were New*, these fantasies are important because they help us “determine what

‘consciousness’ was in a particular age, what thoughts were possible, and what thoughts could not be entertained yet or anymore” (Marvin 1988, 7).

Marvin’s call for the integration of the imaginary into the history of media also acknowledged the methodological and theoretical difficulties that a similar attempt might prompt. For a discipline such as media history, which is strongly concerned with technologies and hence with machines, understanding the role played by human imagination is one of the most fascinating and, at the same time, difficult challenges. Whether called the *imaginaire* (Flichy 2007), media fantasies (Young 2006), or technological visions (Sturken, Thomas, and Ball-Rokeach 2004), this topic raises an array of problems and questions whose answers are complex and intrinsically problematic (see Natale 2012a).

Scholars in media history have approached the topic of the imaginary through a variety of theoretical and critical approaches. While reviewing all of these perspectives goes beyond the aims of this essay, we will consider two main traditions that have contributed to the prominence of the theme of the imaginary in media studies and shaped how this topic is addressed in contemporary scholarship. The first tradition, mainly developed by American scholars, is based on the idea of the “technological sublime” examined by Leo Marx in his seminal work *The Machine in the Garden: Technology and the Pastoral Idea in America* (1964).¹ Considered as a specific character of American culture, the technological sublime refers to the experience of wonder which might be evoked, in industrial societies, by the contemplation of technological achievements. This notion received further attention in American media studies from James W. Carey and John J. Quirk, who applied this concept to the history of communication technologies

¹ The term “technological sublime” was coined by Miller (1965), before being taken up by Leo Marx. For a useful overview of the use of this concept, see Nye (1994)

and coined the term of the “electrical sublime” (Carey and Quirk 1970), a notion that strongly influenced following generations of scholars. Carolyn Marvin, who was Carey’s doctoral advisee, drew on his ideas when she pointed to the study of fantasies and speculations as one of the aims of media history (Marvin 1988, 7). Likewise, the electrical and technological sublime reverberates in the works of other leading scholars in contemporary media history, including David E. Nye, Joseph Corn, and Lisa Gitelman.

The second tradition to have shaped the study of the imaginary in media studies is media archaeology. Under the influence of German media theorist Friedrich Kittler, media archaeology was mostly elaborated by Central and Northern European scholars. While research in this area has been often characterized by a certain methodological anarchy (see Natale 2012b), media archaeologists have the merit of having taken into account the issue of elements of the imaginary and fantastic in media history (Kluitenberg 2006, Andriopoulos 2005). For media archaeology, beliefs and fantasies, including religious visions and “narratives of madmen” (Huhtamo and Parikka 2011: 25), are pieces of evidences just as relevant to historical analysis as patents and institutional sources. As Erkki Huhtamo put it, “any source - be it a detail of a picture or a part of a machine - can be useful if we approach it from a relevant perspective. There is no trace of the past that does not have its story to tell” (Huhtamo 1997: 221).

Although both traditions have contributed to direct historians’ attention toward the relationship between media and the imaginary, ultimately neither has been able to provide a coherent theoretical framework. Programmatically opening to historical analysis territories previously considered marginal, media archaeology has not gone far beyond its polemical aims, lacking a convincing paradigm to explain the role of human imagination in media history. Similarly, the tradition that originated in the United States failed to provide clear answers to

some pressing questions, such as how the discourse on the “technological sublime” can produce evidence of historical meaning. The question of how this area of inquiry should be defined and addressed has been largely left unanswered.

Why have these scholarly traditions failed to develop a solid theoretical framework with which to address the imaginary as a structural component of media history and to clearly define the imaginary as an area of inquiry? Our answer is that approaches to the imaginary in media history have not yet considered media from a perspective which is dynamic in time. Media continuously change in nature, uses, technology, audiences, and significance (Uricchio 2003, 35, Brügger 2002, Poster 2007, 46); the result is that in each moment in a medium’s evolution we find different fantasies, and we need specific approaches to study each.

In order to fill this gap, this article will propose that the imaginary should be integrated into media history through an examination of its role in specific phases in the “life cycle” of each medium (Lehman-Wilzig and Cohen-Avigdor 2004, Stöber 2004, see Neuman 2010). We will show that media interact with human imagination in different ways in different moments of their evolution. In the first of the following three sections, we discuss fantasies that are conceived before the invention of a medium, and are therefore considered “media prophecies” (Nye 2004). The second section is dedicated to fantasies associated with the earliest period after the introduction of a medium – fantasies that arise, in other words, when a medium is *new*. Finally, the third section addresses fantasies connected to what media historians call “old” media, once the technologies are fully institutionalized or have even become obsolete.

1. Before the Medium: The Case of Media Prophecies

In 1930, *Popular Mechanics* published an article entitled “Prophets and Their Prophecies.” The “prophets” to whom the magazine referred were not religious leaders such as Jesus or Mohammed, but instead the authors of forecasts and predictions about the marvels of modern technology. The author of the article described how many of the inventions widely used at the time had been foreseen in previous decades and centuries by scientists, intellectuals, and writers. Thomas Edison, for instance, had predicted the advent of something similar to telephony as early as 1878, before Alexander Graham Bell’s invention had gone into use. Popular science fiction writers had fantasized about technologies like the atomic submarine in the nineteenth century. Among others, the article discussed Jules Verne:

“Jules Verne (...) is the major prophet of modern civilization. In the strict sense, he was a scientist as well as a fiction writer. His description of airplanes, submarines, rockets and engines aroused jeers and hoots, and his defence was, Man can achieve what man can imagine” (1930).

In the history of media there are frequent predictions about future technologies which have—at least apparently—been fulfilled (Corn 1986, De Sola Pool et al. 1977). In certain cases, predictions and speculations about future technologies seem to have actually played a role in the research leading to the innovation. One example is photography, the basic functioning of which was predicted long before the invention of a working technique, and this in turn inspired the work of those who invented photographic processes (Batchen 1997). Another example is the case of artificial intelligence technology, the development of which in the 1950s-1970s was influenced by speculations about its future capacities (Natale and Ballatore 2012).

Because predictions about communication technologies hint at something that does not yet exist, *imaginary* in its essence, such predictions can be regarded as a specific type of media fantasies. This is the pre-history in the “life” of a medium, the period before its actual appearance.² Media fantasies go beyond real media, envisioning radically new and nonexistent media (Kluitenberg 2006). This brings us to the question: How should media history consider and study the specific variety of speculations and fantasies that describe the media of the future?

The fascination for and popular interest in prophecies about technology is connected to the degree by which such prophecies are considered likely to come true. Predictions and futuristic fantasies are narrative constructions whose appearance of trustworthiness is based on factors such as the reputation of the author, the publication or context in which they appear, and the way technology is presented and imagined in the public sphere (Nye 2004). As Vivian Sobchack suggests (2004, 145), media prophecies are largely projections of the way we experience technology in the present, and they can help historians to better comprehend the social and cultural perception of a technology. In other words, predictions should be considered as evidence of the way a medium is imagined at the time the prediction is made, rather than as the pre-vision of a medium yet to be invented.

Take, for instance, the case of French science fiction writer Albert Robida, who in his futuristic novel *Le vingtième siècle* conceived a medium called the “telephonoscope.” This imaginary device, which to the contemporary reader will recall television or the videophone, was

² The idea that a medium might have a “pre-history,” albeit problematic on a theoretical level, has been extensively developed within film studies. In this area, scholars have explicitly analyzed technologies such as philosophical toys, photographic techniques and projecting media as antecedents of the cinema. See, among others, (Mannoni 1995, Ceram 1965, Friedberg 1994)

represented as an implementation of two other media, the telephone and the theater. The telephonoscope added a visual dimension to the acoustic telephone and was also able to bring theater plays at home, as television would later do (Robida 1883).

The interest of Robida's writing, as Philippe Willems notes, rests mainly in the fact that the writer inserted the fictional characters in an environment set in another time and elaborately detailed, thus resembling a historical novel providing a careful description of the Paris of the future. This results in the reader partially forgetting the fictional character of the story (Willems 1999). The use of this narrative strategy, together with the drawings with which Robida, a gifted illustrator, accompanied the novel, makes *Le vingtième siècle* a work whose fictional framework does not weaken but instead empowers the impression of trustworthiness generated by its claims about the future (Müller 2000, 117-130).

Did Robida's telephonoscope actually forecast television or the videophone? On the one hand, the device depicted in his novel replicates quite well some characteristics of these media. On the other hand, the telephonoscope tells us much more about the media of Robida's time than about those of later eras. If we consider the ways in which the depiction of the telephonoscope relied on such media as the theater and the telephone, we realize to what extent the imagination of Robida's device was stimulated by the existence of the latter. In a certain sense, the anticipation was not so much created by Robida's prediction as by the theater and the telephone themselves, whose technical and cultural existence made future media possible. "Old" media technologies are the basis on which innovation becomes possible, and the new medium finds in the old ones many of its technical, socio-cultural, and organizational "novelties" (Acland 2007, Bolter and Grusin 1999, Gitelman 2006, Balbi 2012, Thorburn and Jenkins 2003). As Rudolf Stöber puts it, "the new technology improves something old. For example, Johannes Gutenberg

did not invent the printing press, but he invented printing with removable letters. In other words, he improved writing and copying” (Stöber 2004, 487).

It is interesting to note that the fulfillment of a media prophecy is often established arbitrarily, when someone decides that a speculation of the past should be regarded as the anticipation of the new. Such fulfillment requires a certain degree of imagination itself, as do other predictions, like the horoscope and the magical or religious prophecies which, interpreted *a posteriori*, seem to have perfectly forecasted the future (Ortoleva 2011). This is affirmed by the way in which Robida’s prediction was inserted into the history of “new” media that came later. During the twentieth century, explicit references to Robida’s idea appeared in the launch of a new, now largely forgotten medium: the circular telephone. This was nothing but an application of the telephone which differed from traditional point-to-point communication: through a one-to-many telephone network, a central switching office transmitted news, entertainment and various programs to subscribers’ houses with a precise schedule, elements that radio would later adopt with few changes (Balbi 2010). The circular telephone became popular in countries such as France, Hungary, England, the United States and Italy. Revealingly, both the Hungarian and the Italian flyers promoting this service mentioned the name of Robida and his “theater at home” as the model on which the circular telephone was built:

Years ago, a writer of genius wrote a novel on wonders and unheard improvements of the upcoming century. This writer was Robida and he was able to forecast dirigibles and submarines; in his book he described a tool that would provide conferences to its audience and would let them hear, at home, plays and concerts. Mr. Robida prophesied this invention by the end of the twentieth century, while a few

years later a smart technician from Hungary, without waiting so much, *imagined* a similar communication system based on the telephone and he put it into practice in Budapest, with this simple slogan: “Mr. Robida’s *fantasy* got one century wrong.” The audience immediately said that Mr. Puskas (how the Hungarian technician was called) was a genius and the Telephone Hirmondò (how the invention was called) a wonderful business that went ahead of Mr. Robida’s *fantasy*. (n.d.)³

The ad explicitly referred to Robida’s book as a relevant source of fantasy and imagination, two words which were employed in this advertising brochure. The message provided in the advertisement was that the science fiction writer and the inventor had created something different, but intrinsically connected, and that Robida’s imagination was instrumental in the invention of the circular telephone.

The way Robida’s telephonoscope was used as an advertising argument for the launch of the circular telephone provides a valuable example of how media prophecies are often validated *a posteriori*. The context of appearance for such a validation, an advertisement for the circular

³ Italian original: “Anni or sono un romanziere di genio scrisse un’opera sui prodigi e sugli inauditi progressi che si sarebbero realizzati nel secolo venturo. Lo scrittore si chiamava Robida e come seppre prevedere i palloni dirigibili e i sottomarini, descrisse nel suo libro una macchina che avrebbe dato conferenze ai suoi ascoltatori e li avrebbe messi in grado di sentire a casa propria le recite dei teatri e dei concerti. Il sig. Robida profetizzava questa invenzione appena per la fine del secolo XX mentre poco dopo un bravo tecnico ungherese, senz’attendere tanto, immaginò un sistema di comunicazioni telefoniche del tipo di quelle preconizzate dal brillante scrittore e le pose in pratica a Budapest, con questa semplice osservazione: “La fantasia del sign. Robida si è ingannata di un secolo”. Il pubblico disse subito che il sign. Puskas (così si chiamava il tecnico Ungherese) era un uomo geniale e l’”Araldo Telefonico” (così si chiamò l’invenzione) una meravigliosa organizzazione che superava di molto la fantasia del sig. Robida.”

telephone, is revealing of how the media prophecy was decontextualized and re-used for particular purposes, in this case, for advertising. It follows that media historians should resist the temptation to validate past media prophecies and instead explore the relationship of these prophecies to the culture of the time in which they were created. Predictions such as Robida's should be considered in connection with the "old" media that make it possible to conceive of this particular imagination or fantasy, not with the media of the future. In this way, media prophecies become relevant evidence on the limits of imagination of a certain age; to use Marvin's words again, they become a way to comprehend "what 'consciousness' was in a particular age, what thoughts were possible, and what thoughts could not be entertained yet or anymore" (Marvin 1988).

2. When the Medium is New: Imaginary and Interpretative Flexibility

Relying on the consideration that every medium has once been "new," novelty has recently become one of the key categories for media history. Authors such as Marvin (1988), Gitelman (2006), Bolter and Grusin (1999), and Jenkins (2006), among others, have argued for the importance of a historical interpretation of the category of *newness* in reference to communication technologies. Following this line of scholarship, novelty is the second phase in a medium's life which we take into consideration.

Scholars addressing the concept of new media have devoted significant attention to the issue of "media fantasies". The authors of a collection of essays on technology and the imaginary, for instance, argue that a new medium "is almost inevitably a field onto which a broad array of hopes and fears is projected and envisioned as a potential solution to, or possible problem for, the world at large" (Sturken, Thomas, and Ball-Rokeach 2004, 1). Similarly, media

historian William Boddy, in his book *New Media and Popular Imagination*, documents how “alternately fearfully and euphoric representations” (2004, 4) accompanied the introduction of radio, television, and digital media.

While these contributions have done much to stress the symbolic relevance of newness for the cultural reception of technologies, less attention has been given to the question of how media fantasies may contribute to the early development of media. In order to fill this gap, we propose to integrate into the paradigm of old and new media elements of a field which has reached a high level of methodological complexity: the Social Construction Of Technology (SCOT). As we will argue, the concept of “interpretative flexibility” developed within the SCOT framework may provide a valuable contribution to bridging the apparently divergent areas of human imagination and technological devices.

According to the SCOT framework, a new technology is often used in its early phase for different purposes by different social groups, and every group fights to impose a specific meaning on the novelty. This phase of uncertainty is termed “interpretative flexibility,” because the new technology is malleable and can be interpreted in many different ways. In a certain sense, the new technology is to be regarded not so much as a single technology as a continuum of possibilities. According to the SCOT framework, this process ends when a specific and unique use overcomes other possibilities: this is termed the “closure of flexibility” (Pinch and Bijker 1987, 419-424, Bijker 1995).

During the “interpretative flexibility” phase, new media stimulate an array of different conceptions. This is the stage when different ideas and possibilities are proposed and new technologies are discussed and debated. How to use a new technology, how to integrate it into everyday life, how to solve long-term problems adapting and adopting it: these are only some of

the questions and needs that social groups imagine, debate and solve in the early phases of the life of new media. Many of these early visions and uses of new media will disappear in later stages, others will yield secondary and alternative uses of these or other media, and only a few will be part of the dominant identity of new media – becoming, in a word, “mainstream.”

The concept of interpretative flexibility has been employed with regard to the history of several media technologies. Deac Rossell, for instance, applies the SCOT framework to the case of cinema, noting how its invention and early development were based on the convergence of different social and professional groups, such as magic lanternists, photographers and showmen, each of which groups gave a different interpretation to the new medium (Rossell 1998). Andreas Fickers recently argued that radio sets could be directly linked to the ways in which radio broadcasting was imagined. The radio dial of the 1920s, for instance, was a “mediating interface” which emerged through three different elements: the appropriation of an imagined space known as the ether; a change in receivers’ design following a major shift in social interaction with the radio; and, finally, a consequence of the broadcast spectrum regulation by the International Broadcast Union, without the wave frequencies of which the radio dial could have not been imagined. According to what Fickers terms “SCOT reloaded,” the imaginary plays a role in the emergence of the different interpretations and uses which contribute to the social construction of a new medium (Fickers 2012). In the novelty phase, imaginations, fantasies and attempts at prediction contribute to the construction of different interpretations and possible uses for the new medium.

Let us further consider the case of radio in the first two decades of the twentieth century. The new wireless technology launched by Marconi at the end of the nineteenth century was extremely flexible: thought of as the “natural” replacement for wired telegraphy, in particular for

long-distance communication, and as a competitor to undersea cables (Hong 2001), it was also imagined, in particular by the physicist Nikola Tesla, as a system for transferring electric power without wires (Carlson 2005), a tool for ships and land stations to identify their location in space (Brown 1996), and even as a possible explanation for the functioning of telepathic powers (Natale 2011, Andriopoulos 2005). Moreover, it was later used as a one-to-many medium: radio broadcasting, a technical and cultural option embedded in the technology of the wireless, was discovered only twenty years after its “invention” (Douglas 1987). As the wireless was in its infancy, different ideas and different imaginations were applied to the new medium, producing different ideas of new media: telegraphs and telephones without wires, the transfer of electricity, a detection tool later called radar, and ultimately what might be considered the most important medium of the twentieth century, broadcasting.

The case of the wireless shows that competing fantasies around a new medium can contribute to its development. As Jennifer Uglow has written, technological innovations are always the result of imaginative work, “the physical incarnation of vision by means of technical skill” (Uglow 1996, 3). This is particularly true, as De Sola Pool notes in his insightful analysis of predictions made about the future of the telephone in the first years after its invention, if the fantasies about the possible applications and development of a medium are made by its inventors and early developers. Their ideas are the most successful in part because these are persons who are able to fulfill their own prophecies. Early developers “had inventions, a vision of how the inventions could be used, and they controlled the businesses that implemented those visions” (De Sola Pool et al. 1977, 129).

In summary, fantasies and speculations about new media provide a pool of ideas, a reservoir of possible interpretations for experimentation and application. Literature on the

media's novelty period can benefit from the contribution of the SCOT framework by employing the concept of interpretative flexibility to better comprehend the process of constitution and institutionalization of a new medium. The imaginary of a new medium is to be seen, in this regard, as one of the contexts in which competing ideas of how a medium may develop are conceived and discussed.

3. Fantasies of Obsolescence and Death: The Imaginary of Old Media

In a collection entitled *Residual Media*, Charles Acland (2007) proposes a series of reflections on how processes of obsolescence influence the development, the reception and more generally the history of media technologies. Exploring the idea of residual media, meaning all of the ways by which media are recycled, neglected and discarded, Acland calls our attention to the importance of the old in media history. This section, responding to Acland's call, takes into account fantasies appearing after a medium has completed the process of institutionalization, in other words during the "old age" in the life of a medium.

In the last two decades, media historians have strongly focused on the early stages of communication technologies' lives. Taking into account the periods "when the old media were new" (Marvin 1988) has benefited the field, which has found a valuable rhetorical and argumentative point as well as an element that offers rewarding comparisons with the contemporary reality of "new" digital media (Park, Jankowski, and Jones 2011). This has also resulted, however, in the tendency of contemporary media history to take positions that accord an excessive privilege, if not sufficiently problematized and discussed, to the novelty period, often neglecting the other stages in the evolution of a medium, such as the maturity stage. We should

not forget that media exercise a powerful influence on culture and society throughout their entire life cycle.

Old media are those media whose institutional, social, and cultural position is fully developed and established. When successful and widespread, media gain a high degree of popularity, accompanied by the capacity to stimulate cultural discourses that can reach an extremely high degree of relevance and diffusion (Edgerton 2007). Sometimes media can become unconscious metaphors used by contemporary societies to think about the present and the future. The more successful they are, the more media impose and create the imaginary around them: cinema has produced and visualized a vast range of imaginary constructions (Sorlin 1997, Morin 2005); newspapers have created imagined, and often national, communities of people linked by a common medium (Anderson 1983); television has restructured fears and imaginations of contemporary societies (Sconce 2000, 124-166).

The tendency of media history to focus on the novelty period has also been evident in literature on the imaginary developed within this field, and the question of how the imaginary is related to old media technologies has been frequently disregarded. The present section aims to fill this gap in media theory and history by addressing the question of which media fantasies are specific to old media. We will argue that old media are usually entangled in imaginary constructions which point to one of two main ideas: their potential disappearance and the nostalgic feeling they evoke.

The first idea to play a role in the imaginary of old media is connected to their possible disappearance. Old media are often the subject of predictions expressing limited faith in their future, especially when a new technology seems poised to “replace” them in certain ways. Here speculations arise about the possible disappearance of the older medium. While it is not

considered kind to suggest to a person that she is going to die, this straightforward social rule does not apply to media technologies, as can be seen by examining the frequency of forecasts imagining the possible “death” of a medium. In the history of media, one can find many examples of predictions and fantasies about the death of old media. Following the introduction of computer technologies and the internet, for instance, critics have proposed the possible “death” of television (McRae 2006). A few decades earlier, the same was said of radio and cinema when television appeared destined to cannibalize them (Young 2006, Stephens 1991).

Media historians have demonstrated that these forecasts are often wrong. Old media frequently react to the introduction of a new technology, changing institutional frames, applications, and targeted publics, but they rarely disappear (Balbi 2005, Thorburn and Jenkins 2003, Spar 2001, Natale and Ballatore 2014). Radio, for instance, did not die after the introduction of television. Instead, it became more popular to listen to radio at certain times of day, such as the early morning, when the television is not yet on and people listen to the radio; moreover, radio increased its capacity to reach specific kinds of audiences, such as people who often travel by car.

The creation of fantasies about the “death” of a medium is today at play in the imaginary connected to the introduction, and the commercial success, of e-readers. Nostalgic commentators lament the fact these new devices lack the smell and feel of books (Ballatore 2012). Others fear that the “old” paper books will disappear, and that in the future readers will have to rely exclusively on displayed books. While it is not possible to ascertain now whether this claim is true, the history of the book suggests that technological changes have usually not caused older writing media to disappear completely – even if technological change has resulted in the marginalization of certain techniques (Eisenstein 2005).

The second idea to have a strong impact on the imaginary of old media is connected to the feeling of nostalgia (Turner 1987). When a new medium partially or completely supplants a new one, mechanisms of emotional affection and nostalgia can arise. This has been the case, for instance, in the passage from vinyl to digital music recording, with the aging of the vinyl format being accompanied by its emergence as a cult object and an item for collecting (Davis 2007); in the shift from silent to sound cinema (Altman 2004); or in the move from analog to digital photography and film, with the older technologies being re-interpreted as more fascinating or authentic (Marks 1997). In all of these cases, the status of the old as residual of a nostalgic past or as decaying intersects with the emotional attachment between media technologies and their users. The old medium is invested with an aura of fascination which may stimulate the creation of fantastic narratives (Bolter et al. 2006).

An instance of how nostalgia influences the imaginary of old media can be found in the history of spirit photography, a spiritualist practice by which the image of one or more spirits was supposedly “captured” on a photographic plate. The interaction of psychical research with the development of communications technologies in the nineteenth and early twentieth century has recently been the subject of much scholarly attention (Peters 1999, Sconce 2000, Hahn and Schüttpelz 2009, Galvan 2010). As many have noted, spiritualists, parapsychologists and psychic researchers have entertained particular relationships to media. To many of them, such as those who compared telepathy or spiritualist séances with mediated communication at a distance (Andriopoulos 2005, Ronell 1989), media were a symbolic point of reference; to others, they were instruments of recording which made it possible to register the presence of psychic powers and spirit messages, or bearers of scientific authority to be used in support of supernatural claims (Noakes 2007, 1999, Stollow 2008). This emphasis on media and technology was sometimes also

directed by nostalgic feelings toward obsolete media. In particular in the early twentieth century, obsolete photographic technologies and cameras were employed by spiritualist mediums to detect ghosts through the production of spirit photographs (see Natale 2008). Many considered older photographic technologies to be a more powerful means of channeling the other world (Coates 1911). Thus the nostalgia for old technologies merged with the fascination for death and fantasies about the clairvoyant power of the photographic medium, and the reliance on technology for exploring and verifying supernatural phenomena was coupled with a predilection for obsolete photographic technologies.

In summary, a series of fantasies specific to old media can be identified. These are most frequently connected to the idea that the old medium may disappear in the future or to the emergence of nostalgic feelings regarding obsolete media. The resulting fantasies recur in media history, which is to say that they can be found in connection with different media in different times. Like prefabricated formulas which an orator can employ in different contexts, these imaginary constructions are to be regarded as *topoi* or “recurring cyclical phenomena” (Huhtamo 1997, 222) of the way old media are perceived and imagined within the public sphere.

Conclusion

This paper addresses different periods in the evolution of media as the organizing principle for examining diverse imaginary constructions of media technologies. As we have shown, fantasies are something that media continuously produce, and which continuously influenced media. Prophecies and speculations about the future of media reveal not so much the possibilities of future technologies as they do contemporary thinking about communication and its possibilities. Imaginaries applied to new media and media that are still coming into being contribute to the

early development of these technologies, providing early pioneers and users with a reservoir of possible interpretations to be experimented with and applied. Lastly, in the phase of maturity, media create recurring imaginary fantasies about their disappearance and obsolescence, helping communities to rethink the role of old media and to stimulate their change.

How will media studies benefit from the study of the imaginary? We argue that this can be productive in at least three ways. First, imagination is an inherent aspect of media history, embedded in every phase of a medium's life. Studying media history also means studying the history of the imaginary, because the latter can tell a great deal about what societies of the past thought of media and which horizons of possibility were believed to be real or impending. Second, the imagination is an engine for media change, producing possibilities that can be experimented with and developed. Because media change is among the most relevant topics – perhaps the most relevant (Poster 2007) – for contemporary media history, scholars should be careful not to overlook the dimension of the imaginary. Third and last, studying the impact of the imagination on media history is one more way to better analyze the social and cultural construction of media. Fantasies are produced by the agency of different social groups, and they in turn lead to the development of different ideas of media. Studying these fantasies means analyzing the cultural grounds and the cultural possibilities through which media have been built, changed, saved, and also “killed” or forgotten. In sum, the study of media fantasies touches on the grounds in which media history should be rooted: the life, change, and perception of media technologies.

References

1930. "Prophets and their prophecies." *Popular Mechanics* no. 54 (6):970-973.
- n.d. *Cosa è l'Araldo Telefonico e come funziona?* Pescara: Industrie grafiche di Pescara.
- Acland, Charles R. 2007. *Residual media*. Minneapolis: University of Minnesota Press.
- Altman, Rick. 2004. *Silent film sound*. New York: Columbia University Press.
- Anderson, Benedict. 1983. *Imagined communities: Reflections on the origin and spread of nationalism*. London: Verso.
- Andriopoulos, Stefan. 2005. "Psychic Television." *Critical Inquiry* no. 31 (3):618-637.
- Balbi, Gabriele. 2005. "I vecchi e i giovani: Strategie di mimesi tra old e new media." *Studies in Communication Sciences* no. 5 (1):183-204.
- Balbi, Gabriele. 2010. *La radio prima della radio: l'Araldo telefonico e l'invenzione del broadcasting in Italia*. Roma: Bulzoni.
- Balbi, Gabriele. 2012. There is something new under the media today, or rather, something ancient. In *4th National Conference STS Italia*. Rovigo, Italy.
- Ballatore, Andrea. 2012. Kindle non olet: The emergence of e-Readers and print book nostalgia. In *4th National Conference STS Italia*. Rovigo, Italy.
- Batchen, Geoffrey. 1997. *Burning with desire: The conception of photography*. Cambridge: MIT Press.
- Bijker, Wiebe E. 1995. *Of bicycles, bakelites, and bulbs: Toward a theory of sociotechnical change*. Cambridge, Mass.: MIT Press.
- Boddy, William. 2004. *New media and popular imagination: Launching radio, television, and digital media in the United States*. Oxford: Oxford University Press.

- Bolter, J. David, and Richard A. Grusin. 1999. *Remediation: Understanding new media*. Cambridge, Mass.: MIT Press.
- Bolter, J. David, Blair MacIntyre, Maribeth Gandy, and Petra Schweitzer. 2006. "New media and the permanent crisis of aura." *Convergence: The International Journal of Research into New Media Technologies* no. 12 (1):21-39. doi: 10.1177/1354856506061550.
- Brown, Jim. 1996. *Radar: How it all began*. London: Janus.
- Brügger, Niels. 2002. "Theoretical reflections on media and media history." In *Media history: Theories, methods, analysis*, edited by Niels Brügger and S. Kolstrup. Aarhus: Aarhus University Press.
- Carey, James W., and John J. Quirk. 1970. "The mythos of the electronic revolution." *The American Scholar* no. 39 (3):395-424.
- Carlson, W. Bernard. 2005. "Inventor of dreams." *Scientific American* no. 292 (3):78-85.
- Ceram, C. W. 1965. *Archaeology of the Cinema*. New York: Harcourt, Brace and World.
- Coates, James. 1911. *Photographing the invisible: Practical studies in spirit photography, spirit portraiture, and other rare but allied phenomena*. Chicago, Ill.: Advanced Thought Pub.
- Corn, Joseph J. 1986. *Imagining Tomorrow: History, Technology, and the American Future*. Cambridge, Mass.: MIT Press.
- Davis, John. 2007. "Going analog: Vinylphiles and the consumption of the "obsolete" vinyl record." In *Residual media*, edited by Charles R. Acland, 222-236. Minneapolis: University of Minnesota Press.
- De Sola Pool, Ithiel, Craig Dekker, Stephen Dizard, Kay Israel, Pamela Rubin, and Barry Weinstein. 1977. "Foresight and hindsight: The case of the telephone." In *Social impact of the telephone*, edited by Ithiel De Sola Pool, 127-157. Cambridge, MA: MIT Press.

- Douglas, Susan J. 1987. *Inventing American broadcasting, 1899-1922*. Baltimore: Johns Hopkins University Press.
- Edgerton, David. 2007. *Shock of the old: Technology and global history since 1900*. Oxford: Oxford University Press.
- Eisenstein, Elizabeth L. 2005. *The printing revolution in early modern Europe*. 2nd ed. Cambridge: Cambridge University Press.
- Fickers, A. 2012. "Visibly audible: The radio dial as mediating interface." In *The Oxford handbook of sound studies*, edited by T. Pinch and K. Bijsterveld, 411-439. Oxford: Oxford University Press.
- Flichy, Patrice. 2007. *The Internet Imaginaire*. Cambridge, Mass.: MIT Press.
- Friedberg, Anne. 1994. *Window shopping: Cinema and the postmodern*. Berkeley: University of California Press.
- Galvan, Jill Nicole. 2010. *The sympathetic medium: Feminine channeling, the occult, and communication technologies, 1859-1919*. Ithaca: Cornell University Press.
- Gitelman, Lisa. 2006. *Always already new: Media, history and the data of culture*. Cambridge, Mass.: MIT Press.
- Hahn, Marcus, and Erhard Schüttzel. 2009. *Trancemedien und neue Medien um 1900: Ein anderer Blick auf die Moderne*. Bielefeld: Transcript.
- Hong, Sungook. 2001. *Wireless: From Marconi's black-box to the audion*. Cambridge, Mass.: MIT Press.
- Huhtamo, Erkki. 1997. "From kaleidoscomaniac to cybernerd: Notes toward an archaeology of the media." *Leonardo* no. 30 (3):221-224.

- Jenkins, Henry. 2006. *Convergence culture: Where old and new media collide*. New York: New York University Press.
- Kluitenberg, Eric. 2006. *Book of imaginary media: Excavating the dream of the ultimate communication medium*. Rotterdam: NAI.
- Lehman-Wilzig, Sam, and Nava Cohen-Avigdor. 2004. "The natural life cycle of new media evolution: Inter-media struggle for survival in the internet age." *New Media & Society* no. 6 (6):707-730. doi: 10.1177/146144804042524.
- Mannoni, Laurent. 1995. *Le grand art de la lumière et de l'ombre : archéologie du cinéma*. Paris: Nathan.
- Marks, Laura U. 1997. "Loving a disappearing image." *Cinémas* no. 8 (1-2):93-111.
- Marvin, Carolyn. 1988. *When Old Technologies Were New: Thinking about Electric Communication in the Late Nineteenth Century*. New York: Oxford University Press.
- Marx, Leo. 1964. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. New York: Oxford University Press.
- McRae, Phil. 2006. "The death of television and the birth of digital convergence: (Re)shaping media in the 21st century." *SIMILE: Studies In Media & Information Literacy Education* no. 6 (2):1-12.
- Miller, Perry. 1965. *The life of the mind in America, from the Revolution to the Civil War*. New York: Harcourt.
- Morin, Edgar. 2005. *The cinema, or, The imaginary man*. Minneapolis: University of Minnesota Press.

- Müller, Jürgen E. 2000. "L'intermédialité, une nouvelle approche interdisciplinaire : perspectives théoriques et pratiques à l'exemple de la vision de la télévision." *Cinémas* no. 10 (2-3):105-134.
- Natale, Simone. 2008. "Quella sensibilità esagerata della lastra: Raggi X e revival del mesmerismo nella fotografia di fine Ottocento." *AFT – Rivista di Storia e Fotografia* no. 24 (48):53-61.
- Natale, Simone. 2011. "A cosmology of invisible fluids: Wireless, X-rays, and psychical research around 1900." *Canadian Journal of Communication* no. 36 (2):163-175.
- Natale, Simone. 2012a. "Fantasie mediali: Storia dei media e la sfida dell'immaginario." *Studi Culturali* no. 9 (2):269-84.
- Natale, Simone. 2012b. "Understanding media archaeology." *Canadian Journal of Communication* no. 37 (3):523-527.
- Natale, Simone, and Andrea Ballatore. 2012. Programming the future: Technological forecasts and the rise of artificial intelligence (1943-1974) In *"Intorno ai media" Seminars Series*. Torino, Italy.
- Natale, Simone, and Andrea Ballatore. 2014. "The Web Will Kill Them All: New Media, Digital Utopia, and Political Struggle in the Italian 5-Star Movement." *Media, Culture & Society* no. 36 (1):105-121.
- Neuman, W. Russell. 2010. *Media, technology, and society: Theories of media evolution*. Ann Arbor: University of Michigan Press.
- Noakes, Richard J. 1999. "Telegraphy is an occult art: Cromwell Fleetwood Varley and the diffusion of electricity to the other world." *The British Journal for the History of Science* no. 32 (4):421-459.

- Noakes, Richard J. 2007. "Cromwell Varley FRS, electrical discharge and Victorian spiritualism." *Notes and Records of the Royal Society of London* no. 61 (1):5-21.
- Nye, David E. 1994. *American Technological Sublime*. Cambridge, Mass.: MIT Press.
- Nye, David E. 2004. "Technological prediction: A Promethean problem." In *Technological visions: The hopes and fears that shape new technologies*, edited by Marita Sturken, Douglas Thomas and Sandra Ball-Rokeach, 159-176. Philadelphia: Temple University Press.
- Ortoleva, Peppino. 2011. "Que sera sera. Il piacere di prevedere nella cultura di massa." *Lexia* no. 7-8:37-50.
- Park, David W., Nick Jankowski, and Steve Jones. 2011. *The long history of new media: Technology, historiography, and contextualizing newness, Digital formations*. New York: Peter Lang.
- Peters, John Durham. 1999. *Speaking into the air: A history of the idea of communication*. Chicago, Ill.: University of Chicago Press.
- Pinch, Trevor J., and Wiebe E. Bijker. 1987. "The social construction of facts and artifacts: Or how the sociology of science and the sociology of technology might benefit from each other." In *The social construction of technological systems: New directions in the sociology and history of technology*, edited by Wiebe E. Bijker, Thomas Parke Hughes and Trevor J. Pinch, 17-50. Cambridge, Mass.: The MIT Press.
- Poster, Mark. 2007. "Manifesto for a history of the media." In *Manifestos for History*, edited by K. Jenkins, S. Morgan and A. Munslow, 39-49. New York and Abingdon: Routledge.
- Robida, Albert. 1883. *Le vingtième siècle*. Paris: G. Decaux.

- Ronell, Avital. 1989. *The telephone book: Technology--schizophrenia--electric speech*. Lincoln: University of Nebraska Press.
- Rossell, Deac. 1998. *Living pictures: The origins of the movies*. Albany: State University of New York Press.
- Sconce, Jeffrey. 2000. *Haunted media: Electronic presence from telegraphy to television*. Durham: Duke University Press.
- Sobchack, Vivian. 2004. "Science fiction film and the technological imagination." In *Technological visions: The hopes and fears that shape new technologies*, edited by Marita Sturken, Douglas Thomas and Sandra Ball-Rokeach, 145-158. Philadelphia: Temple University Press.
- Sorlin, Pierre. 1997. *Les fils de Nadar : le "siècle" de l'image analogique*. Paris: Nathan.
- Spar, Debora L. 2001. *Ruling the waves: Cycles of discovery, chaos, and wealth from the compass to the Internet*. New York: Harcourt.
- Stephens, Mitchell. 1991. "Television transforms the news." In *Communication in history, technology, culture, society*, edited by D. David J. Crowley and Paul Heyer, 237-43. White Plains, NY: Longman.
- Stöber, Rudolf. 2004. "What media evolution is." *European Journal of Communication* no. 19 (4):483-505.
- Stolow, Jeremy. 2008. "Salvation by electricity." In *Religion: Beyond a concept. The future of the religious past, vol. I*, edited by Hent De Vries, 668-686. New York: Fordham University Press.
- Sturken, Marita, Douglas Thomas, and Sandra Ball-Rokeach. 2004. *Technological Visions: The Hopes and Fears That Shape New Technologies*. Philadelphia: Temple University Press.

- Thorburn, David, and Henry Jenkins. 2003. *Rethinking Media Change: The Aesthetics of Transition*. Cambridge: MIT Press.
- Turner, Bryan S. 1987. "A Note on nostalgia." *Theory, Culture & Society* no. 4 (1):147-156.
- Uglow, Jennifer S. 1996. "Introduction." In *Cultural Babbage: Technology, time and invention*, edited by Francis Spufford and Jennifer S. Uglow, 1-23. London: Faber.
- Uricchio, William. 2003. "Historicizing media in transition." In *Rethinking media change: The aesthetics of transition*, edited by D. Thorburn and H. Jenkins. Cambridge, MA: MIT Press.
- Willems, Philippe. 1999. "A stereoscopic vision of the future: Albert Robida's *Twentieth Century*." *Science Fiction Studies* no. 26 (3):354-378.
- Young, Paul. 2006. *The cinema dreams its rivals: Media fantasy films from radio to the Internet*. Minneapolis: University of Minnesota Press.