

Participation in Broadband Society

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Broadband Society and Generational Changes

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The role generations play in accepting and shaping digital technologies, and possibly vice versa, is an increasingly relevant issue in contemporary society. For the first time in the academic debate, this volume outlines the theoretical issues and explores some results from empirical researches on the relationship between generations and the media in digital society. The first part of the book deals with the theoretical debate on generations, from Mannheim's to the revisiting of some classical notions shaped by disciplines as history, demography, marketing and sociology. The second part gathers a selection of researches at international level, with particular attention to the European context. Though each research used specific methodologies, the main approaches focused on media domestication by young and old generations, and on the comparative analyses of different generations in adopting media.

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The Access to Memory in Video Archives On-Line. Generational Roles on YouTube and Ina.fr

1 Introduction

The Internet can be seen as an audiovisual resource that, in the view of researchers, constitutes a 'real' collective memory. If we consider the role of younger generations in the use of new media and the significant influence these new forms of knowledge have on young people, it is useful to examine the ways in which the web addresses these users and gives them access to this audiovisual memory.

There are two websites which demonstrate a different approach to this question: Ina.fr, the online database of *Institut National de l'Audiovisuel*, a French state-governed commercial organisation, and YouTube, the largest source of videos on the web. 'Surfing' these archives is akin to 'surfing' the collective memory. The intention to build an audiovisual memory online has been explicitly put forth by INA (whose slogan until 2008 was "we build the future of your memory") and the same idea is implicit in YouTube, which can be surmised by the fact that it functions as a time capsule with a potentially infinite quantity of television programmes archived by users.

2 The Semiotic Perspective

The methodological perspective employed in this study is that of a semiotic comparative analysis, based on the effects of meaning that surfing the web engenders. The analysis proceeds through the study of two semiotic notions.

The first notion – that of the model user – is a notion applied by Giovanna Cosenza (2008, p.134) to new media which has as its foundation the model reader theorised by Umberto Eco (1979, p.50). The website addresses a user and reaches her/him by adopting rhetorical strategies. These strategies are discursive: they are part of the website and do not depend on real, or empirical, users. More than an enactment of a typical or ideal user, the model user is thus a textual construction that we find through an analysis of the places that the site creates for her/him in allowing her/him to act. The second notion is that a web-

- Colombo, F., 1998. *La Cultura Sottile: Media e Industria Culturale in Italia dall'Ottocento agli Anni Novanta*. Milano: Bompiani.
- Davies, P., 2002. Pirates Have "two out of three" Pay-TV Homes in Italy. *New Media Markets*, 20(27), p. 5.
- Forgacs, D., 1990. *Italian Culture in the Industrial Era, 1880-1980*. Manchester: Manchester University Press.
- Furnari Luvàrà, G., 1995. *La Logica del Preferibile: Chaim Perelman e la "Nuova Retorica"*. Soveria Mannelli: Rubbettino.
- Ginsborg, P., 1998. *L'Italia del Tempo Presente*. Torino: Einaudi.
- Menduni, E., 1999. *L'Autostrada del Sole*. Bologna: Il Mulino.
- Milanaccio, A., 2007. Presentazione. *Quaderni di sociologia: giovani e nuovi media*, 44, pp. 3-8.
- Morcellini, M., ed. 2005. *Il Mediaevo italiano: industria culturale, tv e tecnologie tra XX e XXI secolo*. Roma: Carocci.
- Morcellini, M., 2008. Leggere i segni e le provocazioni della new age. Senza pregiudizi ma anche senza abdicazioni. In: S. Tirocchi, 2008. *Ragazzi fuori: bullismo e altri percorsi devianti tra scuola e spettacolarizzazione mediale*. Milano: Franco Angeli.
- Morcellini, M. & Mazza, B., ed., 2008. *Oltre l'individualismo. Comunicazione, nuovi diritti e capitale sociale*. Milano: Franco Angeli.
- Noelle-Neumann, E., 1980. *Die Schweigespirale: Öffentliche Meinung, unsere soziale Haut*. München: Piper Verlag.
- Palfrey, J. & Gasser, U., 2008. *Born Digital: Understanding the First Generation of Digital Natives*. New York: Basic Books.
- Pietropolli Charmet, G., 2008. *Fragile e spavaldo: ritratto dell'adolescente di oggi*. Roma-Bari: Laterza.
- Pira, F. & Marrali, V., 2007. *Infanzia, media e nuove tecnologie: strumenti, paure e certezze*. Milano: Franco Angeli.
- Tirocchi, S., 2008. *Ragazzi fuori: bullismo e altri percorsi devianti tra scuola e spettacolarizzazione mediale*. Milano: Franco Angeli.

site is considered an interface, and not a space to be filled with content¹, as suggested by the supermarket metaphor which can be easily applied to Ebay (Stockinger, 2005), for example. The idea of a site as a place does not take into account the effects of meaning that the platform engenders: the interface determines the content and vice versa. In the study of an online archive we will be interested in the effects of meaning precipitated by the relocation of content; the influence of the context on the signification of the content is thus the objective of this analysis. As far as methodology is concerned, interfaces will be studied through interpretative paths as theorised by François Rastier (Rastier, 2001). These are the routes of meaning that the site grants the model user. The notion of a path takes us away from the idea of a static meaning, subjacent to the media, and is closer to the dynamism of the use of new media, where interaction plays a fundamental role. The meaning reveals itself in the interpretative movement through a multiplicity of anchors ('anchors' here denoting the supports of the interpretation of the object). Now these anchors may be part of the published content, a video (as in the context of broadcasting), or rather be external to it, such as the comments that a website posts with a video. The choice of the term 'interpretative' underlines that in the choice of the path we always have a production of meaning: in other words, reading a comment or clicking on one link rather than another has an influence on the meaning of the visit. These anchors of interpretation are, furthermore, conceivable as forms of expression in semiotic terms (a hyperlink, for example).

3 The Context of INA: the Editorialization of Audiovisual Documents

First of all we need to explain the particular context of INA. Its mission is the preservation of French audiovisual heritage, i.e. television and radio archives. The INA archives were, however, created with the purpose of commercially exploiting television archives (that is, selling them to professionals). The exploitation of this audiovisual heritage being historically entrusted to the cinema (especially in France, where film Institutes considered as heritage only 'authorial' films to the exclusion of commercial ones, (Vernet, 2007)), at its birth, INA was far from considering the aesthetic value of its television documents.

It is with the digitalization of this heritage, and with numerous more interesting possibilities offered by new technologies, that INA approaches the development of archives – aside from their preservation aimed at commercial gain. The plan for digital protection that consists of the mass digitalization of the heritage was signed in 1999 and INA has been officially responsible for the ex-

ploitation of the audiovisual heritage² since 2000 its mission is to give access to the heritage to the public.

The publication of documents after their digitalization is thus the main operation of the Institute. INA relies on multimedia products for the editing of archive documents. After their indexation in a catalogue, certain documents are then republished within specific projects of contextualization. They then become interactive DVDs, web archives or are even reassembled from archive films. These operations of re-contextualization are necessary for the exploitation of a large quantity of documents.

What interests us, from the point of view of the meaning of archived images, is that a system of editing that changes the context of publication changes the anchors on which the paths of interpretation of spectators rely. This change thus brings about an alteration in the meaning and value of published documents. In other words, if we see editing as a semiotic practice, where the operations of publication bring about expressive variations that imply consequent variations in the content, we can hypothesise that the editing of audiovisual documents has an influence on their meaning.

The comparison between Ina.fr and YouTube will allow us make clear some characteristics of these processes of re-contextualization in the case of audiovisual archives on the net. But first of all, we will look at the differences between the two sites from the point of view of both content and public.

4 YouTube

4.1 Contents

YouTube is a user-generated content site, i.e. videos are uploaded directly by users, although recent statistics indicate that only a small percentage of users actually generate content (between 0,5 and 1,5 %) (Manovich, 2008).

From a more specific perspective, the audiovisual genres proposed by YouTube are as follows:

The re-diffusion of TV programmes – especially old or foreign programmes that are of interest because of 'hearsay' on the web.

20% of content is actually musical video clips which also comprises 74% of the 50 most searched words. YouTube diffuses a large quantity of copyright protected video content. According to a study of online video by CNC con-

1 The notion of interface applied to new media we refer to Manovich, 2001, pp. 62-111.

2 Article 49 du loi du 1er Août, 2000.

ducted by QualiQuanti³, streaming is not considered by most users to be an illegal activity. Video clips are also a way of listening to music online without paying for it (looking for a song on YouTube is certainly faster than downloading it). Furthermore, Google search results for a song normally list YouTube video clips first.

YouTube is conducive to a form of entertainment which sees users taking pleasure from the misfortunes of others – *Schadenfreude* (Gervais, 2007).

4.2 Public

YouTube is a social network, and as a social network it is directed at an active user with a personal account and his or her own playlists. YouTube therefore contributes to the transformation of the web into an immense hard disk where data is stored⁴. The user of social networks also takes charge of the indexation of videos, through so-called 'folksonomies' (according to Crepel, 2008, 45% of tags used on Flickr are used only once, indicating the low reliability of widespread use of the system). Folksonomies generate a system where the information is managed bottom-up rather than top-down⁵. Furthermore, YouTube's public is young – aged between 18 and 24 (ComScore, 2008) – and so-called heavy streamers (those who watch videos on YouTube for more than 3 hours per day) are also the very young.

5 Ina.fr

Ina.fr was initially a business-to-business site, dedicated to broadcasting professionals. In 2006, the institute decided to widen its audience to non-professionals. The idea was to propose a dynamic archive emerging from the dichotomy (and opposition) between news and archive (Amit, 2009). Ina.fr was founded in 2006 – thus prior to the purchase of YouTube by Google and just before the boom of online video.

³ Les Nouvelles Formes de la consommation des images : TNP, TVID, VoD, sites de partages, piraterie, analyse qualitative, QualiQuanti (Daniel Bô, Claire-Marie Lévêque, Alexandra Marisglia), Paris, CNC, novembre 2007.

⁴ Fauré, C., Dataware et infrastructure du Cloud Computing. In Stiegler, Giffard, Fauré, 2009, p. 222.

⁵ Stiegler, B., Du temps-carbone au temps-lumière. In Stiegler, Giffard, Fauré, 2009, pp. 90-93.

5.1 Content and the Public

INA is the French national repository of television and radio archives. Its public and content are thus different from YouTube. A third of its content is news; another third comprises documentaries and reportage, and the remaining third is dedicated to entertainment (television series and features). As opposed to YouTube, there are no limits to the length of videos and the site provides a video-on-demand section. Officially, 80% of INA's digitalised archives are accessible online free (Amblard, 2007) of charge.

The target of Ina.fr is adult and also passive since users do not generate content. Content is useful for researchers, students or historians. According to Alexa's demographic charts most users are between 25 and 44 years of age (data which is only partly reliable). A certain number of hypermedia services are integrated into the site. In particular, we can single out the interactive frescoes: *Charles de Gaulle*, *paroles publiques* or *Jalons*. With a re-contextualization operated by historians, *Charles de Gaulle*, for example, gives value to a large quantity of old television news about Charles de Gaulle, with comments and historical reconstructions which increase understanding of the historical period. Other playful multimedia products try to allow a high-level interaction with the public. An interesting example is the Berlin Remix Festival⁶. Organised in partnership with DailyMotion, the festival presents a series of archive videos from INA available for reassembly by users. Several prizes are awarded to the best re-edited films made by users. If the remix is – alongside the database – one of the principal forms of contemporary creation for Lev Manovich, (2008) Berlin Remix is potentially the apotheosis of both.

5.2 The New Ina.fr

INA published a new version of its archives online in June 2009. The site, called "Archives pour tous", became the current Ina.fr. It was a specific marketing strategy aimed at broadening its audience. The title, moreover, evoked a difference between the real archives and the limited version available to the general public. The perspective has been thus inverted: archives are first of all for everyone, and only in the second instance does a more detailed version emerge for professionals. It is both an archive and a new media, according to Roei Amit, (2009), chief editor at INA.

How did Ina.fr attempt to achieve this change? It used Web 2.0 methods, following the example of YouTube (Gervais, 2007). The new site allows users to have a personal account, to insert comments and to evaluate videos, create

⁶ <http://www.dailymotion.com/sas/BerlinRemix>.

reading lists, export videos onto other sites and blog and share them through social networks. Videos carrying the label "INA" now circulate freely on the Web and in particular on sites broadcasting traditional media (Lemonde.fr, Liberation.fr, Telerama.fr etc.). These media make use of videos from the past to address current problems, in the same way as Ina.fr does. Content type has also expanded since the recent addition of 200,000 old advertisements made available by Ina.fr online.

5.3 Main Differences

YouTube	Ina.fr
User Generated Content	National Archives
Autonomy	Editorial Activity
Heterogeneity	Filter and Selection
Illegal Contents	Institutional Contents
Music Videos	News
Bottom Up Memory	Institutionalized Memory
Age: 18-24	Age: 25-44

Table 1: Main differences between YouTube and Ina.fr (Source: the author)

To conclude this section, we can state that the main differences between the two sites derive generally from the mode of publication of content. YouTube is a site containing user-generated content whereas Ina.fr is a national archive. This implies a significant heterogeneity for YouTube and an active process of selection and filtering for Ina.fr. Consequently we have autonomy on the one hand and a daily editorial activity on the other. The most popular type of material on YouTube is the video clip whereas on Ina.fr it is the news. On the one hand, part of the content is illegal and on the other, the all content is explicitly institutional content. Thus we see institutionalized memory in Ina.fr and "democratic" memory in YouTube generated by users. As far as the age of the public is concerned, the brackets are slightly different: 18-24 for YouTube, 25-44 for Ina; this is a reflection of the differences in content. It is now necessary to see how these differences are reflected in various forms of online navigation, and thus how two types of model user are conceived by different forms of access to content.

6 Navigation in the Archive

Audiovisual archives such as YouTube and Ina.fr determine the way we access documents since the user is generally driven by the editorial choices of the site⁷. The first three results of a search on Google attract 80% of clicks. The user therefore trusts the hierarchical organization presented by the search engine (although the PageRank system and filters used by Google are not neutral and are often also stochastic (Ertzscheid, et al., 2007)). William Uricchio has noted the continuity in the evolution from old media to new media, and in doing so he points out that the protocols of metadata and filters used by search engines are never neutral in their advancement of viewing habits (Uricchio, 2009). Furthermore, cognitive science studies show that users are often superficial and distracted. It is thus necessary to consider the website as a technological support where content is fixed (Bachimont, 2007).

We can see the archives as a network, where documents are interconnected as happens in a rhizome. By following the model of Eco's encyclopedia (1984) a journey around the archives plays the role of a journey into the collective memory. Now, this journey is determined by the shape of connections among kernels of the rhizome; or the way of moving from one document to another in the website.

6.1 A Model of Online Navigation

We are now going to propose a simple cognitive model where the anchors of interpretative paths modulate the perspective of model users. The archives are thus a network where several documents are interconnected through a Web interface. This network is not static and fixed for all. It is modulated by user-generated research. Now we can see every click on the screen to move from one document to another as an interpretant that puts the ensuing document into perspective.

Charles Sanders Peirce defines the interpretant as the mediating representation that allows the passage between the representation and the represented object. Any activity of understanding would thus be a translation between various signs. Interpreting, according to Peirce, "fulfils the office of an interpreter, who says that a foreigner says the same thing which he himself says" (Peirce, 2003, pp. 57-68).

To conceive of a kernel of the network as an interpretant is useful for understanding the production of meaning present in every passage. For example, if you click on Ina.fr's 'most popular videos' link you are offered videos that you

⁷ Carou (2007) considers the statistics about VOD in France by QualiQuanti.

understand to have been seen already by many other users and this influences your perspective of the document. Editorial choices thus determine the way content is accessed and they also allow for meaning to be accrued. Furthermore, seen positively, these tools have an epistemic character: they affect our knowledge (De Souza, 2005, p.11).

Moreover, digitalization leads to a loss of material interpretative anchors which we used to in graphic reason (Goody, 1979, cited in Bachimont, 2000). For example, we lose some spatial anchors as the material structure of the book with its pages, which leads to a loss of orientation (Bachimont, 2000). The solution for disorientation, according to Bruno Bachimont (2000), is to give to users meta tools so to have a global view of the document to retain. In other words, a solution to the new problems spurred by digital technology would thus be the implementation of plans of navigation so that users can find themselves. Consistently with this position, the online archives of INA enable the user to see his or her own position within the archives. INA has chosen to create flexible margins of operation for users. Rather than force users into already mapped-out roads, Ina.fr allows them choose their own paths. Ina.fr offers tools that we shall call meta-discursive, so that users can choose their interpretative paths and consciously harness the possibilities of online navigation.

The context is thus constantly manageable for the user according to his or her purposes and interests. Ina.fr does not aim at erasing the context to prevent it influencing the meaning of documents; it aims rather at allowing the users to manipulate the context. This has the purpose of bringing to light the contextualization and the constitution of the archives by enabling users to be conscious of the processes activated through archival work.

6.2 YouTube

Following this model, let us now look at the differences between navigation on YouTube and navigation on Ina.fr. The homepage of YouTube (Figure 1) allows the user to see a selection of videos: videos that are being watched at that very moment, videos that are recommended and 'the most popular'. This type of categorization, independent of content, is directed at users who do not have a precise objective, and who can be placed in the category of the *flâneur* (Cosenza, 2008, p.135). Rather than looking for something particular, the *flâneur* navigates the Web as a surfer. Serendipity is the principle behind any search: coming across something that one was not looking for. This navigation without objectives is a product of the behavioral composition of the other users (Cardon, 2008). It is quantitative: other users index videos and thus actively determine the list of most-seen videos and videos being watched at that moment. Also in line with a quantitative system is the hierarchization of documents i.e. the ordering

of user comments on the screen. The passage from one knot of the net to another is founded therefore on delegation to other users of the choice of content and subsequent categorization of these choices (tags are planned by the same users through so-called folksonomies, Crepel 2008). The system of folksonomies mirrors the constitution of a bottom-up archive, where categorization is not determined by experts but by users themselves. YouTube is a container that seems neutral and democratic: its graphic aspects (like that of Google) are stylistically simple and sober (a white background and an almost total absence of decorative elements), giving the impression of a neutral and impartial container whose only role is to provide an available space for users. In reality the indexing and filters aren't neutral and drive the user into a time-wasting net, the goal being to provoke the maximum number of Hits. Meaning is therefore 'dispersed' to a thematic level, as passage from document to document is not determined by content. The result is an expansion of that type of attention that Katherine Hayles has called "hyperattention", as opposed to "deep attention" (that which focuses on a well-defined object for a long period of time) (Hayles, 2007 cited in Giffard, 2009, pp. 184-185). YouTube also incites constant activity in the form of comment or evaluation. The model user of YouTube focuses on the immediate instant without spending time examining the past with a look at the future which always rests restricted to the limits of a contingent action (Georges, 2009). This user loses him or herself in the archive.

6.3 Ina.fr

The objective of Ina.fr (Figure 2) is instead to allow the user to find his own position in the archive. The site aims at the editing of content with a selection clearly devoted to an adult target user base. The first page presents some news items, fruit of editorial activity, with the purpose of introducing the events of the past to be used to interpret the present.

Videos previously viewed are always available in an expandable window. It is the function called "mon parcours". The user is thus led to reflect on the connections of his journey around the archive. "Mon parcours" allows him to preserve a memory and a trace of his own navigation. The new Ina.fr site also offers the Mediagraph research system – a search engine with cluster technology (Figures 3, 4). A keyed-in term brings up a flashed animation showing all the documents to which it is connected. By clicking on a video thumbnail the system shows us the connections to other similar videos both thematically and visually. A few clicks will bring up a true local and perspective map of the archive. Making the relationship between documents explicit is therefore a meta-discourse on the archive. If we consider the archive as a labyrinth where one loses oneself, the Ina.fr user is a Dedalus who discovers a way to go out into

the dimension that transcends it Dedalus escapes from the labyrinth by flying away: in other terms, he discovers the third dimension. At the same way, the user sees his own position by putting the archive into perspective through a local map.

In conclusion, we consider the archive of Ina.fr as constituted by a net of intertextualities (just as with YouTube); the passage between documents is determined by the editing of content. If intertextualities on YouTube were therefore other users, on Ina.fr, the passage from one knot of the net to the other is generally determined by editorial choices. The site nevertheless gives the opportunity to put the same net into perspective through meta-discursive functions.

6.3.1. Two Parallel Forms of Navigation

It is now necessary to consider that with the objective of reaching a target of a more sizeable public, and in particular a younger public, Ina.fr adopted a web 2.0 style of navigation. We are not going to deal with a comparison between the old and the new versions of the Ina.fr site, although it is important to emphasise that the meta-discursive tools are always proposed and never imposed.

Simplifying Ina.fr allows two types of navigation: one based on the style of web 2.0 – like YouTube – and another parallel type that we can define as “conscious”. Web 2.0 institutionalises the notion of a young model user, whose searches are often superficial. Ina.fr therefore puts the style of conscious navigation into second place: tools are only potentially present and partly hidden by new graphics. With the objective of opening up to a young user base, Ina.fr harnesses some of the disorienting strategies of YouTube.

7 Conclusions

In conclusion, the young model user, the one generally concerned with web 2.0, seems to be conceived of by online audiovisual archives as a user who is not able to search independently for videos, but rather looks passively at what is offered with the objective of simple relaxation. Ina.fr shows nevertheless that we can allow the user to build connections in autonomous and divergent ways, guaranteeing a local vision of the archive and therefore of his own position in it. Considering that a system of unfocused navigation has great influence, especially on young people, the role of institutions does not appear to guarantee a satisfactory form of navigation or quality of content: rather, it provides critical apparatus that enables users to independently develop consciousness of their own navigation.

Bibliography

- Ambard, M.-C., 2007. Premiers enseignements d'une nouvelle offre: Ina.fr et Ina.media. *Archimages 07*. Paris: Institut national du patrimoine.
- Allard, L., 2005. Express Yourself 2.0! In: E. Maigret & E. Macé. *Penser les médiacultures. Nouvelles pratiques et nouvelles approches de la représentation du monde*. Paris: Armand Colin/INA.
- Amit, R., 2009. L'Ina.fr est un Nouveau Type de Média. *L'Avenir de l'audiovisuel passe-t-il par le web? Dossier de l'audiovisuel*, Bry sur Marne, INA, Available at: <http://www.ina-entreprise.com/observatoire-medias/dossiers/avenir-av-web/article-7.html> [Accessed 14 December 2009].
- Bachimont, B., 2000. L'Intelligence Artificielle comme écriture Dynamique : de la Raison Graphique à la Raison Computationnelle. In: Petitot, Fabbri ed. 2000, *Au nom du sens. Autour de l'oeuvre de Umberto Eco*, Paris: Grasset, pp. 290-319.
- Bachimont, B., 2007. *Ingénierie des Connaissances et des Contenus*, Paris: Hermès.
- Bachimont, B., 2008. La Conservation du Patrimoine Numérique: Enjeux et Tendances. *Patrimoine Numérique: Mémoire Virtuelle ou Mémoire Commune? Dossier de l'Audiovisuel*, Bry sur Marne, INA. Available at: <http://www.INA-entreprise.com/observatoire-medias/dossiers/patrimoine-numerique/la-conservation-du-patrimoine-numerique-enjeux-et-tendance.html>. [Accessed 14 December 2009]
- Cardon, D., 2008. Le Design de la Visibilité. Un Essai de Cartographie Du Web 2.0. *Réseaux Sociaux de l'Internet, Réseaux*, 154, Paris: Lavoisier.
- Carou, A., 2007. Archiver la Vidéo sur le Web. *BBF*, 2007, 2, p.56-60, Available at: <http://bbf.enssib.fr> [Accessed 14 December 2009].
- Corroy, L. ed. 2008. *Les Jeunes et les Médias. Les Raisons du Succès*, Paris: Vuibert/INA.
- Crepel, M., 2008. Les Folksonomies Comme Support Emergent de Navigation Sociale et de Structuration de l'Information sur le Web. *Réseaux Sociaux de l'Internet, Réseaux* n. 154, Paris: Lavoisier.
- Cosenza, G., 2008. *Semiotica dei Nuovi Media*, Milano: Bompiani.
- De Souza, C., 2005 *The Semiotic Engineering of Human Computer Interaction*, Cambridge, Massachussets: MIT Press.
- Eco, U., 1979. *Lector in Fabula*, Milano: Bompiani.

- Eco, U., 1984. *Semiotica e Flosodia del Linguaggio*, Torino: Einaudi.
- Ertzscheid, O., Gallezot, G., Boutin, E., 2007. *Perspectives Documentaires sur les Moteurs de Recherche: entre Serendipité et Logiques Marchandes*. Available at: <http://archivesic.ccsd.cnrs.fr/docs/00/17/21/69/PDF/ertzsgallbout.pdf>. [Accessed 18 December 2009].
- Georges, F., 2009. Représentations de soi et identité Numérique. *Web 2.0. Réseaux* n.154, Paris, Lavoisier, pp. 165-193.
- Gervais, J., 2007. *Web 2.0. Les internautes au pouvoir*, Paris: Dunod.
- Getting Beyond Big Online Video, Comscore, 2009
- Hayles, K., 2007. Hyper and Deep Attention: the Generational Divide in Cognitive Modes. Available at: <http://www.mlajournals.org>. [Accessed 18 December 2009].
- Intelligence Demographic Charts on You Tube, Hitiwise, Decembre 2008
- Jacquinet-Delaunay, G. & Kourt E., 2008. *Des Jeunes et des Médias en Europe*, Paris: L'Harmattan/INA
- Le web 2.0 et l'essor des contenus audiovisuels sur Internet. La Lettre du CSA, n° 204, avril 2007, Available at: http://www.csa.fr/actualite/dossiers/dossiers_detail.php?id=122697&chap=2971 [Accessed 10 December 2009].
- Les Nouvelles Formes de la consommation des images: TNP, TVID, VoD, sites de partages, piraterie, analyse qualitative, QualiQuanti (Daniel Bô, Claire-Marie Lévêque, Alexandra Marisglia), Paris, CNC, novembre 2007, Available at: www.cnc.fr/Site/Template/T1.aspx?SELECTID=2809&ID=1898&Type=4&Annee=2007&t=2 [Accessed 10 December 2009].
- Manovich, L., 2001. *The Language of New Media*, Cambridge Mass.: MIT University Press.
- Manovich, L., 2008. The Practice of Everyday(Media) Life, Available at: http://www.manovich.net/DOCS/manovich_social_media.doc [Accessed 10 December 2009].
- Online Video. New Face of the Internet, Comscore, 2008
- Peirce, C.S., 1978. *Collected Papers*, Cambridge Mass.: Harvard University Press. Translated from english by M. Bonfantini, 2003. Milano: Bompiani.
- Rouquette, S., 2009. *L'Analyse des Sites Internet*. Bruxelles: de Boeck Université, collection Médias-Recherche.
- Stiegler, B., Giffard, A., Fauré, C., 2009. *Pour en Finir avec la Mémoire*, Paris: Flammarion.

- Uricchio, W., 2009. Télévision: l'institutionnalisation de l'intermédialité. In M. Berton & A. K. Weber, ed., *La Télévision du Téléphonoscope à YouTube. Pour une Archéologie de l'Audiovision*, Lausanne: Éditions Antipodes.
- Vernet, M., 2007. Les Archives de Cinéma et d'Audiovisuel et les Bibliothèques. In BBF, n° 2, p. 5-11, Available at: <http://bbf.ensib.fr/> [Accessed 18 December 2009].