

Received: 13-02-2011 Revised: 06-03-2011 Accepted: 28-03-2011 DOI: 10.3916/C37-2011-03-02

Javier Marzal Felici & Maria Soler Campillo Castellón (Spain)

# Consumption Patterns and Uses of Photography in the Digital Era among Communication Students in Spain Hábitos de consumo y usos de la fotografía en la era digital entre estudiantes de comunicación en España

This paper presents the results of a research study exploring consumer behaviour and uses of photography among first-year students of the Degrees in Journalism, Audiovisual Communication, and Advertising and Public Relations in four Spanish universities (University of Malaga, University of Santiago de Compostela, University of the Basque Country and Universitat Jaume I in Castellón). As it is well known, the emergence of digital technologies has caused far-reaching transformations in the field of photography. These changes have affected production, distribution and circulation processes. However, digital technology has particularly changed the concept of photography itself as a means of expression and communication, above all among young people. Changes in how photography is perceived nowadays, brought about by the onset of digitalization, in turn raises a series of questions that merit reflection. To this end, a survey was designed and administered to a total of 467 communication sciences students in Spain. The results of this research reveal, on the one hand, how these communication students relate to the use of photography today; on the other hand, and more importantly, the results throw some light on how to approach the teaching of digital photography in a higher education context.

Se presenta una investigación sobre los hábitos de consumo y usos de la fotografía entre estudiantes de primer curso de las licenciaturas en periodismo, comunicación audiovisual y publicidad y relaciones públicas, en cuatro universidades españolas (Universidad de Málaga, Universidad de Santiago de Compostela, Universidad del País Vasco y Universitat Jaume I de Castellón). Como es sabido, la aparición de las tecnologías digitales en el campo de la fotografía ha provocado profundas transformaciones en el panorama fotográfico. Estos cambios han afectado a los procesos de producción, a los modos de distribución y circulación de las imágenes. Pero, sobre todo, ha tenido notables consecuencias en la forma misma de conceptualizar la fotografía como forma de expresión y comunicación, y en los usos de la fotografía, en especial entre los más jóvenes. La digitalización ha contribuido a transformar, asimismo, la propia percepción del medio fotográfico, que merece una reflexión en estos momentos. A tal fin, se ha diseñado una encuesta que ha sido realizada a un total de 467 estudiantes de ciencias de la comunicación de nuestro país. En definitiva, el análisis de las respuestas que ofrece la presente investigación nos ha permitido, por un lado, tomar conciencia sobre cómo se relacionan estos estudiantes de comunicación con el medio fotográfico en la actualidad. Pero, sobre todo, se trata de una investigación que nos ofrece algunas pistas sobre cómo abordar, en plena era digital, la enseñanza de la fotografía en el contexto educativo universitario.

Fotografía, fotografía digital, consumo de medios, educación audiovisual, cultura digital, educación en comunicación, análisis de la imagen, postfotografía.

Photography, digital photography, media consumption, audiovisual education, digital culture, education in communication, image analysis, post-photography.

Dr. Javier Marzal-Felici is Full Professor and the Head of the Department of Communication Sciences at the School of Human and Social Sciences of the University Jaume I in Castellón (Spain) (marzal@com.uji.es).

Dr. Maria Soler-Campillo is Assistant Professor of Audiovisual Communication and Advertising at the School of Human and Social Sciences of the University Jaume I in Castellón (Spain) (solerm@com.uji.es).

#### 1. Introduction

It is well-known that the dramatic emergence of digital technologies in the field of photography, which began twenty years ago, has ultimately achieved a far-reaching transformation of the means of producing images. Still more importantly, this revolution has led to an extension and generalisation of images without precedent in human history. In order to fully understand this fact, there is nothing better than looking at a few figures. According to the statistics published recently by institutions like the Photo Marketing Association (PMA)<sup>1</sup>, around 755 million digital cameras were sold in 2006 and 85% of these were integrated into mobile phones. The forecast for 2011 is for the number of mobile phones worldwide to reach 4.2 billion, and that 75% of these will have an integrated camera. Meanwhile, the Camera and Imaging Products Association (CIPA), an organisation bringing together the main manufacturers of photographic equipment in Japan, indicates that, in that country alone, almost 120 million digital cameras were manufactured in 2008, most of them intended for export. This represents a 19.3% growth in sales compared to the previous year and a 29.7% growth in the sale of digital reflex cameras compared to the previous financial year<sup>2</sup>. Sales forecasts are optimistic for 2010 and 2011, with forecast increases of 2.4% every year, although this represents a considerable reduction in the strong growth of previous years due to the far-reaching economic crisis affecting all international markets since 2007.

No less surprising are the data offered by the GFK-Emer consultancy<sup>3</sup>. Every day in the United States, more than 500 million photographic images are taken (which gives us the astonishing figure of 182,500 million photographs a year). In Germany during 2007, around 7,102 million photographs were taken, of which 3,390 received a digital photo finish, while just 47% (that is, about 1,605 million photographs) were printed (or digitally developed).

These figures clearly show the extraordinary way in which digital technology has popularised the production and consumption of photographs. Alongside this technological revolution, a double suspicion has been growing up around the photographic medium. Firstly, digitalisation has accentuated the capacity to manipulate photographs, which means that photography as a procedure has less and less value for "certifying the real", in the words of Bazin (1990) or Barthes (1990). This compromises the commonly accepted nature of photography as a record. Meanwhile, and as a logical development of this idea, doubts have even been cast on the nature of the photographic image itself (Marzal, 2007). This even affects its validity now, as many scholars of the image in the sphere digital visual culture, such William Mitchell (1992), Nicholas Mirzoeff (2003), Hans Belting (2007) or Fred Ritchin (2009), speak openly of "the death o photography" as a result of the appearance of digital photography. This is understood as an occurrence that has transmuted the very nature of the photographic medium in such a way that photography has been diluted in the universe of the digital image.

One of the main references for this research is the study carried out in the mid-1970s by Bourdieu (2003) on the social function of photography in France, a moment when photography was extended to millions of citizens of the whole world with the appearance of compact and reflex cameras. That study demonstrated that very little relating to photographic activity by enthusiasts is improvised or spontaneous: even the most modest photography reflects a way of understanding the society in which it exists.

Both Chalfen (1987) and Spence and Holland (1991) have approached the study of the uses of domestic photography based on a visual anthropology approach. These scholars focus their attention on analysing family photographs and their personal and social significance, in that, despite the deep subjectivities they express, domestic photographs are a faithful reflection of public conventions, supported by the existing technologies at each historical moment. In the last few years, the appearance of digital photography and the integration of photographic cameras into mobile phones have stimulated much research into the new uses of photography and user behaviour. From this, we would highlight the studies by Van House, Davis and others (2005) of the uses of photography on the Internet and the effects of sharing images on young people, and by Van House and Ames (2007) on usage habits for mobile phones with integrated cameras as instruments for affirming identity, constructing everyday memory and as a banalising communication tool among young people and teenagers.

In this sense, the appearance of phenomena like Flickr, a website for sharing photographs used by tens of millions of Internet users throughout the world, has provoked reflections from many researchers. Cox, Clough and other (2008) stress that Flickr cannot be understood as just another expression of the consumer culture in which we live. Instead it is also a symptom of the cultural changes occurring at the moment. Its ease of use and the reciprocal comments among users of this virtual community cause moral dilemmas, generate states of

opinion and stimulate interaction and communication. Murray has a great deal to say on this idea, highlighting how digital photography and sharing photographs deeply condition the way we perceive reality and construct the idea of everyday life, in that small details or anecdotes can become much better known that would be possible without the use of photography to witness them (Murray, 2008: 147-163).

Finally, the work of Martin Lister, a first-class reference for the analysis of the social and cognitive effects of digital photography, must be highlighted. We would like to stress two fundamental ideas from his work. Firstly, digital photography has occurred at a socially very complex time that has made us forget that «it is, above all, a cultural object» (Lister, 1997: 17). Secondly, the digitalisation of photography constitutes a fairly logical evolutionary step in the information economy: as happens with capital on financial markets, photographs are exchangeable objects whose circulation reveals, above all, that «very important changes in photographic practices» are occurring (Lister, 2007: 272).

As can be seen, the research we present forms part of a tradition of studies of the uses of photography, which is particularly prolix in the Anglo-Saxon scientific sphere.

# 2. Methodological design of the research

In our opinion, it is necessary to discover the current perception of digital photography of our own group of students of communication science students when they begin their studies. For this purpose, we believed it necessary to design a survey to be completed by students on the three degree courses of audiovisual communication, journalism, and advertising and public relations. The initial idea was to extend the research to a total of ten centres, but positive responses were obtained from only four out of a total of 44 university centres offering communication studies in Spain. The sample we have finally been able to determine consists of first-year students at several universities, mentioned below:

- Universitat Jaume I (Faculty of Human and Social Sciences, Castellón): first-year students on the audiovisual communication, and advertising and public relations degree courses.
- University of the Basque Country (Faculty of Social Sciences and Communication, Leioa, Vizcaya): first-year students on the audiovisual communication, advertising and public relations, and journalism degree courses.
- University of Santiago de Compostela (Faculty of Communication Sciences): first-year students on the audiovisual communication and journalism degree courses.
- University of Malaga (Faculty of Communication Sciences): first-year students on the audiovisual communication, advertising and public relations, and journalism degree courses.

The creation of the questionnaire, consisting of twenty closed-answer questions, has been based on the type of questionnaire implemented in several of the studies already mentioned. It touches four basic aspects: material conditions for students taking photographs; questions on consumption habits concerning the taking of photographs; specific knowledge about photographic culture and perception and conceptualisation of photography among communication students.

The final sample consists of 467 surveys. To process all the information and carry out the interviews, we have had the cooperation of the heads of the aforementioned university centres<sup>4</sup>. Excel spreadsheets and the SPSS statistical data processing program have been used as computer tools.

Based on the details requested at the top of the survey, the following information has been extracted about the sample of students who have filled it in. Of the total number of people surveyed [467], 66% are women [308] and 34% [159] men. The distribution of students by degree courses is as follows:

UNIVERSITY	TOTAL	ADVERTISING	JOURNALISM	AUDIOVISUAL COMMUNICATION
University of the Basque Country	76	16	49	11
University of Santiago de Compostela	96	0	72	24
University of Malaga	156	83	27	46
Universitat Jaume I	139	74	0	65
	467	173	148	146

## 3. Results of the research

# 3.1. Material conditions for students taking photographs

Firstly, the general trend towards purchasing domestic digital cameras is confirmed, with a large percentage of students using compact digital cameras (78.59%), while the vast majority own neither a photochemical reflex camera (83.51%) nor a digital reflex camera (75.37%). Our attention is drawn by the fact that, out of the total of 467 responses, 153 students (32.75% of the total) state that they never or hardly ever take photographs, while the majority take between 1 and 5 a week (56.96%), with only a really small percentage taking more than 5 a week (10.29%). Meanwhile, half those surveyed never use retouching or photo processing programs and, among those who do, the majority use the Adobe Photoshop program. Finally, the

responses confirm the general trend for students to store photographs (61.7%), with only a quarter of students taking their photographs to the laboratory to be developed and few printing them at home (13.5%). The data examined makes it possible to confirm that the differences between degree courses and university centres are, in principle, not very significant.

## 3.2. Photographic culture consumption habits

The questionnaire then included different questions about the photographic culture consumption habits among communication science degree students. The study reveals that 51% of the students in the sample analysed never visit photography exhibitions. Meanwhile, when it comes to expressing their preferences for photographic genres on a 1 to 5 scale, a majority interest in artistic photography is shown (with an average score of 4.17 points out of 5), followed by advertising photography (with a score of 3.78). Press photography receives a score of 2.89 out of 5 points). There is no relationship between this difference in results and the students' courses.

We find the analysis of the responses on what is considered most important when it comes to judging the value of a photograph, also on a scale of 1 to 5 (5 = greatest interest) more significant. The highest rated aspect is "surprise", with 4.11 points on a 5-point scale; "composition" appears in second place (3.77 points), almost equal with "quality" (which, spelt out like this, referred to technical quality, although it is a difficult item to interpret as it is fairly ambiguous). The "viewpoint" appears with a score of 3.61 points, while "the historical value of the photograph appears in fourth place, with a score of 3.20 points, with the "economic value of the photograph" bringing up the rear (2.05). Something similar happens concerning students' preferences for photography in black and white (B/W) or in colour. A preference for colour photography (40.6%) as against B/W (33.1%) is confirmed, while the option "either" is favoured by only a quarter of students (23.6%).

Finally, the students state that they regularly use social networks such as Flickr, Facebook or MySpace to share their photographs, with a really very high percentage (81%), that is 4 out of every 5 students. By university centre, we should highlight the fact that between Universitat Jaume I (85.6%) and the centre where fewest students use social networks, the University of Malaga (77.6%), there is a difference of just 8 points, which does not seem a very great one to us. Concerning distribution by sexes, it is significant that the percentage of social network users is higher among women (86%) than among men (73.6%), a difference of 13 points.

## 3.3. Specific knowledge of photographic culture

When students were asked to mention 3 photographers whose work particularly interested them, their answers revealed a lack of clear references. Of all the photographers mentioned, the following names stand out in terms of the number of references from those surveyed: Annie Leibovitz (47), Chema Madoz (31), Robert Capa (21), David Lachapelle (15), Oliviero Toscani (14), Andy Warhol (11), Henri Cartier-Bresson (11), etc. In total, more than 150 names appear mentioned, many of whom are not actually photographers and many of whom either do not exist or have been invented.

Meanwhile, the students state that they largely know little about leading magazines in the field of photography studies, such as Enfocarte (96.8%), PC Foto (89.9%), Revista Foto (94.6%), the website Masters of Photography (95.3%) and La fotografía actual (website) (95.3%). Although the survey was carried out at the end of the 2008-09 academic year, when they had already studied at least one subject directly related to the field of photography, such as image theory, communication and audiovisual information, audiovisual media technology, etc., the students' memory of leading scientists such as Roland Barthes (33.6%), Susan Sontag (25.5%) and Walter Benjamin (22.1%) was quite vague. Finally, the confirmation that very few of those surveyed (17.6%) state that they have any idea about whether they know the rights and duties of a professional photographer in terms of the authorship and reproduction of a photograph is significant.

# 3.4. The perception and conceptualisation of photography among communication students

The last five questions in the survey focused on aspects related to the importance of photographic culture in relation to working as a professional communicator. The first significant aspect is that, despite some responses offered at other points in the survey, the majority of students (95.1%) stated that "having knowledge of photography could be important for their future professional development in the communication sphere» in any field. Meanwhile, when it comes to giving an opinion over whether "press photography has lost credibility as a result of the eruption of digital technologies in the field of photography", the students show themselves to be quite divided in their responses: while 54.8% state that credibility has been lost, 45.2% believe that digital technology has not robbed press photography of credibility. Thirdly, a very large majority of students (79.9%) consider that "the quality of photographic production, in general, has undergone a substantial improvement with the application of digital technologies in the field of photography". Fourthly, the majority of students (77.3%) reject the idea that "thanks to the technical improvement in photography, with the arrival of digital photography, it will no longer be necessary in future to have professional

photographers, as it is becoming increasingly easy to obtain good results at a technical level». Finally, the vast majority of the group of students surveyed (86.7%) reject the idea that "the improvement of the quality of digital video and the generalisation of its use, as well as the growing influence of other forms of entertainment, such as video games, Internet use, etc., point, in the medium or long term, to the end of photography as a form of expression and communication».

In this way we complete the presentation of the results of the fieldwork we have carried out among communication science students. We now propose to make an assessment of selected aspects of the research and draw a series of conclusions.

# 4. For discussion: assessment of the uses of photography

#### 4.1. Main reflections for debate

From the results presented above, we consider it necessary to pause and consider certain responses that deserve some kind of qualitative assessment. In our opinion, it is worrying that, among a group of communication science students from four university centres, there should be 27.42% who state that they hardly ever take photographs and 5.33% who never take photographs. This is an indication of quite a widespread perception among the students (at least in practice) of the unimportance of taking photographs for their future professional development as communicators.

Meanwhile, the fact that 80% of communication students never use computer programs to create digital albums draws our attention. We relate this with the generalised trend towards accumulating captured photographs in computers (61.7%) without preparing them to be shown to other users, at least not in traditional album format. This situation coincides with the general trend towards not developing or printing photographs, largely for financial reasons. This was detected years ago by the principal manufacturers of photographic products – Kodak, Fuji, Nikon, etc.– (in their annual reports), by consultancy firms such as GFK and by other agents in the photographic sector (Soler Campillo, 2005, 2007).

In our judgment, it is very worrying that 51% of students never visit photographic exhibitions. It should be pointed out that the centre where there is the greatest percentage of students who never visit photographic exhibitions is the Universitat Jaume I, with 59.7%, whereas at the University of Santiago de Compostela this percentage is 57.89%, at the University of the Basque Country it reaches 47.92%, and at the University of Malaga, the percentage falls to 41.67%. There is a difference of 20 points between Universitat Jaume I and University of Malaga, which is quite a considerable one.

In this sense, we believe that the disparity and, in many cases, incongruence of their responses when they were asked to mention three photographers whose work particularly interested them, points towards a worrying lack of photographic culture among communication science students, which must be related to the lack of general culture that we have been seeing for years. Meanwhile, it also seems worrying to us that the majority of communication science students are not interested in all photographic genres, as we believe the average should have been higher. The survey has not made it possible to establish a correlation between the speciality studied and interest in the most closely related photographic genre (photojournalism, advertising photography and artistic photography and their respective specialities), which we relate to the lack of strong motivation among communication science students for their own courses.

The analysis of the answers to the question about what is considered most important when it comes to judging the value of a photograph deserves particular attention. The fact that the majority give the highest rating to "surprise" (4.11 points out of 5) is a response that must be related to the society of spectacle in which we live. This figure is above the value of "viewpoint" (with 3.61 points out of 5, which seems a worryingly low score to us for future communication professionals).

With the formulation of the question about students' preferences for B/W or colour photography, we expected to find a very high percentage of responses in the "either" option, as this is a choice between representational options making it possible to communicate very different information, emotions etc. depending on the context and the specific communication objectives. The fact that the "either" option should have been picked by just 23.6% of those surveyed points to the low cultural level of our students in terms of visual culture.

# 4.2. The conceptualisation of photography among communication students

The analysis of the answers to the last questions on the questionnaire deserves particular attention. Firstly, despite the fact that many answers might make one think of the students' lack of interest in photography, the vast majority of communication science students in any of the three specialities perceive that the study and knowledge of photography are very important for their future professional development. It must be remembered, in this sense, that many communication science curriculums at Spanish universities do not include the study of photography as a compulsory subject.

Secondly, there is a division of opinion concerning the idea that press photography has lost credibility in information terms as digital technologies have burst on to the scene in this field. In our opinion, this lack of

agreement in the answers could be interpreted two ways: either the perception of the manipulation capacity of digital technology in photography is not sufficiently widespread or it is considered that, as a representational device, all photography, whether it is photochemical or digital, always involves a form of manipulation of reality.

Thirdly, although a majority of students (79.9%) coincide in indicating that digital photography has broadly achieved improvements in photography, a large majority of those surveyed (77.3%) believe that the digitalisation of photography is no threat to the profession of photographer and that these professionals should survive in communication sectors.

Finally, quite a large majority of communication students (86.7%) do not have the perception that photography is going to disappear as a form of expression differentiated from other media. This contradicts the supposedly widespread belief in the death of photography, an expression belonging to a certain current of sensationalism of which the academic world is not entirely free.

## 4.3. Limits of the research carried out

The following aspects should be highlighted as main problems involved in the research. Firstly, the survey has been carried out in April/May 2009, that is, at the end of the academic year, so it does not offer us information about students' levels of prior knowledge, but rather what they have learned during the first year of their degree courses.

Secondly, as their curriculums are not homogeneous, we find that, depending on the university, students may or may not have studied photography-related content in the first year. Even in core subjects with content directly related to «Image theory» or «Audiovisual media technology» it is possible that the study of photography has been purely tangential. In some cases, students may have studied an optional subject with content directly related to the photographic medium. In the 2008-09 academic year, the journalism and audiovisual communication degree courses at the University of Santiago de Compostela contain, in the first year, the year-long core subject "Communication and audiovisual information"; at the University of the Basque Country students on the three degree courses have studied the one-semester core subject «Audiovisual media technology»; at the University of Malaga the three degree courses include the year-long core subject «Image theory, history and technique», while at the Universitat Jaume I audiovisual communication and advertising and public relations students take the compulsory year-long subject «General image theory», and they may also study an optional subject called «Introduction to photographic theory and technique». On new degree courses, this is likely to become even more complex, with very considerable changes in all curriculums. We are fully aware of these problems, but, beyond them, we consider that this field work constitutes a valuable source of information about the level of knowledge of communication science students, as we have been able to show. This research has been approached as a pilot study in the form of a bank of tests for future application in better conditions, once the new degree courses are fully established (in about 2014).

## 4.4. Conclusions

By way of a final summary, a majority of current communication science students have adopted digital photography, are users of social networks, have a low level of visual culture and have little motivation to study or look in depth at the field of photography but they are aware of the importance of studying photography for their future professional development.

Meanwhile, the research makes it possible to see, not without a degree of frustration, the low level of visual culture these students have when they begin their studies (even at the end of their first year, which is even more worrying). It is clear that, based on the lack of visual culture among our communication students – a vocational, strongly motivated group – we have an education system which, even today, in the age of the image, continues to ignore education about/with images. This situation is still more alarming in the field of the photographic image, historically very much ignored in all educational environments, even universities, but which should be promoted from infant school (Granado, 2008) and which could be very effective in visual education (Alfonso Escuder, 2002).

In fact, it can easily be confirmed that few studies of photography are published in scientific journals, that very few PhD theses are written on photography and that photography subjects are present on current journalism, audiovisual communication and advertising and public relations curriculums only in very isolated cases at most Spanish universities. This contrasts with the considerable volume of photographic production and activity that surrounds us (exhibitions, publication of catalogues, presence and importance of photography in newspapers and magazines, on websites, etc.), but also with the more than 175 years of history of the photographic media and with the considerable economic and commercial activity driven by the photographic sector in our country and throughout the world.

Along these lines, we must remember the genealogical value of photography when it comes to historically conceptualising the contemporary image. In this context, photography continues to occupy a very important position. We do not believe it is possible to approach the study of the cinematic, televisual and videographic

image seriously and rigorously without starting from a solid base of photographic knowledge (composition, photometry, colorimetry, densitometry, etc.). In our judgment we must accept that photography has to play a much greater role on communication science degree course curriculums if we want to train more competitive professionals.

Carrying out research of this nature makes it possible to discover the cultural level of communication science students as both consumers and as creators of images. In our opinion, the critical analysis of the results offers some keys on how to focus teaching in the subjects making up the degree courses we are involved in. If this type of study was carried out at a broader sample of educational centres and if it was expanded to other aspects of communication (cinema, press, radio, advertising, etc.), the information extracted would be very used for the academic management of degree courses and even for educational administration. It is clear that we cannot remain inactive in the face of the clearly low cultural level and deficient audiovisual competence of students in our faculties, even at the end of the first year at university.

Ultimately, this small study we have presented has helped us to become aware of the important educational deficits in photography suffered by our students and to take the appropriate measures to correct these problems, particularly at such a complex and delicate time, when the new degree courses are being implemented in the context of the creation of the European Higher Education Area (EHEA). It seems clear that such problems cannot be eradicated without all levels of the education system working together. In this context, universities can provide our resources, capabilities and knowledge to promote education in/about the communication media.

#### **Notes**

- <sup>1</sup> See the website www.pmai.org (16-03-2009).
- <sup>2</sup> See the website www.cipa.jp/english (16-03-2009).
- <sup>3</sup> See the website www.gfk-emer.com (16-03-2009).
- <sup>4</sup> We would like to thank those responsible for degree courses who have cooperated with us in handing out the surveys: Miren Gabantxo (University of the Basque Country), Xosé Soengas Pérez (University of Santiago de Compostela), Juan Antonio García Galindo (University of Malaga) and Andreu Casero Ripollés and Francisco Javier Gómez Tarín (Universitat Jaume I), as well as the Universitat Jaume I research student Elisabeth Trilles Tarín for her inestimable help in processing large amounts of information.

# Support

This study has been carried out with the aid of the "New Trends and hybridisations of contemporary audiovisual discourses" research project, financed by the 2008-2011 round of National R+D+i grants from the Ministry of Science and Innovation, with the code CSO2008-00606/SOCI, directed by Dr. Javier Marzal Felici.

## References

Alfonso Escuder, P. (2002). La mirada desconfiada: reflexiones en torno a la obra de Joan Fontcuberta. Comunicar, 19: 152-155.

Barthes, R. (1990). La cámara lúcida. Nota sobre la fotografía. Barcelona: Paidós.

Bazin, A. (1990). Ontología de la imagen fotográfica, en ¿Qué es el cine? Madrid: Rialp.

Belting, H. (2007). Antropología de la imagen. Buenos Aires: Katz Ediciones.

Bourdieu, P. (2003). Un arte medio. Ensayo sobre los usos sociales de la fotografía. Barcelona: Gustavo Gili. Chalfen, R. (1987). Snapshot Versions of Life. Bowling Green, Ohio: Bowling Green State University Popular

Cox, A. M.; Clough, P.D. & al. (2008). Flickr: a fist look at user behavior in the context of photography as serious leisure. IR Information Research, 13-1. (http://informationr.net/ir/13-1/paper336.html) (15-01-2011).

Granado Palma, M. (2008). La otra educación audiovisual. Comunicar, 31; 563-570.

Lister, M. (Ed.) (1997). La imagen fotográfica en la cultura digital. Barcelona: Paidós.

Lister, M. (2007). A Sack in the Sand. Photography in the Age of Information. Convergence: The International Journal of Research into New Media Technologies, 13-3; 251-274.

Marzal, J. (2007). Cómo se lee una fotografía. Interpretaciones de la mirada. Madrid: Cátedra.

Mitchell, W.J. (1992). The Reconfigured Eye. Visual Thruth in the Post-Photographic Era. Cambridge, Massachussets: MIT Press.

Mirzoeff, N. (2003). Una introducción a la cultura visual. Barcelona: Paidós Arte y Educación (1ª Ed. 1999).

Murray, S. (2008). Digital Images, Photo-Sharing, and Our Shifting Notions of Everyday Aesthetics. Journal of Visual Culture, 7-2; 147-163.

Ritchin, F. (2009). After Photography. Nueva York: W. W. Norton & Company, Inc.

Spence, J. & Holland, P. (1991). Family Snaps: the Meaning of Domestic Photography. Londres: Virago.

Soler Campillo, M. (2005). Estructura del sector fotográfico: análisis de la actividad económica y de las políticas de comunicación de las empresas de fotografía en la Comunidad Valenciana. Castellón: Universitat Jaume I. (www.tesisenxarxa.net) (15-01-2011).

Soler Campillo, M. (2007). Las empresas de fotografía ante la era digital. El caso de la Comunidad Valenciana. Madrid: Ediciones de las Ciencias Sociales.

Van House, N.; Davis, M. & al. (2005). The Uses of Personal Networked Digital Imaging: An Empirical Study of Camephone Photos and Sharing. Computer/Human Interaction 2005 Conference. Portland, Oregon. Estados Unidos. (www.chi2005.org) (28-02-2011).

Van House, N. & Ames, M. (2007). The Social Life of Cameraphones Images. Computer/Human Interaction 2007 Conference. San Diego, California. Estados Unidos. (www.chi2007.org) (28-02-2011).

