

# VISUAL IMPACT IN THE DIGITAL PRESS

a spanish empirical research

Copyright © 2010  
SBP Jor / Sociedade  
Brasileira de Pesquisa  
em Jornalismo

JOAN FRANCESC FONDEVILA GASCÓN  
*Universitat Abat Oliba CEU*

## ABSTRACT

Visual resource (photography and video) inclusion in digital journalism is obtaining importance in the multimedia area. The principal resources of digital press are multimedia, hypertext and interactivity. Multimedia is in an initial process of evolution. The objective of this research is to observe empirically the use of visual resources by the digital *pure player* press. These media try to take advantage of the new multimedia possibilities in the development and presentation of the contents. We have analyzed empirically video and photography inclusion in the multimedia framework (text, photography, video, audio, infograph and animation programs) in four digital newspapers (*Libertad Digital* and *El Plural*, in Spanish, and *Vilaweb.cat* and *e-Noticies*, in Catalan) analyzed according to journalistic genres. **Key words:** Video. Photography. Multimedia. Digital journalism. Journalistic genres.

## INTRODUCTION

### The visual role in digital journalism

The digital press is undergoing consolidation in the communication world. Internet and the new visual and digital reality are changing the creative conceptions. The evolution is exponential (GILDER, 2002; SALAVERRÍA, 2005). The visual impact and the change in the journalistic genres are related to the combination of all the systems of signs of the previous journalistic languages in a unique support. Internet offers the possibility of coexistence between the traditional text, fixed images and images in movement (visual), sound and other elements, even in the same message. The predictable trend has to be toward more intensive multimedia use (FONDEVILA GASCÓN, 2010).

The multimedia resources are evolving in parallel with digital journalism (PICARD, 2000). Initially, the textual contents and the fixed images (photography) went on to the Internet without major transformations. Nowadays, video, the animation of images and

infograph and sound strongly support the content units in the scenario of mediamorphosis and media mitosis (FIDLER, 1997) that is leading to new concepts like blogosphere and the weblogs (HOOKWAY, 2008). Multimedia creates two meanings in the area of the communication sciences (SALAVERRÍA, 2001). The first one involves the languages (informative messages, presented or perceived as unified across multiple media), and the second one is the media (the multiple intermediaries that can take part in the transmission of an informative product). For some authors, in multimedia language the content units should transmit in digital format and with interactivity by the users (JANKOWSKI & HANSEN, 1996). Anyway, the singular thing of multimedia is the synchronous and unified integration of contents expressed in diverse codes. The convergent digital technology and telecommunications generate a communication increasingly ubiquitous, interactive and with greater capacity for transmission of information. Multimedia content has to have a communicative unit. It is the characteristic of some informative products of shaping a unique meaning by the harmonization of diverse informative elements communicated across different codes. The positive aspects are the non-redundancy between the messages expressed across every code, the complementarities of these messages in the movement towards a common informative goal or the transfer of the prominence to the code that in every case should be the most pertinent.

Fixed images are present in the principal cores that contain the elaborated statement of the events. They are used to create galleries of photos that extend notably the graphical testimonies, both of the facts and of the process of research. The photo galleries add to the set of links of the documentary type that form this complementary core of the different informative pieces. The animated and interactive infograph constitutes a multimedia resource increasingly used by its ability to explain complex processes, spatial and temporal dispositions. Video is the least exploited format, but it increasingly receives dominant spaces in the journalistic multimedia accomplishment.

Since the end of the twentieth century (ARMAÑANZAS & DÍAZ NOCI & MESO, 1996), visual has been acquiring more significance. It accompanies parallel processes, like the irruption of participative journalism (GILLMOR, 2004). The first experiences of world digital journalism (usually placed in 1994 and 1995) had two versions of visualization, the hypertextual one (HTML) and that of the whole page (PDF). The speech of the cybermedia, constructed with messages not always thought of as for the media in the Internet, is new and dominated

by the adjustment of the productive *modus operandi* of the traditional media. The current tools offer a plethora of ways of organizing and presenting the information. They facilitate the construction of open messages, which integrate text, sound, image, databases or possible programs, which generates multiple meanings for every act of reading.

If we compare them with other media experiences, digital newspapers born only on the Internet (we call them *pure players*) are developing and are acquiring relevant audience ratios. Furthermore, there are digital newspapers on the Internet that turn up as a digital branch of the traditional media (BURKE & BRIGGS, 2002). Despite the increase of payment for contents (FONDEVILA GASCÓN, 2008a) and the cases of *The Wall Street Journal*, the *Financial Times* or the Orbyt platform<sup>1</sup> (*El Mundo*), the trend in the Spanish case in 2011 is toward free consultation of the contents and consolidation of the unified newsrooms that elaborate contents for the traditional newspapers on paper and for the digital ones. In this context, the concept of coepetence appears, meaning collaboration and competition, among traditional press and digital press media.

One focus of this collaboration in the multimedia spectrum is that occurring between telecommunication operators (and in general the technological sector) and content producers, guided by digital journalism. A challenge in the lucrative synergy between telecommunications and journalism is the network and content integration. The establishment of access quotas (the *premium* system) for the readers is evolving as a revenue system. The handicap of the media and, in general, the Internet business, is the low profitability of the advertising. There are also barriers to charging for contents (we have a lot of examples, like music, the cinema or the news). The *Financial Times* model of partial payment permits the reading of a certain amount of articles per month by all the readers, but from the fourth article on it is necessary to register (LEIVA, 2009). The strategy is centered on the unification of design, editorial and business.

This unifying option is being studied by other media to avoid difficulties of profitability in the multimedia convergence. The strategies to obtain profitability in online journalism (MINGS & WHITE, 2000; ONLINE PUBLISHERS ASSOCIATION OF EUROPE, 2004) have generated two models. The first one is the *freemium* model (WILSON, 2006), in which there exists the offer of two versions of the online service, the basic one free (with fewer applications or scope, less suitability and low quality) and the *premium* version. This model has been adopted by *The Wall Street Journal*: the same product has several levels of quality and the price of each one depends on the attributes (*versioning*). The second model is

the *utility* or *metered* model (*Financial Times*). It has similarities with public utilities, because it is based on measurement of consumption and variable collection. In the *freemium* model, the editors of every section have to decide which content units are free and which are not. Normally, the *premium* contents are exclusive, useful and developed by selected authors, with a progressive value of local news (AHRENS, 2007). The introduction of visual and multimedia elements in these paid contents would be an added argument to stimulate the demand. It is clear that the readers will not pay if the digital journals offer the same contents as the free newspapers. Leiva (2009) establishes some ways to assure good payment solutions: introducing added value to overcome the resistance, forgetting the previous failures, adopting a correct micropayment system (per unit, subscription, packages of products or bundling, and time of utilization), making subscriptions, ending cannibalization (the Internet promotes an effect of competitive displacement in the area of the traditional news), obtaining agreements on an industrial scale and not restricting too much the copies.

Achievement of profitability is the aspiration of the digital newspapers. The inclusion of more multimedia sources could be a system for attraction. The quality of the contents and the classification in the deliveries are main factors, but the key in the future will be the quality in the reception of the products on the Internet. The content units will be very dense, loaded in bits per second. The increasing amount of multimedia inclusions will require high percentages of guarantees depending on the need of the reader. The service level agreement system (SLA) and the committed information rate (CIR) are being studied by the press holding companies and the telecommunication enterprises. The value of the Information and the Knowledge Society and the Broadband Society (FONDEVILA GASCÓN, 2008a) depends on the content creators (Law of Journalistic victory, GILDER, 2002). It continues with other steps: aggregation and presentation, infrastructure of rendering of services, IP Multimedia Subsystem (IMS), network and device used for reception. The journalistic genres are adapting themselves to the digital environment (DÍAZ NOCI, 2004).

The link between journalism, telecommunications and computing has positive effects for all three disciplines and for the multimedia and visual applications. Digital journalism has forced the development of the technology applied to the digital media. Hypertext, interactivity and multimedia characterize this new ecosystem. Multimedia allows the opportunity to play with a lot of resources in the same content

unit: text, photography, video, interactive graphs, audio and animation programs (like Java or Flash applets), among others, ordered, juxtaposed or integrated. The digital press uses criteria and journalistic skills. The possibility of complementing the contents with audio, video or other multimedia resources implies the need to develop empirical analysis and to remodel the classical journalistic genres or to create new genres (FONDEVILA GASCÓN, 2009a). The goal of this research is to observe empirically the use of visual resources by the digital *pure player* media. These media try to take advantage of the new multimedia possibilities in the development and the presentation of the contents.

The cybernetic language has five characteristics (DÍAZ NOCI & SALAVERRÍA, 2003). The first one is multimedia (the writing is mixed with sound and image in motion), the second one is hypertext (navigation from nodes), the third one is instantaneousness (the present is cumulative and not substitutive, successive and sequential like in the other media), the fourth one is interactivity (the user becomes an active element in the communicative process) and the fifth one is universality (everyone with an Internet connection could have access to the digital content units). Hypertext and multimedia make possible the hypermedia role in the digital press. The classification of the journalistic genres in the digital press is very new. We can find informative genres (news), interpretive genres (report and chronicle), dialogic genres (interview, forum or debate, chat and survey) and argumentative genres (comment and opinion). All the dialogic genres are interactive, but not all the genres that use interactivity are necessarily dialogic (DÍAZ NOCI, 2004). There are new genres created by the Internet's multimedia journalism possibilities, like multimedia report (MARRERO SANTANA, 2008). To make the statistical study we have used a traditional and debatable proposal (MARTÍNEZ ALBERTOS, 2000), adapted to digital journalism. Scientifically it is prudent to wait for the consolidation of a long-term taxonomy. We have tended to utilize the classical theory of the journalistic genres, which considers three types of genres: informative (news), interpretive (report, chronicle, interview) and opinion (editorial, comment, opinion article, column, letter to the editor, critical article, cartoon and blogs). The hybridizing process (SALAVERRÍA, 2005) could generate new genres for digital journalism in spite of the most conservative concept of transposition (CANTALAPIEDRA, 2004), the mechanism that leads to a text or to a genre jumping from one language to another or from one way to another. Hypermedia takes advantage of connectivity, multimedia integration and convergence. In the inclusion of multimedia resources, digital newspapers have in mind the broadband

aspects, because the collapse of the connection could provoke a dramatic situation for the contents producers and for the readers. Speed and reliability have to be compatible, and the language has had to adapt to transmit the information through the network, becoming a unifying, plural and multimedia language.

We consider it necessary to establish the degree in the use of multimedia resources by digital newspapers. This is produced by the trend of the readers to discharge contents in a cross-platform, multiterminal and always on dynamics. Technological convergence affords the readers a lot of information (cross-platform). Computers, television, mobile telephones or electronic agenda are favored by the new technological standards (FONDEVILA GASCÓN, 2009b). They are interchangeable in the hypermedia framework, in which the infomediary figure appears (ONUDI, 2003). Infomediary connects the offer of market with the demand of solutions requested by the consumers.

The European Union (EU), aware of this and inspired by precedents like the White Book of Jacques Delors and the Bangemann Report, has created a social, economic and cultural system that places the contents (and the visual ones) in the apex of a theoretical productive pyramid. The applications of the digital society are centered on the Welfare State (e-learning and e-health) and on business on the network (e-business, e-commerce or e-banking), whose purpose is to promote teleworking. And at the head of this structure remain the creation of contents and the inclusion of visual items, since the Internet depends on these, on the creation and on the creators of contents. Within this creation of contents, we might define journalism as an angular axis (FONDEVILA GASCÓN, 2008a).

Journalism's inclusion of video depends on the different genres, whose adaptability reflects the energy and quickness of digital communication (FONDEVILA GASCÓN, 2009b). Thanks to the processes of convergence and digitalization, the profitability and productivity of every content unit evolves in an exponential form. The symbiosis between visual communication, technology and telecommunication exercises an influence on the way of producing and distributing contents.

The Delors Book places emphasis on the audio-visual mass media and on the culture, now under the protection of the multimedia and hypertext. The development of the European market for digital and interactive contents is based on the quality of the new mass media. The same spirit moves to the Latin-American area (FONDEVILA GASCÓN, 2009c). The European authorities corroborate the unstoppable expansion

of the content sector of the interactive media, both in cultural policies and in the mass media, but they admit that it continues largely in the initial phase regarding investment and income, and therefore more attention to the above-mentioned contents, including audiovisual ones, is necessary.

There are few products in which there really is a harmonization, a balance between the multimedia sources. Juxtaposition is the key actor of current digital journalism. The ideal solution would be multimedia by integration, which should offer different routes to the reader to obtain information. It is not enough to insert the video format as the basic platform in the mounting of the principal cores. Hyperlinks would be necessary, from within, with other resources, in a conception nearer to the complexity of a network. Until now it was necessary to distinguish between the diverse written and audio-visual codes of transmission. The content that comes to us through the Internet unifies the different languages into one single language. It adds to the current possibilities those of the hypertext. We will use all the languages that we already know to produce a plural and unifying one - multimedia. It is indispensable for the digital press. In this new multiple language, video and visual and iconic elements are essential.

The exchange of experiences, the availability of financial support adapted to guarantee the development of creative contents and the distribution and marketing of interactive European contents are the European Union's mission over the long term. The development of the European market for interactive and multimedia contents depends on the quality of the content of the new mass media (with the digital press at the top), combining artistic freedom, creativity and innovation, as well as linguistic and cultural diversity, consumer protection and promotion of the access of all the citizens to the interactive media and of the increased attention that the private and public sector give this industry, especially to attract new investments. The EU must study the way in which the industries of interactive and multimedia contents might take advantage of the creation of networks to foster the development of competition, taking into consideration that interactive contents raise specific challenges regarding existing national or community actions with regard to development, distribution and marketing; it should study the way in which interactive contents should be used for fomenting and spreading Europe's cultural and linguistic diversity; and study the way in which the interests of the consumers must be borne in mind. The EU proposes to respond to four big challenges: increasing the speed of the broadband services in Europe; stimulating new services and online

contents; promoting devices and the related compatible platforms; and making the Internet safer with regard to fraud, harmful contents and technological failures.

### **The use of visual resources: an empirical analysis**

The utilization of visual resources by the digital press in the world is an original study subject. Communication sciences have not yet focused on an empirical point of view in this new area. Statistical bases are required to generate solid conclusions and to confirm our working hypothesis: the use of visual resources in the digital newspapers is high but capable of improvement. The study is applied and empirical. We obtained evaluative results. The research is sectional. It uses primary sources. Methodologically, the study is exploratory, descriptive and explanatory. It has a quantitative character, because we try to show the degree of use. The establishment of the causes requires a qualitative approximation. We have analyzed four digital newspapers (two Catalan, two Spanish), representative in Catalonia and in Spain, during March 2009. The Catalan journalistic industry is in a hybrid traditional-digital stage (FONDEVILA GASCÓN, 2008b). We chose, like in the Spanish case, digital *pure player* newspapers, born on and for the Internet. The selected digital journals are *Vilaweb.cat*, *e-Notícies.cat*, *EIPlural.com* and *Libertaddigital.com*.

The selection of the analyzed media was decided by their representativeness according to the audience data of OJD Interactive for the media in Spanish and in Catalan. The analyzed newspapers must be controlled by OJD. In comparison with other digital media, they have a representative audience. Other digital media show symbolic and not representative audience figures. Digital versions of the traditional print media (free or not) or digital branches of audiovisual media were rejected.

The objective of the research was to analyze the use of visual resources (photography and video) in the four digital newspapers from the content units on the front page. The contents corresponding to the genres were classified in informative, interpretive and opinion. The parameters were the next: text (characters with spaces), photography, video, audio (declarations without video), infograph and animation programs (Java or Flash applets). We considered photography and video as the main visual parameters. The data obtained and classified generated the averages. The study aimed to discover whether the media used multimedia resources, and to what degree. Considering the use of the text in the style of the traditional newspapers, we established a global



average of use of the rest of multimedia resources in each newspaper, the addition of visual resources and the average of all newspapers.

Table 1: Use of visual resources in digital newspapers (informative genres)

Digital newspaper	Photography	Video	Visual resources (addition)	Audio	Text	Infograph and animation programs
Vilaweb.cat	1,50	0,07	1,57	0	1966,35	0,01
e-Notícies	0,82	0,23	1,05	0	1397,40	0
ElPlural.com	0,74	0,06	0,80	0	2610,19	0,01
Libertad Digital	0,72	0	0,72	0	2312,22	0,01
Mèdia	0,94	0,09	1,03	0	2071,54	0,01

Source: Statistical research of the Group of Research and Analysis of Digital Journalism (2009), directed by the author of this article

The data regarding informative genres (Tables 1 and 2) show a prominence of photography. The Catalan digital newspapers are in the top positions in the use of photography. *Vilaweb.cat* includes 1.50 pictures for each content unit, and *e-Notícies.cat* 0.82. The average of the Spanish newspapers is less than the Catalan figures. We detect that the *pure player* journals follow the analogical tradition, because they make intensive use of the photographic resource. However, video and sound (differential factors in relation to traditional journalism) show low ratios of use. In video, *e-Notícies.cat* is the first digital newspaper: each content unit contains 0.23 insertions. *Vilaweb.cat* contains 0.07 insertions, and *ElPlural.com* 0.06. *Libertad Digital* does not use video. Audio is not used. The infograph and animation programs set up as a resource is only used by *Vilaweb.cat*, *ElPlural.com* and *Libertad Digital*, with a 0.01 average per unit. *Vilaweb.cat* and *e-Notícies.cat* are the leaders in the use of multimedia resources, but always with conservative numbers. The two Spanish digital newspapers lead in the number of characters of text. The addition of photography and video shows 1.03 insertions per content unit, an improvable but respectable number.

We must bear in mind digital journalism creates a new (and more visual) informative model, which combines aspects from the traditional printed press, radio and television. The digital press incorporates images in motion (through videos or in movement graphs) and sound. Multimedia and visual resources acquire a great prominence. This implies

possibilities of return on the investment (GARCÍA DE TORRES et al., 2004). The multimedia concept has assumed a process that has led it in the relation between journalism and communications sciences, audiovisual communication, computer sciences and telecommunications.

Multimedia works depend on the genre analyzed. In the content units of the informative genre, the utilization of sound and video is usual when it improves the quality of the information. It is indispensable for the correct comprehension of the contents when text or photography are not enough. These elements could add value to the information. Sound complements images or occupies a singular space. The audiovisual sequences are usually short, but as we confirm here, the inclusion of video is not frequent. One of the causes could be the costs which this implies. Another cause is the time of discharge and the need for the digital newspaper to establish an SLA agreement with the telecommunications operator. Broadband is a determining factor (FONDEVILA GASCÓN, 2009c) in the inclusion and reading process of multimedia elements.

Another key factor in the explanation of the moderate inclusion of video in the production of online news is immediacy. Digital newspapers offer a service of permanent updating of the information. This generates a culture of principal news, which causes the news to be published when it is produced. This fact means that often the professional journalist does not have time to include photography or videos. This gives rise to a first few items of information that the journalists and the receivers consider to be the first sketch. Some of them will turn into big topics, and others will not be mentioned again.

Table 2: Use of visual resources in digital newspapers (interpretive genres)

Digital newspaper	Photography	Video	Visual resources (addition)	Audio	Text	Infograph and animation programs
Vilaweb.cat	1,16	0,12	1,28	0	1581,76	0,09
e-Noticies	0,75	0,06	0,81	0	1275,43	0
ElPlural.com	0,94	0,09	1,03	0,02	3597,85	0
Libertad Digital	0,72	0	0,72	0	2652	0,13
Média	0,89	0,07	0,96	0,01	2276,76	0,06

Source: Statistical research of the Group of Research and Analysis of Digital Journalism (2009), directed by the author of this article

In the analysis of the interpretive genres (Table 2), the addition of visual sources (0.96) is below that of the informative genres. *Vilaweb.cat* confirms the profuse use of photography. Its average (1.16) is lower than in the informative genres, but leads *ElPlural.com* (0.94), *e-Notícies* (0.75) and *Libertaddigital.com* (0.72). The use of photography in the interpretive genres is less than in the informative genres. In the case of video, *Libertad Digital* follows its path in the informative genres and does not include any. *Vilaweb.cat*, *ElPlural.com* and include this multimedia resource. *E-Notícies.cat* shows a clear drop with relation to its informative genres levels. *ElPlural.com* and *Libertaddigital.com*, followed by *Vilaweb.cat* and *e-Notícies.cat*, are the digital newspapers which devote more space to text. They shows a brief and direct style. infograph and animation programs are used by *Libertad Digital* (0.13) and *Vilaweb.cat* (0.09), in interpretative genres much more than in informative genres. However, *ElPlural.com* is the unique media that uses audio, with a token average (0.02).

In the interpretive genres, we observe a process of natural adaptation to the digital support. This guides some characteristics. One of these is multimedia (the union of different supports in the same platform); the sequence break (thanks to hypertext, the reader can make random readings); the periodicity break (the interpretive genres do not give priority to current questions; they adjust with greater facility to the cyberjournalistic ideal of constant updating and completing of the information); interactivity (the adjustment of the interpretive genres to the Internet possibilities is high, because of the hierarchical structuring of a series of documents to which the public has access depending on the preferences involved in using links); legibility (with the support screen giving priority) and the HTML code (the quality of the digital journalistic interpretive item will increase, depending on the good use that it makes of the possibilities of edition and of certain computer complementary applications in the basic HTML code).

The introduction of multimedia in the reports, with hypertext and interactivity, generates for the interpretive genres the reconfiguration of some of the traditional features and the introduction of other innovative (usually visual) elements. The characteristics of hypertext give great importance to the interpretive genres (especially the report) as a way of presenting the information connected with a series of complementary information items that can disseminate without limits of space or support. For the journalistic chronicle, the appearance of weblogs (the citizen journalism of Gillmor) provides a new focus for analysis, adding

to its presence in the conventional and professional digital publications. We find temporal and space fixations, and the role in these genres for the journalist as author of personalized information. This author participates or interpretes the facts he reports. The digital interview (with products like the online interview) will utilize words, signs, voices and images. The interview will approach the concept of media convergence.

Table 3: Use of visual resources in digital newspapers (genres of opinion)

Digital newspaper	Photography	Video	Visual resources (addition)	Audio	Text	Infograph and animation programs
Vilaweb.cat	0,58	0,10	0,68	0,01	1891,38	0
e-Noticies	0,37	0,01	0,38	0	1824,59	0,12
ElPlural.com	0,99	0	0,99	0	3841,71	0
Libertad Digital	0,63	0,03	0,66	0	4344,86	0,01
Média	0,64	0,04	0,68	0	2975,64	0,03

Source: Statistical research of the Group of Research and Analysis of Digital Journalism (2009), directed by the author of this article

The use of the visual resources in the argumentative and opinion genres (Table 3) is less than in the other groups of genres. The Spanish digital newspapers take advantage of the use of photography. *ElPlural.com* obtains an average of 0.99 (above its levels in the interpretive and informative genres). *Libertaddigital.com* posts 0.63, below its levels in the informative and interpretive genres. The use of photography is moderate in *Vilaweb.cat* (0.58) and *e-Noticies* (0.37). In the Catalan newspapers, the presence of photography is above that shown in the other genres. *Vilaweb.cat* includes video in opinion genres more than in the informative genres. On the other hand, *e-Noticies.cat* uses it less than in the other genres. The digital newspaper *Libertaddigital.com* uses video (0.03) for the first time. *ElPlural.com* uses video more in interpretive genres than in informative genres, and avoids it in the argumentative genres. Regarding text, *Libertad Digital* uses more characters than in the other genres. *ElPlural.com* is another intensive user, and *e-Noticies* and *Vilaweb.cat* are somewhat behind in this respect. *E-Noticies.cat* and *Libertaddigital.com* use infographs and animation programs. *Vilaweb.cat* uses symbolically audio (0.01 on the average) for the first time in the statistical sample.

For opinion or argumentative genres, the Internet generates a new model in regard to the management of rationalization and emotion. The reader can express his position rapidly before any argumentative exposition by the media, and especially by observing rapidly the opinion. The possibility of visual inclusions improves the traditional relationship between newspaper and reader.

Table 4: Overall average of visual resources use (photography and video)

Digital newspaper	Overall average
Vilaweb.cat	1,18
e-Notícies	0,75
ElPlural.com	0,94
Libertad Digital	0,70
Média	0,89

Source: Statistical research of the Group of Research and Analysis of Digital Journalism (2009), directed by the author of this article

The overall average use (Table 4) of visual resources (photography and video) is near one per item (0.89). It is a high level, which would be improved in the future. After the text, the next most used resources are photography, video, infograph and animation programs, and audio. If we establish an overall average eliminating the text, *Vilaweb.cat* shows 0.24 on the average, *El Plural* 0.19, *Libertad Digital* 0.14 and *e-Notícies* 0.10. The general average is low: 0.17. In comparison, the use of photography and video is remarkable. This statistical research confirms the initial hypothesis: visual resources are the leader in the use of multimedia resources, with a high but improvable number. The possibilities for intensification of the use of visual resources in the digital press are clear. The digital journalistic language, which started like that of the traditional newspapers, utilized at the beginning the linguistic, paralinguistic and non-linguistic series. Now, with the multimedia possibilities, it must add the image in movement and the sound. The visual linguistic series are the speech in graphic transcription (written language). The visual paralinguistic series include a set of variations that fulfill a role analogous to the sonorous variations for linguistics in interpersonal communication (those involved, the size, spatial disposition, etc.). They are graphical resources which qualify a text in very diverse ways, like the tone of voice in verbal messages. The visual non-linguistic series are image, photography, drawings or color. The full synergy between multimedia language and multimedia enterprise (SALAVERRÍA, 2001)

will only have been reached when the media are capable of developing and disseminating informative multimedia products, using all the tools (especially visual tools), unifying the final product.

### Conclusions

The empirical study and the analysis of the data on the use of visual resources by a sample of four digital newspapers (*Libertad Digital*, *El Plural*, *Vilaweb.cat* and *e-Notícies*) reflect a high level of use, especially in comparison with the other multimedia sources (if we leave aside the text). The initial status quo in the sector is overcome in the visual area. However, the possibilities of maturity are large. We have to take into account that the digital press has fifteen years of existence. In this sense, a conservative use of the multimedia resources (including all them) by the Spanish and Catalan digital *pure player* newspapers was predictable.

The statistical results show that the use of visual resources is significant, especially photography, because video is in an evolutive phase. On the other hand, multimedia resources like audio, infograph and animation programs in the *pure player* digital newspapers are in a primitive phase of development. The exception is photography. This is because of the weight of the analogical tradition, in the same way as the textual role. The mediamorphosis is evolving in a moderate rhythm, and the steps are gradual. The averages resulting from the empirical research are improvable. This requires time and bandwidth. The introduction of multimedia in the content units will imply a greater need for uploading and downloading, and it will reinforce the relationship between the communication and telecommunication sectors.

Photography is clearly the most used multimedia resource by the Catalan and Spanish digital press. *Vilaweb.cat* uses it very often, followed by *El Plural*, *Libertad Digital* and, at a distance, *e-Notícies*. The use of video is still very timid. The digital newspaper *e-Notícies* is the leader, followed by *Vilaweb.cat*, *El Plural* and *Libertad Digital*. The inclusion of audio is only used in the case of *El Plural* and *Vilaweb.cat*, but in a token way. The other two digital newspapers did not use this resource during the period studied. Infograph and animation programs show more presence than audio, with poor marks for *Libertad Digital*, *e-Notícies*, *Vilaweb.cat* and *El Plural*.

In the sample analysis, *ElPlural.com* and *Libertad Digital* publish more text in the genres studied. In the informative and the interpretive ones, the first is *ElPlural.com*. In the argumentative ones *Libertad Digital* is the leader. *Vilaweb.cat* wins over *e-Notícies*. Text leads, following the print newspaper tradition, in the use of multimedia resources, followed

by photography, video, infograph and animation programs and audio. The possible causes of the scanty use of some multimedia sources are diverse. One is the immaturity of the digital newspapers, although the years of digital evolution do not justify this in all respects. Another aspect is the need for more technological and human resources in the digital newspapers. Some digital newspapers are limited from the technological point of view. The human resources are also limited, especially in the case of informative enterprises with two versions, digital and print. In this case, the trend is to take advantage of these resources. The *pure player* journals, without the traditional influence, establish *a priori* the human resources policies.

Another item which contributes to the improbable percentage of multimedia use (directly affecting video) is the broadband in the media-reader relationship. For the full development of the new possibilities, it is necessary to provide more bandwidth. The first predictable step is a slow path to universality; the second one is the increase in bandwidth.

The link between the media and the reader is another cause for the conservative visual use. When the digital environment achieves more maturity, the demands of the reader will increase. Multimedia resources (and video more than photography, because the latter is in a solid position in the traditional newspapers) are the added value of the cybermedia. The reader wants to complement the textual information with visual resources, often indispensable for the holistic understanding of an event.

Photography and infographs are already used in the traditional newspapers. The goal for the digital newspapers is to emphasize their identity signs: video and audio; on a second level, the animation programs. The resource most used by the digital media is photography, like in the traditional press. If the traditional press was reluctant to include the image, it is understandable that the digital press is also timid regarding inclusion of video. However, digital journalism knows the way to take advantage of its visual resources, and the figures for the addition of photography and video are encouraging.

## | NOTA

- 1 Orbyt is an application that allows reading the print newspaper through the Internet. The subscription costs 14.99 euros per month. The business went beyond the individual user, and it reached the large state enterprises with interests outside the country and working professionals.

The goal of El Mundo was to achieve a large number of subscriptions to the platform by companies that offered them to their employees who were transferred all over the world. The key factors were the institutional accesses, like the paper subscriptions acquired by the companies, with an advantage: the absence of distribution costs.

## | BIBLIOGRAFIA

AHRENS, F. Big profits in small packages: Little newspapers prosper with narrow focus on very local news. **The Washington Post**. 2007. Available in <<http://www.washingtonpost.com/wp-dyn/content/article/2007/03/07/AR2007030702408.html>>.

ARMAÑANZAS, E., DÍAZ NOCI, J., MESO, K. **El periodismo electrónico**. Información y servicios multimedia en la era del ciberespacio. Barcelona: Ariel Comunicación, 1996.

BURKE, P., BRIGSS, A. **De Gutenberg a Internet**. Una historia social de los medios de comunicación. Madrid: Taurus, 2002.

CANTALAPIEDRA, M. J. "¿Una mera transposición? Los géneros periodísticos en la red" [*on-line*]. **Telos, Cuadernos de comunicación, tecnología y sociedad** (59), 2004. Available at <<http://www.campusred.net/TELOS/articulocuaderno.asp?idarticulo=4&rev=59>>.

DÍAZ NOCI, J. Los géneros ciberperiodísticos: una aproximación teórica a los cibertextos, sus elementos y su tipología. II Congreso Iberoamericano de Periodismo Digital. **Anais**. Santiago de Compostela, 2004.

DÍAZ NOCI, J.; SALAVERRÍA ALIAGA, R. (Coords.). **Manual de Redacción Ciberperiodística**. Barcelona: Ariel Comunicación, 2003.

FIDLER, R. **Mediamorphosis: Understanding New Media**. Journalism and Communications for a New Century. Thousand Oaks, California: Pine Forge Press, 1997.

FONDEVILA GASCÓN, J. F. La alianza entre el periodismo digital y tradicional y los operadores de telecomunicación: hacia un rendimiento óptimo de la red. **Communication**. II Congreso Nacional Ulepicc. Barcelona, España, 2008a.

\_\_\_\_\_. *Estructura econòmica de la indústria periodística comarcal: cap a un model híbrid tradicional-digital*. **Anais**. Congresso da ACPC. Morella: ACPC (Associació Catalana de Premsa Comarcal), 2008b.

\_\_\_\_\_. Adaptació dels gèneres periodístics al periodisme digital: estudi empíric comparatiu. **Trípodos** (Extra 2009-V Congrés Internacional Comunicació i realitat, La metamorfosi de l'espai mediàtic, Universitat Ramon Llull) (1): 657-666, 2009a.

\_\_\_\_\_. La televisión IP (IPTV) y la transmisión mediante VDSL: realidad y perspectivas de negocio [*on-line*]. **Revista Vivat Academia** (XI, 105), 2009b. Available in <<http://www.ucm.es/info/vivataca/numeros/n105/articulo.htm#TV>>.



\_\_\_\_\_. El papel decisivo de la banda ancha en el Espacio Iberoamericano del Conocimiento [on-line]. **Revista Iberoamericana de Ciencia, Tecnología y Sociedad-CTS** (2, Portafolio CTS): 1-15, 2009c. Available in <[http://www.revistacts.net/index.php?option=com\\_content&view=article&id=240:el-papel-decisivo-de-la-banda-ancha-en-el-espacio-iberoamericano-del-conocimiento&catid=80:articulos&Itemid=23#JOSC\\_TOP](http://www.revistacts.net/index.php?option=com_content&view=article&id=240:el-papel-decisivo-de-la-banda-ancha-en-el-espacio-iberoamericano-del-conocimiento&catid=80:articulos&Itemid=23#JOSC_TOP)>

\_\_\_\_\_. Multimedia, digital press and journalistic genres in Catalonia and in Spain: an empirical analysis. **Communication Studies Journal**, num. 7, May 2010: 81-95, 2010.

GARCÍA DE TORRES, E., et al. Propiedad, difusión y potencial interactivo y multimedia de los diarios españoles en Internet. **Revista Comunicación y Estudios Universitarios** (12): 93-106, 2004.

GILDER, G. **Telecosm: The World After Bandwidth Abundance**. New York: Touchstone, 2002.

GILLMOR, D. (2004). **We the Media: Grassroots Journalism by the People, for the People**. Sebastopol: O'Reilly Media.

HOKWAY, N. Entering the blogosphere: some strategies for using blogs in social research. **Qualitative Research** (8, 1): 91-113, 2008.

JANKOWSKI, N. W., HANSEN, L. (Eds.) **The Contours of Multimedia**. Recent Technological, Theoretical and Empirical Developments. Luton: Luton University Press, 1996.

LEIVA, R. El precio justo: Estrategias para cobrar por las noticias on-line. [on-line]. **Cuadernos de Información** (25), 2009. Available in <[http://fcom.altavoz.net/prontus\\_fcom/site/artic/20091216/imagen/FOTO\\_0220091216152156.pdf](http://fcom.altavoz.net/prontus_fcom/site/artic/20091216/imagen/FOTO_0220091216152156.pdf)>.

MARRERO SANTANA, L. El reportaje multimedia como género del periodismo digital actual. Acercamiento a sus rasgos formales y de contenido" [on-line]. **Revista Latina de Comunicación Social** (63): 348-367, 2008. Available in <[http://www.ull.es/publicaciones/latina/08/29\\_40\\_Cuba/Liliam\\_Marrero.html](http://www.ull.es/publicaciones/latina/08/29_40_Cuba/Liliam_Marrero.html)>.

MARTÍNEZ ALBERTOS, J. L. **Curso general de redacción periodística: lenguaje, estilos y géneros periodísticos en prensa, radio, televisión y cine**. Madrid: Paraninfo, 2000.

MINGS, S. M., WHITE, P. B. Profiting from on-line news: The search for viable business models". In KAHIN, B. & VARIAN, H. R. (Eds.). **Internet publishing and beyond: The economics of digital information and intellectual property**. Cambridge: MIT Press, 2000. p. 62-96.

ONLINE PUBLISHERS ASSOCIATION OF EUROPE. **Online publishing in Europe: Markets, strategies, revenue streams**. Berlin: OPAE, 2004.

ONU DI (Organización de las Naciones Unidas para el Desarrollo Industrial). **Fomento de la capacidad de establecer redes de información comercial** [on-line], Subdivisión de Pequeñas y Medianas Empresas. 2003. Available in <[http://www.unido.org/fileadmin/import/23687\\_StrategyPaperExternal3.3Spanish.pdf](http://www.unido.org/fileadmin/import/23687_StrategyPaperExternal3.3Spanish.pdf)>.

PICARD, R. G. Changing business models of *on-line* content services: Their implications for multimedia and other content producers. **International Journal on Media Management** (2): 60-68, 2000.

SALAVERRÍA, R. (Coord.) Aproximación al concepto de multimedia desde los planos comunicativo e instrumental. **Estudios sobre el Mensaje Periodístico** (7), 2001. Available in <[http://www.ucm.es/info/periol/Period\\_I/EMP/Numer\\_07/7-5-Inve/7-5-13.htm](http://www.ucm.es/info/periol/Period_I/EMP/Numer_07/7-5-Inve/7-5-13.htm)>.

\_\_\_\_\_. R. (Coord.) **Cibermedios**. El impacto de Internet en los medios de comunicación en España. Sevilla: Comunicación Social Ediciones y Publicaciones, 2005.

WILSON, F. **My Favorite Business Model**. 2006. Available in <[http://www.avc.com/a\\_vc/2006/03/my\\_favorite\\_bus.html](http://www.avc.com/a_vc/2006/03/my_favorite_bus.html)>

**Dr. Joan Francesc Fondevila Gascón** is a professor in the Universitat Abat Oliba (UAO), Universitat Autònoma de Barcelona (UAB) and Universitat Oberta de Catalunya (UOC), and director of the Cable Studies Center (CECABLE). He has published many scientific books and articles about technology, broadband, communication and information sciences, journalism and cable and telecommunications.