

Offline Media Landscape in Spain: A Quantitative Approach

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Abstract

As in other European countries, the online media have completed their first ten years in Spain. In this first decade, the Spanish online publications have expenienced a process; off birth, development and consolidation of professional standards. Based on a quantitative methodology applied to a census of 1,274 online media, which was achieved by the research team in January 2005, this paper provides valuable data regarding the degree of developments reached by the Spanish online media. This research, carried out by professors; from four universities (Navarre, Basque Country, Santiago de Compostella and Malaga), analyses such wariables as the geographical distribution of online publications, media types and their contents, the correspondence with offline print and broadcast media, the linguistic diversity and the development of business models, among others.

1. Introduction: a decade of online media in Spain

The history of the presence of the mass media on the Internet in Spain can be dated from the year 10994, which gives us a perspective of a little over a decade for considering certain phenomena with the necessary distance. It is now possible to distinguish tendencies and even establish periods.

The weekly magazine El Temps was the first publication that we have documented to make the leap onto the Web in Spain. Curiously, this weekly spresence on the Web was later to become somewhat scarce. Also on Servicom, through its BBS, two general information newspapers, El Periódico de Catalutya and El Mundo; experimented with online editions. In March 1994, El Periódico de Catalutya began research, together with other European companies and with European Commission funding, into a flat screen, a computer dedicated specificalityto receiving news in an electronic formato They were pioneers in this respecto

The definitive leap to the Internet by the main newspapers occurred in 1995. El. País, however, delayed the unveiling of its digital version until May of the following year, in order to coincide with its twentieth anniversary.

From 1996, the question becomes one of the committed search for a business model, the configuration of products that become increasingly independent from the mere reproduction of the contents of the printed editions, the formation of more or less independent editorial committees, etc.

The great leap was taken in the year 2000 by El País - the general information newspaper with the highest sales in Spain - with the formation of Prisacom. The new company contracted the services of Mario Tascón and the rest of his collaborators from Elmundo.es; which caused a conflict with the latter newspaper. Elmundo:as was forced to react. They had realized the potential held by the animated infographics made possible by Flash, and had opted decidedly for this. Time proved them to be right: in 2004, the infographics section was one of the most visited sections, possibly the most visited, of Elmundo:as; as was demonstrated by the influx of visits it received following the terrorist attacks in Madrid that year. Something similar had occurred following the attacks on the Twin Towers in New York on September 11th 2001 (Salaverría, 2005a: 74).

A new stage began in about 2002 (parra & Álvarez, 2004: 59). This was characterised by the introduction of payment for contents by some media. Lawanguardia.es, for example, included in its services all of its back issues, digitalised in pdf format - probably the most extensive digital press archive in Europe, since the newspaper dates back to 1883. Between 2000 and 2002 there was not only a change of design in many digital media (and a committed move towards the more or less constant updating of news) but also a change in business strategy. In 2005, Elpaís.es, which had moved to a model involving complete payment, expended the majority of its contents, as well as experimenting with the possibilities of multimedia in the free digital edition of its supplement for young people, El País de las Tentaciones(EP3). Anyway, one thing is clear: there is no going back along the path travelled by the digital media towards complete emancipation (Salavería, 2005b).

1.1. Main tendencies in the online press market in 2005

The start of online journalism coincides with, and is the offspring of, the use of the Net in our country. The data of the Asociación para la Investigación en Medias de Comunicación (AIMC) [Association for Research in the Communications Media] show how such use increased continuously from 1996, when the number of users was somewhat over 1.5 million, to the end of 2004, when the figure reached 12 million users.

The majority of users now connect with the Internett from their homes, no longer from their workplaces as had happened at first, which shows the growing penetration of the computer as an instrument of domestic use. This evolution has also meant that the Vorld Wide Web has become the most used service; it has even overtaken electronic mail, which was the most used ten years ago. Similarly, use by gender is becoming more balanced, evolving from 75.4% male and 24.6% female Internett users in 1996, to 57.2% male and 42.8% female users. Ages are also becoming more balanced: the number of youngen usens has doubled (to the extent that the computer has virtually become a household appliance like the television), growing from 8.1% to 16.1%, although in higher age brackets its use remains almost the same. In the last decade, the middle class has become the main Internet usen (42% in 2004), while in 1996 the upper class was the main user (35.6%).

Today, the most visited media - according to AIMC and Officina de Justificación de la Difusión (OJD) [Audit Bureau of Circulation] - are precisely those owned by the big groups, with few exceptions and in spite of the disaster of the dot.com companies in the late-1990s, following an initial stage of investment euphoria that then collapsed. However, it is significant that the digital versions of some big Spanish newspapers, such as La. Vanguardia on El País, have preferred not to be controlled by the OJD.

Determining the audience of the Spanish digital media is a difficult undertaking. Not only because of the discrepancy existing in the methodology employed in measuring the number of readers, pages wisited or visits per day, but because many Spanish media do not submit to the wolumtary measuring of the OJD. Nonetheless, with the figures available it is possible to trace the history of the tendencies and the audience evolution of digital media on Internet. In 1999 the first place amongst the digital newspapers was occupied by Fl Pais Digital' (in spite of its being a lutecomer with respect to the other newspapers with a national distribution), which had twice as many daily visits as Elhundo. (90.768 compared to 46.836). Today, however, the first place is occupied by Elmundo. with over 35 million visits in November 2005 assauresult of the strategy of Elpais es of charging payment for contents. There has been asspectacular growth in three years, from 19 million visits in January 2003, to the figure of 35 million at the end of 2005. Amongst the general news media, it was followed by Liberlad-Digital—an journal, we should need 11, that never had a printed version and that therefore

ofiginated on the Net, with 3,863,000 visits, and by A been, with 1,156,000 visits in November 2005. Next, significantly, we find a confidential newsletter: Confidential Digital, with over 1,825,000 visits at the end of 2005, already surpassing some national general newsmedia; such as Abrees.

With regard to other types of media, both televisions and radios have opted to accertain extent for Internet. Both to publicise their programs—a type of display window—and also,, in a sense following in the wake of the BBC, to make use of news items that reach their editorial offices and that are used in an even lower percentage than in the printed media. This makes it possible for the listener of the spectator to be informed by the media during the long periods when such channels are not offering a news program over the airwaves. The offer is completed by the possibility of listening to, or even watching; the programs our streaming, of even recovering fragments from an archive, rather than live, which makes it possible to overcome the space-time shortcomings of radio and television throaticast over the airwaves. Finally, many channels have opened their own website to different programs; these have been particularly successful where the participatory dimension is promoted: through forms of chat, for example.

The audiovisual media have an advantage in a multimedia world since they make use of different news formats and employ editorial and work strategies that are better suited to 24 hour cyclesthan the printed media, which are more accustomed to periodicity.

2. Research method

2.1. The researching group: composition, characteristics and origin

This paper is the result of the research project "El impacto de internet en los Medios de comunicación en España ((2002-2005)" [[Impact of the internet in mass media in Spain], francedibythe Ministry of Science and Technology of Spain. This paper was executed by a research treamint regrated by research some of the most active laboratories and research groups which investigate in online icournalism and digital communication in Spain.

The anthors of the puper fulfilled the initial objective of the original design of this research: the constituted to the consus of the online media in Spain. Meanwhile, the project contributed to the critiforcomout of a not of Spanish researchers who work on galine journalitism. All of the modificated in the European project COST A20 and, by all means, intregaters winted by severence of the Spanish online compatism.

2.2. Research design

In order to approach this research's objective, we planned a method model which integrates a double process:

- a) Identification of the unities that are part of the online media census in Spain, and the application of an analysis index cardo
- b) Analytic and interpretative reading of the data obtained in the precedent phase of the research.

2.2.1. Online media census in Spain

For the creation of the online media census in Spain, we setded, in the first place, the main. characteristics of an online media. We resume this concept in three parameters:

- a) There are online media those which pursue an ISSN (International Standard Serial Number). ISSN is, in the way of an ISBN in a book, acoder for all those periodical publications which demand it.
- b) There are online media all those which are born as an ordine edition of another media, printed or audiovisual, which refresh their information, and do not act as mere "showcases" -in which, for instance, some televisions announce their programming of those media. This tendency of radios and televisions, mosely, was quite common during the 90s, but nowadays those sites are being substituted by new ones that develop the informative aim of the media.
- c) There are online media those that were exclusively created for the internet.

This census had in January, the 31*, 2005, 1,274 entries. It is the result of documentary research process, which permitted us compile all the data referred to the location of online media.

For this purpose, we checked private and public communication guides. Once we communicated and willidated this data, the research team summed up all the alternative online media. By means of mon-printed local directories and other references, we could obtain a finallist with all the online media wall of for our research.

From this second media registry, we did an intensive checking in order to confirm their existence on to determine its main characteristics. This task was not restricted in time, but updated by the research team in the search for new possible entries. We also paid special attention to mews regarding the creation of online media. Meanwhile, each six months or less, the research tream confirmed the continuity of the previous entries.

2.2.2. Index card structure and interpretative guide

In second term, the research team created an index card for the data compilation of the online media in Spain and its further exhaustive analysis.

The dispersion of the different research groups -Basque Country, Galicia, Navarre, and Malaga- required an intranet to optimise data compilation. The intranet, private and protected with a password, permitted the members the access to the main database.

The designed index card contains a full range of empiric variables integrated in two main areas: a) identification and geographic location data, and b) data regarding the production of information.

a) Identification and geographic location data

The selected fields for this ftrst objective were: name (complete name of the online media); address (physicallocation data of the main office of the online media); city or village of the main office of the online media; province of the main office of the online media; autonomous community in which is located the main office; URL (full address to access the site); e-mail; and contact people.

b) Data regarding the production of information

The fields selected for this task were: updating frequency; corresponding media (mentioning if the online media had its correspondence in print, radio or TV); type of content; language of publishing; brief description, in no more than 250 words, of the online media contents.

3. Results

By means of the above-explained methods, as a result, the census gave the number of 1,274 active online media in the whole of Spain, as of January 31st, 2005.

It is certainly not an exhaustive number, since due to the characteristics and scale of the project an absolute tracking was beyond our reach. Nevertheless, it is, without a doubt, a representative number. In addition, it provides figures that are in perfect agreement with other media census in other platforms that are considered as a trustworthy reference, such as the printed publications listings made by organizations of circulation auditors or the public registries of audiovisual media.

¹ This database was built with MySQL. It provided our research with a great versatility in the statistic work, with the use of SPSS, for instance. We could, by this means, optimise as much as possible our data collection.

In this sense, Information y Control de Publicationes (Introl) [Information and Publications Control; formerly OJD], the auditor society of printed media in Spain, certified in December 2004 the circulation of 788 publications. These were distributed in the followingway: 114 daily newspapers (107 pay newspapers and 7 free of charge), 69 non-daily newspapers (56 pay and 13 free), 19 newspaper supplements and 586 magazines (576 pay and 10 free). However, not all the Spanish periodical publications are subject to the control of Introl, so the real volume of publications printed in Spain is way beyond these numbers: WAN, for instance, certified the existence of 135 newspapers in Spain in 2004 (WAN, 2004), at the same time that the number of magazines was estimated in 7,000 (Salaverria et al., 2005)

Regarding the audiovisual media, there are not data as precise as those off the case off printed media, since the map of the television and radio companies in Spain is very fragmentary. In addition, in many occasions, mainly in the case off local stations, the audiovisual media work within a framework of allegality. As a consequence, those radio and television stations do not appear as registered on official censuses, although they compete in the same market as the authorized media.

In spite of these difficulties, we are able to point out some illustrative numbers. With regard to television stations, we may mention, for instance, the census published in October 2002 by the AIMC, which counted 897 local televisions distributed among 606 localities all over the country (AIMC, 2002). Taking apart the channels received via satellite, in would be necessary to add 4 television companies of national scope and 13 public radio-television companies of autonomic scope to those 897 local stations, without forgetting that in several cases those companies own more than a channel. Therefore, the number of television companies exceeds the 900.

The situation of radio in Spain was at the beginning of 2005 even more confused, if that is possible. The Asociación Española de Radiodifusión Comercial (AERC) [Spanish Association of Commercial Radio Broadcasting], which gathers the private stations that broadcast with a legilificense, congregated 1,150 stations (AER, 2005). It was necessary to add to these more than a thousand of public owned stations, either dependent of the State, the autronomous communities or the local councils – for instance, only Radio Nacional de España (RNE) [Spanish National Radio] counted with 827 radio frequencies (RTVE, 2005) – ,, and more than 2000 transmitters that broadcasted without legal license (El País, 2005). Altogether, more than 4,000 radio stations.

Table 1. Media figures in Spain (January 2005)

| Newspupers | Magazines | TV Stations | Radio stations | Online media |
|------------|-----------|-------------|----------------|--------------|
| 1B35 | >7/0000 | >900 | >4,000 | 1,274 |

Source: personal elaboration.

Assseen((Tablel)), the number of online media registered in this research is about 10% of the accoundlated total of printed and audiovisual active media in Spain. In other words: for each conline media, there are ten media from other type.

Nevertheless, it must be considered that out of the 1,274 online media registered, 268 ((21%) correspond to Internet media exclusively, whereas 1,006 (79%) correspond to media promoted by mewspaper, magazine, television or radio companies. Although we have already speaking it is possible to affirm that, at the beginning of 2005, about one out of ten Spanish printed and audiovisual media counted on an active Web site – that is to say, with updated information and not just corporate contents –. In fact, the printed media were the media with greater presence on the Internet (mainly newspapers and, to a relatively lesser extent, magazines), whereas the audiovisual media had a more modest presence in the Web (see Table 2).

Table 2. Parent media company of the Spanish online media (N=1,274)

| Parent media company | Online media number | 6, 0 |
|---|---------------------|--------------|
| Newspapers and magazines | 695 | 54.6% |
|]Radio | 352 | 27.6% |
| (Online media only in Internet and others | 116 | 9.1% |
| Television | 111 | 8 .7% |

Source: personal elaboration.

Other interesting results of the study have to do with the geographic distribution of online media. The Spanish administrative structure is made up of 17 autonomous communities and 2 autonomous cities; the communities in turn are divided in 52 provinces. The geographic dimensions and the volume of population are very different among the different communities, as well as their economic development. Although during the last twenty years the wealth of the regions has balanced remarkably, there still are differences off more than 20% of GDP per capita among the poorest and the richest communities (see Table 3).

ONLINE MEDIA LANDSCAPE IN SPAIN: A QUANTATIVE APPROACH

Table 3: Number of offine media by autonomous communities of and indicators of wealth, and use of the interper (2004)

| use of the Inter | | | | | | |
|------------------|------------------|------------|-------------------------|---------------------|----------------|--------------------|
| Autonomous | Population2 | Online | Population - | Totát GDP2 | GDPper | Internet- |
| Community | (2664) | media | by online | (2003; | capita 2 | users ³ |
| | | number * | medium! | thousands oE € | (2003; €) | (12/200 |
| | <u> </u> | (01/20055) | | | | 4) |
| Àfidalusia | 7,687,518 | 125 | 61.500 | 78,714,612 | 10,670 | 30.4% |
| Àfagon | 1,249,584 | 29 | 43.089 | 17,756,624 | 15,254 | 33.9% |
| Asturias | 1,673,761 | 2 9 | 37.026 | 12,558,264 | 12,013 | 30.1% |
| Balearic | 955,645 | 49 | 19.49T | 12,597,327 | 14,915 | 36.3% |
| The Canary | 1,915,546 | 5 8 | 33.027 | 22,247,887 | 12,259 | 30.5% |
| Islands | | | | | | ļ |
| Cantabria | 554 , 784 | 26 | 21,338 | 7,100,510 | 13,369 | 35.3% |
| Castilla = La | 1,848,881 | 55 | 33,616 | 19,912,278 | 13,233 | 23.8% |
| Mancha | ĺ | | | | | |
| Castilla and | 2,493,918 | 19 | 131,259 | 32,442,080 | 11,468 | 26.0% |
| Leon | | | | | | |
| Catalonia | 6,813,319 | 206 | 33,074 | 103,709,507 | 16 ,484 | 36.5% |
| Valencian C. | 4,543,304 | 74 | 18,664 | 55,227,377 | 13,220 | 28.9% |
| Extremadura | 1,075,286 | 29 | 61,396 | 10,023,704 | 9,254 | 26.0% |
| Galicia | 2,750,985 | 69 | 37,079 | 30,542,808 | 11,164 | 27.2% |
| l),Iadrid | 5,804,829 | 279 | 39,869 | 98, 919 ,752 | 18,603 | 40.3% |
| Murcia | 1,,294,694 | 45 | 20,806 | 13,952,133 | 11,971 | 29.9% |
| Navarre | 584,734 | 37 | 11,336 | 9,894,342 | 18,127 | 34.4% |
| Basque | 2,115,279 | 118 | 28,771 | 36,235,858 | 17,499 | 39.4% |
| Country | | | | ŕ | i | i i |
| Rioja ((La) | 293,553 | 9 | 1 5, 8 04 | 4,253,6114 | 15,741 | 26.8% |
| Ceuta | 774,654 | 4 | 17,926 | 865,162 | 11,285 | - |
| Meliilla | 68,016 | 6 | 32,617 | 778,439 | 11,398 | - |
| TOTAL | 43,197,684 | 11,2274 | 36,720 | 568,311,000 | 13,575 | 32.9% |

Sources: 11) personat data in: http://www.ineies/daco// ica/ daco427 / cre// cre9503.kks); 3) AIMC.

These data show a high statistical correlation between the GDP per capital and the penetration of Internet within an autonomous; community. In other words, in Spain the wealth of atterritory is determining; in its Internet use level. However, althought existent, such statistical correlation is not that pronounced with regard to the number of online media.

In addition to the geographic distribution, our study considered other variables such as 1) the type of content, 2) the language and 3) the rate of information update. These were the results regarding those three variables.

In relation to the type of content, we detected a clear preponderancer of general information online media. More particularly, out of the 1,274 registered online media, 761 (59.8%) were general information media and 513 (40.2%) dealt with specialized information. The autonomous community with more general information online media was Catalonia, with 143; allthough this community obtains a modest ninth position in the ranking of population by online media, nevertheless it counts with a very numerous local press dedicated to general information on small communities, which explains its first position as the community with more general information online media. On the other hand, the community of Madrid is the one that counts with more specialized information online media (183); this is due to the fact that a great part of specialized publications of national diffusion (daily newspapers and, mainly, magazines) have their head offices in Madrid.

Our study also tackled the typology of specialized information online media. In this case, we verified that cultural information online media were clearly predominant (see Table 4).

Table 4. Type of content in specialized online media (N=513)

| Type of content | Online media number | % specialized online |
|--------------------------------|---------------------|----------------------|
| | | media |
| Culture | 120 | 23,4% |
| Leisure time and Tourism | 51 | 9.9% |
| Economy | 49 | 9.6% |
| Communication and media | 45 | 8.8% |
| Services | 43 | 8.4% |
| Sports | 40 | 7.8% |
| Science, Health and Technology | 35 | 6.8% |
| Society | 34 | 6.6% |
| New technologies | 25 | 4.9% |
| Education and Children | 19 | 3.7% |
| New social trends | 18 | 3.5% |
| Politics | 10 | 2.0% |
| Religion | 10 | 2.0% |
| Legal information | 4 | 0.8% |
| Other | 10 | 2.0% |

Source: personal elaboration.

ONLINE MEDIA LANDSCAPE IN SPAIN: A QUANTATIVE APPROACH

Regarding the language, the Spanish clearly leads the marker of the contine media in Spain, . as it was to be expected. A total of 972 on the media (76.3%) offer their contents exclusively in that language.

Nevertheless, it should not be forgotten that Spain is a mutilingual lecounty. In raddition of Spanish, it has other three languages equally recognized as official in some rantonomous of communities. Catalan in Catalonia and in the Baleanic and the Valenciair communities of Basque language in the Basque County, and Calicia in Catalonia and the rejpsy dialects of minority languages — Asturian, Aragonese, Aranese, Judaic Spanish and the rejpsy dialects of that have presence on the Internet, even though they have not the come coordificial in diverse communities. It is also necessary to remember that Spain is an eminenty tourist country, and this is a very important factor since it causes that some online media are regularly published in languages such as English or German. Finally, in our research we identified a significant amount of bilingual online media, which in most cases alternated the Spanish with one of the three minority co-official languages, or, to a lesser extent, which offered are international of catalon with contents in a foreign language, which is nearly always English (see Table 55).

Table 5. Languages used by online media (N=1,274)

| Languages | Ontine media number- | % |
|-------------------------------|----------------------|------------------|
| Spanish | 972 | 776;39%′ |
| Cardran | 148 | 1 11.66%′ |
| Bashe | 57 | 44.55%′ |
| Calician | 29 | 2.3%′ |
| Fenglish | 11 | 0.9% |
| Cerman | 7/ | 0.5% |
| Ather languages and bilingual | 570 | 3.9% |
| medita | | |

Source: personal elaboration.

Leastly, threstudy analyzed the update rate of online press in Spain. Regarding this aspect, a clean peditorinance of miline modia with variable update eyeles was detected - that is to say, most of throm landwell off defined guidelines regarding their update face together, with problomed update rates—with update cycles of more than a week - (see Table 6).

Table 6. Models of information update in online media (N=1,274)

| [Updatermodel | Online media number | % |
|----------------|---------------------|-------|
| Constant | 1/89 | 14.8% |
| I Daily | 290 | 22.8% |
| Weekļy | 1116 | 9.1% |
| Wariable | 679 | 53.3% |

Source: personal elaboration.

4. Conclusions

The continuous appearance of media in the Internet, as well as, the illegal framework some audio-visual media work with in Spain, makes difficult data accuracy in the official census and, assaconsequence, also in this research, so some figures must have been considered in an orientative way. Anyway the results of this research provide important conclusions about the orline Spanish media development, as well as its position in relation to its European equivalents. As a culmination of this analysis some trends or perspectives are explained for the second online media which obviously, we research with more knowledge about online media than in the internet origino

4.1. Interpretation of Spanish online media market

In the quantitative interpretation of the results gathered in the research team database, it is concluded that Spanish online media are the third more numerous media in Spain after magazines and radios. From a more generic perspective it can be said that one out off six Spanish media, whether print (newspaper or magazines) or broadcast (radio or television), have currently an active website. Furthermore, the presence of print publications in the Internet is higher than audiovisual media presence.

As for geographical distribution, it is noticed that online media development is more related to territory wealth than to the Internet penetration degree. On the other hand, the analysis of the centent shows the predominance of general information online media, over specialized information online media, and within the latter, cultural information publications are in a leading position. Considering language, 76.3% of online media are only in Spanish.

From the analysis of the news updating pace, it has been seen that over half the online media do not have a defined updating model (they are variable in this context) or remain over one week without updating.

4.2. Spanish online media in the European framework

Spanish online media got in their first decade a similar development devertoritie one scentary the fest of European countries. Although the Spanish media market has some special drawbacks (lower number of internet users and lower reading index than most to developed European countries), the quality of its online media is high comparing to the European average. The main Spanish online publications are remarkable dients their innovation in the cuse of interactive and multimedia possibilities (Salaverriae et al., 2005).

Another peculiarity of Spanish online media in comparison with European media thas a been the coexistence of different business models in the next (free, payed-for, and mixed). However this situation has started to change since Spring 2005, as a consequence of the online advertising market recovery and the proliferation off free offers in and out online, media. In 2006, the mixed business model predominates in Spain. This model combines cost-free status and payment of some services and contents:

At the end of their first decade, the more significant Spanish ordine media have experienced a reorientation that has taken them from the original cost-free status; to the mixed business model, as well as, from the mere repetition of matrix medium-information-to the endountion of content and added value services, such as, last minute news; documentary contents of newspaper archive of the own medium. This way, Spanish media as well as European media keep similar publishing roles in which the main trend is the mixed tusiness-model and the more and more determined bet on own contents publishing (Salaverría et-al., 2005).

Bibliography

AER (2005) "Associación Española de Radiodifusión Comercial (Spain)". Accesible en: http://www.aereurope.org/memblers/séredath/lel (3 enero 2006).

APMC(2002) "APMC presents su tencer sense sobre televisiones locales", 8 October; at: http://downdoadlaime.cs/hime/09Notat/ce/nso/620TN % 202002:pdf, 1 (accessed 3 January 2006).

Armañnmas, H. Diaz Nogi, K. Meso Ayardi (1996) Esperiodismo. ejedrónim. Infirmacióny sereivido multimedia en addel ilberaspailo. Barcalona: Ariel.

D'izz Nvoii, J). (19994) "El muevo presiódico electrónico. Redefinición del mensaje periodificional como producto interactivo y multimedia". Paper presented at 13.

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JJornatias IInternacionales de Ciencias de la Información, Universidad de Navarra, Pamplona, November 1994.

Díaz Noci, J),, K. Meso Ayerdi ((1997) Medios de comunitazición en Internet. Madrid: Ariaya Multimedia.

El IPáis ((2005) "IEl Gobierno accúa contra los 'piratas' para reordenar el sector aaudiovisual", 220 mayo.

Estévez, J. ([2002) Periodismo sen la Red. Madrid: Anaya Multimedia.

ParraWalcarce, ID, J. Álvarez Marcos ((2004) Ciberperiodismo. Madrid: Síntesis.

FRTVE ((2005) "Frecuencias de emisión de Radio Nacional de España, S.A.", 16 October; aat: http://www.ntve.ess/fre/emisoras/fréc-methule (accessed 3 January 2006).

Scalaverría, R. ((2005a) "An immature medium. Strengths and weaknesses of online mewspapers on September 1111". Gazette. The International Journal fir Communication Suitles, Vol. 67((1),pp.69-86.

Salaverría R. ((coord) ((2005b) Cibermedios. El'imparto de internet en los medios de romanicuciónen lespaña. Sevilla Comunicación Social Ediciones y Publicaciones.

Salaverría, R., J. Diaz Noci, X. López and M.B. Palomo (2005) "Spain: multimedia trichness and wariety of business models", in Van der Wurff, R. and E. Lauf (eds) Print anticordine newspapers in Europe. A comparative analysis in 16 countries. Amsterdam: Het Spinkuis Publishers.

Smith, A. ((1980) Goodf: ye Gurenberg. The newspaper revolution of the 1980-1 New York: Oxfort' University Press.

WAN (2004) World Press Trends, 2004. Paris: World Association of Newspapers:

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