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Typology of Digital News Media: Theoretical Bases for their Classification

Tipología de los cibermedios periodísticos: bases teóricas para su clasificación

Abstract

Since their beginnings in the 1990s, digital news media have undergone a process of settlement and diversification. As a result, the prolific classification of online media has become increasingly rich and complex. Based on a review of media typologies, this article proposes some theoretical bases for the distinction of the online media from previous media and, above all, for the differentiation of the various types of online media among then. With that purpose, nine typologic criteria are proposed: 1) platform, 2) temporality, 3) topic, 4) reach, 5) ownership, 6) authorship, 7) focus, 8) economic purpose, and 9) dynamism.

Resumen

Desde su aparición en los años 1990, los medios periodísticos digitales han experimentado un proceso de asentamiento y diversificación. Como consecuencia, la fértil clasificación de los cibermedios se ha hecho cada vez más rica y compleja. A partir de una revisión de las tipologías de medios, este artículo propone bases teóricas para la distinción de los cibermedios respecto de los medios anteriores y, sobre todo, para la diferenciación de los distintos tipos de cibermedios entre sí. Con tal fin, se proponen nueve criterios clasificadores: 1) plataforma, 2) temporalidad, 3) tema, 4) alcance, 5) titularidad, 6) autoría, 7) enfoque, 8) finalidad económica y 9) dinamismo.

Keywords

Digital Journalism; Digital Media; Mass Media; Typologies

Palabras clave

Ciberperiodismo; medios de comunicación; medios digitales; tipologías

1. Introduction

Classifying news media into categories seems simple. In theory, you just have to create a complete and homogeneous ensemble of types in order to place each media outlet into the corresponding spot. On a small scale, the idea in the end is to emulate the titanic work once done by Carl Linnaeus who attempted to classify all living beings on Earth. This 18th century Swedish scientist and naturalist was responsible for the classification system used nowadays to put living beings into many different categories: kingdoms, divisions, classes, orders, families, genera and, finally, species.

But news media outlets obviously do not even remotely show the diversity of human beings. Therefore, their classification should theoretically be much easier. However, it is difficult to find classification system proposals that organize the different types of media completely, homogeneously and systematically.

This lack of unquestionable classification systems should not be surprising. In fact, journalism has always been known as a discipline that refuses standardized classifications. Unlike the natural and exact sciences, which are divided by sharp limits, the field of social science is much more blurred and hybrid.

There are a number of examples of this difficulty in subjecting journalism to specific mapping. Without going further back, the Byzantine debate on the classification of journalism writing genres is simply one more example of this circumstance. In fact, despite the fact that the identification and allocation of those genres has been subject to an endless number of theoretical proposals in recent decades (Sánchez, 1992; Sánchez y López Pan, 1998; Fernández Parratt, 2001), since the breakthrough of digital new media the debate seems far from over (Díaz Noci & Salaverría, 2003; Salaverría & Cores, 2005b; Larrondo Ureta, 2008, 2010; Seixas, 2009; López Aguirre, 2010).

This article aims to offer theoretical bases for creating a taxonomy for past, present or future digital news media outlets. We are aware that, due to the reasons outlined above, the discretional nature of journalism resists such classifications and that sooner than later there will likely be examples of media outlets that do not precisely fit into the theoretical dividing lines described below. In any case, it is our aim for these contributions to at least help construct a theoretical framework to study digital media that may gradually become more solid.

2. Traditional bases for classifying media outlets

Differentiating between media outlets has been common since the dawn of journalism. It was not really necessary to differentiate between media outlets back in the 17th century as there were only notices, lists and gazettes (Espejo Cala, 2010) and they all basically shared the same characteristics. However, such differentiation began to be necessary as soon as the media scene was enriched. This started occurring in the 18th century when the old gazettes, reconverted into magazines published at longer and often irregular intervals, began to see competition in new shorter and more constant media publications: newspapers (Seoane & Saiz, 2014). As a result, periodicity became the first factor of media classification.

This factor has continued to have an influence all the way to today. In fact, periodicity continues to be the feature that identifies the essence of the news profession. As indicated by Martín Algarra et al. (2013: 76), the notion of period is a "condition of possibility for current news". In essence and from the very beginning, the journalism has been and is the profession of periods.

There were no other news publications in the 18th and 19th centuries besides newspapers and magazines. However, this non-existence of new media outlets did not mean there was any type of stagnation in the diversification of publishing models. Throughout the long period of time it took for new news platforms to be created, which would take two centuries, a new differentiating factor arose: the topic.

Note that from the very beginning, the topic factor was always secondary to periodicity. The main element used to differentiate media outlets continued to be publication time intervals and only after that idea was it appropriate to differentiate media outlets in virtue of any specialization in certain topics. In other words, the first news media outlets were mainly identified by whether they were newspapers or magazines; and once that distinction was made, they could be associated respectively to a certain topic or approach.

As a result, magazines and newspapers began to differentiate themselves secondarily by the type of news they offered. There were literary, political, scientific and other publications and gradually, yes, publications that offered mostly news, hence, certain news media outlets began to stand out.

The next differentiating element came onto the scene in the beginning of the 20th century: the means of communication. The first broadcasting experiments over the radio waves at the end of the 19th century (Faus, 2007) were a prelude to the rise of a new generation of media in the following century: audiovisual

outlets. First radio, starting in the 1920's, and then television, starting in the 1930's (Magoun, 2007); these two media outlets enriched the media scene with a new media variant, the main differentiating factor for which was the means of communication. If newspapers and magazines embodied the veteran species of printed media, radio and television inaugurated the all-new category of audiovisual media.

The rise of audiovisual media upset the traditional typology foundations. Suddenly, the means of communication became the supreme differentiating factor — even more important than that of periodicity. For two centuries, periodicity had made it possible to establish classes among printed publications, but now the new factor would go beyond that: it marked a difference between printed media —irrespective of the periodicity— and audiovisual media.

Throughout the rest of the 20th century and up until the digital revolution erupted, they were the essential grounds for compartmentalizing the media. Journalism practitioners and academics alike assumed this matrix which led them to classifying media pursuant to the following factors or grounds from most to least important: firstly, the means of communication; secondly, the periodicity; and, thirdly, the topic.

3. The first digital news media classification systems

On the eve of the arrival of the first digital news publications in the mid-1990's, the "media" were defined in the following terms by the Dictionary of Communications Science and Techniques:

The social communication media —also known as channels or mass media— are the public or private companies whose mission is to broadcast up-to-date information in physical and technical means that modern technology has made possible (Del Rey Morató, 1991: 902).

The appearance of the first digital publications did not question these types of traditional definitions for media. Nonetheless, the term continued to be considered "exceptionally ambiguous" (López García et al., 2005: 39), to the point that many authors felt the need to continue establishing differences with respect to related concepts such as "means" of communication (Meso Ayerdi, 2006: 137) and "channels" (Alonso & Martínez, 2003: 262). Yet if something truly changed with the arrival of digital media, that would actually be the very classification system of the media and, as will be seen further below, the criteria on which it is based.

Digital news medium was placed on the same supreme high-profile level as the press, radio and television from its very birth (Morris & Ogan, 2002). It was immediately acknowledged as the "fourth media outlet" (Bonington, 1995; Gang, 1998; Macnamara, 2010), with "its own idiosyncrasies and characteristics making it different from all other media outlets" (Pareja Pérez, 2003: 36).

In the first few years, some authors described the newly-arrived media outlet as a synthesis that had evolved from the others (Fidler, 1997). Canga Larequi, for example, highlighted at the very beginning of this century that Internet "combines the characteristics of the three traditional media outlets" although "it blends these characteristics together with new ways of presenting the content (…) such as interactivity, multimedia, hypertext, links, etc." (Canga Larequi, 2001). In the end, the digital medium was reflected as news organizations that were similar to those already in existence yet enriched with certain unique features.

While awaiting more specific details of these special characteristics to be defined, the first theoretical analyses on digital media often compared them with their printed and audiovisual predecessors (Armentia et al., 2000). Thus, it is no surprise that those initial classification attempts were also supported on pre-digital typologies.

In Spain, the first classification attempt was made by Díaz Noci and Meso, who in 1997 reviewed the digital media in the Basque Country and organized them in accordance with the five following main categories (we have omitted the actual media attached to each class as well as the smallest sub-categories to focus only on the categories comprising their classification system): (1) "textual media", which were then sub-divided into four types: newspapers, magazines, corporate publications and press groups; (2) "radio", with two categories under it: stations and radio programs; (3) "television", with three types: television stations, television studios and television programs; and finally, (4) "communications businesses and agencies" and "newspaper stands" (Díaz Noci & Meso Ayerdi, 1997: 78-80; 1998). As can be observed, the purpose of this classification system was modest: to arrange the few digital media that existed in the Basque Country at the end of the 1990's —there were a total of 53—. Díaz Noci and Meso did not aim to postulate a typology of digital news media with which to classify the many media varieties that would arise in the following years.

Another early classification attempt was made by Cabrera González (2001), who described four digital media models based on classification criteria relating to the degree of digital evolution. The typology included the following categories: (1) the "facsimile model", which consisted of faithfully representing the

print version of a media outlet on the Internet with a PDF document, for example; (2) the "adapted model", based on printed content as well yet adjusted for the communications possibilities offered by the net; (3) the "digital model" where the content was already expressly designed for the Internet yet with publishing criteria inherent to the previous media outlets; and finally, (4) the "multimedia model" where both the content as well as the language used to represent them were completely digital. Similar typological proposals which frame the media in an evolutional continuum can also be found in the writing of authors such as Machado et al. (2003), among others.

By the end of that first decade of digital news media, three typological proposals based on those initial typologies stood out due to their analytical power and forward-looking perspectives. They correspond respectively to Jaime Alonso and Lourdes Martínez (2003), to Xosé López García et al. (2005) and, finally, Guillermo López García (2005a, 2005b; López García & Palacios, 2009).

In chronological order, the first typology came from Alonso and Martínez, who estimated back in 2003 that it was still necessary to typify the "new media" with comparisons to traditional media outlets. According to these two authors' analysis, the new media variant which had become stronger since the decade before could be characterized by eight features: they were digital, interactive, personalized, multimedia, instantaneous, hypertextual, universal and innovative (Alonso and Martínez, 2003: 271). On the basis of these characteristics, these two authors would then distribute the "main interactive media" (p. 287) into five different types: (1) digital newspapers, (2) portals, (3) search engines and directories, (4) blogs, (5) people networks and (6) virtual communities (pp. 286-303).

Two years later, Xosé López García et al. (2005), added another contribution to this theoretical debate as part of the results of a research project by the Infotendencias Group established in 2003 by professors at several Spanish universities (Infotendencias Group, 2012). They published a chapter in a book entitled Cibermedios (Salaverría, 2005) called "Cybermedia typology" (López García et al., 2005), which exalted this concept as "a new category of media classification" (p. 43). The neologism cybermedia in all reality is a natural evolution of the term cyberjournalism, which had already been coined and used for a few years by a number of researchers in the field (Flores Vivar & Arruti, 2001; Islas, 2002; Díaz Noci & Salaverría, 2003; Parra Valcarce & Álvarez Marcos, 2004), pursuant to the linguistic recommendations offered by the Spanish Royal Academy (RAE, 2005: 135; see the entry on the compound prefix "cyber-"). López García et al. define cybermedia as the transmitter of content with a will for mediation between facts and the public which fundamentally uses journalistic criteria and techniques, uses multimedia language, is interactive and hypertextual, is updated and is published on the Internet (López García et al., 2005: 40).

These authors affirm that "their similarity to the press, radio and television" allow them "to be considered as one more item in the traditional means of communication taxonomy" (p. 44), yet later emphasize that "its originality as an institution that has arisen from the depths of the Internet is what forces (them) to design internal cybermedia classification systems" (p. 45). The criteria used to establish this classification system is the "level of dynamics" which "alludes to the level of the use (…) of the possibilities afforded by the online medium —the application of hypertextual, multimedia and interactive techniques and frequent updating—" (p. 45). In short, they base their typology on the level of exploitation of the communicative features of the Internet in such manner that a digital media outlet would stand out more above the other three types of preceding media the more these elements are taken advantage of. Finally, they added one topic-related difference: they made a distinction between general news and specialist news digital media.

Guillermo López García, a professor at the University of Valencia, published his own capital contributions to the subject of this article back in 2005. They are above all found in his book Modelos de comunicación en internet (Internet Communication Models) (López García, 2005a), although he also added a few other nuances in a chapter of the collectively written book El ecosistema digital (The Digital Ecosystem) (López García, 2005b). The first of these two publications clarifies the terminology and sets the theoretical bases for constructing a classification system for Internet means of communication models. It divides them into two main categories: "interpersonal means of communication" (López García, 2005a: 94-127) and "mass means of communication" (López García, 2005a: 129-193). The first category covers email, distribution lists, news groups, chats, P2P networks, debate fora, wikis and Internet gaming. On the other hand, mass means of communication which include the most journalistic type of media encompasses personal websites, weblogs, organizations' websites, portals, cybermedia and, finally, search engines and directories.

When describing "cybermedia" —in other words, the most journalistic type of digital media—, Guillermo López García assigned three main features to them: the priority given to the content, the fact that it is subject to updating and respect for journalism and professional criteria when generating content. Immediately afterwards, he makes this key observation:

We can clearly see that these criteria correspond to the criteria for defining traditional mass means of communication. On the other hand, other criteria which were also a part of this definition such as

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periodicity in the publication of content or the preponderance of a means of communication lost meaning here. (...) For this reason, it no longer makes sense to speak of digital 'dailies' or 'newspapers' nor is the media a product of text, images or sound; in other words, they are not 'written media' or 'audiovisual' but rather simply 'digital'" (López García, 2005a: 170; the cursive font was added in this article for emphasis).

Following these typological reflections, there have been endless proposals for classifying digital news media (Meso Ayerdi, 2008; Campos Freire, 2008; Cebrián Herreros, 2009; Larrondo Ureta, 2009; Grimley & Allan, 2010; González & Mahugo, 2010; Irala Hortal & Pérez Martínez, 2013; Engesser, 2014; Dourado, 2014; López García et al., 2015; Sádaba et al., 2016; Colussi, 2016), and even more so with respect to some of the complementary areas (Erdal, 2009; Casero-Ripollés, 2010; Guallar et al., 2013; Bleyen et al., 2014) and elements, quite particularly journalism genres (Larrondo Ureta, 2008, 2010; López Aguirre, 2010; Iglesias García & Fernández Poyatos, 2011; Mayoral Sánchez & Edo Bolós, 2014). These contributions to the theory have of course helped expand and enrich academic thought on the classification of digital media. However and in order to avoid excessive long-windedness, the suggestions indicated up to this point are enough. We believe they sufficiently situate the terms of the theoretical debate.

These reflections outline a turning point in the theoretical analysis of the classification systems for digital news media. This is true not only because they more than speak to the validity of the traditional typology of the media with respect to Internet publications but also because they even reject the legitimacy on the net of the two supreme criteria supporting it: the periodicity and means of communication. As stated by Guillermo López García (2005a: 170), the digital news media can no longer be classified pursuant to the prior nomenclature and, in fact, the classification criteria that were once valid are no longer of use.

In short, a certain question arises if the typological grounds of the past are no longer of use: How should we classify digital news media? And this key question can only be answered if we first properly answer another no less important one: What criteria must be used to classify digital news media?

4. Theoretical bases for classifying digital news media

A proper classification system for digital news media must start with one essential idea: it is one thing to differentiate digital news media from that which is not and it is quite another thing to differentiate digital news media from among each other. We will follow this conceptual discrimination to outline our proposed typological bases.

4.1. Identification of digital media versus other media

As has been noted, the first theoretical reflections surrounding the classification of cybermedia mainly focused on differentiating between digital media and non-digital media. The same typological bases from the past remained: the means of communication, the periodicity and to a lesser extent, the topic.

Pursuant to this triad of criteria, cybermedia was described as that which —as opposed to the press, radio and television— was characterized by: 1) the fact that it is published on a digital means of communication —which in all reality means that cybermedia is free of the confines of any physical medium (López García, 2015: 16-19)—; and 2) the fact that it is not subject to any type of periodicity given that it not only admits periodic publication formulas but also the possibility of constant updating (García de Torres & Pou Amérigo, 2003: 69-72) and deferred coverage (Palacios, 2009), which de facto means cybermedia is a multi-timed or "polychronic" media (Salaverría, 2005: 23-24).

With respect to topic, this factor is confirmed as subsidiary in nature to the criteria of periodicity and means of communication. The topic does not make it possible to distinguish between digital media and other types of media as they all allow for identical diversity in the topics. Before and after the arrival of digital media, there were general and specialist news media. Therefore, it is not appropriate to distinguish digital news media from other media varieties in virtue of the topic discussed. Nonetheless, as will be seen, the topic factor is valid when establishing inter pares differences; in other words, differences between certain types of digital news media and others.

Perhaps the reader has noted that we have not included characteristics often indicated as exclusive to digital media among the factors that differentiate digital news media from similar media. Particularly, we have not referred to features such as hypertext, multimedia and interactivity. We did not do this because we thought they lack such distinctive nature. Although these three characteristics are expressed with a certain intensity in digital news media, the truth is they are not exclusive to digital publications; they are also found to a lesser extent in the prior media. As already explained in other places (Salaverría, 2005; 2014), a printed newspaper undeniably features hypertextual characteristics (reading is not linear and it uses an

editorial architecture that is full of references which, in all essence, work very much like hypertextual links), multimedia traits (the information combines two linguistic codes: text and image) and even interactive attributes (yet modestly, aren't letters to the editor a means of interaction?). Similar features are noted on the radio and on television. Thus, it does not seem correct to us to use the features of hypertextuality, multimediality and interactivity to differentiate digital news media from other types of media. To more or less extent, all media reflect these same characteristics.

Table 1. Differentiation of media as per the medium and periodicity

Media outlet	Means of communication	Periodicity
Press	Paper	Newspaper
Radio	Sound	Continuous
Television	Audiovisual	Continuous
Cybermedia	Digital	Polychronic

Source: Own compilation.

Therefore, we used two more traditional typological bases to show an initial difference between media categories: means of communication and periodicity. But do these two factors really distinguish the different types of cyber media from each other?

4.2. Differentiation of digital news media from each other

The boundaries between the various digital media outlets are ever vaguer. Recent research, in fact, indicates that clearly journalistic digital media not only reflect increasing diversity but also overlap with hybrid forms, leading to what has been baptized "metamedia" (Campos-Freire, 2015; Noguera-Vivo, 2016).

In view of this growing complexity in digital news media typology, we believe it is essential to offer solid theoretical grounds for constructing a homogeneous digital media classification system. It is with this purpose that we propose nine criteria below to differentiate between the various digital news media: 1) platform, 2) temporality, 3) topic, 4) scope, 5) ownership, 6) authorship, 7) approach, 8) economic aim and 9) dynamics.

4.2.1. Digital news media according to the platform

As already explained, the media can be differentiated firstly by the means of communication through which the information is disclosed; in other words, based on the element, technology and/or specific device used to disseminate and consume it. This makes it possible to distinguish the media that is digital from that which is not.

However, a further distinction can be made within digital media or cybermedia in virtue of the platform used for publication. Herein "platform" means the specific digital technology that makes possible a certain type of publication either because of the inherent standards or computer language or the specific device needed for its consumption.

From this perspective and in accordance with the current state of digital technologies, four types of digital news media can be listed: 1) web only, 2) tablet only, 3) mobile only and 4) multi-platform (in other words, media that is published simultaneously on at least two of the three foregoing platforms).

Please note that this is not by any means an all-inclusive list. Current trends in technological innovation suggest the coming rise of new digital media models related to the platform. In fact, it does not seem at all unrealistic to imagine that in the more or less near future we will see digital news media arising in the form of "virtual reality", "holographic", "haptic" —in other words, with the feeling of touch— and other formulas of the like (Salaverría, 2016a). For the time being, these forms of digital news media are little more than speculation inherent to science fiction. However, we have all been witness to the dizzying speed at which what once seemed technologically unimaginable just a few years back has now become daily reality. It would not, therefore, be shocking if the same happens —once again— with digital media publication platforms.

4.2.2. Digital news media according to the temporality

Just as we highlighted the similarity between the concepts of means of communication and platform, we could do so with periodicity and temporality. Just as with the former, these two are not synonymous.

As explained, periodicity gave rise to journalism — even from an etymological perspective. Therefore, it is an essential concept in all journalism activity (Martín Algarra et al., 2013). However, digital news media have incorporated this concept in a limited manner to the point that many of these digital media outlets' publishing cycles are considered "continuous" or "flowing" (Salaverría & Desideri, 2015). In other words, not periodic but rather consecutive. It is for this reason that just as the case of other authors (Díaz Noci, 2004) when identifying types of periodicity in digital news media, we believe it is more accurate to use the term temporality which encompasses both periodic and non-stop publication modes.

As concerns this temporary nature factor, we have differentiated three types of digital news media: 1) periodic ones —those which respect a fixed interval of time between editions—, 2) continuously updated ones —those with a publication cycle that is dictated by the existence of new information or, ultimately, the pace of the news—, and 3) polychronic or multi-timed ones —those which blend the characteristics of the other two—.

Most of the digital editions of newspapers in fact correspond to the polychronic digital news media model. They often combine two cycles: daily refreshing of the news from the printed edition, on the one hand, and continuous updating dictated by the evolution of the news throughout the day, on the other hand.

4.2.3. Digital news media according to the topic

As has been seen when discussing the types of pre-digital media, the topic has been useful throughout the history of journalism when distinguishing between media of a single type but not so much when distinguishing between types of media. The typological utility of this factor has made it so this attribute remains in the era of digital journalism.

Just as in the past, a difference can be made between two main categories of media in the digital age from a topic-based perspective: 1) general news digital media and 2) specialist news digital media.

General news media are those which include a wide range of affairs and aspire to cover all of the relevant current news that may be of interest to the public. Specialist news media though focuses on a single subject or field yet offers the broadest and deepest information possible. Just as occurs with non-digital media, specialist news cybermedia can be sub-divided into as many specialty areas as one would be capable of listing. Moreover, they may handle these topics on a number of levels of depth: from more general —sports, economics, culture—, to more specific —mountain biking, investment funds, puppet theatre—.

4.2.4. Digital news media according to the scope

Internet and, by extension, digital news media, has been said to transcend the boundaries of space and time (López García, 2015: 19-21). In fact, the omnipresence of the net means any page hosted on a web server may be accessed by any user regardless of the geographic area where said user is located.

This attribute means any digital news media outlet, as modest as it may be, automatically becomes global in scope. However, the reality is not as awesome: it is one thing for a digital media outlet to be able to be read at the other end of the globe and quite another thing for someone there to be interested in what said media outlet is publishing.

For this reason, territorial boundaries continue to be valid even in the omnipresence of the Internet when determining the actual scope of a media outlet. These boundaries are often not even linguistic but rather strictly geographic: most digital news media, especially those which publish general news, find their public among those who co-exist or come from the same place and not so much those who speak the same language. Thus was confirmed, for example, upon analyzing the characteristics of digital journalism in the twenty-two countries comprising the vast Ibero-American community (Salaverría, 2016b: XXI).

Having made this observation, we can distinguish four types from the territorial scope perspective: 1) international or global digital news media, 2) national digital news media; 3) local digital news media — which can be further sub-divided, as applicable, into digital publications of a regional, insular, provincial, county-wide and/or municipal scope—; and 4) neighborhood or district-wide digital news media, also known as "hyperlocal" (García Avilés & González Esteban, 2013).

4.2.5. Digital news media according to the ownership

Another factor that makes it possible to differentiate between certain types of digital media and other types is the ownership. In this aspect, there are as many varieties of digital news media as there are in non-digital media. The two main categories are 1) publically-owned digital news media and 2) privately-owned digital news media.

Those which are publically-owned exist on a number of scales: from websites for large international, national or regional audiovisual corporations to small municipally-promoted digital media outlets. No less diversity is detected among privately-owned digital news media: with everything from digital publications published by multinational companies to modest local or even hyperlocal commercial ventures.

4.2.6. Digital news media according to the authorship

Although similar to the ownership criteria, that of authorship is an inherent typological factor. While ownership indicates who the owner of a media outlet is, authorship identifies who is responsible for publishing the content. Ownership and authorship may coincide as a single private individual or legal entity, but may also differ.

The main distinction in this case is between 1) individually authored digital news media and 2) collectively authored digital news media. The latter are more common given that maintaining the publication of any media, whether digital or not, usually requires relatively extensive human resources. Notwithstanding, it is also possible to find individually authored digital news media much like the habitual sole proprietorship publications seen up until the 19th century. In fact, Internet has helped recover that type of media created by a single author thanks to how technically easy it is to publish on the net. Most blogs, which in all reality are no other than one more form of digital media (Orihuela, 2006: 38), precisely follow this pattern.

4.2.7. Digital news media according to the approach

The net is populated by an enormous quantity of publications. It is logical, therefore, for digital media to be subject to very disparate informational principles. Many of them follow completely periodical publishing patterns both in form and depth. However and despite appearing as graphically similar to purely journalist media, many others in all reality serve another type of interest more inherent to institutional communication, advertising or propaganda. This typological factor related to the content is what we call approach.

In this case, we again propose two types: 1) news digital media and 2) non-news digital media. Obviously, the former include outlets which operate in modes and under principles inherent to the journalism business. On the other hand, the latter serve another type of interest not strictly news-related where the priority is on a will to convey a positive image of a company or institution, an aim to promote a product or service or an attempt to politically persuade the population, just to name three possibilities.

Those activities can be dressed up to look journalistic. Yet, if they do not meet the ultimate and supreme purpose of simply informing, they cannot be considered journalism. Thus and although it is often difficult to determine under which of these two types a certain digital media outlet should be classified —reality is always rich in nuances—, it does seem necessary to defend this typological criterion, the objective of which is to distinguish between digital media that can be considered true journalism and that which cannot.

4.2.8. Digital news media according to the economic aim

Much has been written in recent years on the search for sustainable business models by digital news media outlets (Casero-Ripollés, 2010; Cea, 2013; Vara-Miguel & Díaz-Espina, 2015). Such interest is no surprise considering that this matter has been the main challenge in the consolidation of digital media for more than two decades now (Salaverría, 2016b: XXXI- XXXII). As described in those studies, the digital news media have tested a number of funding models with unequal results. If one thing is clear, that would be that the search for sustainable economic models must continue.

With these funding model related questions aside, however, a basic typological distinction can be made regarding the economic aim of digital news media. All media outlets aim to be profitable of course but some understand such profitability strictly in economic terms while others interpret it in a social, altruist, humanitarian, artistic and/or community manner.

Based on this economic aim criterion, we can once again differentiate two more main types of digital media: 1) for-profit digital news media and 2) not-for-profit digital news media.

4.2.9. Digital news media according to the dynamics

In the book Cibermedios, Xosé López García et al. (2005) establish, as already explained, types of digital media based on the degree to which they take advantage of the hypertextual, interactive and multimedia possibilities. They encompass this set of factors under a single denomination: dynamics.

Based on the term chosen by those authors, we suggest distributing digital media into two large categories: 1) static digital news media and 2) dynamic digital news media. Needless to say, the first are those that make scarce or null use of hypertextual, interactive and multimedia resources. On the contrary, the second are those which stand out due to the opposite.

Just as occurs with the typological categories described previously, these two models are not separated by limited differences. Rather they are linked by a gradual scale ranging from mainly static digital news media to mainly dynamic digital news media.

Table 2. Differentiation of cybermedia according to typology factors

Typology factor	Types of digital news media
Platform	1. Web only digital news media 2. Tablet only digital news media 3. Mobile only digital news media 4. Multi-platform digital news media
Temporary nature	1. Periodic digital news media 2. Continuously updated digital news media 3. Polychronic digital news media
Topic	1. General news digital media 2. Specialist news digital media
Scope	1. International or global digital news media 2. National digital news media 3. Local digital news media 4. Neighborhood or hyper-local digital news media
Ownership	1. Publically-owned digital news media 2. Privately-owned digital news media
Authorship	1. Individually authored digital news media 2. Collectively authored digital news media
Approach	1. News digital media 2. Non-news digital media
Economic aim	1. For profit digital news media 2. Not-for profit digital news media
Dynamics	1. Static digital news media 2. Dynamic digital news media

Source: Own compilation.

5. Discussion

Digital news media are already acknowledged on an equivalent level as the three traditional news media outlets: the press, radio and television. This acknowledgement was in fact attained at a very early stage when digital news media had barely taken their first steps.

In the more than two decades that have passed since then, digital news media have gone through a settling and diversification process. Thanks to the growing audiences, the fertile digital media typology has become more and more exuberant. The digital news media species have multiplied to the point that it is necessary to create more and more specific categories. In the mid-1990's, one general term referred all digital media. At the time, the main objective was to distinguish the form of media that arose out of the preceding media. Nowadays, however, the situation is quite different. It has now become essential to create typological categories that differentiate the more and more varied digital news media models from each other.

More than suggest a new classification system for digital news media —a task that remains open for the future—, this article offers theoretical bases for such work. We have done this because, like Linnaeus, we believe that any suggestion for classification whether of living beings or news media must be deductively constructed from theory to specific cases.

6. References

[1] Alonso, J., & Martínez, L. (2003). Medios interactivos: caracterización y contenidos. En Díaz Noci, J., & Salaverría, R. (coords.) *Manual de redacción ciberperiodística* (pp. 261-305). Barcelona: Ariel.

[2] Armentia, J. I., Caminos Marcet, J. M., Elexgaray Arias, J., Marín Murillo, F., & Merchán Mota, I. (2000). *El diario digital. Análisis de los contenidos textuales, aspectos formales y publicitarios*. Barcelona: Bosch.

[3] Arrese, Á., & Kaufmann, J. (2016). Legacy and Native News Brands Online: Do They Show Different News Consumption Patterns? *International Journal on Media Management*, 18(2): 75-97.

[4] Bleyen, V.-A.; Lindmark, S., Ranaivoson, H., & Ballon, P. (2014). A typology of media innovations: Insights from an exploratory study. *The Journal of Media Innovations*, 1(1): 28-51.

[5] Bonington, P. (1995). The fourth media. *Internet World*, 6(4): 6.

[6] Campos Freire, F. (2008). Las redes sociales trastocan los modelos de los medios de comunicación tradicionales. *Revista Latina de Comunicación Social*, 63: 287-293.

[7] Canga Larequi, J. (2001). Periodismo e Internet. Nuevo medio, vieja profesión. *Estudios sobre el mensaje periodístico*, 7: 33-48.

[8] Casero-Ripollés, A. (2010). Prensa en internet: nuevos modelos de negocio en el escenario de la convergencia. *El Profesional de la Información*, 19(6): 595-601.

[9] Cea, M. (2013). Economía de los cibermedios: modelos de ingresos y fuentes de financiación. *El Profesional de la Información*, 22(4): 353-361.

[10] Cebrián Herreros, M. (2009). Nuevas formas de comunicación: cibermedios y medios móviles. *Comunicar: Revista científica iberoamericana de comunicación y educación*, 33: 10-13.

[11] Colussi, J. (2016). Propuesta de clasificación de blogs periodísticos. *Rizoma*, 4(1): 24-39.

[12] Del Rey Morató, J. (1991). Medio. En Benito, Á. (dir.) *Diccionario de Ciencias y Técnicas de la Comunicación*. Madrid: Ediciones Paulinas.

[13] Díaz Noci, J. (2004). Los géneros ciberperiodísticos: una aproximación teórica a los cibertextos, sus elementos y su tipología. En Gago Mariño, M., Limia Fernández, M., Otero, M. L., Xosé López García, X., & Pereira Fariña, X. (coords.) *Tendencias en el ciberperiodismo iberoamericano: ponencias do Congreso Iberoamericano de Xornalismo Dixital* (pp. 47-69). Santiago de Compostela: Servicio Editorial de la Universidad de Santiago de Compostela.

[14] Díaz Noci, J., & Meso Ayerdi, K. (1997). *Medios de comunicación en Internet*. Madrid: Anaya Multimedia.

[15] Díaz Noci, J., & Meso Ayerdi, K. (1998). Tipología de los medios de comunicación en Internet. Génesis y desarrollo de un nuevo paradigma comunicativo. El caso vasco. *XIV Congreso de Estudios Vascos*: 77-83.

[16] Díaz Noci, J., & Salaverría, R. (coords.) (2003). *Manual de redacción ciberperiodística*. Barcelona: Ariel.

[17] Dourado, T. (2014). Modelos de revistas em formatos digitais: novas ideias e um conceito ampliado. *Leituras do Jornalismo*, 1(1): 109-124.

[18] Engesser, S. (2014). Towards a Classification of Participatory News Websites: Comparing heuristic and empirical types. *Digital Journalism*, 2(4): 575-595.

[19] Erdal, I. J. (2009). Repurposing of Content in Multi-Platform News Production: Towards a typology of cross-media journalism. *Journalism Practice*, 3(2): 178-195.

[20] Espejo Cala, C. (2010). Gacetas y relaciones de sucesos en la segunda mitad del XVII: una comparativa europea. En Cátedra García, P. M. (dir.), & Díaz Tena, M. E. (ed. lit.), *Géneros editoriales y relaciones de sucesos en la Edad Moderna* (pp. 71-88). Salamanca: SEMYR.

[21] Faus Belau, Á. (2007). *La radio en España (1896-1977): una historia documental*. Madrid: Taurus, 2007

[22] Fernández Parratt, S. (2011). El debate en torno a los géneros periodísticos en la prensa: nuevas propuestas de clasificación. *Revista Zer*, 11.

[23] Fidler, R. (1997). *Mediamorphosis. Understanding the New Media*. Thousand Oaks, California: Pine Forge Press.

[24] Flores Vivar, J., & Arruti, A. M. (2001). *Ciberperiodismo: nuevos enfoques, conceptos y profesiones emergentes en el mundo infodigital*. México: Limusa Noriega.

[25] Gang, G. (1998). Facing a Coming Era of the Fourth Media. *Journalism & Communication*, 3.

[26] García Avilés, J. A., & González Esteban, J. L. (2013). Cibermedios nativos españoles: explorando modelos de rentabilidad. *Trípodos*, (30): 153-167.

[27] García de Torres, E., & Pou Amérigo, M. J. (2003). Características de la comunicación digital. En Díaz Noci, J., & Salaverría, R. (coords.) *Manual de redacción ciberperiodística* (pp. 49-79). Barcelona: Ariel.

[28] González, J. L., & Mahugo, S. M. (2010). Modelos de medios cívicos ante la crisis, los casos de Bottup y Triangle. *Doxa Comunicación. Revista Interdisciplinar de Estudios de Comunicación y Ciencias Sociales*, 10: 151-166.

[29] Grimley, M., & Allan, M. (2010). Towards a pre-teen typology of digital media. *Australasian Journal of Educational Technology*, 26(5): 571-584.

[30] Guallar, J., Abadal, E., & Codina, L. (2013). Sistemas de acceso a la información de prensa digital: tipología y evolución. *Investigación Bibliotecológica: Archivonomía, Bibliotecología e Información*, 27(61): 29-52.

[31] Harlow, S., & Salaverría, R. (2016). Regenerating Journalism: Exploring the 'Alternativeness' and 'Digital-ness' of Online-Native Media in Latin America. *Digital Journalism*. doi:10.1080/21670811.2015.1135752

[32] Iglesias García, M., & Fernández Poyatos, M. D. (2011). Ciberperiodismo: definiciones, desarrollo y tipología. En Larrondo Ureta, A., & Meso Ayerdi, K. (Eds.) *III Congreso Internacional de Ciberperiodismo y Web 2.0: la transformación del espacio mediático* (pp. 437-452). Lejona, Vizcaya: Servicio Editorial de la Universidad del País Vasco.

[33] Infotendencias Group (2012). Media convergence. En Siapera, E., & Veglis, A. (eds.) *The Handbook of Global Online Journalism* (pp. 21-38). Malden (MA, USA), Oxford (UK): Wiley-Blackwell.

[34] Irala Hortal, P. & Pérez Martínez, V. M. (cords.) (2013). *Cibermedios: palabra, imagen y tecnología*. Zaragoza: Ediciones Universidad San Jorge.

[35] Islas, O. (2002). *Explorando el ciberperiodismo iberoamericano*. Patria Editorial.

[36] Larrondo Ureta, A. (2008). *Los géneros en la redacción ciberperiodística. Contexto, teoría y práctica actual*. Bilbao: Servicio Editorial de la Universidad del País Vasco.

[37] Larrondo Ureta, A. (2009). Evolución de las tipologías genéricas en los cibermedios vascos. En Sierra Caballero, F. (coord.) *Iberoamérica: comunicación, cultura y desarrollo en la era digital. Ibercom 06, IX Congreso Iberoamericano de Comunicación* (25 pp.). Sevilla: Universidad de Sevilla.

[38] Larrondo Ureta, A. (2010). Propuesta metodológica para una aproximación empírica a los géneros ciberperiodísticos. *Zer: Revista de estudios de comunicación*, 15 (29): 157-174.

[39] López Aguirre, J. L. (2010). Análisis de géneros ciberperiodísticos en la prensa digital mexicana. En Said Hung, E. (coord.) *Tic, comunicación y periodismo digital* (pp. 247-257), Tomo II, Vol. 2. Bogotá: Ediciones Uninorte.

[40] López García, G. (2005a). *Modelos de comunicación en Internet*. Valencia: Tirant lo Blanch.

[41] López García, G. (2005b). Modelos de medios de comunicación en Internet: desarrollo de una tipología. En López García, G. (ed.) *El ecosistema digital: Modelos de comunicación, nuevos medios y público en Internet* (pp. 55-86). Valencia: Servei de Publicacions de la Universitat de València.

[42] López García, G. (2015). *Periodismo digital. Redes, audiencias y modelos de negocio*. Salamanca: Comunicación Social Ediciones y Publicaciones.

[43] López García, G., Alonso, J., & Palacios, M. (2009). Typology of online media. En Palacios, M. & Díaz Noci, J. (eds.) *Online journalism: research methods. A multidisciplinary approach in comparative perspective* (pp. 15-22). Bilbao: Servicio Editorial de la Universidad del País Vasco.

[44] López García, X., Limia, M., Isasi, A., Pereira, X., Gago, M., Calvo, R., & Orihuela, J. (2005). Tipología de los cibermedios. En Salaverría, R. (coord.) *Cibermedios. El impacto de internet en los medios de comunicación en España* (pp. 39-82). Sevilla: Comunicación Social Ediciones y Publicaciones.

[45] López García, X., Silva, A., & Toural, C. (2015). Historia, teoría, características y tendencias de los cibermedios. En Núñez Ladevéze, L. (coord.) *Periodismo en la red: géneros, estilos y normas*. Madrid: Editorial Universitas.

[46] Machado, E., Borges, C., & Miranda, M. (2003). Modelos de produção de conteúdos no jornalismo digital baiano. En Machado, E., & Palacios, M. (orgs.) *Modelos de jornalismo digital.* Salvador de Bahia: Edições GJOL.

[47] Macnamara, J. (2010). 'Emergent' media and public communication: Understanding the changing mediascape. *Public Communication Review*, 1(2).

[48] Magoun, A. B. (2007). *Television: the life story of a technology*. Westport: Greenwood Press, 2007.

[49] Martín Algarra, M., Torregrosa, M., & Serrano, J. (2013). Un periodismo sin períodos: actualidad y tiempo en la era digital. En García, A. (coord.) *"Periodística y web 2.0: hacia la construcción de un nuevo modelo". Estudios de Periodística XVII* (pp. 73-83). Madrid: CEU Ediciones.

[50] Martínez-Fernández, V. A., Juanatey Boga, O., & Crespo Pereira, V. (2015). Native cybermedia of web and social networks: Presence and activity of Spanish media on Facebook and Twitter. *10Th Iberian Conference on Information Systems and Technologies, CISTI 2015*. doi:10.1109/CISTI.2015.7170577

[51] Mayoral Sánchez, J., & Edo Bolós, C. (2014). Tipología de vídeos en el periodismo digital español: análisis cualitativo de cinco cibermedios. *Doxa Comunicación: Revista Interdisciplinar de Estudios de Comunicación y Ciencias Sociales*, 19: 31-56.

[52] Meso Ayerdi, K. (2008). Tipología de los cibermedios vascos y modelos de producto. Estado de la cuestión del estudio del fenómeno del ciberperiodismo desde la UPV-EHU. En López García, G. (ed.) *Comunicación local y nuevos formatos periodísticos en Internet: cibermedios, confidenciales y weblogs* (pp. 47-67). Valencia: Servei de Publicacions de la Universitat de València.

[53] Miel, P., & Faris, R. (2008). News and information as digital media come of age. Media Republic overview. Boston: Berkman Center for Internet & Society at Harvard University.

[54] Morris, M., & Ogan, C. (2002). The Internet as mass medium. En McQuail, D. (ed.) *McQuail's Reader in Mass Communication Theory*. Londres: Sage Publications.

[55] Negreira Rey, M. C., & López García, X. (2015). Los cibermedios nativos digitales en Galicia. Tendencias y características de un modelo en auge. En Rúas-Araújo, J., Silva-Rodríguez, A., & Puentes-Rivera, I. (eds.) *De los medios a los metamedios de comunicación. Actas del I Simposio de la Red Internacional de Investigación de Gestión de la Comunicación* (pp. 84-101). Pontevedra: XESCOM.

[56] Noguera-Vivo, J. M. (2016). Metamedios y periodismo: revisión panorámica de los nuevos cibermedios. *El Profesional de la Información*, 25(3): 341-350.

[57] Orihuela, J. L. (2006). *La revolución de los blogs*. Madrid: La Esfera de los Libros.

[58] Palacios, M. (2009). La memoria como criterio de valoración de calidad en el ciberperiodismo: algunas consideraciones. *El Profesional de la Información*, 18(3): 270-276.

[59] Pareja Pérez, V. M. (2003). Introducción al periodismo digital. En Pareja Pérez, V. M. (coord.) *Guía de Internet para periodistas* (pp. 29-58). Madrid: Consejo Superior de Investigaciones Científicas.

[60] Parra Valcarce, D., & Álvarez Marcos, J. (2004). *Ciberperiodismo*. Madrid: Síntesis.

[61] Real Academia Española (2005). *Diccionario panhispánico de dudas*. Madrid: Santillana Ediciones Generales.

[62] Sádaba, C., García Avilés, J. A., & Martínez-Costa, M. P. (coords.) (2016). *Innovación y desarrollo de los cibermedios en España*. Pamplona: EUNSA.

[63] Salaverría, R., & Negredo, S. (2013). Caracterización de los cibermedios nativos digitales. En Cabrera, M. Á. (coord.) *Evolución de los cibermedios. De la convergencia digital a la distribución multiplataforma* (pp. 175-180). Madrid: Fragua.

[64] Salaverría, R. (2014). Multimedialidade: informar para cinco sentidos. En Canavilhas, J. (org.) *Webjornalismo: 7 caraterísticas que marcam a diferença* (pp. 25-52). Covilhã: LabCom, Livros LabCom.

[65] Salaverría, R., & Desideri, Leonardo L. (2015). El flujo continuo de noticias y sus efectos. En *El nuevo diálogo social: organizaciones, públicos y ciudadanos* (pp. 149-160). Valencia: Campgráfic.

[66] Salaverría, R. (2016a). Los medios de comunicación que vienen. In: Sádaba, C., García Avilés, J. A., & Martínez-Costa, M. P. (coords.) Innovación y desarrollo de los cibermedios en España (pp. 255-263). Pamplona: EUNSA.

[67] Salaverría, R. (2016b). Ciberperiodismo en Iberoamérica: marco general. En Salaverría, R. (coord.) *Ciberperiodismo en Iberoamérica* (pp. XV-XXXIV). Madrid: Fundación Telefónica y Editorial Ariel.

[68] Sánchez, J. F. (1992). Tipologías de textos periodísticos. En Vilarnovo, A., & Sánchez, J. F. *Discurso, tipos de texto y comunicación* (pp. 133-165). Pamplona: EUNSA.

[69] Sánchez, J. F., & López Pan, F. (1998). Tipologías de géneros periodísticos en España. Hacia un nuevo paradigma. *Comunicación y Estudios Universitarios*, 8: 15-35

[70] Seixas, L. (2009). *Redefinindo os gêneros jornalísticos: proposta de novos critérios de classificação*. Covilhã: LabCom Books.

[71] Seoane, M. C., & Saiz, M. D. (2014). *Cuatro siglos de periodismo en España*. Madrid: Alianza Editorial.

[72] Suárez Villegas, J. C. (2015). Nuevas tecnologías y deontología periodística: comparación entre medios tradicionales y nativos digitales. *El Profesional de la Información*, 24(4): 390-395

[73] Terras, M. (2009). Digital images. En Bates, M. J., & Maack, M. N. (eds.) *Encyclopedia of Library and Information Sciences* (pp. 1569-1576). Boca Raton: CRC Press.

[74] Vara-Miguel, A., & Díaz-Espina, C. (2015). Nuevos modelos de negocio, creación de valor y el cambiante rol de la prensa en los sistemas democráticos. *Trípodos*, 36: 151-166.

Acknowledgment