

The mediamorphosis of local radio. A perspective from the Galicia-Northern Portugal Euro-Region¹ setting

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Abstract

This article focuses on the expansion of proximity radio to the internet from the perspective of the Galicia-Northern Portugal Euro-Region. Starting from both sides of local radio, namely local content and a medium for community participation, a content analysis was carried out of the websites of 65 traditional radio stations, 37 of them Galician and 28 Portuguese. This study has verified the limited adaptation of local radio to the internet in terms of multimedia and interactivity of its content, as well as the possibilities for its listeners-users to interact.

Keywords

Mediamorphosis, local radio, content, interaction, Euro-Region.

Resum

Aquest article tracta l'expansió de la ràdio de proximitat a internet des de la perspectiva de l'Euroregió Galícia – Nord de Portugal. A partir de les dues vessants de la ràdio local, continguts de proximitat i mitjà comunitari-participatiu, s'ha realitzat una anàlisi de contingut dels llocs web de 65 emissores convencionals, 37 de gallegues i 28 de portugueses. Un estudi que ens ha permès constatar la limitada adaptació de la ràdio local a la xarxa pel que fa a la multimedialitat i la interactivitat dels seus continguts, així com a les possibilitats d'interacció dels seus oïdors-usuaris

Paraules clau

Mediamorfosi, ràdio local, continguts, interacció, Euroregió.

1. Introduction

In July 2014 Radio Valga became the online audience leader in the *radios.net* application and its website. With over 1,500 visits² the municipal radio station in Valga (a municipality in the Pontevedra area with a population of 6,000) topped the list of 427 Spanish radio stations of different types and ranges.³

The airing of *Palco de Estrelas*, a musical show on Galician bands, put Radio Valga among the twenty most popular stations in a daily worldwide ranking on several occasions.⁴

This municipal station's bid to broadcast its signal live over this website made it a spontaneous example of *glocalization* from both market and cultural standpoints (Castells 2005).

If, as Fernet-Betancourt points out (2002), *glocalization* represents a unique chance to universalise the local sphere and localise the universal sphere, the internet is the context within which this phenomenon takes shape (Terol 2014). On the internet media can extend the scope of their local content to a worldwide community, at the same time as allowing their users to follow up global issues without leaving their website.

The emergence of the internet within the media ecosystem triggered a process involving the transformation of the media and their professionals to adapt to the potentials of the web. This mediamorphosis (Fidler 1997), a process that still continues

today, has led radio to seek new communication formulas to adapt to this new context and develop its own language and expression.

Although radio stations first used websites to gain an online presence and put out their broadcasts live or simulcast (Franquet 1999), they soon started to experiment with the possibilities of the digital medium, different conceptions of time and technological devices (Alves 2003).

2. From the sound medium to R@dio

On the internet radio has lost the ephemeral quality that once characterised it through the emergence of new on-demand distribution formulas which mean the listening experience can be personalised, as well as the time, place and device on which its products are consumed. Although podcasting made the medium flexible for a personal and mobile experience in offline settings too (Gallego 2012; Sellas 2012), the development of broadband and connectivity of portable devices have made streaming the dynamic core of online radio (Cordeiro 2012).

Radio stations combine technologies and distribution platforms to extend their range and impact, both from a perspective of public service and also economic benefits (Bonet and Quijada

2011). On the internet radio has broken some of the bounds of the traditional medium such as the geographical restrictions⁵ determined by the broadcasting range and the occupation and regulation of the radio spectrum.

The technological aspect in this case depends on the actual medium's capacity to develop its communication potential with sound as the anchor point (Cebrián Herreros 2008, Reis 2014b).

Beyond new formulas for distributing online content, the shift from traditional to online radio has also entailed the adoption of its multimedia and interactive potential, both in the message and in the relations established with listeners-users (Nyre and Ala-Fossi 2008, Priestman 2002).

The digital medium gives radio an ideal scenario to interact and generate new dynamics with its radio listeners, especially in the field of social platforms (Monclús and others 2014). In this setting listeners can take on an active role and become involved both in creating the medium's content (*User Generated Content*) and its distribution via their personal networks (*User Distributed Content*).

Interactivity, convergence and cloud computing are giving rise to a new concept of radio or R@dio, as this is called by Cordeiro (2012, 503), which combines "sound and image, is [more] interactive, [more] participative, shareable, asynchronous, repeatable, reproducible, inspectable, personalisable, discontinuous, hypertextual, non-linear, convergent and on demand".

In the age of portability (Kischinhevsky 2009) this R@dio becomes mobile as its universe expands to smartphones, tablets and other multimedia devices through applications which optimise access to its contents and services. With the leap to mobile devices radio gains in connectivity, adds flexibility and intensity to the consumption of the medium, multiplies options for personalisation and integrates new functions based on geo-location technology in a unique and perfectly interwoven experience.

Aware of these potentials, traditional radio broadcasters are showing a growing interest in the internet, its range of channels, platforms and content, as a strategic medium for attracting and consolidating communities of listeners-users (Martínez Costa, Moreno and Amoedo 2012).

Within this framework, several different authors have studied the transposition of the sound-based medium to a web-based and, to a lesser extent, mobile platform, as well as its impact on traditional radio stations. These approaches have tackled different aspects of mediamorphosis (the transformation of the communicative paradigm, distribution of content or audience participation, among others) from the standpoint of the main radio broadcasters with a range that covers the whole state or autonomous community.

But what's happening to local radio? What impact is mediamorphosis having on "proximity radio"?

This study set out to examine the transposition of local radio stations in the Galicia-Northern Portugal Euro-Region

to web-based and mobile platforms, especially as regards the multimedia quality of content and interaction-participation of their audiences.

We started out from the concept of the Euro-Region as a cross-border cooperation structure covering two regions belonging to different states with common characteristics which require the more or less institutionalised cooperation of both regions.

The Galicia-Northern Portugal⁶ cooperation area encourages economic, social and cultural cooperation between organisations, companies and citizens on both sides of the border.

The geographical proximity of these areas is favourable for receiving the signal from radio stations in the neighbouring country. Although this overspill stimulates cultural familiarity and brings both territories closer together, it can also give rise to cross-border conflict with a limited radio spectrum, a conflict that disappears with online broadcasting.

3. A brief overview of local radio in Spain and Portugal

When we talk about local radio we're referring to a heterogeneous set of stations with differing management, structure and content, including municipal, associational, free, educational and other stations. All these radio broadcasters have one common denominator: a limited range, which restricts their sphere of action from a geographical standpoint although it boosts their potential as regards social interaction (Bonet 2004). As Flichy (1981) points, out, these stations play an important role in stimulating local social life and initiatives and, by extension, in the cohesion of the community and in encouraging a feeling of belonging.

In this respect Bonet (2004) proposes the use of the term "proximity radio", a term which refers to one of the key aspects of this type of station: the rationale implemented in broadcasting their content and its influence on programme planning and information. Local radios stations focus on local information and bring up specific issues and angles of interest for the community they serve (Bonixé 2006).

The other aspect is that of local radio as a community or participatory medium. Such radio stations are conceived as a pluralist platform, alternative to the mainstream media, which gives citizens a voice in social and political debate, integrating different groups (Buendía and Pino 2008). According to Del Barco (2014) proximity radio represents a force for empowering the people and contributes to territorial structure and the construction of a participatory community.

Local radio stations tend to be the result of dynamic processes of civic development or specific initiatives within the community. The structure and development of such initiatives are nevertheless disparate in terms of objectives and context. A study of local radio in the Galicia-Northern Portugal Euro-Region therefore requires a brief examination of the particular aspects of the Spanish and Portuguese radio sector.

In Spain radio has a firmly-rooted local basis, albeit with

state-wide aspirations. Right from the start Spanish radio was characterised by its local spirit due to technological conditioning factors (the short range of the frequencies) and political aspects. The radio industry started becoming more concentrated in the 1980s, resulting in a state oligopoly supported by a network of local stations. Rather than through the licenses awarded, the main radio broadcasters have increased their range and influence through specific agreements with local stations. A system for broadcasting across the network with (local and regional) variation opt-outs for certain content was thus established.

In parallel to this, in the late 1970s proximity stations of different kinds emerged such as municipal, community, education and association-based broadcasters, taking on the role of service to the local community (Franquet 2008). Some of these stations, which *squatted* in the airwaves, were able to regularise their situation thanks to the creation of a specific legislative framework and the licenses granted. Others have nevertheless been discriminated against in the share-out of frequencies, as occurred in the tender put out by Galicia's regional authority from 2011 to 2013, which forced non-commercial stations into "piracy" (Calvo 2011).

In Portugal local radio went through three different phases of development. The first was the emergence of Portuguese radio, when local stations with small structural and financial volumes appeared (Reis, 2014a). This stage came to a close in 1975 with the decree for nationalising radio.⁷

From that time up to 1988, when the regularisation process started, different types of "pirate" radio stations were set up, backed by small companies, the church, local newspapers, sports clubs, cultural associations, local administrations, etc. (Bonixé 2014). In January 1989, after the pirate stations were closed down (24th December 1988), a new stage in Portuguese radio began with a major presence of proximity radio (Reis 2014a). In fact Portuguese radio has a strong "real" local base in which network broadcasting hardly comes into play.

Table 1. Type of local radio by content–range

| Type of local radio by content – range |
|--|
| Genuinely local, by range and/or content |
| Local through opt-out From the regional network From the state network |
| Local through advertising opt-out |
| By opt-in |
| By purchasing or swapping programmes produced by other local radios |

Source: Bonet 2004.

Beyond any differences in the structure of radio sectors, both Spanish and Portuguese contexts have the advantage of their proximity radio stations to alter "the local and public nature of communication and also the actions of social agents interacting with and via these" (Buendía and Pino 2008, 86). This function would stay with radio in its transfer to online broadcasting.

4. Materials and method

To analyse the transposition of proximity radio stations in the Galicia-Northern Portugal Euro-Region (hereinafter known as the Euro-Region) to the internet a quantitative exploratory study was carried out of the websites and Apps available using content analysis as our research method. This provides a systematic analysis of the 'signified' and 'signifier' aspects (analysis of procedures, of conventions, of formal features) of any text (Igartua Perosanz 2006).

As Mata (1993) claims, apart from being a means of communication, radio can also be considered as a signifying practice and cultural experience. This perspective was reflected in the choice of local radio from the Euro-Region as our subject for analysis. Apart from proximity to the sample examined and an interest in comparing two different states, the existence of a common culture [Galician-Portuguese] with a strong oral element was also involved in this choice.

4.1. Determining the sample

Setting the boundaries for the sample to be studied represented one of the most complex parts of this work due to the general nature of the term "local radio" and the particular aspects of the Spanish radio sector. Although the selection of Portuguese radios was based on data from the *Autoridade Nacional de Comunicações*,⁸ ruling out any stations that were inactive in October 2014, this process became more complicated in the case of Galician radio due to the limited correspondence between the assignation of frequencies and the real occupation of the radio spectrum.⁹

This lack of correspondence led us to compare data from the Ministry of Industry, Energy and Tourism with information from the press, Council websites, state and regional radio chains, sites such as *Guía de la Radio* and *Info de la radio* and our own experience as radio listeners to determine which stations (with or without an assigned frequency) were regularly broadcasting in November 2014.

The next step involved in selecting the sample was to set the boundaries for the concept of "local". Although many of the radio stations that cover the state or autonomous community in Galicia offer local opt-outs for news bulletins and other content, we opted to restrict the subject being analysed to "proximity radio" *per se* for the sake of greater comparability (between these and Portuguese stations).

This limitation does not mean that all network broadcasting has been eliminated. In fact, we should highlight the *Radiofusión*

project, an initiative by the association of Galician Municipal Radio Stations (EMUGA) for the common, efficient development of locally-based content, which occupies a considerable part of its programme scheduling. We should also note the existence of two local stations, private initiatives, whose main sphere of action is the province of Pontevedra: *Si Radio* (broadcasting from the counties of Salnés, Condado, Paradanta and the *concellos* districts of Crecente and Arbo) and *Vía Radio* (with a presence in Vigo, Pontevedra, Pontearreas, A Guarda and Ourense). These radio chains have a single website for all their stations, which is why they are treated as a single radio station in this analysis.

In the case of *Radiodifusión*, its website has individual sections for the stations associated with EMUGA, which meant that, for those municipal stations without their own website, these individual sections were considered as a single unit of analysis.

After setting the limits for the sample of proximity radio stations in the Euro-Region active in October-November (Table 2), and in view of the subject being studied, we selected those stations with a space on the internet to distribute their audio content. We based this selection on the fact that audio constitutes the characteristic feature of radio, also on the internet (Reis 2014b).

Finally, the last step was to set out the limits for the sample in view of radio content. If, as Chantler and Harris (1997) assert, information constitutes the differentiating element of local radio in a context of media saturation, it was deemed more relevant to find out how talk proximity radio is adapting to the internet rather than its musical equivalent.

In short, this multiple demarcation process led to the selection of an analytical sample of 65 traditional talk radio stations (37 Galician and 28 Portuguese) which distribute their audio content on the internet.

4.2. Tools

To study the adaptation of proximity radio stations in the Euro-Region to online radio we produced a worksheet on the two key aspects of radiomorphosis (Prata 2008): the sphere of

genre and interactivity. As well as both these aspects, which correspond to the two facets of local radio (content and participation), the range of mobile applications available was also broadly included:

- Genre: dissemination of audio content (live, streaming, podcast), use of text, image, video, integration of plugins from other platforms, expansion to other platforms, etc.
- Interactivity: possibilities to interact with the medium's content (rating, voting, comments, forms), inclusion of participation mechanisms (User Generated Content), shareability (User Distributed Content), integration of social networks (plugin, icon), etc.
- Range of applications available or mobile devices.

In a second stage these stations were classified according to their degree of adaptation to online radio. Several authors have proposed a classification for traditional radio broadcasters based on their development in the online medium. Bulck and Hermans' work (the only one specifically on local radio) provides three possible phases in radio's evolution which do not entail the distribution of audio content.

The remaining classifications refer to the evolution of online radio in terms of its adaptation to the multimedia concept (genres) and the interactivity of the digital medium. These two variables are also included within our own classification.

To assess the degree of website appropriation by proximity radio a station, a dual evaluation scale was produced taking into account the genres and interactivity.

As regards genre, live broadcasting was considered as the basic form of radio communication on the internet. In this case the maximum degree of appropriation was established as the incorporation of different content in the image, text or video format apart from access to all, or practically all, programmes on demand.

As for interactivity, the study was based on the classification by Chung (2008), who suggests three categories of cybermedia: low interactivity (saving and downloading content); average (rating, replying to surveys, and other kinds of automated interaction) and high (passing on content, comments, chats, etc.). Moreover, based on the idea of participation as a step further in listener relations with the producers of the medium, requiring a greater level of commitment, the highest rating was given to radio websites with mechanisms for User Generated Content. This function becomes particularly important in the case of proximity radio in view of its community and participatory component.

Each of these categories is considered to be one level further towards the appropriation of website-based radio, integrating the previous level, but an intermediate rating (0.5) is nevertheless included for indicating distinctive features: for example, the radio websites with audio distribution via streaming but not live.

Table 2. Type of proximity radio stations in Galicia-Northern Portugal

| Type of station | Galicia | Northern Portugal |
|-----------------|-----------|-------------------|
| Educational | 3 | 2 |
| Religious | 1 | 0 |
| Free | 8 | 0 |
| Municipal | 28 | 0 |
| Local | 3 | 55 |
| Musical | 3 | 4 |
| Local chain | 2 | 0 |
| Regional | 0 | 2 |
| Other | 2 | 0 |
| Total | 50 | 63 |

Source: author.

Table 3. Classification of radio stations by degree of platform appropriation

| Bulck and Hermans (2011) | Portela (2006) | Cordeiro (2004/2011) | Franquet (1999) | Cebrián Herreros (2008) |
|--|---|-----------------------------|-------------------------------------|---|
| No website | | | | |
| Website with limited content. Homepage or simple structure. No audio. | Minimum level. Does not broadcast or the broadcast is on an external platform | Token | Radio sites | |
| Website with advanced content. More advanced structure, content in different languages | | | | |
| Live content | Basic level. Website with homepage or simple structure. Live streaming. | | Live Bitcaster | Radio via the internet (only broadcast) |
| Streaming | Mid-level. Content multiplied in different languages (image, text, video, programme archive, contact by email and questionnaires) | Multimedia | Bitcaster on demand | Radio on the internet (including interaction tools and access to programming) |
| Podcast | Advanced level. Multimedia quality and complete interactivity. | R@dio | Full Bitcaster (live and on demand) | Cyber radio |

Source: author.

Table 4. Categories to rate internet appropriation – genre and interactivity. By local station

| | Genres | Interactivity-participation |
|---|--|--|
| 0 | Direct Autoplay | No |
| 1 | Direct connection | Rating, voting, “likes” |
| 2 | Content incorporated in text, image and video | Comments, forum, plugin RSS or shareability (interaction in the medium or participation in distributing content) |
| 3 | Access to audio via streaming | Comments, forum, plugin RSS and shareability (both) |
| 4 | Radio on demand (main programmes via streaming or podcast) | Participation in medium’s content |

Source: author.

5. Proximity radio on the internet. Genres

Radio stations from the Euro-Region are heavily audio-based in their move onto the internet. All the stations analysed broadcast some type of audio content either live (a total of 57 radio websites, 27 in Galicia and 30 in Portugal) or on demand (49 stations, 28 Galician and 20 Portuguese).

Streaming appears to be the most usual format for distributing content on demand. 75% of the websites analysed (41 from the internet itself, 22 in Galicia and 19 in Portugal, and a further 7 through external plugins: 6 Galician and 1 Portuguese) include some type of content in this format, a usage which contrasts with the limited presence of podcasts (3 stations, 1 in Galicia and 2 in Portugal). The association of non-linear consumption with podcasting has nevertheless meant that another type of audio file has been identified as such, namely those which, although they can be downloaded, are not syndicated content (the salient trait of podcasting).

In spite of the major presence of content on demand, only eight of the websites analysed provide real “radio à la carte” by distributing both current affairs news and their main programmes on demand. The other stations simply act as vehicles for some content, either news, programmes, interviews, fragments of sports competitions or even municipal plenary sessions.

Apart from the types of distribution via their own websites, 33 of the stations analysed (22 in Galicia and 22 in Portugal) have extended their online universe to other audio internet platforms. Tools such as TuneIn (used by 6 Galician stations and 9 Portuguese ones) or iVox (used by 10 Galician stations) mean that radio stations can replicate their programme on the internet, generate a library with their content for consumption via streaming, have this content downloaded or automate the process through podcasts. The use of other audio services has been noted to a lesser extent, such as Livestream (4 Galician stations), MixCloud (2 Galician stations), SoundCloud, MySpace or Cotonete (each found at 1 Portuguese station) to distribute audio via streaming.

The fact that these tools are free, the ease with which they can be integrated within a specific website (as a plugin or embedded content) and their socialisation possibilities represent an opportunity for proximity radio stations on the internet from both the viewpoint of content and also the interactivity of their audiences.

As regards the use of other languages, there appears to be a major integration of text and image content on the websites analysed. 80% of the sample (52 stations, 24 Galician and 28 Portuguese) incorporate texts and images on their sites either as an introduction to audio content, the station or announcers (21 radio websites, 8 Galician and 13 Portuguese) or as independent content (31 stations, 16 Galician and 15 Portuguese).

We should stress the interdependent relationship established between texts and images. Introductory or summary texts tend to be accompanied by icon-style images to identify programmes, announcers, sections of the website, etc., while news or content of greater importance includes photographs to complement

said information. Audiovisual content is less conspicuous on proximity radio station websites, especially in Galician stations (2 websites as opposed to 14 Portuguese).

Lastly, the analysis of the range of applications available for portable devices has revealed scant implementation of mobile radio among proximity radio stations. Only 9 stations (6 Galician and 3 Portuguese) have extended their presence to mobile devices by offering an application of their own. These applications are extremely simple and more prevalent are internet Apps enabling access from different mobile operating systems to live radio broadcasts.

6. Proximity radio stations on the internet. Interactivity

As regards interactivity, the evidence indicates a limited use of the possibilities for interaction, participation in content and shareability offered by the digital medium.

Almost half the stations analysed (34 radio stations, 17 Galician and Portuguese respectively) provide some option for interaction with their content, automated options (rating, voting, likes) being more common than comments (possible on 13 Galician radio websites and 9 Portuguese).

The incorporation of social networks in the realm of online radio has provided a complement for the interactive possibilities of websites with the inclusion of social plugins or icons to provide access for listeners-users to social conversation. In this respect 44% of the radio websites analysed (29 stations, 12 Galician and 17 Portuguese) include access to their social channels on the website, especially as regards Facebook (12 Galician and 17 Portuguese websites) and, to a lesser extent Twitter (8 Galician and 9 Portuguese stations).

This number of stations drops considerably when we look at user participation in the medium's content. Only five stations, all Spanish, offer some kind of function to facilitate and prompt User Generated Content. Although incorporating a contact section with an online form or the station's email address enables listener/user participation, this does not tend to be associated with a ‘call to action’ to encourage them to send in their own content.

Including interaction formulas over the Internet, such as emails or online forms, has replaced telephone contact at 12 of the radio stations analysed (9 Galician and 3 Portuguese). This situation, whose explanation may lie in the limited infrastructure available at some of these stations, rules out the radio participation formula *par excellence*. Indeed, according to Tolson (2006) telephone calls constitute the most powerful form of participation since they limit how much the medium's producers can control and interfere with the listener's message.

In addition to interaction with radio content, 47% of the websites (31 radio websites, 14 Galician and 17 Portuguese) include shareability options which allow listeners-users to distribute their content via social media. The options for User Distributed Content provided by these stations are fairly

standard, mainly enabling the redistribution of text content via email, Facebook and Twitter.

7. The internet radiomorphosis of Galician and Portuguese stations

The data collected in the content analysis allow us to evaluate how far proximity radio stations have adapted to the website platform, revealing certain differences in the mediamorphosis of local Galician and Portuguese radio.

As regards the adaptation of Galician radio stations to the digital medium, some convergence between stations can be seen (Graph 1). Most of the websites analysed (25 stations) contain content in different formats (text, image and audio) and even offer different formulas for interaction or shareability (17 and 14 stations, respectively).

More specifically, 59% of Galician radio websites (a total of 19) get a rating above 2 in the area of genre, which only occurs in 30% of the stations (a total number of 11) in the case of interactivity-participation.

We can therefore state that there is a medium-high degree of appropriation of the digital platform by Galician stations, even though there are some discrepancies.

On the one hand, although three radio websites have the maximum adaptation from the point of view of genre (thereby revealing themselves to be real à la carte multimedia radio stations) and a further five stations provide formulas for User Generated Content, both perspectives do not manage to appear together. There is no Galician proximity radio station with the highest degree of internet development.

On the other hand, there are six Galician stations which, al-

though they have adapted their content to the digital medium (two of them even have medium-high adaptation in the field of genre), they have not considered the potential for interaction. These stations are disregarding one of proximity radio's opportunities to create and consolidate an active and participatory community of radio listeners.

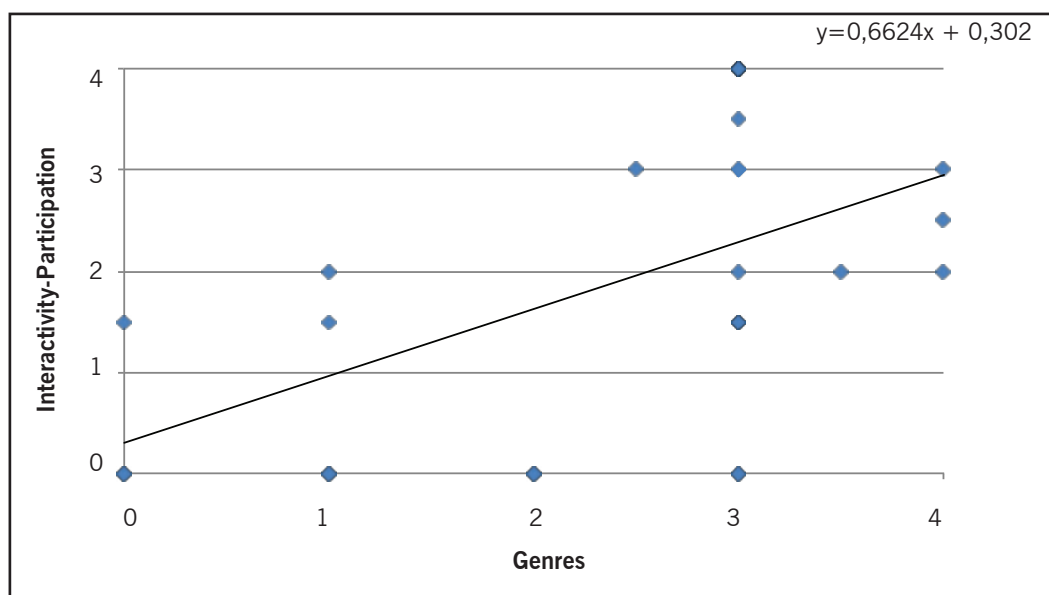
In their adaptation to the internet, Portuguese stations are seen to be more diverse than their Galician equivalents. Indeed, as shown in Graph 2, there are some major fluctuations as regards genre.

Portuguese proximity radio stations have a diverse morphology and structure ranging from very simple websites in which live broadcasts are provided via a plugin from another internet platform (2 radio websites) to genuine à la carte radio stations which not only incorporate content in text, image or video format but also enable access to all, or practically all broadcasts on demand (3 stations). In any event, the most commonly found pattern is that of a radio combining live broadcasts with some informative content in text, image or audio format via streaming (13 websites, representing 46%).

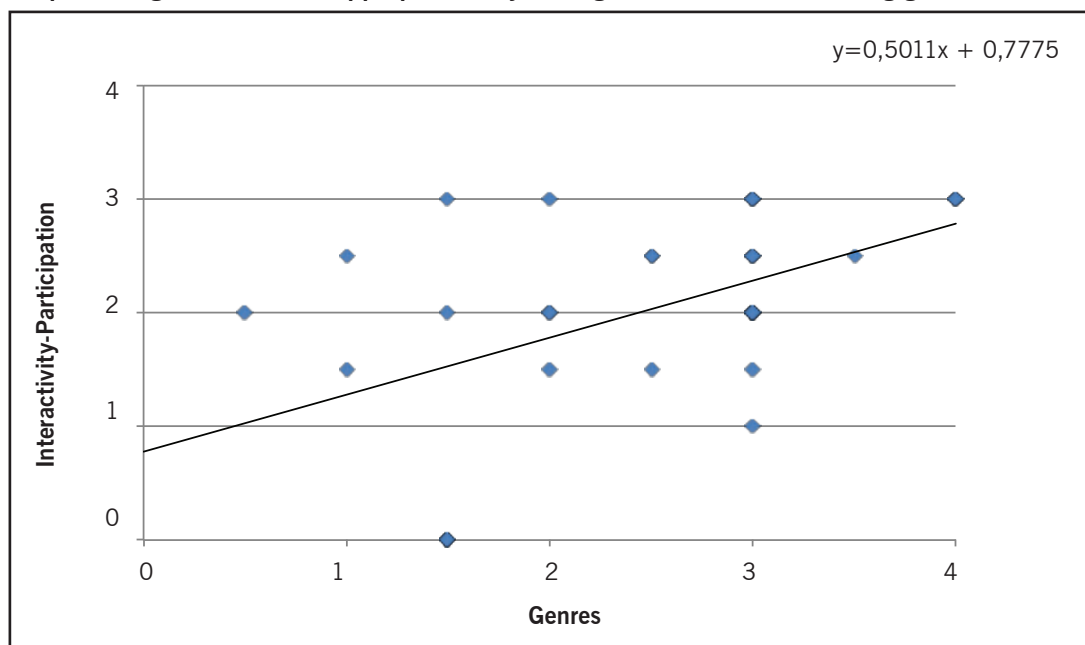
In the domain of interaction-participation, an intermediate phase in the appropriation of Portuguese radio stations of the internet platform should be noted, with 71% of the sample (20 stations) within the range of 1.5 to 2.5. None of the radio websites analysed offers formulas to encourage the interaction of listeners-users in the medium's content.

It is also significant that eleven stations (49%) make use of the website's own potential in terms of interactivity (ratings, surveys, comments) by integrating a social plugin or plugins. Although the inclusion of such a social screen represents a high level of interactivity (Chung 2008), it shifts the conversation to a platform that is external to the radio website itself.

Graph 1. Degree of internet appropriation by Galician stations considering genre-interactivity



Source: author.

Graph 2. Degree of internet appropriation by Portuguese stations considering genre-interactivity

Source: author.

8. Conclusions

The concentration in radio seen over the last few decades has placed the future of radio and its mediamorphosis in the hands of large multimedia groups. The same as with the big names in radio, proximity radio stations have developed in the digital medium by creating their own spaces on the internet. As regards the mobile platform, the development of local radio is still in a preliminary phase.

In the context of the Galicia-Northern Portugal Euro-Region, six out of every ten local traditional radio stations have extended their presence to the internet by setting up their own website. The leap from traditional to online radio has been greater in the Galician context where 80% of proximity radio stations have a place on the internet compared with 51% of Portuguese stations, although this difference lessens when we take into account the adaptation of these radio stations to their website platforms.

59% of Galician and 46% of Portuguese stations combine the distribution of a live signal on their websites with content in text, image and audio formats for personalised consumption. The study has discovered six (evenly distributed) radio websites which have succeeded in truly appropriating the internet in terms of content distribution. In spite of the stations analysed revealing a medium-high adaptation to the internet, there is still no genuine à la carte multimedia radio (cyber radio, full Bitcaster or R@dio) insofar as the multimedia quality is limited, as well as the type of on-demand content provided by these radio websites.

As regards interactivity-participation, proximity radio stations have incorporated different formulas for listeners-users to interact with the medium and content. These are nevertheless a long way from the real potential offered by the internet. 35% of Galician radio websites and 32% of Portuguese sites do not provide the opportunity to comment on their content, limiting themselves to other automated interaction formulas which require less commitment from and to listeners-users. As regards participation, only 8% of the stations analysed (all Galician) provide any option to intervene directly in the medium.

Along these lines, one out of every two local Portuguese stations have attempted to offset the shortage of mechanisms on their websites for interaction-participation by incorporating plugins from other social platforms.

The leap made by proximity radio stations in Galicia and Northern Portugal to the interactive medium *par excellence*, as well as the incorporation of multiple tools and social channels, has not resulted in more participatory radio. As pointed out by Willems (2013) and Tolson (2006), telephone intervention, a formula that has disappeared in 18% of the radio stations in the sample (9 Galician and 3 Portuguese), is the most immediate and spontaneous form of participation on the radio, a type of interaction which gives listeners greater control than email, social media or WhatsApp.

The 2.0 audio distribution services provided an opportunity for the mediamorphosis of proximity radio; the stations in Galicia-Northern Portugal Euro-Region should now appropriate the tools for social interaction and use these strategically to achieve more participatory radio; ultimately to create radio for and by the local community.

Notes

1. A study carried out in October-November 2014 during a placement at the Centro de Estudos de Comunicação e Sociedade of the Universidade do Minho, financed by the IACOBUS Programme of the Galicia-Northern Portugal European Grouping for Territorial Cooperation.
2. These platforms count as visits any access to the broadcaster of a specific radio station lasting more than one minute.
3. Followed by Cadena SER Madrid AM and Radio Cadena COPE AM with 1,226 and 853 visits, respectively.
4. A ranking of 18,000 stations all over the world except for Brazil.
5. It has nevertheless been found that some online radio providers apply restrictions to access to certain content when detecting a foreign IP.
6. The NUTSIII (Nomenclature of Territorial Units for Statistics) of Northern Portugal covers the regions of Minho-Lima, Cávado, Ave, Grande Porto, Tâmega, Entre Douro e Vouga, Douro and Alto Trás-os-Montes.
7. Decree-Law No. 674-C/75 of 2nd December 1975 which nationalised all radio stations except for Radio Renascença and local stations Rádio Altitude de Guarda and Rádio Pólo Norte in Caramulo. See <<http://www.gmcs.pt/ficheiros/pt/decreto-lei-n-674-c75-de-2-de-dezembro.pdf>>
8. Data on local stations with coverage in the NUTSIII for Northern Portugal. ANACOM Servicios de radiodifusión sonora. <<http://www.anacom.pt/render.jsp?categoryId=1646#.VTQeEmYxZJM>>
9. Radio spectrum. <<http://www.minetur.gob.es/telecomunicaciones/Espectro/RadioTV/FM/Paginas/radiodifusionFM.aspx>>. This page gives a total of 112 radio broadcasting frequencies in Galicia, with a total number of 261 active stations being recorded. This mismatch becomes more obvious if we start from the fact that some of the radios awarded in the frequency distribution of the Xunta de Galicia (2013) had not occupied these in November 2014.

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