

IP Syndication: Syndication and the new content distribution model in Catalan local TV networks

REINALD BESALÚ

Lecturer and researcher in communication at the Universitat Pompeu Fabra

reinald.besalu@upf.edu

Abstract

The new technological context, new forms of audiovisual uses and the crisis affecting media sector have been decisive factors in the transformation of the model of local television networks in Catalonia. Consequently, content syndication is emerging as an adaptation strategy. This article analyzes the syndicated production model, as well as the structure and new possibilities offered, in terms of transport and exchange of content, by the new IP-architecture of distribution implemented in these networks.

Key words

Local television, audiovisual production, syndication, IP net, media structure.

FREDERIC GUERRERO-SOLÉ

Lecturer and researcher in communication at the Universitat Pompeu Fabra

frederic.guerrero@upf.edu

Resum

El nou context tecnològic, les noves formes de consum audiovisual i la situació de crisi que afecta el sector dels mitjans de comunicació han estat factors decisius en el procés de transformació del model de les xarxes de televisions locals a Catalunya. En aquest sentit, la sindicació de continguts es perfila com a estratègia d'adaptació de les xarxes a l'escenari actual. En aquest article s'analitza el model de producció sindicada, així com l'estructura i les noves possibilitats que ofereix, quant a transport i intercanvi de continguts, la nova arquitectura IP de distribució d'aquestes xarxes a Catalunya.

Paraules clau

Televisió local, producció audiovisual, sindicació, xarxa IP, estructura dels mitjans.

Introduction

Since the granting of licences for local DTT and the analogue switch-off, Catalan proximity TV has had to face many challenges: the economic crisis, market saturation and difficulties in meeting production and programming commitments being just a few of them.¹ On the other hand, syndicated programming, a phenomenon with years of tradition in Catalan local TV, is an increasingly popular option for local TV stations as it means they can continue to meet their commitments to the territory at the same time as reducing costs. In fact, according to the Catalan Audiovisual Council itself, "content syndication is a formula that enables the system to be efficient and stable" (2009:74), and this was corroborated in 2008 with the emergence of two new private syndication networks (TDI and TVLocal.cat). The public's response has also helped: according to data from the Barometer of Communication and Culture, in 2009 25% of the accumulated audience for all stations in the Local Television Network (XTVL in Catalan) were viewers of syndicated programming. Moreover, 15.1% of the screen time for stations associated with this network corresponds to syndicated programming.²

To a certain extent, this phenomenon of syndicated programming becoming more important in local television might be characterised as institutional isomorphism. According to DiMaggio and Powell (1983), institutional isomorphism occurs

when several institutions gradually adopt the same way of organising themselves. In the case in point, the proliferation of new private syndication networks over the last few years is typical of this process of isomorphism. There are three mechanisms through which organisational structures tend to adopt similar operational models: coercive isomorphism, mimetic isomorphism and normative isomorphism (*ibid.* 150). In particular, Catalan local television has undergone mimetic isomorphism, occurring especially in situations of uncertainty, such as the current situation for local television, in which the problems faced by institutions have few evident solutions (*ibid.* 151). However, there are also signs of coercive isomorphism, produced when certain organisations apply pressure, formally or informally, on other dependent organisations to adopt certain operational mechanisms. The Catalan audiovisual regulatory authority, the CAC, might have indirectly encouraged Catalan local television stations to adopt the syndication method in light of certain decisions, such as the one to consider this kind of production as original programming (CAC Agreement 34/2008) or the highly favourable statements regarding this organisational model contained in its report entitled *Diagnòstic de la televisió digital terrestre local a Catalunya (setembre-octubre 2009)* [Diagnosis of local digital terrestrial television in Catalonia (September – October 2009)].

Given this situation, this article will analyse those specific traits of syndicated production that make it an option for the

future in order to overcome the challenges currently faced by local television.

The content syndication model

The model's defining features

CAC Agreement 34/2008 (2008:8-9) contains a definition of content syndication, proposed in decision PRE/2804/2005. According to this document, content syndication is "the broadcasting of programmes (especially public service programmes) produced or co-produced by local television stations". Consequently, we can conclude that, in our field, syndicated production is by local television stations and its main aim is to encourage cooperative production between the different local TV stations in Catalonia through the networks they're associated with.

This feature that characterises local television stations is only one of the features included by Enzensberger (1974:43) within the notion of the emancipatory use of the media, among which there were, apart from this collective production, decentralised programming, control by self-managing entities or the fact that each receiver can become a transmitter. In this section we will describe the main features of (syndicated) collective production by the local television stations in Catalonia in order to see how close they are to this emancipatory use of the media. However, this categorisation does not pretend to be exhaustive but is rather the result of our aim to highlight the model's most relevant features, in our opinion.

Decentralisation and autonomy

Most of the networks through which Catalan local television stations share content are characterised by being decentralised, with each of the operators being autonomous. So, although there are organisations (such as the XAL, Comunicàlia or TDI) that in some way act as central nodes for the network, the involvement of the stations that form part of this network depends solely and exclusively on their own wishes, as they decide when they want to broadcast syndicated content and which content they want to broadcast. So there's no hierarchical structure imposing programming on operators. This model is therefore the complete opposite to operators that chain broadcast shared content.³

Numerous authors have highlighted the advantages of decentralised organisation and autonomy in institutions (Ferejohn and Noll 1976; Adame 2003; Scolari 2008). In the case of proximity television stations, it's evident that sharing content through a decentralised system helps operators to take advantage of a wide range of content at a relatively low cost, without this leading to loss of decision-making powers. Consequently, operators are not tied to corporate policies decided in another distant location and therefore continue to be autonomous and able to offer the content they deem to be most suitable for their area. We can therefore distinguish two kinds of advantages pro-

vided by a decentralised operational structure in proximity TV networks: on the one hand, economic advantages that cannot be provided by content syndication through a "disconnection" structure (i.e. programming that contains both national and local slots), and advantages in terms of territory, society and even identity, not offered by a fully centralised structure based entirely on chain programming. Advantages that constitute the *raison d'être* of proximity TV.

Quality

Although not directly, a connection can be made between the existence of content syndication networks for local television stations and the quality of their programmes. Fundamentally for two reasons: firstly, because the fact that suppliers don't have to worry about filling the whole schedule with their own programming means they can devote more effort to producing their programmes, something which, *a priori*, should improve quality. Secondly, because having a syndication network in which all members can access what is produced by the others motivates operators to provide the network with good products. So the existence of *cooperative competition* between operators (part of the revenue they receive depends on the products they provide for syndication being used) impels them to place good products on the network that are chosen by other television stations. Consequently, although a content syndication network is obviously no guarantee per se, it does encourage quality.

On the other hand, if we see the diversity of programmes as a dimension of TV quality (Pujadas 2002), then this is a kind of quality that's encouraged by content syndication: the network encourages each operator to contribute innovative products, different from the rest as, in this way, they have a greater chance of being bought by stations using the network to find content they can't produce themselves. Notwithstanding the fact that Hotelling's law⁴ states that greater competition leads to less diversity in content, this phenomenon would be reversed in the case of syndication and the local TV market as competition becomes cooperation: TV stations are not keen to make the same programmes but rather, thanks to syndication, they can offer their viewers a much wider range of content than if they'd acted completely independently and without competing/cooperating with other stations.

Specialisation and horizontal structure

Very closely related to what we have just mentioned, one of the possible advantages of syndicated programming is that, among the members of the local TV station network, there is a tendency to specialise in content production. In this way, those TV stations with a greater knowledge, experience or skill in certain genres can specialise in producing them. In turn, specialisation of the network's components leads to a greater diversification in the overall content of the syndicated programming, as not all TV operators have to make an effort to produce the same programmes. Redundancies are therefore eliminated and, at the same time, synergies can be generated between different net-

work players. With specialisation (Doyle 2002:27), media companies can enjoy gains in productivity. In this respect, it should be noted that the syndication model, as well as that of the network itself, goes against media's current trend towards vertical integration, proposing a horizontal structure that facilitates such specialisation. A horizontal structure also means that no member needs to be dependent, in terms of programming, on any other member or organisation that runs the network.

Network

The network structure on which content syndication institutions are based in the field of local television means they have some specific characteristics shared with all organisational structures of this type. If we look at the definition given by Requena (1989) of the word *network* as an operational concept in the sphere of social science research, we can see that it's characterised by containing certain players that become central and powerful, depending on the kind of relations they have with the rest. It seems evident that the centrality of a television operator in a content syndication network is closely related to the degree of diversification of its programme exchanges with the rest of the operators, both output and input (i.e. both using content and offering content, reciprocally). A supplier that exchanges content with a lot of channels becomes central because it has a greater capacity to diversity its relations and, consequently, becomes less dependent, at the same time as producing dependency in the rest. If a central operator leaves the network, all the rest are affected. A large part of the content syndication networks operating in Catalonia have some central players that support the network and without whom they would probably disappear. This centrality is mostly related to the economic size of the suppliers, which translates into a greater capacity to produce more and better programmes.

Other network characteristics that are relevant within the context of TV content syndication are: density, which varies according to the number of links existing; directionality (depending on the degree of reciprocity in the exchange, an aspect dealt with at another point in this categorisation) and intensity, which refers to the degree in which the network members' behaviour is influenced by the behaviour of the rest. Evidently, the existing networks vary somewhat in terms of these characteristics, not only between each other but also in themselves over time. In general, networks become dense and intense during periods when exchanges are most frequent.

On the other hand, in a network perceived as an exchange structure, it's important to differentiate between the quantity and quality of these exchanges (Wellman 2000). Probably, in evaluating the contributions of each player within the network, we must always bear in mind the fact that, in addition to the hours of programming syndicated, it's also useful to assess their quality. This has yet to be achieved in most syndication networks, where contributions are evaluated economically only according to the number of hours (although there are some pri-

or requirements that must be met by all syndicated content, especially regarding the idea of public service and proximity). Seeing as, at an abstract level, the structure of syndication clearly fosters higher quality in programmes, it would be interesting to obtain information and evaluations, as this would help to assess the Catalan networks for proximity television.

Contribution – distribution

One of the main aims of syndicated production is to encourage contribution in creating audiovisual production on the part of all members of the local TV association. Participation is therefore encouraged through producing or co-producing, in the same sense as the model of mass self-communication defined by Castells (2009:101), by means of an exchange network of syndicated content and where each television station, like internet users, is both a creator and consumer of content. Syndication therefore supposes the creation of a horizontal network in which everyone contributes and distributes programmes (or fragments of programmes, which are added to the *container programme*) equally, following one of the basic principles in creating local TV networks in Catalonia (especially in the case of the XAL), namely the spirit of cooperation. In addition to distributing programmes, this network also helps to combine, modify and adapt content to the programming schedules of different stations, thereby adding an element of flexibility. The fact that all network members also provides for a local-local connection. However, as a factor we've already mentioned and also stated in the CAC report (2009), one of the aspects that can undermine the syndication model are suppliers that distribute content but that, on the other hand, do not make any contribution. In spite of the differences in terms of economic potential, the desire and spirit of a network is to attempt to avoid such differences.

Added to the contributory aspect of the model, a content syndication network is also a shop window where proximity TV stations display what they produce. This not only leads to a probable improvement in the quality of products, as we have seen, but also in mutual professional enrichment, in the sense that a network becomes a means of learning for all operators and for those working in proximity communication. Moreover, new formats designed specifically for a certain local audience are more likely to be circulated and improved thanks to structures of this kind.

Generating economies of scale

As stated by Doyle (2002:27), economies of scale are present in all media sectors, in spite of the large initial cost of audiovisual productions. Together with diversification and specialisation, we therefore find that syndicated programming, such as the co-productions proposed by the network itself, evidently help to generate economies of scale. In this respect, syndication products can benefit from more resources (economic but also technical and human) and undertake larger projects that boost product quality, especially with the crisis in economic

and investment terms that the sector is currently facing. The fact that syndicated content reaches a larger number of viewers also leads to a reduction in the average production cost (Doyle 2002:14). Realising these economies of scale (Doyle 2002:27) also makes it easier to invest more and to adopt new technologies on the part of media firms. An example of this is the adoption by IP technology networks, which we will analyse later on in this article.

Similarities between the Catalan syndication model and the North American public model

The syndication of programming between local TV stations is a phenomenon characteristic of Catalonia that's difficult to find in such an institutionalised and consolidated state in the rest of Spain or Europe. However, in the words of the CEO of the Xarxa Audiovisual Local (XAL), Marc Melillas,⁵ we can find a guiding principle in how television is organised in the United States, based on networks that serve programmes to local stations and, specifically, those affiliated with the Public Broadcasting Service (PBS) network. According to Melillas, the pioneers that decided to create the first syndication structures in Catalonia established a model, albeit intuitively, that's quite similar to the public system in the United States, particularly regarding the underlying community-oriented philosophy that can be observed (Prado and de Moragas 2002).

The PBS, set up in 1967 in the United States through the Public Broadcasting Act, is a network of independent local television stations that cooperate with each other and belong to public or private not-for-profit institutions. With the creation of this network, which provides content for its stations, the aim was to ensure the existence of completely non-commercial programming, with a public service mission, on North American TV. In Catalonia, the public local TV networks (XTVL and Comunicàlia) also express this desire to offer public service programmes and justify their existence, and the fact that they receive funds from the administration, precisely because they help to fill a gap of good quality information and entertainment designed for a local audience (López 2005:90 and Guimerà 2007:164). Both in the North American and in the Catalan case, at a local level the network structure to share content is seen as a good mechanism to guarantee the existence of public service television.

The PBS is partly financed by federal funds while, in the Catalan case, the public networks are connected to supra-municipal bodies: the provincial governments. But Catalonia also has private syndication networks such as TDI. On the other hand, as is also happening in Catalonia, among those stations that form part of the PBS, there are a few, those with the biggest budgets, that provide the structure with the greatest number of programmes (Bertrand 1992; Hilmes 2002). The PBS was also the first network to distribute content via satellite, as do most of the Catalan networks, pending the replace-

ment of this technology by IP transmission, as described below. It's important to note that, as an institution, the PBS does not produce anything; it simply limits itself to redistributing programmes to its broadcasters or to offering them products made externally and does not have the capacity to impose schedules. In the words of Michele Hilmes, the Act that set up the PBS aimed "to put production power and funding in the hands of the stations themselves, eschewing a central production facility in favor of dispersement production" (2002:232). In this respect, this is different from some of the Catalan syndication networks, which offer content produced by themselves. However, all these networks explicitly state their desire to respect the independence of their affiliated TV stations, which have the last word regarding the content they want to broadcast and when they want to broadcast it, as has already been mentioned.

One last similarity between the PBS and Catalan syndication networks can be found in how a price is established for syndicated programmes. In the United States, programmes are priced according to the revenue received by the broadcasters that buy them and the number of stations that want to broadcast them (the more stations, the lower the price). In the case of Catalonia, most networks establish prices according to the population census of the demarcation where the TV station that wants to buy the programme operates. In both cases, therefore, the networks adapt their product prices to what the stations can afford, something that highlights their cooperative nature.

Exchanging productions. The benefits of the new IP networks

One of the aspects in which local TV networks have invested most heavily in Catalonia in recent times is in modernising and adapting their content exchange networks to new technologies. Taking into account the improvements occurring over the last few years with regard to the quality of service (QoS) of the TCP/IP networks, these have become one of the technologies with the most projection in the audiovisual sector (one example is TDI, where associated television stations have created a server to hold programmes that can be accessed by all the stations). This technology, among other aspects, further enhances the possibilities of sharing syndicated productions and accentuates some of their characteristics. In this section we will analyse these benefits, closely related to those described before.

Immediacy and flexibility

The possibility of having a platform to circulate content is one of the most important factors in the success of syndicated production. The new communication networks installed in Comunicàlia, XTVL and TDI, with IP technology and symmetrical in terms of uploading/downloading content, mean that this distribution is almost immediate, a basic element in today's television as it competes with media such as the radio and the internet, where immediacy is one of their fundamental charac-

teristics. IP networks mean that contributions can be made as soon as the audiovisual piece has been generated, and they also mean that these pieces can be accessed by the rest of the network's members at the same time, which can download, modify and adapt them to their own programming.

Until very recently, the alternatives to this immediacy were transporting the recordings by land (with an economic cost that's very often higher than that of the production itself) or satellite transmission (uni-directional, from the centre to the periphery), also at a considerable cost. However, circulating programmes via IP networks currently has disadvantages due to connection technology. One of the main drawbacks is the technical impossibility of live connections being distributed to network members in real time and with optimum image quality. For this reason, and in spite of the cost, local TV networks still use satellite transmissions, while waiting for the technology to develop so that this kind of broadcast can be carried out using the same exchange network.

Circulation interface and IP-TV

The IP network also brings the circulation of syndicated production closer to its broadcast via internet-based local TV platforms (XipTV, in the case of XTVL, and the platform being prepared by TDI to offer the entire content from all the TV stations that form part of the network). In this way, syndicated content can be flexibly integrated within the different websites to access local TV programming. Moreover, distributing syndicated pieces using IP technology helps to generate interfaces to manage audiovisual products that are run via browsers and are therefore easy to adapt to the needs of all the members that make up the network. Finally, we should note that this characteristic of the network can facilitate the convergence of the management of both kinds of content distribution and can resolve some of the limitations of TV stations related to digital broadcasting.

As noted by Jenkins (2006:243), this convergence "represents a paradigm shift—a move from medium-specific content toward content that flows across multiple media channels, toward the increased interdependence of communication systems, toward multiple ways of accessing media content [...]". One of the important aspects in this respect is the progress made in local television in dialogue and proximity terms, as broadcasting television via the internet means, among other things, that there is greater interaction with the public and even a live dialogue, apart from the advantages related to the nature of the network per se, such as access to an audiovisual stock with all the programmes from the TV stations (Agnola and le Champion 2003:10), which we are not looking at in this article.

Statistical monitoring

Another of the great advantages of IP-TV is that network managers can have specific, detailed information on the uses and broadcasts of different syndicated pieces or productions that

are programmed on the different associated local TV stations, as well as the contributions made by each of the stations to this programming. This knowledge was much more complicated to obtain when programmes were distributed via satellite. It therefore offers the possibility to draw conclusions regarding the circulation of programming among the different network members, which can help to identify indicators of great use in improving the circulation of syndicated production, as well as of those pieces most requested or those members making a greater contribution to the syndicated programming.

Economic benefits

Finally, all these characteristics result in an evident economic benefit for networks of local TV stations. As has already been pointed out, they help to gradually eliminate much more expensive and inaccessible forms of content distribution,⁶ such as land transport and satellite transmission. Compared to these, the ADSL lines used in IP networks are much more economical. This is also a flexible and scalable solution, easily adaptable to any future changes that may be required in order to circulate content.

Conclusions

Seen in the abstract, the model of content syndication among proximity TV stations (a singular phenomenon in Europe, fully implemented in Catalonia and with interesting similarities to the North American PBS model) is an organisational form with huge potential for local TV stations. The network organisation on which the model is based means that the stations that form part of this network are in a better condition to take on the challenges posed by a complex and completely uncertain communicative and economic context, without having to abandon what is their main *raison d'être*: a link with the territory. In this article, we've attempted to show how content syndication, conceived as an experience based on community and on the philosophy of contribution/cooperation, helps local television viewers to enjoy higher quality and more diverse content, at the same time as allowing TV operators to generate economies of scale without losing their powers of decision. Moreover, this model brings local TV networks even closer to the emancipatory use of the media described by Enzensberger.

Nonetheless, this model is also vulnerable to certain abuse. For example, it might lead to some channels taking advantage of the structure to obtain content without providing any, something which highlights the need to establish corrective mechanisms in order to avoid such situations. In fact, on too many occasions there are just a few suppliers (those with the most economic capacity) that support the network with their high contributions of programmes. It would also be advisable to design transparent, homogeneous mechanisms to evaluate the quality and public service value of the programmes syndicated, an issue that is still quite opaque today.

The current syndication model would not make sense, or would not be able to function as it does, if it were not for the use of new technologies that allow the instantaneous circulation of data. The networks implemented at the different local television associations, both public (XTVL and Comunicàlia) and private (TDI), make it possible to share all the material produced or co-produced by associated television stations, as well as enabling convergence between the distribution platforms. Moreover, after investment has been made in IP connection devices, such networks help to noticeably reduce expenditure on connectivity, and make it noticeably more effective, than the technology used up to very recently. What we might call *IP syndication* is therefore one of the great hopes for the future and one of the solutions to ensure the viability of proximity television in Catalonia.

Notes

- 1 For an exhaustive analysis of the challenges facing Catalan local television, see the report entitled *Diagnòstic de la televisió digital terrestre local a Catalunya (setembre - octubre 2009)*, produced by the CAC in 2009.
- 2 One of the main problems in studying programming on Catalan local TV is the lack of public data on the percentages and minutes of syndicated programming. Moreover, when these data can be accessed, they are normally not comparable with those provided by other institutions. One last problem is that there is some confusion regarding the terms, making comparisons even more difficult.
- 3 The chain broadcasting of content consists of establishing identical programming in terms of content for all operators that belong to the same business structure, the result of a unilateral decision by this higher structure. Consequently, suppliers give up their editorial powers. In Catalonia, proximity television chains must broadcast a minimum of original programming and have a legal limit of 25% of weekly broadcasting time for chain programming. Syndicated programming, with prior authorisation from the CAC, is not subject to this limit as it is felt that it preserves the editorial powers of the suppliers and is therefore also original programming. (CAC Agreement 34/2008).
- 4 The Hotelling law, formulated in 1929, states that, in competitive markets, players tend to standardise their products more than in oligopoly markets. Pujadas and Oliva (2007) demonstrated, in a study on the diversity of TV programming in Spain, that the emergence of new chains effectively results in less diversity of genres in the TV system.
- 5 Interview held on 29 March 2010 at the offices of XAL, Barcelona.
- 6 As stated by Frederic Cano, President of Televisions Digitals Independents (TDI), in an interview published at the Observatory of Audiovisual Production (<http://www.upf.edu/depeca/opa/ds4_ent3.htm>).

References

- Agreement 34/2008, of 18 March, of the Plenary of the Catalan Audiovisual Council. Barcelona.
- ADAME, C. "Organizaciones: nuevos retos, nuevos diseños". A: *Investigaciones europeas de dirección y economía de la empresa*. 2003. Vol. 9, no. 1, p. 49-66.
- AGNOLA, M.; LE CHAMPION, R. *La télévision sur Internet*. París: Presses Universitaires de France, 2003.
- BERTRAND, C. *La televisión en Estados Unidos. ¿Qué nos puede enseñar?* Madrid: Rialp, 1992.
- CASTELLS, M. *Comunicación y poder*. Madrid: Alianza Editorial, 2009.
- CONSELL DE L'AUDIOVISUAL DE CATALUNYA. *Diagnòstic de la televisió digital terrestre local a Catalunya*. Barcelona: CAC, 2009.
- DIMAGGIO, P.; POWELL, W. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields". In: *American Sociological Review*, 1983. Vol. 48, no. 2, p. 147-160.
- DOYLE, G. *Understanding Media Economics*. London: SAGE Publications, 2002.
- FEREJOHN, J.; NOLL, R. "An Experimental Market for Public Goods: The PBS Station Program Cooperative". In: *The American Economic Review*, 1976. Vol. 66, no. 2, p. 267-273.
- ENZENSBERGER, H. M. *Elementos para una teoría de los medios de comunicación*. Barcelona: Anagrama, 1974.
- GUIMERÀ, J. A. *La televisió local a Catalunya: gestació, naixement i transformacions (1976-2006)*. [Online]. Barcelona: CAC, 2007.
<http://www.cac.cat/pfw_files/cma/premis_i_ajuts/treball_guanyador/Televisi_Local_Catalunya_XIX_Premis_CAC.pdf>
[Consulted: 18 May 2010]
- HILMES, M. *Only Connect: A Cultural History of Broadcasting in the United States*. Belmont: Wadsworth/Thomson Learning, 2002.
- JENKINS, H. *Convergence Culture*. New York: New York University Press, 2006.
- LÓPEZ, F. *La situación de la televisión local en España*. Barcelona: Universitat Autònoma de Barcelona, 2005.
- MARCUS, D. "Public Television and Public Access in the US". In: HILMES, M. (ed.). *The Television History Book*. Londres: British Film Institute, 2003.
- MARZAL, J.; CASERO, A. "La investigación sobre la televisión local en España: nuevas agendas ante el reto de la digitalización". In: *Zer*, 2008. Vol. 13, no. 25, p. 83-106.
- OBSERVATORI DE LA PRODUCCIÓ AUDIOVISUAL. *La producció de les xarxes de televisions locals de Catalunya: XTVL i Comunicàlia*. [Online]. Barcelona, UPF, 2009.
<http://www.upf.edu/depeca/opa/ds4_inf1.htm>
[Consulted: 18 May 2010]
- OBSERVATORI DE LA PRODUCCIÓ AUDIOVISUAL. *Entrevista a Marc Melillas*. [Online]. Barcelona, UPF, 2009.
<http://www.upf.edu/depeca/opa/ds4_ent1.htm>
[Consulted: 18 May 2010]
- OBSERVATORI DE LA PRODUCCIÓ AUDIOVISUAL. *Entrevista a Joan Vila i Triadú*. [Online]. Barcelona, UPF, 2009.
<http://www.upf.edu/depeca/opa/ds4_ent2.htm>
[Consulted: 4 June 2010]
- OBSERVATORI DE LA PRODUCCIÓ AUDIOVISUAL. *Entrevista a Frederic Cano*. [Online]. Barcelona, UPF, 2010.
<http://www.upf.edu/depeca/opa/ds4_ent3.htm>
[Consulted: 4 June 2010]
- PRADO, E.; DE MORAGAS, M. "Les televisions locals a Catalunya. De les experiències comunitàries a les estratègies de proximitat". In: *Quaderns del CAC*, 2002. Barcelona
- PUJADAS, E. "Premisas y ámbitos de definición de la calidad en TV". In: PÉREZ, J. (ed.). *El anuario de la televisión*. Madrid: Geca, 2002.
- PUJADAS, E.; OLIVA, M. "L'avaluació de la diversitat de la programació televisiva". In: *Quaderns del CAC*, 2007. No. 28, p. 87-98.
- REQUENA, F. "El concepto de red social". In: *Revista Española de Investigaciones Sociológicas*, 1989. No. 48, p. 137-152.
- SCOLARI, C. *Hipermediaciones. Elementos para una teoría de la comunicación digital interactiva*. Barcelona: Gedisa, 2008.
- WELLMAN, B. "El análisis estructural: del método y la metáfora a la teoría y la sustancia". In: *Política y Sociedad*, 2000. No. 33, p. 11-40.
- XARXA AUDIOVISUAL LOCAL. *Protocol general*. Barcelona: XAL, 2009.