Protest mobilization and disagreement in online issue networks

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Abstract

The use of Internet for mobilization is slowly growing into an important subject in citizen politics as political use of the internet and online contentious politics are becoming widespread practices. I argue that mobilization needs to be considered further than its role for improving turnout in order to appreciate a greater democratic potential for internet use. This paper looks for discursive practices in protest mobilization by comparing different actors' online strategies and online issue network features. It uses protest survey data and hyperlink network analysis in order to question how mobilization actors deal with political adversaries and political disagreement in electronic public spheres. Internet use has raised great expectations considering that its possibilities for opening new spaces for discursive exchange and exposure to political diversity may also result in the fragmentation and isolation of issue publics. This paper looks at the role of social movements and other civil society organizations in mobilizing political action as they have become central actors in capturing issue attention for politically interested individuals who trust the intermediation function of their online platforms in an increasingly intricate electronic public sphere. As unconventional forms of participation work on less instrumental rationalities than electoral politics, it is expected that protest mobilization processes take on argumentative elements by establishing bridges between political divides. This potential acknowledgement of political difference is a central question as it helps to explain participation within heterogeneous networks in which exposure to disagreement is theoretically expected to reduce turnout. It is also a critical question from a normative viewpoint as discursive mobilization is a central issue for group interest representation processes. Two cases are compared, and some preliminary conclusions are presented on the importance of online social network features as explicative factors for the differences between protest participants.

Keywords: Mobilization, online politics, political disagreement, protest, hyperlink network analysis

Introduction

Mobilization has been widely recognized as a key determinant for political participation by the mainstream research on citizen politics (Rosenstone & Hansen 1993, Verba et al. 1995) and as one of the central functions for social movements and other political intermediation organizations which promote collective action (Snow & Benford 1988). Resource mobilization theory (McCarthy & Zald 1977) has focused on social networks and its effects on protest and social movement participation and special interest has been given to the role of promoting participation by a call to action through a "push" to activism; as it has been an alternative way to explain collective action which complements the study of individual attitudes, dispositions, or grievances (McAdam 1986). However, the effects of mobilization and individual attitudes have been studied independently with few exceptions that look at these effects or of social interaction with political contents, such as political conversation during electoral campaigns. Such is the case in the research field of political disagreement, where network effects have been shown to affect participation outcomes (Huckfeldt et al. 2004) but only recently it has advanced to identify the causal pathways through individual traits ((Mutz 2006; McClurg 2006; McClurg 2009; Voltmer & Lalljee 2003).

Research on political disagreement and exposure to conflict has mainly taken care of interpersonal communication networks in the context of electoral politics, but the effects of political networks and personal interactions may have important effects on individual participation in non-electoral politics as well. This paper deals with mobilization practices in order to explore differences in mobilization networks and the role of actors involved in staging and promoting political protest. Mobilization practices imply political communication which can be expected to affect individuals with higher levels of interaction or exposure to political information sources in similar ways as political conversation does. The emergence of movement media and grassroots communication online provides issue publics with a highly interactive sphere for political communication. Therefore, internet users who report political participation

are suggested as an appealing group for assessing the effects of networked political communication on individual attitudes.

Since the expansion of internet use, online communication has been increasingly recognized as a central instrument for protest mobilization. Three mechanisms have been acknowledged by multiple researchers in order to explain the effect of internet use on protest participation: reduction of participation costs, promotion of collective identity and community development (Garrett 2006). Furthermore, the expansion of movement media and alternative media online has been recognized as a factor that promotes high levels of awareness for participation opportunities and improved chances to receive mobilization stimuli (Pickerill 2007).

This paper will focus on mobilization networks and web spaces (Rogers 2008), in order to assess a particular communicative feature of mobilization practices: the extent to which they deal with political disagreement. The main purpose is to explore how mobilization actors deal with political adversaries and disagreement in order to look for evidence on the role of protest mobilization in promoting discursive exchange and exposure to political diversity or rather encouraging fragmentation and isolation of publics on opposing issue stances.

An assessment of the context for participation that individuals face when receiving mobilization messages is proposed by exploring online issue networks and the structural and substantive features of mobilization actors within those networks. Online issue networks are defined as "issue professionals using new media" (Rogers & Marres 2000) and therefore, the hyperlinks between the most prominent actors for a particular issue are expected to determine the connections between core actors.

Issue-specific information sources are growing in importance as online advocacy and other politically oriented actors provide a rich variety of personalized information through multiple online channels. In the electoral arena, campaign information users report that Internet provides the political information they cannot get from traditional news sources (Pew Internet survey - Rainie & Horrigan, 2007). Furthermore, unconventional participation is better related with non-

institutional media, and internet-powered communication as grassroots organizations and political activism have found in email lists, websites and blogs, the channels to maintain virtual communities that bring into being online movements. Online spaces have become the natural environment for building movement identity (Castells, 1997,Ronfeldt et al. Arquilla, Fuller, & Fuller, 1998Z) and for mobilizing political action as they have definitely become core elements of movement life and transformed collective action (Bimber et al. 2005). However, this perspective is based on a single dimension of group communication as it focuses on the communication processes of like-minded individuals in homogeneous networks and fails to explicitly acknowledge their components of reference to otherness as the necessary condition for establishing identity in a political context.

Research on social movements recognizes homogeneous social networks as motivating and enabling participatory activities (McAdam, 1986; Mutz, 2006; Polletta & Jasper, 2001) seeing that this type of social networking brings individuals closer to the political process for it provides group identity and support for action. Online spaces such as social movement media and alternative press provide communication channels which enhance network features that have been traditionally considered participation incentives and mobilization resources given their potential for spreading information, developing cognitive skills and providing socialization spaces for the development of group identity and emotional attachment. These within-group processes can be considered a preparation for public exposure and deliberation as they enable the formation of supportive views expressed within like-minded communication networks and may contribute to deliberative activities by enriching diversity of views through enhancing expressive participation of the minority (Hwang et al. 2007) and contextualising self-identity into broader political spheres.

From a more comprehensive perspective, mobilization can be understood as the processes in which homogeneous groups are obliged to look outward in order to deal with political disagreement and difference. These processes are mainly discursive practices that promote engagement within a public space in which group interests need to be fitted into place. As

mobilization requires the formation of group-identity, it implies a need for reference and context which can only be achieved by looking over group borders and recognizing otherness. It is an intermediation function which is central in promoting collective action as communicative practices that cross the boundaries from the private to the public realm. In this sense, mobilization endeavours are communicative as they invite individuals to act on private interests in a way that is observable to others (Flanagin et al. 2006). However, considering political conflict as a constitutive element of identity, of assuming a group stance, implies reference to adversarial arguments and frames. In this sense, mobilization implies asynchronous interaction which takes place in non-deliberative spaces but is still enclosed in the principles of acknowledging otherness in spite of political difference. This reciprocity principle determines in a large extent the quality of democratic political interaction for the instances in which homogeneous communication networks face opposing stances and competing worldviews.

Political use of the internet has been expected to promote precisely the type of information needed to account for disagreement as it provides access to information which is necessary in order to hold knowledgeable and contextualised positions about political decisions as it provides online access to a wide perspective of issues and stances. However, the increasing possibilities for self-selection and contents filtering in online communication may become a risk as they have a great potential for fragmentation (Buchstein 1997; Sunstein 2002; Bimber 1998). Internet use is a critical factor in this communication dynamics as it could foster political polarization by increasing individual control over information exposure. The use of source filters, the provision of RSS channels or email lists, allow groups of likeminded individuals to expose themselves selectively to single-sided viewpoints which reinforce their self-referential stances. According to this theory, individuals can choose to isolate themselves within self-referential information spheres by blocking out political disagreement. The possibility that political intermediaries follow this path by motivating homogeneous mobilization networks may produce detrimental effects by isolating individuals and increasing political antagonism through heightening political intolerance and political extremity (Mutz, 2006, Sunstein 2002). Taken to the extreme, these

practices may push individuals into perceiving situations in such a way as to evoke more extreme responses than they would otherwise have proposed (Sunstein 2009). Nonetheless, surveys of internet users show that they are more tolerant and open-minded than nonusers (Robinson et al. 2004) and that online news users do not use information tailoring options to filter out viewpoint-challenging information in a significant form (Horrigan et al. 2004).

Research on information practices for particular issue publics or on information provided by identity-based groups within a mobilization context is expected to shed further light on the internet balkanization hypothesis related to political fragmentation. I propose the role of intermediaries and information brokers as a key factor for affecting individual attitudes and behaviours in the mobilization processes as they determine substantive and structural features of communicative processes. The motivation of this paper is to look further into the effects of internet use, as it considers that the potential for avoiding political disagreement is a central factor for judging democratic quality in mobilization practices. Mobilization practices imply a trade-off between representation, taken as the need to incorporate private grievances into public discourse, and maximising turnout. In this sense, online possibilities for isolating mobilization publics from political disagreement may aggravate the undesired practices, but they are not exclusive of the online environment.

The proposed trade-off between conflict acknowledgement (associated to better representation within heterogeneous networks) and higher turnout (as a response to single-sided views in homogeneous networks) is a contested theory. Following a broad interpretation of Lazarsfeld`s seminal work (Lazarsfeld et al. 1968), the cross-pressures hypothesis proposes that facing disagreement explicitly and recognizing political adversaries may generate cognitive dissonance and affect turnout. However, there is mixed evidence as some studies of the U.S. electorate do find evidence that exposure to conflict is negatively related to participation levels, as individuals seem to be turned off from public issues when they face cognitive dissonance (Mutz 2006 & Huckfeldt et al. 2004) while others conclude that perceived disagreement within discussion networks does not appear to depress turnout (Huckfeldt et al. 2004, p. 201;(Robert Huckfeldt et

al. 2004). Moreover, several studies evidence the positive effect of heterogeneous discussion networks on various forms of participation (McLeod et al. 1999; Scheufele et al. 2003).

Most of these studies are based on a concept of political disagreement or cross-cutting exposure which has focused mainly on personal networks. They assess the effects of network heterogeneity on individual attitudes related to the explicative factors of political participation by taking political conversation networks, and support for different candidates as a key source of exposure to political disagreement in order to explain turnout. I propose to consider an alternative form of exposure to political disagreement which lies between direct interaction in political discussion networks and private information consumption: mediated online information regarding particular contentious issues.

Hyperlink network analysis and heterogeneity in online mobilization

In the last decade political use of the internet has raised a big hype around the expectations for broadening access to political information. However the migration of politics from offline channels and its reinvention within online spaces reflects highly particular trajectories as it represents a tiny proportion of internet contents (Hindman 2009) and it concentrates around particular issues, their main actors and their specific timing (N. Marres 2007). Furthermore, as attention becomes the most valued resource in the abundance of internet information supply, issue importance becomes a filtering criterion for rational actors, and as issue publics find incentives to seek information in a highly selective manner (Brin & Page 1998) they depend on reliable sources that provide informational cues. In this sense, issue publics become central actors in understanding the dynamics of online political information, especially when trying to follow the supply of information and the exposure to political disagreement in heterogeneous networks.

Issue publics can be established by identifying actors who express interest in a particular policy domain and who share concerns about the substantive contents of policies (Knoke, 2003). Their

interactions can be modeled as networks formed by the exchange of information related to those interests; therefore their online presence is expected to reflect the linkages between them. Defining issue publics as information exchange networks implies that their members are susceptible "*to activation whenever policy events strike at the heart of their interests*" (Laumann & Knoke 1987:125). In previous research, hyperlinks have been used in order to model information exchanges and their features (Bar-Ilan 2005; Björneborn 2006) but also from an actor-centered perspective, in order to analyze the structure of networks of actors and their individual importance (Garrido & Halavais 2003; Park et al. 2002; Van Aelst & Walgrave 2002).

Network studies are based on the modeling of social structures through the identification of actors and the social ties that connect them. The existence of hyperlinks with differing traits enables to clearly identify existing ties, but the substantial meaning of these ties needs to be considered so as to understand their effect on the nature of political discourse. This paper looks at the meaning of hyperlinking between actors with opposing issue stances as a particular characteristic of disposition towards political disagreement and conflict, and as a possible indicator for the acknowledgement between adversaries in contentious politics. Heterogeneity in issue networks can be established by considering the presence of actors with different issue stances in a hyperlinked network. However, exposure to political disagreement is not expected to depend exclusively on the existence of hyperlinks as bridges between opposing stance websites, but also as a way of referencing cross-cleavage viewpoints in the construction of political discourse.

Link analysis research is an established method in social and information science (Thelwall et al. 2005), and although a great deal has been written about methodologies, there is no unanimity concerning the question of how to interpret link analysis research results as links may represent multiple purposes and circumstances and therefore the resulting actor features based on link counts or the network structures that result from their ties can be interpreted in multiple ways. Mike Thelwall asserts that "…link analysis results cannot have a high degree of interpretation

reliability" (Thelwall et al. 2005) and he proposes method triangulation with a direct link analysis that can be performed by classifying them. The general message is the need for awareness that a purposeful interpretation is present; previous research has used or suggested a multiplicity of interpretations for link counts and for links between web sites[1]. The particular purpose in this paper is to propose an interpretation of the political relevance of links between issue actor websites.

The existence of hyperlinks in politically motivated actors enables to clearly identify the ties between them online, but the substantial meaning of these ties needs to be considered so as to understand their effect on the nature of political discourse. Richard Rogers proposes a look at the web as a discursive space which is authored by surfers and not by individual websites with independent information spaces. He argues that hyperlinks can be interpreted as "*acknowledgements by one organization of another organization's relevance to the discourse, based on some appreciation for that latter organization's knowledge and reputation*" (Rogers 2002). Hyperlinks can be expected to create particular spheres of information and communication by connecting websites of different actors (Zimmerman, Koopmans, & Schclecht, 2004). In this sense, mobilization actors provide potential routes or storylines which guide individuals in their exploration of political issues. Interlinked actors provide inputs into issue discourses that are built across sites (Rogers 2002) and online mobilization can then be understood as a guidance process which maps a discourse and a number of routes through the links that individuals may wish to follow (Marres and Rogers, 1999; Rogers and Zelman, 2001).

Research questions

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[1] Thelwall reviews the following interpretations for link counts - visibility (Vreeland, 2000), trust (Davenport & Cronin, 2000; Palmer, Bailey, & Faraj, 2000), worthiness to be looked at (Brin & Page, 1998), quality (Hernández-Borges et al., 1999), and topic authority (Kleinberg, 1999); and for links between web sites - non-geographic proximity measures (Park & Thelwall, 2003), international information flows (Park & Thelwall, 2003), relationships in a network of organizations (Garrido & Halavais, 2003), information exports (Uberti, 2004) and business connections (Park et al., 2002). Moreover, some individual links appear to have no meaning at all, not performing a communication role (Thelwall, 2003).

Assessing network heterogeneity implies two types of analysis, which may be seen as complementary research questions. In first place there is a need to map diversity in issue networks and secondly diversity has to be further characterized. Government agencies, advocacy groups, academia, media and political elites are central actors in policy networks as they constitute the core of issue networks along with civil society organizations which assume different roles. This type of network heterogeneity provides multiple actor perspectives which provide diverse views on a given issue. However, differences between these perspectives can produce further groupings. The particular difference between network actors which is considered as the central political matter in issue networks is their issue-stance. Political disagreement has a different implication for heterogeneity than other actor characteristic features as it implies different levels of compromise towards networking for political purposes. It can be understood as a difference between interaction between diverse perspectives and 'dangerous discussion' (Lev-On & Mannin 2009). In this sense, a rich diversity of actor types needs to be explained by further characterizing the diversity in their issue stances and what these differences imply on the structural matters of online networks.

The first research question focuses on network heterogeneity as expressed in cross-cleavage differences or issue stances. What types of web links and web sites function as cross-cleavage connectors in issue networks across a political web space? This research follows Lennart Björneborn's approach to use social network analysis in order to track intermediaries and to identify interdisciplinary boundary crossings in small-world approaches for academic web spaces (Björneborn 2006). The same type of analysis is proposed, focusing on web spaces formed on particular political issues.

Previous research on online activist networks (Garrido & Halavais 2003, Diani 2000) have identified central clusters as playing important connecting roles, but it has not studied how online activists interact between them or whether their hyperlinking behaviours reflect significant discursive characteristics . It is therefore expected that intermediaries which connect actors or actor-networks in opposing political stances can be correctly identified through link

analysis. In this exploratory analysis, the underlying hypothesis is that advocacy organizations and movement actors will not link directly to their political adversaries, but that they will turn to the most traditional players in the public sphere. Parties and media have a central role in policy-decision spaces and they are expected to connect grassroots actors and improve their role for open mobilization and agenda-setting. This means that common stance groups which are built into closed homogeneous networks are expected to communicate across third parties as they use them to reference political differences through a selection of their public discourse. In this way, they are not expected to provide an entrance point into dangerous discussion, but rather to recur to traditional political intermediaries in order to build their discursive references.

Moreover, the type of relationships between central issue actors and political intermediaries needs to be determined. A subsequent assessment is proposed in order to confirm if cross-cleavage actors are linked as a way to bridge opposing views in a particular issue discourse or if they are linked for any other purpose. This can provide some evidence in order to confirm if hyperlinking between actors in political issue networks has the same meaning as references do in the contents of mobilization discourse. Giving a response to this question implies the need for contents analysis of hyperlinks in order to assess the purpose and the forms of referencing political adversaries. Past research has found evidence that the level of credibility in a web site is a significant reason for establishing hyperlinks, especially considering its 'usefulness' as this indicates that web sites are more likely to hyperlink to others who have valuable and practical contents, information, or services (Park 2002). This interpretation considers linking as a strategy to get a hold of useful contents. Other research has focused on hyperlinks as instruments for augmenting website visibility by optimizing search engine traffic, and these provide an alternative structural reason (Hindman 2009). Further evidence is needed in order to look into the substantial purposes for hyperlinks in order to conclude on their significance on the discursive level.

Considering that this paper deals with the question of online mobilization and its potential for promoting discursive exchange and exposure to political diversity through hyperlinking

practices, hyperlinks need to be examined in order to assess if their particular purpose is referencing other actors and if they denote a particular position toward them. Hyperlinks directly represent a structural connection between actors, but they also have a substantial component as hyperlinks are built through the use of link text and tags and they can be placed in multiple ways as part of lists or they can be embedded in discourse. Furthermore, hyperlinks are used with a specific purpose and they have a polarity in order to qualify the type of reference they make. Referencing a site may mean a positive endorsement, a negative one, or it may also be neutral (Beaulieu 2005). It implies a "hyperlink diplomacy" as links can be cordial, critical or aspirational (Rogers 2002). In the context of political issues between adversarial actors, hyperlinks can denote acknowledgement of political differences or they can exist between sites even if political opponents are undermined. The expectation is that when hyperlinks exist, a high proportion of them will mention actors neutrally or positively. In other words, most hyperlinks are not expected to have a negative connotation.

Data

Two cases were studied in order to assess the potential of hyperlinking between websites for establishing cross-references between opposing stances on a political issue. The first of them was a demonstration that took place in Madrid on March 28th 2010 against changes in the abortion law and the second is the digital rights and antipiracy regulation policy in Spain.

The first case considers the online issue network for the abortion debate in Spain and a protest event which was staged by advocacy organizations who protested the changes to the abortion law which were approved by the Congress in February 2010. The event had an estimated turnout of 10,000 persons and a postal survey was done by handing 871 surveys during the event; a response rate of 29.1% for a total 253 responses[2]. In 177 surveys, respondents identified a total of 35 different organizations as their mobilization sources. Eleven of these were mentioned more than four times and they were considered for the analysis (Table 1 –

Mobilization sources and channels identified by survey respondents at the protest event). The issue network was established by a co-link analysis between the mobilization sources for the protest event and key pro-choice actors involved in the issue[3].

Table 1 – Mobilization sources and channels identified by survey respondents at the protest event

Most Important channel \ Main organizers	Hazte oir	Derecho a vivir	Provida	Médicos por la vida	España vida sí	La vida importa	Foro de la familia	Profesionales por la ética	Iglesia Católica	Socialistas por la vida	Intereconomía	Total
Radio or television	39	37	24	10	2	3	2	3		3	2	**125**
An organization (magazine, meeting, website, mailing list)	41	32	4	1	1		2		1			**82**
Alternative online media	30	17	4	4		1				1		**57**
Newspaper(s) (print or online)	19	10	8	2	1	1	1		1		1	**44**
Partner and/or family	12	10	6	3		1						**32**
Friends and/or acquaintances	9	8	5	1								**23**
Online social networks (e.g. Facebook, Twitter)	8	7	1	2	1	1			1			**21**
(Fellow) members of an organization or association	4	4	3	1	2		1	3	1		1	**20**
Advertisement, flyers, and/or posters		2	1									**3**
Total	**162**	**127**	**56**	**24**	**7**	**7**	**6**	**6**	**4**	**4**	**4**	**407**

Source: Survey responses from the protest event against changes in the abortion legislation Madrid – March 7th, 2010

The second case is an issue network which was composed by the identification of salient actors involved in the Copyright and digital regulation contents policy process in Spain from September 2009 to April 2010. A crawl on their websites was performed in order to identify the linkages between them exclusively through an interactor analysis[4] (Rogers 2000). 50 websites were considered, including social movement organizations, government actors, campaigns, recognized authors in the subject, academics and think tanks (Annex 1 – Issue network description).

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[3] The Issue Crawler was set to crawl the specified starting points (key issue actors identified by media analysis on policy actors and snowballing movement platform members) It then captures the starting points' outlinks (sites they link to), and performs co-link analysis in order to determine which outlinks are common to at least two of the starting points. This process was repeated in two iterations. All the network crawls were done with the Issue crawler from the Govcom foundation – www.govcom.org

[4] Special thanks to Jorge Salcedo for granting access to this data from his research

Methodological approach and Operationalization

The proposed methodology for the analysis of cross-cleavage hyperlinking in issue networks involved the following stages: The issue networks were identified as described previously, and the mobilization network (for the abortion legislation protest event only) was identified within the whole issue network map. Actors were then classified according to their self-reported issue stances (manual content analysis on their websites). These steps provided a good description of the issue networks and their most evident structural features (Figures 1 & 2 in Annex 1), and provide the grouping and linking data for establishing brokerage roles. A five step approach is proposed in order to consider the analysis of structural traits for the actors in the mobilization network and for comparing them with the substantial elements of linking practices (Table 2 – Methodological approach).

Table 2 – Methodological approach

1. Mobilization sources, key players and most prominent media and institutional actors are identified
2. Issue networks are mapped through link analysis by crawling websites of the issue actors
3. Network groups are defined by establishing issue-stances according to self-reported positions and involvement for each case
4. Network brokers are identified and characterized
5. Structural and substantial traits of brokers and their hyperlinking are analyzed

Structural traits

Betweenness-based measures consider the number of paths between a set of actors in which a given actor lies on. They indicate the importance of a given actor for the connectivity of a network. However, as the main concern in this paper is to look further into actors who act as cross-cleavage bridges between opposing political stances, particular kinds of intermediaries need to be identified. The major interest is to identify the shortest distance between stances as this metric is taken to be an indicator of the likelihood of being exposed to political disagreement. Two-step brokerage between opposing subgroups is proposed to be the most pertinent analysis as it considers exclusively those actors linked by paths shorter than two links between opposing subgroups. The subgroup partition is based on a political stance classification

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which was done by identifying each actor's self-placement on the issue[5]. Three groups are identified as favoring, opposing or having no stance towards the particular issue. The last category includes issue-related actors who hold no explicit position on the protest subject or media actors who have declared no direct interest or explicit position in each particular issue. Parties were classified as holding no-stance for the telecoms package case, but for the abortion case only the party in government and party in opposition were classified as pro-choice and pro-life; this categorization is an approximation that neglects intra-party differences and is based on their parliamentary role on the policy process and their explicit party and government position on the protest event (Annex 1 – Issue network description, Table I – Issue networks, column 3 Stance).

Five cross-network mediation structures have been identified as *"qualitatively different [as they] emerge when actors in transaction networks are differentiated into nonoverlapping subgroups"* (Gould & Fernandez 1989). These are brokerage roles in which intermediary actors provide bridges for interaction between other actors who have no access to one another. They are considered pertinent for this study as issue discourse online is expected to be almost "disconnected" between opposing stances. Furthermore, the 'brokerage' role has been used in the social movement theory by McAdam, Tarrow, and Tilly who take it to be a relational mechanism that links *"two or more previously unconnected social sites by a unit that mediates their relations with one another"* ((McAdam et al. 2001: 26). They sustain that brokers can connect common interests leading toward mobilization. In a similar way, the structural position of an actor within a network is recognized as a determinant of its mobilization potential. The specific roles of intermediaries which are considered are not the within-group linking, but the out-group links between political adversaries on opposing issue-stances. Three types of brokers make these between-group linkages: representatives, gatekeepers and liaisons, as described by Gould and Fernandez (1989). In the first case, the broker belongs to the same subgroup as the

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[5] For the abortion legislation, pro-life and pro-choice stance was classified according to any of three criteria: the actors' position on the particular protest event, their position on past abortion policy protest events and their participation in pro-life or pro-choice activism in the past.

initiator of the relation with another group. For the second case, the gatekeeper is a member of the same subgroup as the receiver of the indirect relation. In the last case the initiator, the receiver and the liaison broker belong to three different groups. In all of these cases, brokers are relevant actors in promoting exposure to political disagreement as they connect cross-cleavage positions (Figure 1 – Three types of cross-cleavage brokers).

Figure 1 - Three types of cross-cleavage brokers – taken from Gould and Fernández 1989
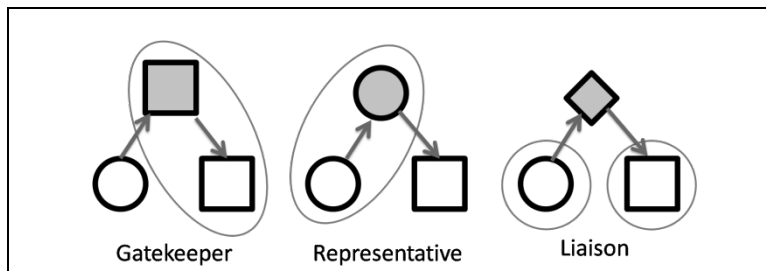
Source: Adapted from Gould and Fernández 1989

Substantial traits

Once the existence of the most relevant hyperlinking structures between actors on opposing stances has been identified, these need to be assessed in terms of their meaning for the mobilization functions that depend on the provision of discourse and context. Three traits are proposed in order to consider hyperlink substantive contents: their pertinence for the issue, the purpose of hyperlink usage and their polarity.

In the first approach, hyperlinks are assessed in order to establish their pertinence to the particular issue which is studied. Actors can be related to the issue for multiple reasons and timeframes, and they can also be thinly related as their central focus may be in other matters or involvement on movement initiatives other than the particular issue discourse. Hyperlinks may therefore signal all these features and therefore their potential for influencing the mobilization discourse is limited to only certain kind of links which deal with the specific issue under question. Issue relevancy is taken as a necessary condition for further analysis.

Secondly, hyperlinks are expected to signal other websites for multiple purposes (Vaughan et al. 2007). Motivation and form may be related as hyperlinks can be integrated in the discursive

contents either as hypertext which provides references to the sources of contents that are cited or embedded in the authoring website, or they can be used as general purpose references in a hyperlink section, or list as recommendations on specific topics.

In the third approach, hyperlink polarity is assessed in order to determine if references are charged with a positive, neutral or negative connotation towards the hyperlinked actor (Anubhav Kale et al. 2007). The assessment is performed by reviewing the keywords which are used in hyperlink 'anchor text' and the hyperlink context. The anchors act as labels for the target website and are a key component of search engine visibility. In Google's first design, their inventers affirm that "*Most search engines associate the text of a link with the page that the link is on. In addition, we associate it with the page the link points to. (…) anchors often provide more accurate descriptions of web pages than the pages themselves.*" (Brin & Page 1998).

The three indicators of pertinence, purpose and polarity are determined by a contents analysis on the links that brokers provide for cross-cleavage communication between actors on opposing stances.

Findings

Cross-cleavage hyperlinking was established by brokerage analysis in the issue networks for both cases and these results were assessed in terms of link properties and the online visibility of brokers in order to provide a comprehensive characterization for each network in terms of its cross-cleavage connectedness.

The findings for these cases are expected to shed some light on the possibilities for cross-cleavage communication across opposing positions online. However it should be noted that the cases are based on networks which include a sample of the issue actors, which were selected from the most salient sources, and it cannot be expected to be a complete or representative map of the issue actors. Bearing in mind this limitation, some comparative observations between

cases are presented in order to show the theoretical value of the findings, followed by the network analyses.

In the telecoms package case, a single intermediary actor (online alternative media) was identified as a liaison and the remaining cross-cleavage brokerage was carried out by 13 actors who represented the digital rights stances and only one copyright agency which links to cross-cleavage actors (Table 3 – Brokerage in the issue networks - by actor count). For this case the issue network included international actors who play an authoritative role in the policy results for Spain, but only Spanish intermediaries were considered (although this includes parties with European representation but they had no relevance). For the abortion case, liaison roles were carried out by the same online alternative media actor (Rebelión), the Madrid government, and the catalan local party of the PSOE (party in government proposing the legislative change). This sub-national actor was classified with no stance toward the abortion legislative change issue, as they do not hold an explicit position as the national party does. From a first look into brokerage roles, structural analysis reveals that cross-cleavage hyperlinking is a minor practice and that none of the ties between opposing stances are reciprocated (linked both ways). Two types of analysis were made in order to consider both the brokerage roles assumed by the actors and the linking practices in the context of their own networks and between-case comparison.

Table 3 – Brokerage in the issue networks (by actor count)

Telecoms Package				Abortion Legislative change			
Stance	Actors	Brokers		Stance	Actors	Brokers	
Digital rights	34	13	13%	Pro-life	39	2	1%
Copyright	17	1	1%	Pro-choice	26	1	1%
N/S	48	1	1%	N/S	78	3	2%
Total	**99**	**15**	**15%**	**Total**	**143**	**6**	**4%**

Actor analysis

A general assessment shows very low brokerage activity for cross-cleavage communication for both networks. In the Telecoms Package (TP) case, only 15% percent of the actors acted as brokers in connecting cross-cleavage discourse and 4% for the Abortion Legislation (AL) case.

The ratios are very similar if the assessment is made without considering intermediaries that hold no stance on the issue (N/S in Table 4 – Brokerage ratios by actors). From this structural analysis, differences between cases are relevant for interpreting brokerage roles as they provide different evidence for valuing the importance of traditional intermediaries in protest issue discourse. The role of intermediaries (media and parties who hold no stance on the issue) is very small for the TP case, but liaison roles account for 50% of the brokerage in the AL case. This part of the analysis provides mixed evidence for the first hypothesis but it only gives a broad picture of brokerage roles on raw observations.

Table 4 – Brokerage ratios by actors

	Brokers/ network population	**Liaison** (as a % of brokerage)	**Representatives** (as a % of brokerage)
Telecoms package	15%	7%	93%
Abortion legislation	4%	50%	50%

Differences between cases have theoretical value as they can signal particular traits of the policy processes or of the actors' disposition for involvement in deliberation, but the magnitude of the brokerage values needs further interpretation by looking into the substantive contents of hyperlinking.

Link analysis

The results for cross-cleavage hyperlinking, measured through outlink count in the whole network, provides another broad image in the context of the overall use of hyperlinks by issue actors. An almost negligible proportion of the total outlinks in both networks is used for establishing cross-cleavage ties (less than 1% for both networks), although the absolute value is irrelevant considering that it depends on the number of actors that comprise the issue network, particularly given that general press, online portals and big media sites are included in order to look for intermediation roles. Link count data is useful for assessing differences between the

cross-cleavage links that were identified for each case. The TP case has more than 10 times as much cross-cleavage oultinks as the AL case (0.93% and 0.07% respectively – Table 5 Cross-cleavage hyperlinking). However, contents analysis for the linked web pages reveals that the pertinence of the hyperlinks changes the interpretation of the raw count.

Table 5 – Cross-cleavage hyperlinking

	C-Cleavage ratio	C-Cleavage ratio - liaisons	C-Cleavage ratio - representatives
Telecoms Package	0,93%	32,49%	67,51%
Abortion legislation	0,07%	79,17%	20,83%

For both cases, between 40% and 42% of the links were classified as issue-related. For the AL case, they were considered pertinent even if they referred to the abortion legislation in different subjects than the protest event or the policy process. For the telecoms package case, issue pertinence was easier to establish, given the shorter timeframe of the digital rights movement and the continuity of the policy process. For both cases, broken links were less than 4% (Figure 2 – Link pertinence by case and brokerage role). The most important observation on pertinence is that it changes the distribution between liaison and representative roles for both cases. In the AL case, 58% of the Liaison outlinks are non-issue related and this is also true for 30% of the cases in the TP case. This result could be anticipated as intermediaries can have multiple engagements with the actors on issues different from the cases in question. However, this result changes the ratio of direct relationships between opposing actors (representative brokerage) and mediated communication seems to be less important when issue pertinence is considered. The ratio of mediated to direct cross-cleavage hyperlinking changes from 32:68 to 5:95 for the TP case and from 79:21 to 55:45 for the AL case. This result is congruent with the mixed evidence presented before so no final conclusion can be offered for political intermediaries having a prominent role over direct brokerage in cross-cleavage online communication.

Figure 2 – Link pertinence by case and by brokerage role

| Total Cross-cleavage hyperlinks | Cross-cleavage hyperlinks by pertinence |
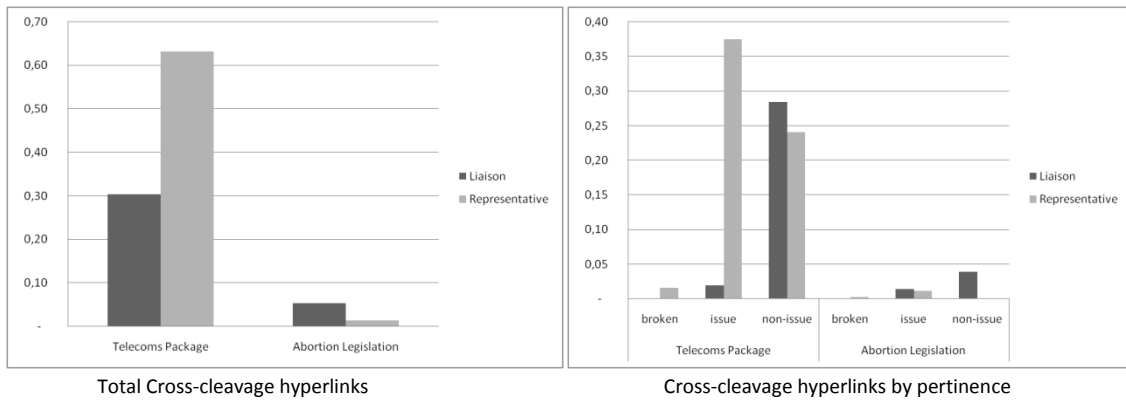
Differences between both cases should also be explored in terms of actor visibility. Outlinks can be examined according to the broker's prominence within the network. As a measurement of actor visibility, the total number of inlinks from the whole network was considered and both cases were compared by actor ranking in each network. Looking exclusively into issue-related hyperlinks, the intra-case differences are only in magnitude, but the ratio is very similar.

Figure 3 – Actor visibility by case and brokerage role
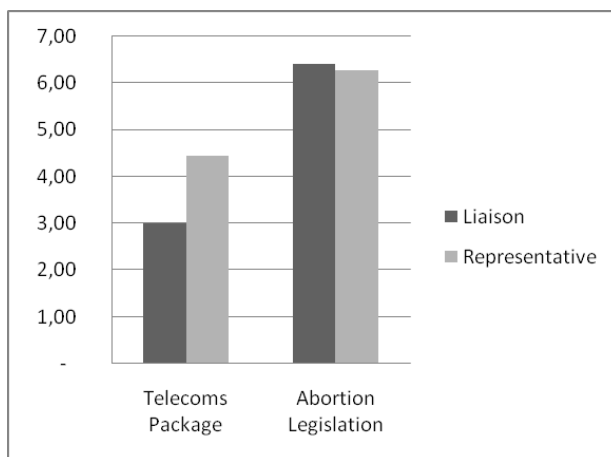
* Results for issue related cases
Network ranking average reported by decile (inlinks from whole network)

Analysis of the substantive contents of hyperlinks

Regarding the substantive contents of hyperlinks, the question for link polarity in the particular context of hyperlinking between opposing issue-stances was addressed by looking into three

features of hyperlinks: purpose, types and titles (anchor text). Qualitative contents analysis[6] revealed a high level of hyperlinking for referencing multiple sources and actors within the issue network. They were immersed in discourse as a general allusion to the sources and subjects of the message. Actors, data sources and key documents ranging from press articles to official documents are the main target in the 110 webpages that compose the sample of issue-related cross-cleavage hyperlinks for both cases. Figure 4 (Hyperlink purpose tagcloud), shows a broad picture of the general purpose of the reviewed hyperlinks in which reference, context and list are the most prominent purposes.

Figure 4 – Hyperlink purpose tagcloud

AL and TP cases for issue-related hyperlinks - 110 webpages – weighted by network size

Hyperlink purposes were merged into three categories (activism, list and reference) in order to assess differences between cases and brokerage roles. The most relevant finding is the widespread use of link lists by intermediaries in the AL case. This is a reasonable result as liaison actors are likely to make an 'institutional' or value-free reference to actors who are more involved or hold a stronger stance on the issue.

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[6] The analysis was carried out through an exploratory review and a second coding was done by a single coder

Figure 5 - (Categorized hyperlink purpose by case and brokerage role
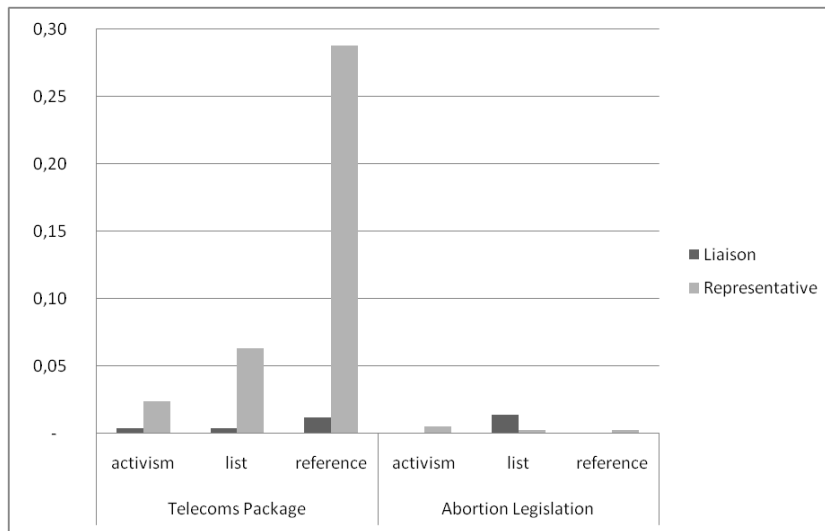
A final analysis on hyperlink types allows an additional perspective in order to understand their role in networked discourse. Links were classified in two categories by noting if they were used with a title (anchor text) or only a locator (web address or url) and link anchors were registered in order to analyze the wording used as a label. This was the first step in order to assess link polarity.

Link lists were found to be mostly within the general practice of providing webpages exclusively dedicated to reference actors and sources somehow related to the website, but some lists were presented as sources for contextualization by providing additional information on a given content. Few of the link texts contained value judgements as they mostly name their expected target or the title of their destination anchor. One of the digital rights activists provides a reference to their discourse by labelling the link "a reductionist and demagogic view to..."[7], but it is the only case in which the anchor text is not a direct label of the target page title or the target actor or source name. Furthermore, no contextual contents for the assessed hyperlinks revealed a negative connotation in the reviewed cases. The context was mainly given by using words that signal a reference or direction like "follow", "here" or "contact" so for this cases there is no evidence to doubt that links do provide a positive or neutral acknowledgment of the

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[7] YP cultural producer blog - http://www.ypsite.net/blog/?m=200712

actors or sources they point to. Further analysis on the contents of the whole web pages would be desirable in order to establish the nature of a larger context for link polarity.

Discussion and Further Research

Structural analysis was used for identifying cross-cleavage hyperlinking practices and further contents analysis provided a detailed picture into the value of hyperlinks in establishing a political discourse with opposing perspectives. Two research lines can be identified in order to get a more comprehensive look into online discourse in protest politics. In first place, external validity limitations will be unavoidable, but case-based research can be extended in order to deal with more diversity in mobilization contexts and issues. Identifying online mobilization networks for street-level protest events provides an enhanced validity for the selection of data samples, but an important caveat is that boundary specification is especially troublesome for online networks as getting data from the identified actors about the size or completeness of the issue universe is an unresolved question unless actors online prominence is considered as the defining criteria. The findings for the cases presented in this paper provide an initial picture of protest discourse online in the normative terms provided, but the selection of the samples for online actors is a central point for concern, particularly when the purpose is to assess network heterogeneity. Additional efforts are needed in experimenting with these limitations in studying online networks and in determining issue networks, as the selection of most visible, salient or influential actors provides a limited reliability on mapping discursive heterogeneity.

A second research line for delving into the question of online exposure to political disagreement is to look into the context of issue networks by focusing more broadly on network contents. Hyperlink structures and their substantive contents have been recognized as critical elements for the visibility and accessibility of online discourse, but access to online contents also involves references and search practices which can be independent from hyperlink networks. More conventional media approaches on the role of referents and frame leads in political discourse, may provide a complementary picture of how online discourse is built beyond its purely structural trace.

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Annex 1 - Protest mobilization and disagreement in online issue networks - Issue network description

Table I – Abortion Legislation issue network and Mobilization sources

Name	URL	Stance	Type	MN	Inlinks	Decile
Amnistía Internacional - Sección española	es.amnesty.org	Choice	NGO		10	6
Ángeles Álvarez	angelesalvarez.com	Choice	Blog		306	1
Asociación de Mujeres Juristas Themis	mujeresjuristasthemis.org	Choice	NGO		7	6
Asociación de mujeres para la salud	mujeresparalasalud.org	Choice	NGO		4	7
Asociación E-mujeres	e-leusis.net	Choice	NGO		5	7
Ciudad de mujeres	ciudaddemujeres.com	Choice	NGO		235	1
Coordinadora Feminista	feministas.org	Choice	Platform		10	6
Federación de Asociaciones de Mujeres Separadas y Divorciadas	separadasydivorciadas.org	Choice	NGO		11	5
Federación de Mujeres Progresistas	fmujeresprogresistas.org	Choice	NGO		10	6
Fundación Isonomía	isonomia.uji.es	Choice	NGO		13	5
Fundación Mujeres	fundacionmujeres.es	Choice	NGO		25	4
Las Linces	laslinces.blogspot.com	Choice	NGO		18	5
Lourdes Muñoz Blog	lourdesmunozsantamaria.blogspot.com	Choice	Politician Blog		494	0
Ministerio de igualdad	migualdad.es	Choice	Government		41	3
Ministerio de Sanidad y Política Social	msc.es	Choice	Government		58	3
Montserrat Boix	montserratboix.nireblog.com	Choice	Blog		83	2
Mujer Palabra	mujerpalabra.net	Choice	NGO		9	6
Mujeres ante el Congreso	mujeresantecongreso.blogspot.com	Choice	Platform		6	7
Mujeres en Red. El periódico feminista	mujeresenred.net	Choice	Specialized press		503	0
Mujeres Jóvenes	mujeresjovenes.org	Choice	NGO		10	6
Nosotras Decidimos	nosotrasdecidimos.org	Choice	Platform		14	5
Partido Socialista Obrero Español - PSOE	psoe.es	Choice	Party		6	7
Plataforma andaluza de apoyo al lobby europeo de mujeres	mujereslobby.org	Choice	Platform		13	5
Plataforma por una Maternidad Libre, por un Aborto Seguro	afavor.wordpress.com	Choice	Platform		0	9
Sin género de dudas	singenerodedudas.com	Choice	Blog		83	2
Spanish Presidency	la-moncloa.es	Choice	Government		205	1
Adopción Espiritual	adopcionespiritual.org	Life	NGO		13	5
Alba Digital	albadigital.es	Life	Specialized press		118	2
Alfa y Omega	alfayomega.es	Life	Specialized press		115	2
Asociación de Víctimas del Aborto	vozvictimas.org	Life	NGO		7	6
Asociación en Defensa de la Vida Humana	adevida.org	Life	NGO		7	6
Bebé-Aido	bebe-aido.com	Life	NGO		0	9
Blogs HO	blogs.hazteoir.org	Life	NGO		227	1
Cadena de Ondas Populares Españolas	cope.es	Life	Media		134	2
Comunicación online	xavs.es	Life	Blog		0	9
Derecho a Vivir*	derechoavivir.org	Life	Campaign	131	323	1
Derecho a Vivir*	17o.derechoavivir.org	Life	Event site		1	8
Embarazo inesperado	embarazoinesperado.es	Life	Campaign		27	4
Facetas	facetas.wordpress.com	Life	Blog		1	8
Federación Española de Asociaciones Pro Vida	provida.es	Life	NGO	62	12	5

Federación Española de Asociaciones Pro Vida	providamairena.org	Life	NGO		3	8
Federación Española de Asociaciones Pro Vida	provida-sevilla.com	Life	NGO		3	8
Flashes de la Iglesia	flashesdelaiglesia.es	Life	Specialized press		1	8
Foro Español de la Familia	forofamilia.org	Life	Platform	6	11	5
Fueracomplejos	fueracomplejos.wordpress.com	Life	Blog		21	4
Fundación Madrina	madrina.org	Life	NGO		3	7
Fundación Red Madre	redmadre.es	Life	NGO	2	7	6
Fundación Universitaria San Pablo CEU	conferenciaepiscopal.es	Life	Academia		105	2
Fundación Universitaria San Pablo CEU	ceu.es	Life	Academia		5	7
Fundación Vida	fundacionvida.net	Life	NGO		5	7
HayAlternativas	hayalternativas.org	Life	Platform		3	7
Hazte Oir	hazteoir.org	Life	NGO	167	599	0
Ignacio Arsuaga - Atalaya de la resistencia	arsuaga.net	Life	Blog		90	2
InfoCatólica	infocatolica.com	Life	Online Media		22	4
Instituto de Política Familiar	ipfe.org	Life	NGO		8	6
La Vida Importa	lavidaimporta.blogspot.com	Life	Blog	7	0	9
Médicos por la vida	medicosporlavida.org	Life	NGO	25	2	8
Nico Susena	nicosusena.es	Life	Blog		0	9
No más silencio	nomassilencio.com	Life	NGO		5	7
Partido Popular - PP	pp.es	Life	Party		3	8
Postaborto-Asturias	postaborto-asturias.es	Life	NGO		4	7
Previous protest campaign	cadavidaimporta.org	Life	Event site	2	350	1
Profesionales por la ética	profesionalesetica.org	Life	NGO	5	3	7
Unidos por la vida	unidosporlavida.org	Life	NGO		10	6
ZENIT	zenit.org	Life	Specialized press		131	2
ABC	abc.es	No stance	Media		482	0
Agencia Estatal de Meteorología	aemet.es	No stance	Government		14	5
Avui	avui.cat	No stance	Media		17	5
Cadena Ser	cadenaser.com	No stance	Media		18	5
Cheque Escolar	chequeescolar.org	No stance	NGO		72	3
Ciudadanos-Partido de la Ciudadanía C´s	ciudadanos-cs.org	No stance	Party		1	8
Comunidad de Madrid - Portal	madrid.org	No stance	Government		22	4
Convergència democràtica de catalunya	convergencia.cat	No stance	Party		41	3
Convergència i Unió - CiU	ciu.info	No stance	Party		315	1
Diario Crítico	diariocritico.com	No stance	Media		11	5
Diario del Sur	diariosur.es	No stance	Media		431	1
Diario Directo	diariodirecto.com	No stance	Media		2	8
Economía Sostenible	economiasostenible.gob.es	No stance	Government		152	2
eGov Portal	060.es	No stance	Government		140	2
eGov Portal	administracion.es	No stance	Government		57	3
El 9 Nou	el9nou.cat	No stance	Media		0	9
El Confidencial	elconfidencialdigital.com	No stance	online Media		2	8
El Correo	elcorreo.com	No stance	Media		7	6
El Mundo	elmundo.es	No stance	Media		73	3
El País	elpais.com	No stance	Media		575	0
El Periódico	elperiodico.es	No stance	Media		1	9
El Periódico de Catalunya	elperiodico.com	No stance	Media		22	4
El Plural	elplural.com	No stance	Media		24	4
El Público	publico.es	No stance	Media		86	2
El Punt	elpunt.cat	No stance	Media		10	6
El Semanal Digital	elsemanaldigital.com	No stance	online Media		10	6
Es Radio	esradio.fm	No stance	Media		15	5
España 2000	esp2000.org	No stance	Party		0	10
Esquerra Republicana de Catalunya - ERC	esquerra.cat	No stance	Party		6	7

Esquerra Unida i Alternativa -EUIA	euia.org	No stance	Party		2	8
Estrella Digital	estrelladigital.es	No stance	online Media		1	9
EU - Spanish presidency 2010	eu2010.es	No stance	Government		1164	0
IndyMedia	barcelona.indyMedia.org	No stance	online Media		264	1
IndyMedia Madrid	madrid.indyMedia.org	No stance	online Media		495	0
Iniciativa per Catalunya Verds - ICV	iniciativa.cat	No stance	Party		1	9
Instituto Nacional de Estadística	ine.es	No stance	Government		64	3
Intereconomía	intereconomia.es	No stance	Media		0	10
Izquierda Unida	izquierda-unida.es	No stance	Party		417	1
Kaos en la red	kaosenlared.net	No stance	online Media		297	1
La Falange	falange.es	No stance	Party		0	10
La Falange Jons	lafalange.org	No stance	Party		0	10
La Mañana	lamanyana.es	No stance	Media		0	10
La Razón	larazon.es	No stance	Media		34	3
La Vanguardia	lavanguardia.es	No stance	Media		49	3
Libertad Digital	libertaddigital.com	No stance	Media		162	2
Ministerio de Cultura	mcu.es	No stance	Gov		63	3
Ministerio de Economía y Hacienda	meh.es	No stance	Gov		177	2
Ministerio de Educación	mec.es	No stance	Gov		40	3
Ministerio de Fomento	fomento.es	No stance	Gov		24	4
Ministerio de Industria, Turismo y Comercio	mityc.es	No stance	Gov		215	1
Ministerio de Justicia	mjusticia.es	No stance	Gov		201	2
Ministerio de Medio Ambiente y Medio Rural y Marino	marm.es	No stance	Gov		24	4
Ministerio de Trabajo e Inmigración	mtas.es	No stance	Gov		55	3
Ministerio de Vivienda	mviv.es	No stance	Gov		33	4
Ministerio del Interior	mir.es	No stance	Gov		41	3
Minuto Digital	minutodigital.com	No stance	online Media		2	8
Nodo50	nodo50.org	No stance	Online Media		1031	0
Onda Cero	ondacero.es	No stance	Media		1	9
Pangea	pangea.org	No stance	NGO		16	5
Partido Comunista de España - PCE	pce.es	No stance	Party		420	1
Partido Socialista de Catalunya	socialistes.cat	No stance	Party		2	8
Partit Socialista Unificat de Catalunya - PSUC	psuc.org	No stance	Party		0	10
Periodista Digital	periodistadigital.com	No stance	Online Media		20	5
Plan Avanza	planavanza.es	No stance	Government		34	4
Plan Español para el Estímulo de la Economía y del Empleo	plane.gob.es	No stance	Government		222	1
Poder Judicial	poderjudicial.es	No stance	Government		32	4
Raco Catalá	racocatala.cat	No stance	online Media		2	8
Radio Inter	radiointer.com	No stance	Media		1	9
Radio Televisión Española	rtve.es	No stance	Media		55	3
Rebelión	rebelion.org	No stance	online Media		34	4
Rebelión	puntoradio.com	No stance	Media		1	9
Red Ciudadanas	redciudadanas.org	No stance	NGO		7	7
Red Feminista	redfeminista.org	No stance	NGO		26	4
Segre	segre.com	No stance	Media		0	10
Sobirania i Progres	sobiraniaiprogres.cat	No stance	Party		0	10
Telemadrid	telemadrid.es	No stance	Media		5	7
Unió Democràtica de Catalunya - UDC	unio.org	No stance	Party		1	9
Unión Progreso y Democracia - UPyD	upyd.es	No stance	Party		1	9

Figure I – Abortion Legislation Issue network
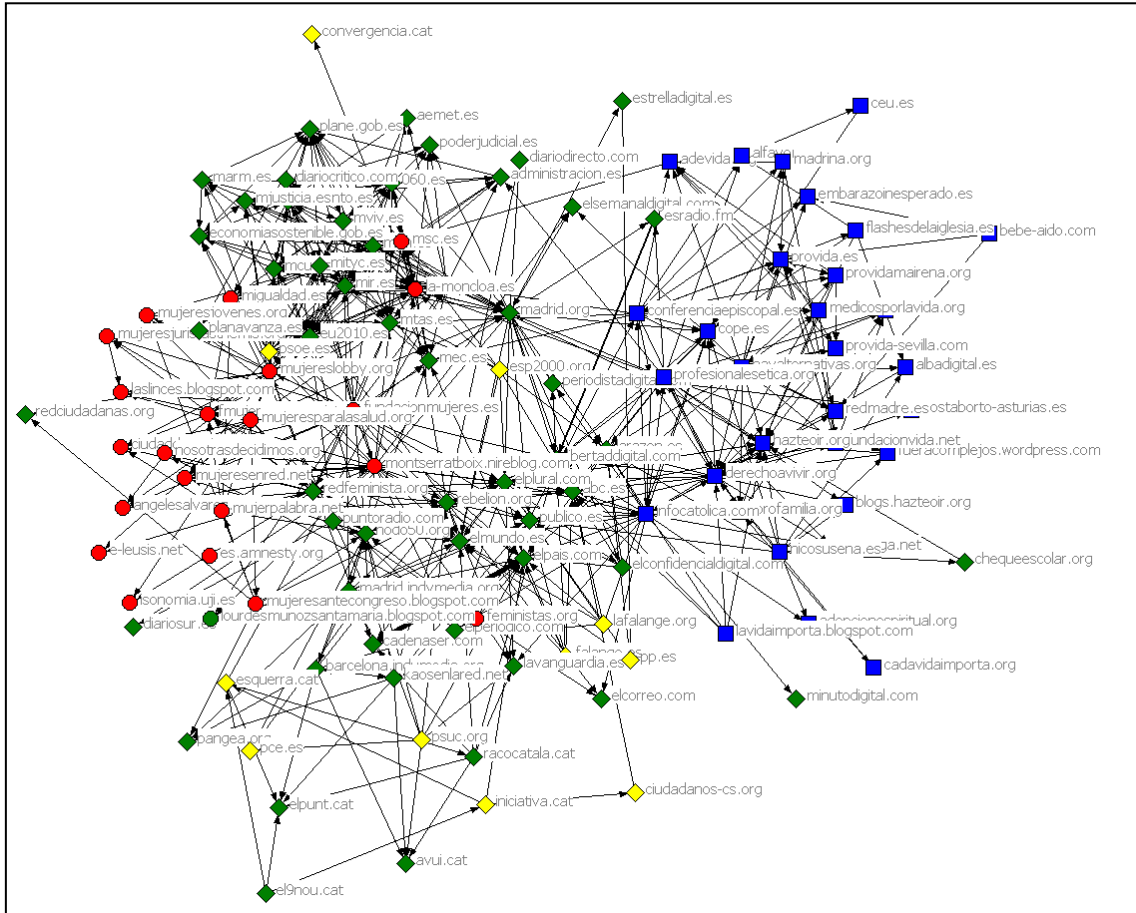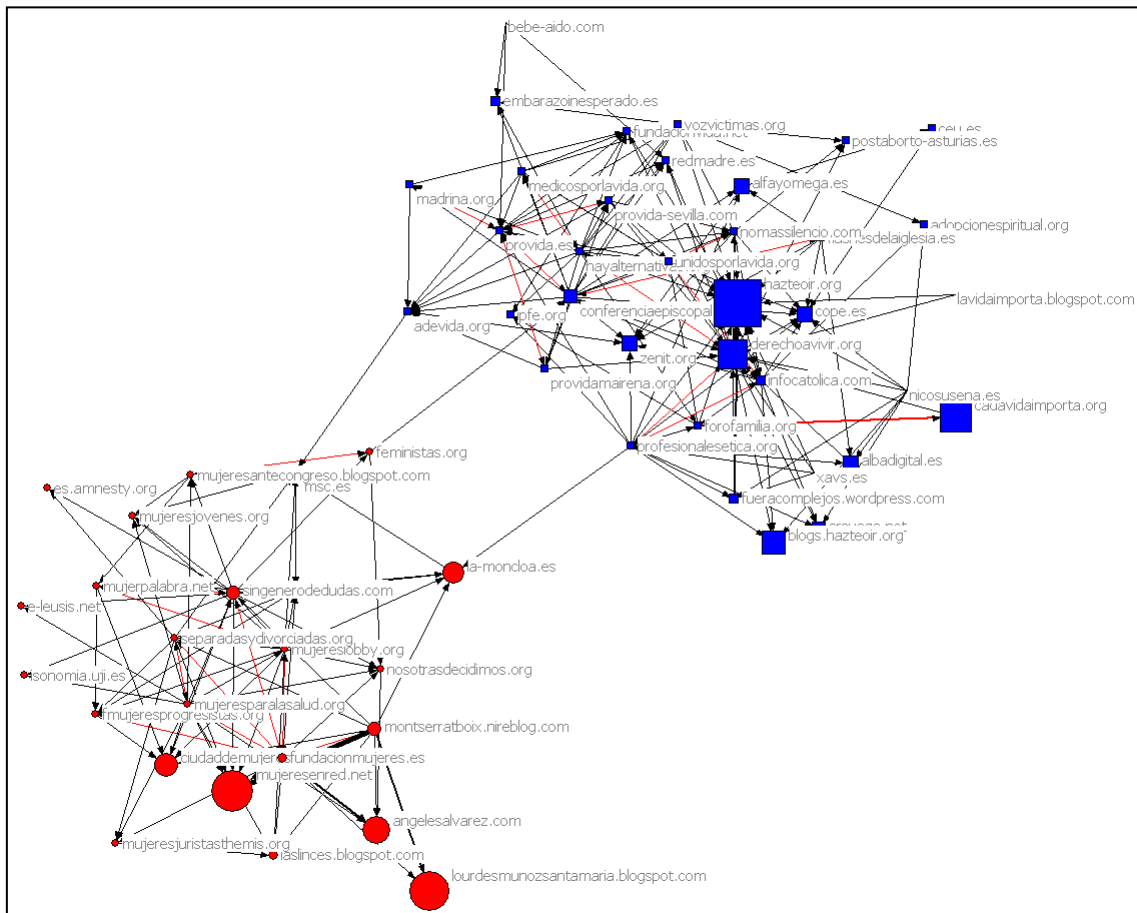

The groupings are defined by establishing issue-stances according to self-reported positions for each case

Red/circle –prochoice
Blue/square – pro-life
Green/rhomb – neutral
Yellow/rhomb – parties

Figure II – Abortion Legislation Issue network - No intermediaries

Red/circle –prochoice   red edges – reciprocated links
Blue/square – pro-life

Table II – Telecoms Package issue network

Name	URL	Issue stance	Type	Scope	Inlinks (core network and periphery, by page)	Ranking	Decile
Anti Counterfeiting Trade Agreetment	ustr.gov	Copyright	Corporate association	National	6	31	4
Artistas intérpretes y sociedades de Gestión	aisge.es	Copyright	Culture industry	National	2	63	7
Asociación de Artistas y Ejecutantes de España	aie.es	Copyright	Culture industry	International	2	67	8
Bussiness Software Alliance	bsa.org	Copyright	NGO	International	6	33	4
Centro español de derechos reprógraficos	cedro.org	Copyright	NGO	National	1	77	9
Copyright alliance	copyrightalliance.org	Copyright	NGO	International	1	91	10
Distribuidores e importadores videográficos – Entidad de Gestión de Derechos de Propiedad Intelectual	damautor.es	Copyright	Culture industry	National	3	57	7
European Comission	ec.europa.eu	Copyright	Culture industry	National	21	3	1
Federación para la protección de la propiedad intelectual	fap.org.es	Copyright	Culture industry	National	3	53	6
Gestión de derechos de productos audiovisuales	egeda.es	Copyright	Culture industry	National	2	64	7
International Federation of the Phonographic Industry	ifpi.org	Copyright	Culture industry	National	4	50	6
News Corporation	newscorp.com	Copyright	Government	International	1	86	10
Productores musicales	promusicae.es	Copyright	NGO	International	5	43	5
Sociedad de autores Audiovisuales	saa-authors.eu	Copyright	Culture industry	National	1	78	9
Sociedad General de autores y editores. Sociedad de Gestión	sgae.es	Copyright	Key individual	National	8	19	3
World Intellectual Property Organization	wipo.int	Copyright	NGO	National	12	9	2
World Trade Organization	wto.org	Copyright	Culture industry	National	8	18	3
Asociación de Internautas	internautas.org	Digital rights	NGO	International	16	4	1
Asociación de usuarios de Internet	aui.es	Digital rights	NGO	International	4	48	6
Asociación de usuarios de Linux	hispalinux.es	Digital rights	NGO	National	5	41	5
Asociación por una infraestructura informática libre	ffii.mx	Digital rights	NGO	International	0	99	10
Castells	manuelcastells.info	Digital rights	Key individual	National	0	99	10
Centro cultural para la creación colectiva	lainvisible.net	Digital rights	NGO	International	2	59	7
Comunidad dedicada a producción de conocimiento en	alqua.org	Digital rights	NGO	International	2	66	8
Danish Internet political association	itpol.dk	Digital rights	Government	International	5	40	5
David Bravo	davidbravo.es	Digital rights	Key individual	National	1	85	10
European Association for Public Domain	communia-project.eu	Digital rights	NGO	National	6	32	4
European Digital Rights	edri.org	Digital rights	NGO	International	10	17	3
EXGAE	exgae.net	Digital rights	NGO	National	12	11	2
Fernando Berlín	radiocable.com	Digital rights	Government	International	2	69	8
Foundation for free information and infraestructure	ffii.org	Digital rights	NGO	National	12	13	2
Free Culture Forum	fcforum.net	Digital rights	NGO	International	14	5	1
Free Knowledge Institute	freeknowledge.eu	Digital rights	Culture industry	International	3	51	6

Knowledge Ecology International	keionline.org	Digital rights	NGO	International	8	20	3
No al cierre de webs	noalcierredewebs.com	Digital rights	Political party	International	1	73	8
Open Knowledge Foundation	okfn.org	Digital rights	NGO	National	5	36	5
Open rights group	openrightsgroup.org	Digital rights	Key individual	National	7	23	3
OpenInternet.gov	openinternet.gov	Digital rights	Culture industry	National	2	62	7
Organización Paneuropea de empresas	euroispa.org	Digital rights	Culture industry	International	1	79	9
Organization for free culture	freeculture.org	Digital rights	NGO	International	4	47	6
P2P Foundation	p2pfoundation.net	Digital rights	NGO	National	5	38	5
Pirate Party	partidopirata.es	Digital rights	Culture industry	International	5	42	5
Piratpartiet	piratpartiet.se	Digital rights	NGO	International	3	54	6
Productora Blip TV	blip.tv	Digital rights	NGO	International	6	28	4
YP Productora cultural	ypsite.net	Digital rights	NGO	National	3	56	7
Productores culturales y software en marco de copyleft	platoniq.net	Digital rights	Author association	National	5	34	4
Profesor IESE experto en temas de propiedad intelectual e Internet	enriquedans.com	Digital rights	NGO	National	6	30	4
Quadrature du Net	laquadrature.net	Digital rights	Political party	National	14	7	2
Red Hackers Ibericos	wiki.hacktivistas.net	Digital rights	Government	International	2	60	7
Red Sostenible SOS	red-sostenible.net	Digital rights	NGO	National	6	29	4
ScriptumLibre	scriptumlibre.org	Digital rights	Government	International	1	82	9
ABC	abc.es	No stance	National press	National	13	8	2
Avui	avui.cat	No stance	Catalan press	National	5	37	5
Basta Ya	bastaya.org	No stance	Alternative media	National	1	76	9
Cadena de Ondas Populares Españolas	cope.es	No stance	Media portal	National	7	22	3
Ciudadanos-Partido de la Ciudadanía C´s	ciudadanos-cs.org	No stance	Local party	National	1	92	10
Congreso de los diputados	congreso.es	No stance	Government	National	14	6	2
Convergència democràtica de catalunya	convergencia.cat	No stance	Local party	National	1	74	8
Convergència i Unió - CiU	ciu.info	No stance	Local party	National	1	72	8
Diari de Girona	diaridegirona.cat	No stance	Catalan press	National	2	70	8
Diario Directo	diariodirecto.com	No stance	Digital press	National	1	81	9
El 9 Nou	el9nou.cat	No stance	Catalan press	National	0	99	10
El Confidencial	elconfidencial.com	No stance	Digital press	National	7	26	4
El Correo	elcorreo.com	No stance	National press	National	2	61	7
El Mundo	elmundo.es	No stance	National press	National	23	2	1
El País	elpais.com	No stance	National press	National	25	1	1
El Periódico de Catalunya	elperiodico.com	No stance	Catalan press	National	7	24	3
El Plural	elplural.com	No stance	Digital press	National	3	55	7
El Público	publico.es	No stance	National press	National	12	10	2
El Punt	elpunt.cat	No stance	Catalan press	National	4	46	6

España 2000	esp2000.org	No stance	National party	National	0	99	10
Esquerra Republicana de Catalunya - ERC	esquerra.cat	No stance	Local party	National	2	65	8
Esquerra Unida i Alternativa -EUIA	euia.org	No stance	Local party	National	1	80	9
Estrella Digital	estrelladigital.es	No stance	Digital press	National	1	83	9
Indymedia	barcelona.indymedia.org	No stance	Alternative media	National	4	44	5
Indymedia Madrid	madrid.indymedia.org	No stance	Alternative media	National	4	45	5
Iniciativa per Catalunya Verds - ICV	iniciativa.cat	No stance	National party	National	1	88	10
Kaos en la red	kaosenlared.net	No stance	Alternative media	National	7	21	3
La Mañana	lamanyana.es	No stance	Catalan press	National	0	99	10
La Razón	larazon.es	No stance	National press	National	7	25	3
La Vanguardia	lavanguardia.es	No stance	National press	National	12	12	2
Libertad Digital	libertaddigital.com	No stance	Digital press	National	11	15	2
Minuto Digital	minutodigital.com	No stance	Digital press	National	1	87	10
Nodo50	nodo50.org	No stance	Alternative media	National	11	14	2
Parlament	parlament.cat	No stance	Government	National	3	52	6
Partido Comunista de España - PCE	pce.es	No stance	National party	National	2	58	7
Partido Popular - PP	pp.es	No stance	National party	National	5	39	5
Partido Socialista Obrero Español - PSOE	psoe.es	No stance	Party in government	National	2	68	8
Partit Socialista Unificat de Catalunya - PSUC	psuc.org	No stance	Local party	National	0	99	10
Periodista Digital	periodistadigital.com	No stance	Digital press	National	4	49	6
Presidency	la-moncloa.es	No stance	Government	National	5	35	4
PSC	socialistes.cat	No stance	Local party	National	2	71	8
Rebelión	rebelion.org	No stance	Alternative media	National	10	16	3
Regió 7	regio7.cat	No stance	Catalan press	National	1	90	10
Sobirania i Progres	sobiraniaiprogres.cat	No stance	Local party	National	0	99	10
Sociedad Española de Radiodifusión	cadenaser.com	No stance	Media portal	National	6	27	4
Tribunal Constitucional	tribunalconstitucional.es	No stance	Government	National	1	75	9
Unió Democràtica de Catalunya - UDC	unio.org	No stance	Local party	National	1	84	9
Unión Progreso y Democracia - UPyD	upyd.es	No stance	National party	National	1	89	10

Figure III – Telecoms Package Issue network
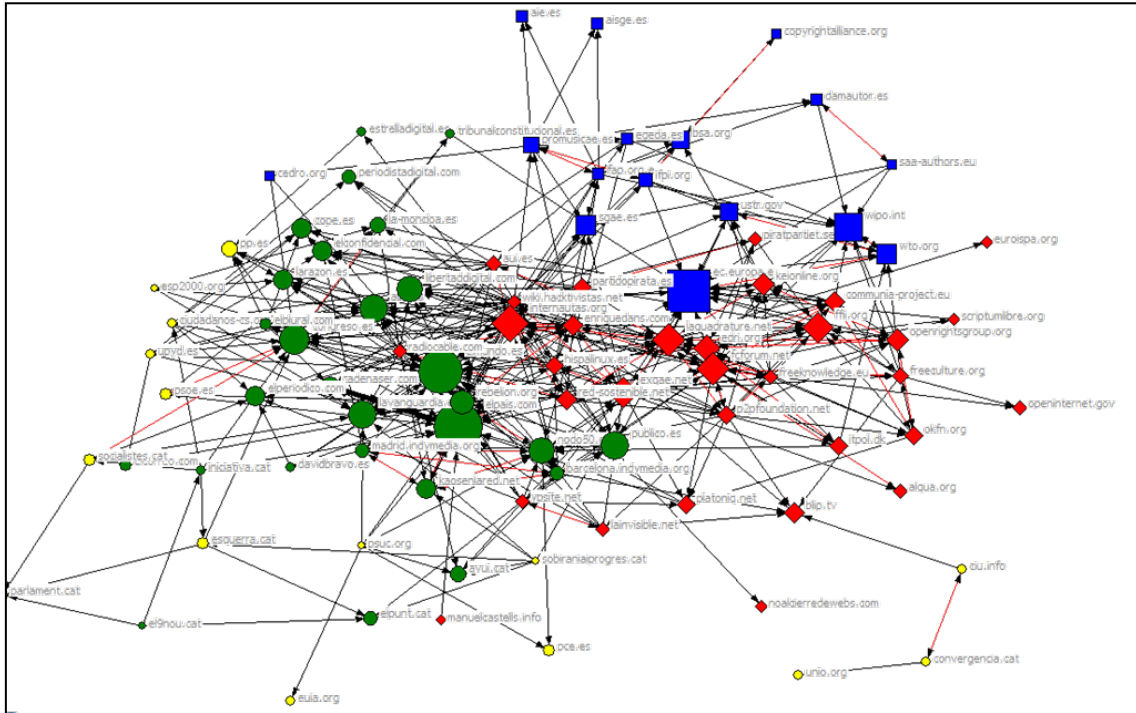
Red/rhomb – Digital rights
Blue/square – Copyright
Green/circle – neutral
Yellow/circle – parties