

## Hyperlinks and Networked Communication: A Comparative Study of Political Parties

### Online

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**Abstract**

This paper analyses hyperlink data from over 100 political parties in six countries to show how political actors are using links to engage in a new form of ‘networked communication’ to promote themselves to an online audience. We specify three types of networked communication - identity reinforcement, force multiplication and opponent dismissal - and hypothesise variance in their performance based on key party variables of size and ideological outlook. We test our hypotheses using an original comparative hyperlink dataset. The findings support expectations that hyperlinks are being used for networked communication by parties, with identity reinforcement and force multiplication being more common than opponent dismissal. The results are important in demonstrating the wider communicative significance of hyperlinks, in addition to their structural properties as linkage devices for websites.

Keywords [Hyperlinks, Parties, Political Communication, Internet, Networked Communication]

## **Introduction**

This paper seeks to improve understanding of how political parties use hyperlinks in political communication strategies. We posit that hyperlinks facilitate a new networked or relational mode of online communication where hyperlinks to other web actors are used as a means of reinforcing and concentrating attention to key aspects of parties' message and ideological outlook.

We identify three types of 'networked communication' that political parties may use hyperlinks to engage in. *Identity confirmation or reinforcement* is where hyperlinks are used as a display of support or endorsement for a particular political cause or issue, therefore reinforcing the party's policy message and priorities. Hyperlinks that are made for purposes of *force multiplication* are designed to exaggerate or inflate a party's online presence and perceptions of the wider level of support for its message. *Opponent dismissal* is where hyperlinks are used as a means of criticizing other groups, thereby creating a negative affect toward them that reinforces the identity of the party.

We hypothesise that engagement in these three networked forms of online political communication varies according to two key party characteristics - size and ideology - and we test our hypotheses using outbound hyperlink data from over one hundred parties in six different party systems.

## **Hyperlinks and political networked communication**

In this section, we review the extant literature on the role of hyperlinks in political party communication, focusing on outbound hyperlinks (hyperlinks that parties place on their websites, pointing to the websites of other organisations and individuals). We identify three types of networked communication that political parties may use hyperlinks to engage in and provide hypotheses on how political party characteristics may impact on this behaviour.

### ***Outbound hyperlinks and political party communication***

Academic investigation of political parties' use of new media has largely focused on the production of websites and use of email as campaign tools (Kluver, Foot, Jankowski and Schneider,

2008; Margolis and Resnick 2000; Norris, 2001; Ward, Owen, Davis and Taras, 2008). Within these analyses there has been some examination of parties' use of hyperlinks for internal networking purposes and building connections with other external political and non-partisan organizations (Gibson, Margolis, Resnick and Ward, 2003). However, little attention has been given to how hyperlinks might be used in more symbolic or indirect forms of communication.

In recent years, studies of other types of political actors have begun to pay closer attention to the communicative role of hyperlinks. In particular, studies of political campaigning among candidates in the U.S. and South Korea have revealed different patterns of connectivity to media and partisan/advocacy oriented groups, depending on individual candidate and party-level factors (Foot, Schneider, Dougherty, Xenos and Larsen, 2003; Park, Kim and Barnett, 2004; Park, Thelwall and Kluver, 2005). The findings provide evidence that hyperlinks are a product of logic and design and that they carry an underlying communicative rationale. Expanding on this, Park, Thelwall and Kluver (2005) argue that the 'relational' nature of hyperlinks means that - in addition to pointing to sources of information - they provide political actors with an opportunity to create and 'cement' political alliances. Such alliances, as well as connecting previously disparate groups and their audiences, also create a sense of 'critical mass' or authority for the message that is lacking in the real world.

Research into the blogosphere has emphasised this relational or associative meaning and value of links. Adamic and Glance's (2005) examination of the linking behaviour of "A-list" liberal and conservative political bloggers in the U.S. revealed a high degree of ideological insularity with the two groups rarely linking to one another, a phenomenon they neatly captured with their 'divided they blog' title phrase. Subsequent work by Hargittai, Gallo and Kane (2008) and Ackland and Shorish (2009) on blog inter-linkage has provided further support for these findings, with the latter developing an economic model of network formation to account for the differential rates of cross-ideological linking observed in the blogosphere.

Taking the notion of hyperlinks as conveying endorsement or support for another group or set of ideas a step further, some authors, particularly those working in the field of political extremism, have argued that they can serve as a means of deliberately enhancing or amplifying an organisation's message within the online sphere. Gerstenfeld, Grant and Chiang (2003), drawing on the work of authors such as Perry (2000) and Whine (2000), contend that use of links helps far right hate groups "...forge a stronger sense of community and purpose..." convincing "...even the most ardent extremist that he is not alone, that his views are not, in fact, extreme at all." (p. 40). They go on to note that making international links via the web may be of particular importance to right-wing extremists groups, since in many countries they face prohibitions to their circulation of material. Studies of sub-groups or variants of right-wing extremist groups have also focused on what links can reveal about the extent of their inter-connectedness, particularly at the international level. While some of these analyses are descriptive reports of the extent and types of sites linked to (Gerstenfeld et al. 2003), others involve using social network analysis techniques to examine the inter-connections between candidates' or organizations' sites (Burriss, 2000).

Finally, reversing some of this logic, other scholars have recognised that in some situations hyperlinks can be used as 'rejection' devices i.e. a hyperlink may be formed when a political party is criticising or rejecting the political position of another organisation and hence may represent a "negative affect relation". In their study of the hyperlinking behaviour of Australian organisations advocating on behalf of refugees and asylum seekers, Lusher and Ackland (2011) excluded links directed towards government sites since these were likely to be included in statements on advocacy websites that were criticising government policy in this area.

Drawing this literature together, we argue that hyperlinks can be used for political communication in two main ways. Non-networked communication is where a link is non-relational in nature and made simply to supply further information or facts. Thus, the link is targeted toward a specific section or pages within a website, rather than the actor itself (e.g. party) that is behind the

site. Networked communication is where the link is relational in that it is made to foster a connection with the organization or actor that is targeted ‘as a whole’ and thereby makes a wider statement about values or policy orientation that the actor making the link adheres to.

### **Networked political communication through hyperlinks**

Below we expand on the literature further to identify three main types of networked political communication and develop a set of hypotheses about how they will be performed, based on party size and ideological outlook.

#### *(1) Identity confirmation/reinforcement*

Hyperlinks have an identity reinforcement role when they are created for the purposes of supporting or endorsing a particular cause, group or issue and thereby reinforce a party’s policy message and priorities. If links are being used to promote parties’ policy messages then one would expect parties on the left to target actors that reflect their internationalist orientation and redistributive agenda. Parties on the right, however, would be expected to favor ‘home grown’ or nationalist groups and the business sector (this would be particularly the case for the mainstream right-wing parties).

*Hypothesis 1a: Parties with a right-wing orientation will be more likely to link to commercial or business interests, while parties with a left-wing orientation will be more likely to link to groups with an advocacy/third sector status.*

*Hypothesis 1b: Parties with a right-wing orientation will be more likely to link to domestic/national sites, while parties with a left-wing orientation will be more likely to link to foreign/international sites.*

#### *(2) Force multiplication*

Hyperlinks have a force multiplication role when they are created as a means of exaggerating or inflating a party’s online presence and the wider level of support for its message. As noted in the literature reviewed above, this type of networked communication is of most importance

for smaller parties with a low offline presence and a more extremist or ‘pariah’ image who have very little to no chance of gaining office. Larger parties that already enjoy public prominence and follow a vote maximizing logic would be highly unlikely to link to their competitors, regardless of ideological proximity as this risks losing support. We therefore, expect smaller parties and those on the far right in particular to be prone to engaging in this type of networked communication.

*Hypothesis 2: Minor parties and particularly those on the far right will be more likely to link to other parties in their ideological ‘family’.*

### *(3) Opponent dismissal*

Hyperlinks are used in opponent dismissal when they are embedded in website text that criticizes or counters other groups, thereby creating a negative affect toward them as well as reinforcing the identity of the party. While the major parties - and particularly those forming incumbent governments - are more likely to be subject to attacks from opponents and therefore have a greater need to ‘link to dismiss’, it is also likely that their prominent status in the system may make them less inclined to elevate their opposition by linking to them. Conversely smaller parties and particularly the fringe element, despite having fewer or less vociferous opponents to dismiss, would have less ‘status’ concerns about officially recognizing their opponents. Given the logic of hypothesis 2, however, this may not hold for far right parties, who are expected to seek to restrict outbound links to others sharing the same ideological outlook.

This reasoning leads to two alternate hypotheses:

*Hypothesis 3a: Major parties will be more likely than minor parties to ‘cross-link’ to other parties outside of their ideological family for the purposes of opponent dismissal.*

*Hypothesis 3b: Minor parties, excepting the far right, will be more likely than major parties to ‘cross-link’ to other parties outside of their ideological family for the purposes of opponent dismissal.*

## Data and methodology

We used search engines and various websites that list political parties in different countries to identify a population of 113 political party homepages that were active when the data were collected between July and September 2007 (these pages are referred to as the "seed set").<sup>1</sup> It is important to note that the seed set comprises the population of active political party homepages, rather than a sample.

The parties included in the analysis are from six established Western democracies where many major and minor parties have established a web presence - Australia, Austria, France, Germany, Italy and the UK.<sup>2</sup> Parties were grouped into six ideological families: far right, right, center, left, far left, ecologist and regionalist variants. The identification of the family types and the allocation of parties was done through a combination of secondary sources, expert judgements, and party website content. [Full details are provided in Appendix and Table A1 available at www.doiXXX.](#) The ideological groupings were also used as measures of party status. In particular, left and right-wing mainstream parties were considered to constitute major parties in that they are typically form the dominant forces in the formation of government in these countries, while those on the far right, far left, and ecologists are rarely if ever involved in government formation and when they are (as in the exceptional case of the German Greens) it is as the 'junior' partner. Centre parties are also classified minor parties in that although their ideological proximity to parties on the mainstream left and right they may be more likely to be involved in coalitions, again typically they are not the leading players. Probably the strongest centre party included in our analysis is the Liberal Democrats which before 2010 (the period our analysis covers) had not succeeded in gaining above 20% of parliamentary seats or governing power.<sup>3</sup> Table A2 presents an overview of the results of the classification of the 113 parties across countries and ideological families; most cells are populated, although some types of parties, such as regionalists and ecologists, are less common. Overall, right-wing parties form the largest group in the database, with the far-left, left and far-right



also well represented.

A purpose-built web crawler<sup>4</sup> was used to crawl each of the pages in the seed set to find *outbound hyperlinks* from the political parties.<sup>5</sup> The crawler was programmed to stop crawling a given site if it had either looked at 100 intrinsic pages or else had returned 1000 new external links.<sup>6</sup> The Yahoo API<sup>7</sup> was then used to find *inbound hyperlinks* to the 113 seed pages (note that the Yahoo API returned up to a maximum of 1000 inbound links to a given page).

The data collection resulted in a network of 60,954 web pages: the 113 pages in the seed set and the 60,841 pages that link to, or are linked to by the seed pages. Given that our focus is on the organizations or entities that political parties are connecting to on the web, it is appropriate to aggregate web pages that come from the same organization or functional grouping.<sup>8</sup> This was achieved by placing all pages sharing the same domain name into the same group or network node (for example, the 198 pages from the BBC site [news.bbc.co.uk](http://news.bbc.co.uk) were aggregated into a single node). This reduced the number of nodes in the network by about half.

Such automated aggregation is theoretically and methodologically justified in that it allows us to more accurately identify inter-organizational online networking. However, a cost of this approach is that some independent sites that are commercially hosted are put into a single network node representing the hosting company, and not counted separately.<sup>9</sup> The aggregation process was not expected to significantly affect the findings, however, since their numbers were relatively small and different types of parties were not seen as more or less likely to link to (or be linked to by) pages hosted by these generic hosting companies.

## **Analysis**

In this section we empirically test the hypotheses outlined in Section 2 regarding parties' use of hyperlinks to engage in various types of networked communication. It is important to note that, in line with other research on organisational hyperlinking behaviour, our approach assumes that hyperlinks reflect authentic organisational preferences. Party websites may be maintained by an

external company (most likely for the larger parties), or an individual member (more typical of fringe parties). However, given their important status as a ‘public face’ of an organisation, it is reasonable to expect a high level of scrutiny of website content by internal and external observers, with links that are at odds with the party’s mission being subject to swift identification and removal.

Table 1 shows that parties on average link to 54 unique sites. Parties on the left and ecologists appear most active. Far left, left and ecologist parties make on average over 70 links from their sites, while far right and regionalist parties make only 26 and 28 links respectively. These patterns appear to hold across party systems, although the extent of audience sharing among environmentalists in Germany is much lower than average. Further investigation of this result shows that these results are heavily influenced by the small number of outbound links from the German Greens’ site.

[Table 1 about here]

### ***Identity confirmation/reinforcement***

To test Hypothesis 1a we categorized each party’s links according to their generic Top Level Domain (TLD). The generic TLD is assigned based on the main purpose of the entity to which it is attached.<sup>10</sup> Thus, ‘.com’ domain applies to commercial entities (that is, companies), ‘.gov’ is used by government agencies; ‘.edu’ is reserved for educational facilities; ‘.net’ is used by many types of organizations and individuals globally but was historically intended for use by internet service providers; and ‘.org’ is intended for use by the non-commercial or non-government sector.<sup>11</sup>

Table 2 shows that for parties as a whole, around half of links could not be classified according to generic TLD, but where a domain could be identified, most links went to .orgs (23 percent) and then to .coms (18 percent).<sup>12</sup> The right, far right and regionalist parties were most likely to link to .coms (18%, 20% and 43% respectively), while the left, far left, centre and ecologists showed a stronger preference for .org’s i.e. the non-governmental/non-profit sector (16%, 34%, 16% and 37% respectively). The findings, therefore, support Hypothesis 1a, with right-wing

parties favoring sites promoting a commercial/business orientation whereas left-wing parties display a stronger preference towards politicized/advocacy oriented groups.

[Table 2 about here]

To test Hypothesis 1b we categorized the hyperlinks made by parties according to country code TLD (ccTLD). Rather than reporting them by individual country domains we divided links into one of three categories – domestic, i.e. the link is going to a site with the same ccTLD as the party and international, i.e. the link is going to a site with a different ccTLD, and ‘unknown’ links where no ccTLD was attached. The results reported in Table 3 show that overall, parties prefer to link to sites from the same country. However, as hypothesised, parties on the mainstream and far right were the most enthusiastic in this regard (69 and 66 percent of their total links went to the same ccTLD respectively), while far-left and ecologist parties only directed 36% and 44%, respectively, of their links to websites with the same ccTLD. Mainstream left-wing parties were more keen to link to other national actors (65% going to the same ccTLD). Finally, regionalist parties were found to be the least nationalist, directing only one quarter of their links to sites with the same ccTLD.

[Table 3 about here]

In terms of unknowns, regionalists had the highest proportion (73%) meaning it was not possible to conclusively determine a national versus international linkage preference. The other parties varied from a low of 23% unknowns for the left to 50% for the ecologists.

To assess the extent of any bias that unknown links may have introduced to the findings, a closer analysis was undertaken of a sample of them to identify their geographic origins. This involved generating a random sample of 20 ‘unknown’ sites that have been linked to by parties from the different party types and national party systems. The sites were coded as national or foreign/international based on site registration information via the ‘WhoIS’ listings and homepage contents. The resulting proportions were then applied to the overall N of unknowns reported in

Table 3 and converted into raw numbers, which were then added to the known national and international N's.

This redistribution of the unknowns did alter the findings of Table 3 somewhat in that the proportion of national links being made by parties increased. Thus for far left parties the ratio of national to international links was found to be 68:32 and for the far right, it increased to 86:14. Redistributing the unknowns by country saw some marginal increases in the nationalist bias for Austria and Germany (5% ) and moderate increases for the UK and Australia and Italy (10-20%). France, however, saw the greatest increase. A full 85% of its sites would be reclassified as national, if the ratio of national to international found in the sample of its unknowns held for the wider population of links. The more limited use of .fr is seen as a legacy of the French government's more restrictive approach to management of the .fr server and assignment of the .fr country.

This above process revealed that unknowns were more likely to be nationally than internationally focused and that the figures reported underestimated the nationalist bias in the parties' links.<sup>13</sup> Overall, then the results are seen as supporting Hypothesis 1b, with the left being more open and pluralist in their linking practices and the right adopting a somewhat more conservative and nationalist approach.

### ***Force multiplication***

To test Hypothesis 2, we examined the extent of linkage occurring within and across ideological families, with a high degree of linkage within families or 'in-group' links being evidence of parties using hyperlinks to inflate or multiply their visibility and wider global presence. Columns 1-7 of Table 4 show the number of parties from one ideological family (listed by row) that link to parties in other families or the same family (listed by column). Reading cross-wise the table shows that seven far left parties link to left-wing parties, while 11 link to other far left parties. It is possible that a party can be counted more than once across a given row if it links to parties in a range of ideological families. Column 8 shows the total number of parties that linked to another

party in general, so here we see that around one third of all parties (39) linked to at least one other party. Column 9 shows the total number of hyperlinks made to other parties and column 10 shows the percentage of these links that went to parties in the same ideological family.

[Table 4 about here]

The results show that parties in general are likely to favour their ‘own’ in terms of directing links to those within their ideological family or those in close proximity. For example far left parties send 46 percent of their links to other far left parties (column 10) and most of their ‘out-group’ links go to leftist and ecologist parties (columns 1-7). Center parties are the notable exception, with a high number of their links going to non-centrist parties. Such a finding may be explained by their median position in the ideological spectrum and wider range of possible linkage partners.

Thus, at first glance it would seem that Hypothesis 2 is not supported in that almost all parties (with the exception of center parties) are engaging in some type of self-referencing to boost their online presence. However, arguably a more stringent test of the force multiplication thesis centers on how exclusive or concentrated the ideological linkage within the ideological family is, or the ratio of in- to out-group linkage. Those parties with a high level of intra-family linkage and lower levels of cross-family linkage can be seen as the most concerted or dedicated self-promoters, and thus the most likely candidates for force multiplication. Based on this more restrictive criterion, the evidence of Table 4 shows that ecologist and far-right parties emerge as the strongest proponents of exclusive in-group linkage<sup>14</sup>, a finding that can be seen to confirm Hypothesis 2, that more marginalized/extremist actors are most likely to inter-link links to boost their online presence.

### ***Opponent dismissal***

Table 4 can also be used to test Hypothesis 3.<sup>15</sup> As noted above, most parties favour those within or close to their ideological family and there are few instances of ‘out-group’ linkage, suggesting that the practice of opponent dismissal via links is quite infrequent. Unfortunately the

data collection process did not capture the content of the linked pages, meaning that it was not possible to know for certain if the links were being made to dismiss.

We did know which individual parties were involved however, and one of the most striking instances of cross-linkage (a far left party linking to several far right parties) suggested support for an interpretation of opponent dismissal. The Communist Party of Great Britain (CPGB) was found to link the British National Party, the Austrian Freedom Party, the Italian Lega Nord and National Alliance and the French National Front. Consultation of archived web pages from the Wayback Machine (<http://archive.org>) revealed that none of the links were placed on the official links page, indicating that they did not form official ‘endorsements’ by the party. The CPGB accounted for further instances of cross-party linkage, with links to several right-wing parties: the Ulster Unionists (UUP), Democratic Unionist Party (DUP), the German Christian Socialists (CSU) and the French Union for a Popular Movement (UMP).

Other examples of apparent opponent dismissal included the far left Austrian Communists linking to the right-wing Austrian Democrats and two French left-wing parties (the Socialists and the Radical Party) linking to the right-wing UMP. Cross-party linkage was less common on the right with three right-wing parties linking to their left-wing counterparts (the French UMP linking to the Radical Party, the Austrian People’s Party (OVP) linking to the Austrian Socialists (SPOE) and the minor Liberal Democratic Party linking to the Australian Labor Party (ALP)). No far right parties were found to engage in the practice. These results suggest that the practice of opponent dismissal was occurring via hyperlinks and was most common among minor parties, particularly those on the left, thereby providing support for Hypothesis 3b.

### **Discussion and Conclusion**

In this paper, we have sought to provide a more systematic conceptualization and empirical investigation of hyperlinks’ role in party communication than has hitherto been undertaken in the literature. We have done so by identifying three networked forms of communication that hyperlinks

promote and derived a set of empirically testable hypotheses that test their performance by parties based on two core attributes - size and ideology. We have tested those hypotheses using an automated method of collecting and categorizing hyperlinks. The findings are in general supportive of the hypothesised relationships, confirming that hyperlinks are being used networked or relational manner (i.e. beyond simply being information pointers) to promote parties' outlooks, policy messages and critical mass or presence.

In particular we found support for our contention that left-wing parties are using links to reinforce their stronger international orientation and along with ecologist parties, their affinity with the advocacy/non-profit sector. Parties on the right and those with a regionalist agenda, however, exhibit stronger ties to commercial and business sector groups and also sites operating within the same country. Furthermore we have also concluded support for the expectation that links are being used as a means of 'force multiplication' by smaller parties with a more extremist agenda. Far right and ecologist parties were found to engage in markedly higher levels of *exclusive* intra-ideological group linkage thereby building a stronger i.e. less 'diluted' online presence. Instances of opponent dismissal through 'out-group' linkage were found to occur among mostly among left and particularly far left parties. Overall, however, this was fairly limited practice, suggesting that it was less important type of networked communication than the other two forms investigated.

The research reported here is seen as constituting an important step forward in the theorizing and empirical examination of hyperlinks as communicative devices for parties and other political actors. Through developing and analyzing an original cross-national data source we have provided compelling new evidence to support the idea that links operate as more than simply 'forwarding' devices to further information, but can act as a new type of strategic and indirect communication for parties (and other actors) to conveying both a substantive messages about their core identity and their wider presence in the offline world.

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**Table 1: Average number of outbound hyperlinks per party by party type and country**

	Far-left	Left	Centre	Right	Far-right	Ecologist	Regionalist	All
Australia	49	48	64	19	14	44	NA	33
Austria	152	195	NA	36	9	43	NA	96
France	69	50	59	25	6	111	NA	57
Germany	20	354	10	96	26	2	NA	69
Italy	97	5	42	20	87	25	12	44
United Kingdom	95	19	0	72	12	212	45	49
All	73	82	41	42	26	81	28	54

Note: The final row figures are the (weighted) average number of outbound links for a particular party family pooled across countries.

**Table 2: Generic TLD of outbound links, by party type**

Party Type	1st	2 <sup>nd</sup>	3 <sup>rd</sup>	Other	Unknown	Total
						Links
Far Left	.org	com	net			
	470 (34)	252 (18)	76 (6)	33 (2)	558 (40)	1389
Left	org	com	net			
	218 (16)	157 (11)	47 (3)	59 (4)	905 (65)	1386
Centre	org	com	net			
	126 (19)	119 (18)	32 (5)	50 (8)	335 (51)	662
Right	com	org	gov			
	220 (18)	163 (13)	128 (10)	44 (4)	672 (55)	1227
Far Right	com	org	net			
	96 (20)	55 (12)	23 (5)	9 (2)	290 (61)	473
Ecologist	org	com	net			
	298 (37)	218 (27)	40 (5)	41(5)	216 (27)	813
Regionalist	com	org	net			
	48 (43)	39 (35)	7 (6)	8 (7)	10 (9)	112

Note: Figures in parentheses are %, calculated row-wise

**Table 3: National/international identity of outbound links, by party type**

Party type	National	International	Unknown	Total Links
Far Left	498 (36)	234 (17)	657 (47)	1389
Left	902 (65)	164 (12)	320 (23)	1386
Centre	407 (62)	25 (4)	230 (35)	662
Right	850 (69)	74 (6)	303 (25)	1227
Far Right	311 (66)	18 (4)	144 (30)	473
Ecologist	359 (44)	50 (6)	404 (50)	813
Regionalist	28 (25)	2 (2)	82 (73)	112

Note: Figures in parentheses are %, calculated row-wise.

**Table 4: Inter-linkage between political parties by party type**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Far Left	Left	Centre	Right	Far Right	Ecol.	Reg.	Total no. of parties linking to other parties	Total no. of links made to other parties	% of links within party family
Far Left	11	7	0	2	1	3	1	12	71	46
Left	3	4	3	2	0	2	0	2	22	50
Centre	0	4	2	2	0	1	0	5	12	25
Right	1	3	1	8	1	2	1	9	20	55
Far Right	0	0	0	1	2	0	0	3	7	71
Ecologist	0	0	2	1	0	6	0	6	14	79
Regionalist	0	0	0	0	0	0	1	1	1	100
								39	147	

Note: The numbers in columns 1-7 are counts of parties (e.g. 11 far left parties linked to other far left parties). Note that the same party can appear in more than once in a given row in columns 1-7 and this is why column 8 (showing the total number of parties that have linked to another seed site) is not equal to the sum of the preceding columns.



<sup>1</sup> The primary source was <http://www.electionworld.org>. Additional sources included <http://www.electionresources.org>; <http://psephos.adam-carr.net>; and the portal sites for the national government in each country. Richard Kimber's University of Keele website on political parties was also consulted and a Google search was performed for parties that were listed in these sources but did not have a homepage listed.

<sup>2</sup> All six countries had a majority of the population online by 2007 (ITU, 2007). Politically, they all operate as parliamentary democracies, and have multi-party systems that include a range of major and minor parties that can be aligned across a left – right ideological spectrum. The left-right cleavage has been the dominant division within almost all Western party systems since the late 19<sup>th</sup> century including those studied here (see the influential work of Lipset and Rokkan, 1965). While the continuing relevance of left-right has been the subject of considerable debate as social class divisions have been seen to erode and new 'values' issues have arisen ((Elff, 2009; Inglehart, 1977; Kriesi, 1998) the party systems of the countries included are still meaningfully interpreted as filling a far left to far right ideological pattern). All countries are for example included in the most recent data produced by the Comparative Manifestos Project which seeks to locate parties on the left – right scale based on their electoral platforms (see <http://manifestoproject.wzb.eu>). Finally, all have far right parties, although most are very marginal, allowing us to conduct a more robust test the force multiplication hypothesis.

<sup>3</sup> As a further check on this assumption we also coded individual parties as major and minor by adapting Norris' 2001 3 category classification for her analysis of online parties in Digital Divide (Table 8.2). This identified minor parties as those receiving up to 20% of seats in the national parliament and major, as above 20% in the most recent national election. Based on this classification only the mainstream left and right parties in our analysis were identified as being major parties, while the parties belonging to the other ideological families were all categorized as minor.

<sup>4</sup> A web crawler is a program that automatically traverses a web site by first retrieving a web page (for example, a political party homepage) and then recursively retrieving all web pages that are referenced (e.g. following hyperlinks throughout the site).

<sup>5</sup> These data collection methods were first outlined in [author cite 2004] and are discussed

further in e.g. (author cite 2010). Hindman, Tsioutsikioulis and Johnson (2003) present a related methodology for studying political web pages that also uses web crawlers to extract hyperlink information. Our approach has been developed independently and also differs in several key respects. In particular, we focus on studying the networks formed by political parties and our ‘seed set’, which is the starting point for our data collection process, contains political party homepages. In contrast, the seed set used by Hindman et al. (2003) consists of web pages (returned by search engines) that “contain content about longstanding, controversial political issues: abortion, gun control and capital punishment” (Hindman et al. 2003, p. 15).

<sup>6</sup> The limits on the crawler reflect both pragmatism (data storage capacity could be exceeded if we attempted to crawl all pages in every seed site, since sites may contain thousands of pages) and the ethics of hyperlink research (crawling a site imposes a bandwidth cost on the site owner). Also, we contend that political parties will place the most important (from an organizational positioning perspective) hyperlinks and text content on their homepages or on pages linked from the homepage, rather than buried deep within their sites.

<sup>7</sup> The Yahoo API enables software programs to directly query the Yahoo databases (i.e. without use of a web browser). See <http://developer.yahoo.com/search/> for more details.

<sup>8</sup> See Thelwall (2002, 2004) for more on aggregating pages into groups or clusters using alternative document models (ADMs) based upon directories, domains and multi-domain sites.

<sup>9</sup> For example, there are 136 pages that are hosted by the commercial free web hosting service [www.geocities.com](http://www.geocities.com) and these have been aggregated into a single network node even though these pages are from a large number of diverse and unrelated websites. Thus, the page from a personal website which is “intended to make communist, anti-capitalist and historical texts available on-line and to link to texts on other sites”, has been placed in the same network node as the page [www.geocities.com/CapitolHill/6708/mensreso.html](http://www.geocities.com/CapitolHill/6708/mensreso.html) which is from the New Zealand Equality Education Forum and provides “International resources on Men's Rights, Fathers' Rights, and Racial Equality”. Pages accessed on 11<sup>th</sup> January 2006.

<sup>10</sup> Each domain name consists of a series of character strings ('labels'), separated by dots, with the rightmost label in a domain being referred to as its 'top-level domain' (TLD). There are several types of TLDs – we focus here on what are known as 'generic' TLDs (e.g. .com, .edu) and 'country code' TLDs (e.g. .au, .uk). See <http://www.iana.org/domains/root/db/> for more details.

<sup>11</sup> See Rogers and Marres (2000) for a more indepth discussion of the alignment of the three main domains - .org, .gov and .com with distinct site types, i.e. NGOs, governmental and corporate sites.

<sup>12</sup> Follow-up analysis of the unknown generic TLDs was not conducted (unlike with the unknown country code TLDs that follows). This was due to the lack of clarity on rules for allocating generic TLD (particularly .coms and .nets) which was seen to make coder categorization of sites a more subjective and contestable process than that of determining the geographic origin/focus of a site. In addition, it was noted that a large majority of the unknowns originated from parties in Germany, Austria and Italy, while Australian and UK parties were much more likely to link to other sites with identifiable TLDs. This finding indicates that use of generic TLDs is more frequent among English language sites and that future application of these automated methods should involve some linguistic adaptation if websites from non-English speaking countries are included in the sample.

<sup>13</sup> We considered using the process of sampling and redistribution to classify the missing generic TLDs. However, as noted later in the paper, the lack of a clear definition of what constitutes a .org, .com or .net means that manual assignment of generic domains would be a highly subjective enterprise and possibly introduce greater bias. The assignment of sites into national versus international/foreign categories based on their content was seen as less controversial and more objective.

<sup>14</sup> Regionalist parties actually display the highest amount of intra-family linkage (100%), however, this is simply an artefact of their very limited engagement in the practice overall, negating any force multiplying effects. Indeed their highly independent and even isolationist approach to hy-

perlinking is possibly a reflection of their separatist agenda.

<sup>15</sup> We acknowledge that it is possible for a party to dismiss another party by linking to, for example, a negative newspaper article about the other party, rather than by directly linking to the party itself. However, our data collection was not able to identify such instances of ‘indirectly linking to dismiss’, and hence we base our analysis on the direct hyperlink network.

Annex for Robert Ackland and Rachel Gibson (2013): “Hyperlinks and Networked Communication: A Comparative Study of Political Parties Online,” *International Journal of Social Research Methodology*, special issue on Computational Social Science: Research Strategies, Design & Methods.

### **Appendix: Classification of parties**

The party classification system (see Table A1) was developed after consultation with a range of sources from the literature on party classification. The foundation of the scheme was based on that put forward by Vandermotten and Lockhart (2000) who used survey data of voters, as well as political histories and programs to classify parties into three basic groups - left, right and extreme right - each of which had sub-categories. After consulting Day (2002), Jacobs (1989), Luther and Müller-Rommel (2002), Katz and Mair (1992) and Carter (2001), as well as personal correspondence with Professor Richard Katz (23/08/04), we decided that this schema was overly reductionist and should be expanded to include the far left and ecologists as separate categories and we also added a ‘regionalist’ party category (Winter and Cachafeiro, 2002). Following Vandermotten and Lockhart (2000), secondary classifications are possible, however only the seven primary classifications were used in this paper, The secondary classifications are: Far Left (Communist, Anarchist, Revolutionary Marxist); Left (Socialist and Social Democratic Parties) Center (Liberals and those forming alliances/coalitions); Right (Liberal Conservatives, Christian Democratic Parties); Far right (Populist and neo-nazi parties.)

To assign parties to one of these ideological families, we consulted the party websites and, in addition to the sources noted above, further literature including Evans (2003), Bull and Newell (1997) and Broughton and Donovan (1999). Additional guidance was provided by the “expert judgement scores” of political parties provided by Huber and Inglehart (1995) and Lubbers (2000), bearing in mind the limitations to their use (see Budge, 2000). Expert scores run on a left to right scale from 0 to 10 and we used them to confirm the general orientation of parties as left and right and centrist rather than their placement in our discrete categories of far right, right etc. Following the logic of Huber and Inglehart, economic policies were used as the main criteria for assigning mainstream left and right labels. Thus, discussion of markets, lower taxes, and controlling inflation were regarded as classic right-wing statements and government ownership, social welfare provision and addressing unemployment, as left wing. Far left parties included all Communist, Anarchist, Revolutionary and Marxist parties. Far right included neo-nazi/fascist organizations, as well as the new radical right-wing populists originally identified by Betz (1994) (but see also Ignazi, 2003 and Norris, 2005). Parties articulating predominantly environmental or regional autonomy concerns were classified as ecologist or regionalist. Finally, classical Liberal parties (favoring minimal government intervention and freedom of the individual) and those that typically formed alliances or coalitions were given their own category - Centre. The provisional assignment of parties was then referred to a panel of country experts and, based on this feedback, a final decision was made by the authors as to parties’ classification. Note that while each expert sought to revise the classification scheme to better fit their country, none rejected the basic seven-fold categories they were asked to apply.

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Table A1: Political party classification data

<i>Id</i>	<i>URL</i>	<i>Party name</i>	<i>Party name (English)</i>	<i>Country</i>	<i>Type</i>
1	<a href="http://www.oevp.at/">http://www.oevp.at/</a>	Osterreichische Volkspartei	Austrian People's Party –OVP	AUT	R
2	<a href="http://www.spoe.at/">http://www.spoe.at/</a>	Sozialdemokratische Partei Osterreiches	Social Democratic Party of Austria	AUT	L
3	<a href="http://www.fpoe.at/">http://www.fpoe.at/</a>	Freiheitliche Partei Osterreichs	Freedom Party of Austria	AUT	FR
4	<a href="http://www.gruene.at/">http://www.gruene.at/</a>	Die Grunen	The Greens	AUT	Eco.
5	<a href="http://www.liberales.at/">http://www.liberales.at/</a>	Liberales Forum	Liberal Forum	AUT	R
6	<a href="http://www.kpoe.at/">http://www.kpoe.at/</a>	Kommunistische Partei Osterreiches	Communist Party of Austria	AUT	FL
7	<a href="http://www.slp.at/">http://www.slp.at/</a>	Sozialistische LinksPartei	Socialist Left Party	AUT	L
8	<a href="http://www.arbeiterinnenstandpunkt.net/">http://www.arbeiterinnenstandpunkt.net/</a>	Gruppe ArbeiterInnenstandpunkt	Workers' Standpoint Group	AUT	FL
9	<a href="http://www.sozialliberale.net/">http://www.sozialliberale.net/</a>	Die Sozialliberalen	The Social Liberals	AUT	L
10	<a href="http://www.die-demokraten.at/">http://www.die-demokraten.at/</a>	Die Demokraten	The Democrats	AUT	R
11	<a href="http://members.magnet.at/cwg/">http://members.magnet.at/cwg/</a>	Christliche Wahlgemeinschaft	Christian Voters' Community	AUT	FR
12	<a href="http://www.u-m-p.org/">http://www.u-m-p.org/</a>	Union pour un Mouvement Populaire	Union for the Popular Movement	FRA	R
13	<a href="http://www.parti-socialiste.fr/">http://www.parti-socialiste.fr/</a>	Parti Socialiste	Socialist Party	FRA	L
14	<a href="http://www.udf.org/">http://www.udf.org/</a>	Union pour la Democratie Francaise	Union for the French Democracy	FRA	R
15	<a href="http://www.pcf.fr/">http://www.pcf.fr/</a>	Parti Communiste Francais	French Communist Party	FRA	L
16	<a href="http://www.planeteradicale.org/">http://www.planeteradicale.org/</a>	Parti Radical de Gauche	Left Radical Party	FRA	L
17	<a href="http://www.lesverts.fr/">http://www.lesverts.fr/</a>	Les Verts	The Greens	FRA	Eco.
18	<a href="http://www.rplfrance.org/">http://www.rplfrance.org/</a>	Le Rassemblement	The Rally	FRA	R
19	<a href="http://www.mpf-villiers.com/">http://www.mpf-villiers.com/</a>	Mouvement pour la France	Movement for France	FRA	R
20	<a href="http://www.m-n-r.net/">http://www.m-n-r.net/</a>	Mouvement National Republicain	National Republican Movement	FRA	FR
21	<a href="http://www.lutte-ouvriere.org/">http://www.lutte-ouvriere.org/</a>	Lutte Ouvriere	Workers' Struggle	FRA	FL
22	<a href="http://notre.republique.free.fr/">http://notre.republique.free.fr/</a>	Pole Republicain	Peublican Pole	FRA	C
23	<a href="http://www.mrc-france.org/">http://www.mrc-france.org/</a>	Mouvement Republicain et Citoyen	Republican and Civic Movement	FRA	L
24	<a href="http://www.lcr-rouge.org/">http://www.lcr-rouge.org/</a>	Ligue Communiste Revolutionnaire	Revolutionary Communist League	FRA	FL
25	<a href="http://www.cpnt.asso.fr/">http://www.cpnt.asso.fr/</a>	Chasse -Peche -Nature -Traditions	Hunting -Fishing -Nature –Traditions	FRA	R
26	<a href="http://www.frontnational.com/">http://www.frontnational.com/</a>	Front National	National Front	FRA	FR
27	<a href="http://www.cap21.net/">http://www.cap21.net/</a>	Citoyennete Action Participation pour le 21 eme siecle	Citizenship Action Participation for the 21st Century	FRA	Eco.
28	<a href="http://www.generation-ecologie.com/">http://www.generation-ecologie.com/</a>	Generation Ecologie	Ecology Generation	FRA	Eco.
29	<a href="http://www.mei-fr.org/">http://www.mei-fr.org/</a>	Mouvement Ecologiste Independent	Independent Ecologist Movement	FRA	Eco.
30	<a href="http://www.partiradical.net/">http://www.partiradical.net/</a>	Parti Radical	Radical Party	FRA	L
31	<a href="http://www.alliance-royale.com/">http://www.alliance-royale.com/</a>	Alliance Royale	Royal Alliance	FRA	C
32	<a href="http://www.alternativelibertaire.org/">http://www.alternativelibertaire.org/</a>	Alternative Libertaire	Libertarian Alternative	FRA	FL
33	<a href="http://www.federation-anarchiste.org/">http://www.federation-anarchiste.org/</a>	Federation Anarchiste	Anarchist Federation	FRA	FL
34	<a href="http://grcio.org.free.fr/">http://grcio.org.free.fr/</a>	Gauche Revolutionnaire	Revolutionary Left	FRA	FL
35	<a href="http://www.alternatifs.org/">http://www.alternatifs.org/</a>	Les Alternatifs	The Alternatives	FRA	FL
36	<a href="http://www.partiblanc.fr/">http://www.partiblanc.fr/</a>	Parti Blanc	Blank Vote Party	FRA	C

Key: AUS - Australia, AUT - Austria, FRA - France, GER - Germany, ITA - Italy, UK - United Kingdom; C - Centre, E - Ecologist, FL - Far Left, FR - Far Right, L - Left, R - Right, Reg. - Regionalist.

**Table A1: Political party classification data (cont.)**

<i>Id</i>	<i>URL</i>	<i>Party name</i>	<i>Party name (English)</i>	<i>Type</i>
37	<a href="http://www.spd.de/">http://www.spd.de/</a>	Sozialdemokratische Partei Deutschlands	Social Democratic Party of Germany	L
38	<a href="http://www.cdu.de/">http://www.cdu.de/</a>	Christlich-Demokratische Union	Christian-Democratic Union	R
39	<a href="http://www.csu.de/">http://www.csu.de/</a>	Christlich Soziale Union in Bayern	Christian Social Union in Bavaria	R
40	<a href="http://www.gruene.de/">http://www.gruene.de/</a>	Bundnis 90/Die Grunen	Alliance 90/The Greens	Eco.
41	<a href="://www.fdp-bundesverband.de/">://www.fdp-bundesverband.de/</a>	Freie Demokratische Partei http	Free Democratic Party	R
42	<a href="http://www.sozialisten.de/">http://www.sozialisten.de/</a>	Partei des Demokratischen Sozialismus	Party of Democratic Socialism	FL
43	<a href="http://www.dkp.de/">http://www.dkp.de/</a>	Deutsche Kommunistische Partei	German Communist Party	FL
44	<a href="http://www2.rep.de/">http://www2.rep.de/</a>	Die Republikaner	The Republicans	FR
45	<a href="http://www.npd.de/">http://www.npd.de/</a>	Nationaldemokratische Partei Deutschlands	National Democratic Party of Germany	FR
46	<a href="http://www.pbc.de/">http://www.pbc.de/</a>	Partei Bibeltreuer Christen	Party of Bible Loyal Christians	R
47	<a href="http://www.neuedemokratie.de/">http://www.neuedemokratie.de/</a>	Neue Demokratie	New Democracy	R
48	<a href="http://www.liberales-demokraten.de/">http://www.liberales-demokraten.de/</a>	Liberales Demokraten	Liberal Democrats	C
49	<a href="http://www.akustisch-nicht-verstanden.de/dpp/">http://www.akustisch-nicht-verstanden.de/dpp/</a>	Deutsche Power Partei	German Power Party	C
50	<a href="http://www.dvu.de/">http://www.dvu.de/</a>	Deutsche Volksunion	German People's Union	FR
51	<a href="http://www.forzaitalia.it/">http://www.forzaitalia.it/</a>	Forza Italia	Go Italy	R
52	<a href="http://www.dsonline.it/">http://www.dsonline.it/</a>	Democratici di Sinistra	Democrats of the Left	L
53	<a href="http://www.alleanzanazionale.it/">http://www.alleanzanazionale.it/</a>	Alleanza Nazionale	National Alliance	FR
54	<a href="http://www.margheritaonline.it/">http://www.margheritaonline.it/</a>	La Margherita - Democrazia e Liberta	Margherita - Democracy and Freedom	C
55	<a href="http://www.udc-italia.it/">http://www.udc-italia.it/</a>	Unione dei Democratici Cristiani e Democratici di Centro	Christian Democratic Centre	R
56	<a href="http://www.leganord.org/">http://www.leganord.org/</a>	Lega Nord	Northern League	FR
57	<a href="http://home.rifondazione.it/">http://home.rifondazione.it/</a>	Rifondazione Comunista	Communist Refoundation	FL
58	<a href="http://www.comunisti-italiani.it/">http://www.comunisti-italiani.it/</a>	Partito dei Comunisti Italiani	Party of Italian Communists	FL
59	<a href="http://www.verdi.it/">http://www.verdi.it/</a>	Federazione dei Verdi	Federation of Greens	Eco.
60	<a href="http://www.sdionline.it/">http://www.sdionline.it/</a>	Socialisti Democratici Italiani	Italian Democratic Socialists	C
61	<a href="http://www.nuovopsiarezzo.com/">http://www.nuovopsiarezzo.com/</a>	Nuovo Partito Socialista Italiano	New Italian Socialist Party	C
62	<a href="http://www.svpartei.org/">http://www.svpartei.org/</a>	Sudtiroler Volkspartei	South-Tyrolean People's Party	Reg.
63	<a href="http://www.unionvaldotaine.org/">http://www.unionvaldotaine.org/</a>	Union Valdotaïne	Valdostian Union	Reg.
64	<a href="http://www.italiadeivalori.it/">http://www.italiadeivalori.it/</a>	Lista di Pietro Italia dei Valori	List Di Pietro Italy of Values	C
65	<a href="http://www.sergiodantoni.org/">http://www.sergiodantoni.org/</a>	Democrazia Europea	European Democracy	C
66	<a href="http://www.fiammatricolore.net/">http://www.fiammatricolore.net/</a>	Movimento Sociale Fiamma Tricolore	Social Movement Three Colour Flames	FR
67	<a href="http://www.popolariudeur.it/">http://www.popolariudeur.it/</a>	Alleanza Popolare Udeur [Unione Democratici per l'Europa]	Popular Alliance Udeur	C
68	<a href="http://www.linoduilio.it/">http://www.linoduilio.it/</a>	Partito Popolare Italiano	Italian People's Party	C
69	<a href="http://www.geocities.com/CapitolHill/8483/">http://www.geocities.com/CapitolHill/8483/</a>	Destra Riformista	Reformist Right	R
70	<a href="http://www.rinascita.info/">http://www.rinascita.info/</a>	Rinascita Nazionale	National Renaissance	R
71	<a href="http://www.radicali.it/">http://www.radicali.it/</a>	Radicali Italiani	Italian Radicals	C

Key: AUS - Australia, AUT - Austria, FRA - France, GER - Germany, ITA - Italy, UK - United Kingdom; C - Centre, E - Ecologist, FL - Far Left, FR - Far Right, L - Left, R - Right, Reg. - Regionalist.



**Table A1: Political party classification data (cont.)**

<i>Id</i>	<i>URL</i>	<i>Party name</i>	<i>Party name (English)</i>	<i>Country</i>	<i>Type</i>
72	<a href="http://www.labour.org.uk/">http://www.labour.org.uk/</a>	Labour Party	Labour Party	UK	L
73	<a href="http://www.conservatives.com/">http://www.conservatives.com/</a>	Conservative Party	Conservative Party	UK	R
74	<a href="http://www.libdems.org.uk/">http://www.libdems.org.uk/</a>	Liberal Democrats	Liberal Democrats	UK	C
75	<a href="http://www.uup.org/">http://www.uup.org/</a>	Ulster Unionist Party	Ulster Unionist Party	UK	R
76	<a href="http://www.snp.org/">http://www.snp.org/</a>	Scottish National Party	Scottish National Party	UK	Reg.
77	<a href="http://www.dup.org.uk/">http://www.dup.org.uk/</a>	Democratic Unionist Party	Democratic Unionist Party	UK	R
78	<a href="http://sinnfein.org/">http://sinnfein.org/</a>	Sinn Fein	Sinn Fein	UK	L
79	<a href="http://www.plaidcymru.org/">http://www.plaidcymru.org/</a>	Plaid Cymru	Party of Wales	UK	Reg.
80	<a href="http://www.sdip.ie/">http://www.sdip.ie/</a>	Social Democratic and Labour Party	Social Democratic and Labour Party	UK	L
81	<a href="http://www.ukip.org/">http://www.ukip.org/</a>	United Kingdom Independence Party	United Kingdom Independence Party	UK	R
82	<a href="http://www.greenparty.org.uk/">http://www.greenparty.org.uk/</a>	Green Party of England and Wales	Green Party of England and Wales	UK	Eco.
83	<a href="http://www.bnp.org.uk/">http://www.bnp.org.uk/</a>	British National Party	British National Party	UK	FR
84	<a href="http://www.socialist-labour-party.org.uk/">http://www.socialist-labour-party.org.uk/</a>	Socialist Labour Party	Socialist Labour Party	UK	L
85	<a href="http://www.party.coop/">http://www.party.coop/</a>	Cooperative Party	Cooperative Party	UK	L
86	<a href="http://www.n9s.org/">http://www.n9s.org/</a>	British Nazi Party	British Nazi Party	UK	FR
87	<a href="http://www.comunist-party.org.uk/">http://www.comunist-party.org.uk/</a>	Communist Party of Britain	Communist Party of Britain	UK	FL
88	<a href="http://www.cpgb.org.uk/">http://www.cpgb.org.uk/</a>	Communist Party of Great Britain	Communist Party of Great Britain	UK	FL
89	<a href="http://www.natfront.com/">http://www.natfront.com/</a>	National Front	National Front	UK	FR
90	<a href="http://www.white.org.uk/">http://www.white.org.uk/</a>	White Nationalist Party	White Nationalist Party	UK	FR

Key: AUS - Australia, AUT - Austria, FRA - France, GER - Germany, ITA - Italy, UK - United Kingdom; C - Centre, E - Ecologist, FL - Far Left, FR - Far Right, L - Left, R - Right, Reg. - Regionalist.

**Table A1: Political party classification data (cont.)**

<i>Id</i>	<i>URL</i>	<i>Party name</i>	<i>Party name (English)</i>	<i>Type</i>
91	<a href="http://www.alp.org.au/">http://www.alp.org.au/</a>	Australian Labor Party	Australian Labor Party	L
92	<a href="http://www.liberal.org.au/">http://www.liberal.org.au/</a>	Liberal Party of Australia	Liberal Party of Australia	R
93	<a href="http://www.democrats.org.au/">http://www.democrats.org.au/</a>	Australian Democrats	Australian Democrats	C
94	<a href="http://www.greens.org.au/">http://www.greens.org.au/</a>	Australian Greens	Australian Greens	Eco.
95	<a href="http://www.onenation.net.au/">http://www.onenation.net.au/</a>	One Nation	One Nation	FR
96	<a href="http://www.clp.org.au/">http://www.clp.org.au/</a>	Northern Territory Country Liberal Party	Northern Territory Country Liberal Party	R
97	<a href="http://www.wa.greens.org.au/">http://www.wa.greens.org.au/</a>	The Greens (WA)	The Greens (WA)	Eco.
98	<a href="http://www.cdp.org.au/">http://www.cdp.org.au/</a>	Christian Democratic Party	Christian Democratic Party	R
99	<a href="http://www.nucleardisarmament.org/">http://www.nucleardisarmament.org/</a>	Nuclear Disarmament Party	Nuclear Disarmament Party	FL
100	<a href="http://members.ozemail.com.au/~irgeo/">http://members.ozemail.com.au/~irgeo/</a>	Australian Mens Party	Australian Mens Party	C
101	<a href="http://www.cecaust.com.au/">http://www.cecaust.com.au/</a>	Citizens Electoral Council	Citizens Electoral Council	FR
102	<a href="http://www.cpa.org.au/">http://www.cpa.org.au/</a>	Communist Party of Australia	Communist Party of Australia	FL
103	<a href="http://www.familyfirst.org.au/">http://www.familyfirst.org.au/</a>	Family First Party	Family First Party	R
104	<a href="http://freetradeparty.tripod.com/">http://freetradeparty.tripod.com/</a>	Free Trade Party	Free Trade Party	R
105	<a href="http://www.iso.org.au/">http://www.iso.org.au/</a>	International Socialist Organisation	International Socialist Organisation	FL
106	<a href="http://www.ldp.org.au/">http://www.ldp.org.au/</a>	Liberal Democratic Party	Liberal Democratic Party	R
107	<a href="http://ncpp.xisle.info/">http://ncpp.xisle.info/</a>	Non-custodial Parents Party	Non-custodial Parents Party	R
108	<a href="http://www.progressivelabour.org/">http://www.progressivelabour.org/</a>	Progressive Labour Party	Progressive Labor Party	L
109	<a href="http://www.shootersparty.org.au/">http://www.shootersparty.org.au/</a>	Shooters Party	Shooters Party	R
110	<a href="http://www.socialist-alliance.org/">http://www.socialist-alliance.org/</a>	Socialist Alliance	Socialist Alliance	FL
111	<a href="http://www.sep.org.au/">http://www.sep.org.au/</a>	Socialist Equality Party	Socialist Equality Party	FL
112	<a href="http://ausfirst.alphalink.com.au/">http://ausfirst.alphalink.com.au/</a>	Australia First Party	Australia First Party	FR
113	<a href="http://www.users.bigpond.com/">http://www.users.bigpond.com/</a>	Australians Against Further Immigration	Australians Against Further Immigration	FR

**Key: AUS - Australia, AUT - Austria, FRA - France, GER - Germany, ITA - Italy, UK - United Kingdom; C - Centre, E - Ecologist, FL - Far Left, FR - Far Right, L - Left, R - Right, Reg. - Regionalist.**

**Table A2: Political parties in sample by party type and country**

	Far Left	Left	Centre	Right	Far Right	Ecologist	Regionalist	All
Australia	5	2	2	8	4	2	0	23
Austria	2	3	0	3	2	1	0	11
France	6	5	3	5	2	4	0	25
Germany	2	1	2	5	3	1	0	14
Italy	2	1	8	4	3	1	2	21
UK	2	5	1	4	4	1	2	19
All	19	17	16	29	18	10	4	113