MULTIPLE ENGAGEMENTS AND NETWORK BRIDGING IN CONTENTIOUS POLITICS: DIGITAL MEDIA USE OF PROTEST PARTICIPANTS

INTRODUCTION

The digital media boom has strongly affected research on protest participation and social movements. Scholars have tackled, both empirically and theoretically, the question to what extent new Information and Communication Technologies (ICTs) make a difference for both contentious activists and movement organizations (see among many others (Bennett 2003; McCaughey and Ayers 2003; van de Donk, Loader, Nixon, and Rucht 2004). It is now commonly understood among protest scholars that individuals do not decide in a social vacuum to participate but that social networks are key to explaining mobilization (e.g., McAdam 1988). Recent developments in technology may be changing the dynamics of protest networks by making it easier to build, maintain, and cross networks. Students of social movements have begun to study the uses of digital media to facilitate collective action, both at the micro-level, involving individuals' decision to participate, and on the meso-level, affecting organizational decisions to protest and to collaborate, along with the capacity to mobilize large numbers of participants often over short periods of time (see for example: Bennett, Breunig, and Givens 2008; della Porta and Mosca 2005; Edwards 2004; Van Laer 2010). Emerging generalizations point to the potential of ICTS to lower networking costs, extend the reach and diversity of networks, and increase levels and scale of participation (Ayres 1999; 2005). At the same time, digitally mediated networks may become harder to manage, less engaged through organizational memberships, and less

receptive to collective movement identity frames (Bennett 2003; Bimber, Flanagin, and Stohl 2005).

Within this broad and expanding research agenda dealing with ICTs and protest politics, our analysis focuses on a specific research question: *to what extent does digital media use allow activists to combine multiple engagements with diverse causes?* The answer to this question has important ramifications both at the micro-level (individuals) and at the meso-level (movement organizations). First, at the micro-level, we show with direct evidence that protest participants using ICTs are indeed more active in more diverse causes. The cause-effect relationship here is less important than the broader implication that digital communication technologies can magnify the capacities of individuals to engage in diverse political networks, and even to become amplifiers in the scale and speed of protest mobilization (Bennett, Breunig and Givens, 2008). In short, digital media such as lists, websites and networking platforms allow individuals to be embedded in more diverse social networks at the same time and make them more 'mobilizable' for different causes. ICT use, thus, affects individual participation and, in particular, the diversity of individuals' participation. Second, our empirical research on the micro-level has repercussions at the meso-level too—that is the way movement organizations are linked to each other. In fact, the study pursues a secondary research question: *to what extent do multiple engagements (afforded by ICT use) lead to network bridging between social movements?* We contend that overlapping activists enhance the integration of social movement networks. Activists combining several commitments provide linkage between the milieus in which they are active. We show that multiple activists have foremost the *capacity* to link across different issue and organization networks, and we present some evidence that these overlaps are sometimes *effectively* used to connect diverse groups.

We draw upon extensive evidence obtained by surveying large numbers of protest participants on different issues, in different nations, and at different points in time. The study rests on three sources of protest survey data: (1) in eight nations, on February 15, 2003, we interviewed and surveyed participants in the massive protests against the upcoming war on Iraq; (2) in Belgium in 2006 and 2007, we surveyed participants in five very different types of demonstrations ranging from bread-and-butter to typical new social movement issues; (3) as the protest momentum against the war on Iraq was slowly withering from 2003 to 2006, we interviewed participants in three different antiwar marches in Belgium. We thus set up a very demanding test for our main argument that ICT use facilitates multiple engagements and network bridging: our analyses are conducted across nations (keeping constant issue), across issues (keeping nation constant), and across time (keeping constant both issue and nation).

ICT USE, MULTIPLE ENGAGEMENTS, AND NETWORK BRIDGING CAPACITIES OF ACTIVISTS

As noted above, this analysis speaks to two different streams in the broad protest literature by dealing with two related questions, one about the individual-level (micro) effects of ICT use, and one about the organization-level (meso) consequences of these individual level effects. The notion of overlapping activism integrates both literatures by showing how individual level network activation also points to bridging diverse networks in ways that may lower the brokerage costs often incurred at higher level organization communication and bargaining. This contribution builds on previous studies suggesting that ICT use enables individuals to hold several positions in separate movements or protest milieus. It

also draws on earlier work pointing to multiple individual engagements as mechanisms for integrating otherwise weakly connected networks or organizations.

Digital communication technologies—both hardware and software—can reduce time constraints and communication costs, enabling individuals to stay in touch with more people and more diverse causes (Boase, Horrigan, Wellman, and Rainie 2006; Lupia and Sin 2003; Wellman 2001). As "many-to-many" communication tools, Internet and email simply allow for dealing with more contacts than other technologies, like for instance telephone or fax, without increasing communication costs and efforts proportionally (Wellman, Quan-Haase, Boase, Chen, Hampton, Isla de Diaz, and Miyata 2003). Internet use seems to foster also an increased breadth of interpersonal communication. Studies by Katz and Rice (2002), Woolgar (2002) and Wellman and colleagues (Wellman 2001; Wellman et al. 2003) all indicate that the use of Internet and email is associated with greater levels of face-to-face communication and interaction with more different others in general. A considerable stream in the research literature on how Internet changes people's communication behavior—the so-called 'social affordance' literature—has convincingly showed that, due to its flexible and asynchronous nature, Internet allows the maintenance of multiple communication streams with more diverse other people (Boase, Horrigan, Wellman, and Rainie 2006; Boase and Wellman 2006; Wellman 2001; Wellman et al. 2003). Via the Internet distant, far-flung and intermittent communities are connected; especially for people with large networks the Internet is important (Boase, Horrigan, Wellman, and Rainie 2006; Wellman 2001; Wellman et al. 2003). Different authors suggest that the Internet is conducive to the development of such "weak ties" providing opportunities for people to posses and expand disparate friendship and organizational networks (Best and Krueger 2006; Hampton 2003; Haythornthwaite 2002; Kavanaugh, Reese, Carroll, and

Rosson 2005). In addition to changing the capacity to extend and manage social networks, the ease of information processing is also enhanced by ICTs. A profusion of software and online tools allow people to organize their diverse contacts, networks and information streams (Culotta, Bekkerman, and McCallum 2004).

Many of these observations relating to social and organizational communication also apply to activism. For example, communication streams can be better controlled and managed, and thin tie links enable activists to affiliate with more diverse causes or issues (Agre 2004). Consequently, activists are not only able to maintain more relationships but these relationships can exist independently of formal movement organizations (Bennett, Breunig, and Givens 2008). Multiple engaged activists can use the Internet and email as jugglers: they attend to different causes, are informed about different ongoing struggles and issues and, most of the time, they do not react but just distantly follow what is going on without getting into action. From time to time, when an attractive issue and an activism opportunity "passes by", they decide to actually engage themselves and, for example, to attend a protest event or to sign a petition. Afterwards, they switch to "stand-by mode" again, simply monitoring what is going on in the different networks they are part of, until the next appealing cause presents itself. The "Netville" study by Wellman and colleagues (2003) shows how digital media creates a new kind of social infrastructure that can be easily and effectively used to mobilize for (local) protest. In similar vein, research by Shah and colleagues (2005) demonstrated that Internet use transforms peoples political relationships and influences their civic participation. In sum, the available work on the effect of ICTs on people's communication practices suggests that digital media allow people to stay in touch with more (and potentially more diverse) people, many of whom they may not know very well, and to connect to more (and potentially more diverse) information streams which

they alternately tune in and tune out as they see fit. In the remainder of this section, we blend these ideas with the literature on social movement networks and how overlapping activists provide linkage to movement networks.

Social movements are networks (or even networks of networks). The network approach has gained much momentum among students of contentious politics (Diani and McAdam 2003; Gerlach 2001). Zald and McCarthy (1987) defined social movements as a network of organizations and Diani termed social movements as "informal networks linking individuals and/or organizations, engaged in a conflict on the basis of a shared collective identity." (Diani 1992: 13). Movements are collective actors without formal boundaries—people can feel part of it or not, irrespective of their formal membership of specific movement organizations—which means that the ties individuals maintain with a movement and the ties movement organizations maintain with each other are key defining elements (Diani 2003b). Movements can only be considered to be political actors if they display some kind of integration, not only ideologically, in terms of shared ideas or a collective identity, but also structurally with the composing units being one way or another interacting with each other in a more or less systematic way. The degree of structural integration varies dramatically between movements, with some movements being quasi unitary actors with strong central leadership and formal collaboration and other movements being collections of only loosely coupled and divergent groups (Diani 2003b). The network perspective also applies to the protest events staged by social movements. Typically, protest events, like street demonstrations, are not only attended by people belonging to the core organizations that stage the event. To be sure, some protest events are attended mostly by social movement members mobilized through "en-bloc recruitment" (McAdam 1986). But in many other protest events the attendees do not have

a formal link with the organizers (Walgrave and Klandermans 2010). In some cases, like in so-called "new emotional events" such as the Million Mom March, a formal organizational backdrop is almost completely absent (Walgrave and Verhulst 2006). In complex protests involving multiple organizations and emotionally driven involvement, individual-level networks are considered to be paramount for explaining recruitment (Snow, Zurcher, and Ekland-Olson 1980). Hence, networks are key for the *internal* integration of a movement, as they connect different organizations, groups and activists. And they also have an *external* mobilization function, as they are essential to explain why and how protest events attract external participants not formally associated with the movement.

One important mechanism creating internal integration and external linkage of contentious actors is the presence of "overlapping activists" (Carroll and Ratner 1996; Meyer and Whittier 1994). Just like interlocking directorates in the world of corporate boards (Vedres and Stark 2010) or the personnel links between parties and social organizations through overlapping leadership or membership (Valen and Katz 1964), activists who are engaged in several movement organizations or who attend protest rallies on several issues provide ties between the different milieus in which they participate. Meyer and Whittier (1994) found in the US that the transmissions and diffusion between the peace movement and the women's movement took place, amongst others, through what they called "overlapping movement communities". Thanks to such personnel bridges information informally flows from one collective actor to the other (della Porta and Mosca 2007; Kavanaugh, Reese, Carroll, and Rosson 2005). Personal networks often lead to mobilization appeals "spill over" from one network to another (Walgrave and Klandermans 2010).

As noted above, the ties created by overlapping activists' personal networks are often weak. In contrast to organizational elites, these more peripheral activists do not "bind" their

organization in any way nor do they have a mandate to represent their organizations or to deliberately coordinate protest actions. As Vedres and Stark (2010) have recently argued for the corporate world, cohesive and strong ties are important to innovate, as innovation depends on combining inside knowledge. Yet, for mobilization for action, weak ties suffice. Weak ties can integrate collective actors and offer various compelling personal motivations for action. Weak ties, Granovetter (1973) influentially argued, are essential to exchange important information. They may not suffice to make people take part in high-risk activism (della Porta 1988) but they can facilitate contacts between core organizers and a more moderate and distant potential constituency. While facilitating mobilization, these overlapping networks may make the borders between organizations porous. Thus, movements are networks and these networks consist of autonomous units that are connected through nodes. Overlapping activists with overlapping network ties can provide linkages fostering internal integration of a social movement and at the same time yield external connections that permit a movement to reach out to a more distant and diverse external constituency.

To summarize the discussion thus far, we have argued that ICT, due to their flexible utilization and asynchronous character, permit people in general and activists in particular to maintain multiple contacts and to hold various engagements for different causes at the same time. Next, we established that social movements, and the events they stage, are essentially built through networks, that those networks require internal integration and external outreach, and that overlapping activists can yield such internal and external connections. Connecting both elements brings us to the main idea of this study that (1) ICTs can enable activists to take up diverse engagements, and that (2) these multiple

engagements provide linkages enhancing the internal mobilization and external reach of social movements.

The idea that ICTs indirectly contribute to bridging between networks by enabling multiple affiliations has been explored earlier by Kavanaugh and colleagues (2005) in their seminal study of neighborhoods in Blacksburg, Virginia. The Internet, they found, helped people to increase their number of weak ties linking distant social groups. A similar finding regarding activists is reported by Bennett and colleagues in their study of the 2003 anti-war demonstrators in the US (Bennett, Breunig, and Givens 2008). Contributing to these findings that ICTs create linkage is the fact that some digital tools are specially designed to "create" networks of explicit and implicit connections by using semantic information from past email communication and Internet practices (McArthur and Bruza 2003). Also the fact that people's entire networks and all their contacts are often integrated in a single computer system or hand held device makes it extremely easy to cross network borders and, for example, to forward an email coming from one network to another network. In fact, to avoid cross-posting and annoying people by sending them information they already received, ICTs might even encourage people to forward incoming messages especially to *other* people in *other* networks who most likely did not receive the message yet. So, the "Net etiquette" may actually stimulate people to link their different networks.

However, not all social movement scholars are convinced that ICTs help to integrate social movements and the events they stage. Some argue that strong as well as weak ties cannot be developed online because, essentially, surfing the Internet is a solitary and individual activity (Ward, Gibson, and Lusoli 2003). Diani (2000) argues that electronic interactions within social movement communities are simply extensions of existing social ties; digital

media do not create brand-new social links. This does not contradict our claim that ICT use facilitates multiple engagements. It is perfectly possible that many ties within and between particular social movement and protest communities are not solely created via the Internet. We do claim, however, that ICTs allow people, at least, to *maintain* these bonds and to stay in touch with networks in which they may have once participated in a face-to-face fashion.

If we would find that ICTs, and more specifically the overlapping memberships they allow to maintain, help to integrate social movements and protest networks, this may have important consequences for the relationship between social movement organizations and (their) activists. First, on the micro-level of the individuals, it may imply that activists experience a growing autonomy vis-à-vis the organizations they are affiliated with and/or engaged in. That ICT helps activists to manage their activist life means, indeed, that individuals are less reliant on organizational resources and depend less on organizational resources and organized communication channels when it comes to maintaining relationships with others. Second, on the meso-level of the social movement organizations, the increasing networking capacities of individual activists may also increase the integration of current social movements. In fact, some authors have claimed that social movements face problems of integration as, for example, ideological commitments have weakened (Bennett 2004; Gerlach 2001). Individual networking capacities, amongst others generated by the Internet, may to some extent replace these older integration mechanisms. The burden of integration, so to say, may have partially shifted from organizations to individuals.

Most available research about ICTs and social movement networks has focused on the role ICTs play in the Global Justice Movement (GJM) (see for example: Clark and Themudo 2003; della Porta and Mosca 2005; Eagleton-Pierce 2001; Fisher, Stanley, Berman, and Neff 2005; Juris 2005; Kavada 2006; Van Aelst and Walgrave 2004). This work has been inspired by the fact that the GJM has often been described as a network movement par excellence (Klein 2001; Pleyers 2004). It attracts activists concerned about many different issues with very diverse organizational affiliations and many activists are committed to multiple issues and maintain affiliations across flexible political action networks. Some even raise doubts as to whether the GJM deserves the predicate "movement" altogether because it has no centre or organizational core but seems to be entirely made up of a heterogeneous bunch of organizations, groups and individuals (temporarily) joining forces on global justice issues (Klein 2001). Digital media use fits very well with the decentralized, egalitarian and inclusive ideology of the GJM (Bennett 2003; 2005).

In this paper, we do not focus on the GJM but argue, more generally, that digital media matter for *all* kinds of contemporary movements and events. Traditional movements and protest events are affected and molded by activists with multiple engagements who combine their multiple commitments by relying on digital media. It may be the case that digital media play a relatively larger role in the new, highly heterogeneous and non-hierarchical network movements and the events they stage. But we expect multiple engaged activists in traditional social movements to rely on digital media more than their less multiple engaged colleagues. However, since the density and the centralization of the "new style" contentious networks may be lower (implying less formal integration), we do expect ICTs to play a relatively larger role in these networks that typically have a high number of ties reaching outside the organizational core of the network (Diani 2003a).

In the discussion above, we explicitly avoided to make causal statements as to whether ICT use "leads to" or "affects" multiple engagements. In fact, the opposite relationship may be possible too. Indeed, the reverse causal direction can also apply to cases where people with diverse engagements may be more inclined than others to start using ICTs politically to cope with their fragmented commitments. Individuals who are involved in multiple different activities face greater problems of time management and are exposed to pressures of conflicting commitments; such constraints may encourage them towards using ICT to reduce the impact of those pressures. Hence, it may not only be the case that ICT use leads to multiple engagements but that multiple engagements lead to ICT use. Still, in the empirical section of the paper we draw on regression analyses in which we consider multiple engagements as the dependent and ICT use as the independent variable which suggests that ICT use somehow affects multiple engagements. We use regression analysis because it permits us to rigorously test for multivariate relationships and because it yields instruments to also tap interaction effects. We also believe that the most probable causal chain is the one we sketch here running from ICTs to multiple engagements and less the other way around. Our assumption is that even people who are inclined to expand the diversity of their networks cannot comfortably do so unless they have the means to manage them, and once those technological means are available, the limits to further network expansion are substantially reduced. This assumption is entirely in line with the main findings of the social affordance literature where ICT use is the common independent variable and communication patterns are the dependent variable. This literature essentially claims that in other areas of public life, communication with friends and acquaintances, ICT use precedes extended and more diverse communication patterns (Boase, Horrigan, Wellman, and Rainie 2006; Boase and Wellman 2006; Wellman 2001; Wellman et al. 2003).

Either way, the direction of causality does not challenge our claim that ICTs are instrumental in maintaining multiple engagements. We cannot, in a cross-sectional study, definitely disentangle this causal puzzle.

DATA, METHODS, AND OPERATIONALIZATION OF THE MAIN CONCEPTS

In order to test the main idea that ICT use facilitates multiple engagements and that these multiple engagements provide linkage to social movements we carried out three series of protest surveys covering in total 14 different protest events. For each of these demonstrations a very similar sampling and interview procedure was followed: two groups of interviewers, each directed by a fieldwork supervisor (the "pointer"), hand out similar questionnaires asking protesters to fill in the survey at home and send it back with the postage-paid envelope. A first group of interviewers+pointer moves from the head of the demonstration to the tail. The pointer selects respondents to be interviewed in each nth-row (depending on the estimated protester turnout) alternatively in the middle of a row and at the left- and right-hand side of it. The second group of interviewers+pointer carries out the same procedure, but starting from the tail up to the front of the protest march. This procedure generates a fair dispersion of the questionnaires over the moving crowd approximating a random sample. In other publications the fieldwork method was described in more detail and a series of tests to check for sample representativity and non-response bias was run. We found that there was hardly any difference between people who agreed to collaborate and people who did not fill in the questionnaire and refused to send it back. There is, however, a slight tendency that older people are somewhat more willing to collaborate than younger people (AUTHORS 2010).

A first series of protest surveys, called the International Peace Protest Survey (IPPS), covered eight national antiwar demonstrations staged on February 15, 2003. IPPS probably is the largest international cross-national protest survey carried out. Over 10,000 questionnaires were distributed in eight countries on the same day: demonstrations in the UK, Italy, the Netherlands, Switzerland, US, Spain, Germany, and Belgium were covered producing 5,155 postal questionnaires. A second series of surveys called the Multi Issue Protest Survey (MIPS) contains data of five Belgian demonstrations on various issues. Between January 2006 and May 2007, five large demonstrations in Belgium were covered with similar questionnaires: we covered another antiwar mobilization ('Antiwar2006') but also a manifestation on illegal immigrants' rights ('Sans papiers'), two traditional trade union mobilizations against corporate reorganization and massive redundancies ('Inbev' and 'VW Vorst'), and a demonstration of Flemish nationalists claiming more autonomy for the Flanders' region in Belgium ('Vlaamse Mars'). The MIPS dataset contains 1,068 respondents who completed a written questionnaire. Finally, we covered another Belgian antiwar demonstration in March 2004 and, together with the 2003 and 2006 Belgian antiwar demonstrations, this small time-series, called the Belgian Peace Protest Survey (BPPS) contains 1,086 antiwar demonstrators surveyed via a postal questionnaire at three different points in time about the same protest issue. We present an overview of descriptives, facts, and response rates of all these demonstrations in Table 1. Note that, in this paper, we only draw on the postal surveys and not on the oral surveys; the oral surveys only serve to check for the response bias in the surveys that are sent back.

<TABLE 1>

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Taken together, we will subject our hypothesis of digital media use, multiple engagements, and network bridging to a test based on a written survey of 6,485 activists (note the overlap between the IPPS, BIPS and MIPS datasets). Our data enable us to examine whether we find differences between countries, between issues, and through time. We expect to find differences between countries among the various antiwar marches staged on the same day (IPPS dataset). As private Internet use, in 2003, was still at very different levels in the countries under study, we anticipate that ICT use and multiple engagements differ across nations. For example, about 60 percent of the US adult population was online in 2003 (Madden 2006) while in a country like Spain only about 23 percent of the population was online in 2003 according to the European Social Survey[1]. Second, the role of ICT has mainly been established for so-called new social movements and especially the Global Justice Movement mainly populated by young and more technologically skilled activists. The Belgian MIPS dataset on different demonstration issues allows us to test whether the Internet plays a similar role in very different and much more classic protests like the events staged by trade unions or by the traditional Flemish nationalist movement. Third, we also expect to find differences in the role of ICTs in fostering diverse network engagement across the three different antiwar protests we covered in Belgium between 2003 and 2006 (BPPS dataset). Through that period of time, Internet use in Belgium continued to grow from 50 percent of the population in 2003 to more than 65 percent in 2005. Frequent Internet use rose from 48 percent to 63 percent (Hooghe and Vissers 2006). However, offsetting these trends, the protest against the war on Iraq gradually declined from 2003 to 2006: the protest size diminished and its public visibility withered. The antiwar movement went through a declining protest wave. In 2003, the movement could count on the support

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[1] Roger Jowell and the Central Co-ordinating Team. 2003. *European Social Survey 2002/2003*. London: Centre for Comparative Social Surveys, City University, and Norwegian Social Science Data Services (NSD) as the data archive and distributor of the ESS data. See http://ess.nsd.uib.no/.

of many people who were not affiliated with core movement organizations; this had changed dramatically in 2006. The remaining activists were die-hards, they formed the core militants of the antiwar cause. We anticipate that the Internet and its linking capacities play a different role in these different stages of the antiwar protests. Indeed, weak ties established through ICTs may become even weaker in the absence of other organizational resources typically used to rally fading movements. This possibility suggests an interesting area for future research and theorizing.

<TABLE 2>

Table 2 contains the key concepts and variables and their descriptives across all surveyed demonstrations. The dependent variables are the multiple engagements (and thus bridging capacities) of individual protesters captured in two types of diversity: "protest diversity" and "organization diversity". We agree with Diani (2009) that the bridging capacities of individuals depend on their multiple activism, and that this activism can be rooted in organizations as well as in collective action participation. Diani coins this "organization milieus" vs. "protest milieus". The latter may be less stable and provide more occasional forms of interaction but they can be very meaningful in supplying ties and solidarity. Note that both variables assess multiple engagements in different *types* of organizations and protest events. We do not consider here, for example, in how many peace protests they had participated but we asked them for how many different issues they had taken to the streets. The multiple engagements we examine here, thus, all create potential cross-movement ties.

First, we assume that a protestor's multiple engagements, and his ability to potentially bridge different networks, are associated with his or her past attendance at different types

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of demonstrations. In order to measure protest diversity, respondents were asked to indicate participation in different types of demonstrations: *"If this is not the first time you have engaged in a demonstration or public protest, please indicate which one(s) you have attended before."* The respondents got the following list of issues: peace, anti-racism and migrant rights, human rights, third world, social issues (including labor), environmental, globalization, women's issues, regionalist, and "other". The level of protest diversity is determined by the number of different issues a respondent checked. All blank unchecked types are counted as zero (i.e. not attended). The scale thus runs from zero (none of the issues checked or demonstrating for the first time) to ten (respondent has protested for all ten different issues).[2]

The second type of multiple activism that may allow activists to provide bridging across different networks is being an active member of different organizations. In order to assess the degree to which a protestor was engaged in different types of organizations, demonstrators were asked whether or not they had been, during the last twelve months, an active or inactive member of sixteen different kinds of organizations ranging from political parties to charitable organizations. Our organization diversity measure is based on the

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[2] Note that for our argument it does not matter whether the number of checked issues corresponds with the frequency of past protest attendance: some people may have demonstrated a lot but only for a small amount of issues, other people may have demonstrated infrequently but each time on a different issue. We are interested here in the diversity of engagements, not in their number, although diversity and frequency of protest participation unsurprisingly strongly correlate (Pearson r = .70). Obviously, we cannot check how people defined their protest participation in terms of issues. The same Global Justice Movement event, for example, might be defined as primarily being an "environmental" event by one demonstrator and as a "third world" event by another. Also, we lack detailed information on when activists precisely participated in events for these different issues; the diversity question did not contain a time frame. However, the protest diversity question was preceded by a protest frequency question that did contain a specific time frame and that may have primed the protest diversity answers. In some surveys, the protest frequency question referred to protest participation during the past five years while in other surveys we asked people how many times they had participated during their life. It is difficult to consider very old participatory engagements, for example 20 years back, as really creating multiple engagements because they may have been consecutive rather than synchronous. Yet, we are fairly confident that our protest diversity variable taps recent, and thus synchronous, participation. In fact, the association between protest frequency "during the last five years" and "ever" is very high (for all covered demonstrations the Spearman correlation is always above .61).

simple summation of active memberships in these various kinds of organizations, ranging from zero (indicating that a person is not an active member of any of the listed organizations) to 16 (active in all different organizations).

Both our dependent variables cover a large theoretical range of possible values from 0 to 10 (protest diversity) and from 0 to 16 (organization diversity). But, looking at Table 2, it shows that both variables' distributions are much skewed towards the lowest categories—means and standard deviations are small. Most people have hit the streets for two or three different issues and are active in one or two different organizations. Comparing both means and standard deviations we do find substantial differences across countries and types of demonstrations. For example, with fairly similar standard deviations, protest issue diversity was more than three times larger among the Belgian antiwar demonstrators in 2006 (4.56) than among the antiwar demonstrators in 2003 in the UK (1.60). Organization diversity was highest in the 2003 antiwar demonstrations in the US (3.05) and was lowest among the 2003 antiwar demonstration in Germany (0.91). Not shown in the table is that both dependent variables are statistically significantly correlated: coefficients range from .153 in the IPPS dataset to .273 in the MIPS dataset. However, the modest size of these correlations points out that protest and organization diversity tap into different dimensions of a protester's multiple engagement.

The main independent variable is the usage of new information and communication technologies. We distinguish three forms of Internet use: one directed at social and political change, a second at obtaining political information, and third at effectively using email to get and forward information about demonstrations. The first ICT variable, using Internet for social change, is a simple binary measure based on the following questions: *"There are*

many different ways in which people can make an effort for societal change. Did you, in the past twelve months, engage in any of the activities below?" We then presented the respondents a long list of such actions: contacting a politician or civil servant, signing a petition, making a donation, buying a product out of ethical or political reasons, participating in a strike or sit-in, and engaging in violent protest etc. If they ticked at least one of the boxes we did then ask: "*Did you use the Internet for any of the above activities?*" (0=no and 1=yes). The second ICT variable, the use of digital media for obtaining political information, is an additive scale that was constructed as follows. The question was: "*Through which channels do you obtain your political information*". People could mark for television, newspapers, magazines, radio, websites, mailing lists, and for "other" media whether they used them never, monthly, weekly, or daily. Only the results for the online information channels were used (email and websites): a zero indicates that a respondent never uses either form of digital media, whereas a maximum score of 6 indicates that he or she would use both forms—email and websites—on a daily basis. The third ICT variable is of a different kind and measures the use of email to receive and forward information about a demonstration. These were the questions: "*Did you receive an email about the upcoming demonstration?*" (0=no and 1=yes) and "*Did you forward this email to other people?*" (0=no and 1=yes). By combining these two questions, we create a new variable with a zero indicating that the respondent did not receive any email message, 1 indicating that he or she received but did not forward any email message, and 2 that the respondent did receive and did forward an email message about the protest event to other people. Unfortunately, we only have this information for the MIPS demonstrations. In contrast to the former two ICT variables, this variable does not measure the bridging *potential* of the Internet but the *actual* use of email to link networks, to get mobilized and mobilize others for a protest event.

For the ICT variables, the main independent variables in the study, we find somewhat larger differences across demonstrations than we found for the dependent variables. For example, there was very high use of the Internet for social change among US 2003 antiwar demonstrators (73 percent) and much lower figures among German 2003 antiwar demonstrators (30 percent). In the MIPS dataset especially trade union activists do not make use of the Internet for social change that much (see InBev and VW Vorst demonstrations). Using the Internet for political information is more skewed towards the lower numbers (on a scale from 0 to 6) but still we find differences between demonstrations. Just like the dependent variables the different independent variables are also statistically significantly correlated (not shown in table), but again, the size of these correlations indicates that all three variables do measure different aspects of ICT use for political reasons.

Finally, the last key independent variable in this study is whether an activist is close to the organizational core staging the protest event in which he or she took part. We suppose that, to reach out to a distant constituency and to really make useful links with other protest communities, the people providing linkage should be part of the organizing core. In fact, if participants with multiple issue engagements are marginal to a protest and are only peripherally connected to the core group organizing the protest event, chances are much smaller that their overlapping activities and memberships effectively provide linkage to different networks. Therefore we identify demonstrators who were actively involved in the organization of the protest and, consequently, are able to serve as key bridge builders across different issue networks. Following Bennett et al. (2008) we term people who are close to the central organizing process as belonging to the "organizational circle". The survey identifies this group as protestors who are and/or know organizing members of the

protest. The resulting variable identifies a protester as to whether he or she belongs to the organizing circle via a dichotomous variable (0=no and 1=yes, with 1 meaning that respondents answered "yes" on one of the following two questions: *"Are you a member of an organization that is (co-)organizing this demonstration?"* or *"If 'No', do you know anyone who is a member of one of these organizations?"*; 0 means that the respondent answered "no" to *both* questions).

Note that we only measure whether people belong to the organizational core regarding the *specific demonstration* in which they participated. Our theoretical argument though, is broader and states that people who are strongly embedded in organizations and protest milieus *in general* are most likely more instrumental in providing useful links than people who are only marginally committed. The point we want to make is thus not that organizational core membership contributed to the mobilization for these specific protest events-although it probably did-but rather that more committed activists increase the chance that valuable information is exchanged. In other words, we consider our measurement of membership of the organizational core of these specific demonstrations as a proxy of the general strength of engagements in protest and organizations for social change. We expect that people who belong to the organizational core of a specific demonstration would on average also be more deeply engaged in other organizations and protests. Again, the same uncertain direction of causality applies to the link between organizational core membership and organization/protest diversity. Not only could organizational core membership contribute to generating more commitments to different causes, but also more diverse commitments could increase the chance that some of these commitments would lead to core membership.

Compared to the two diversity variables and the three ICT variables, belonging to the organizing circle differs a lot across demonstrations. Over all of the cases, about half of the respondents were involved in the organizational circle of the protest. However, for example, while only 37 percent of respondents know or are an organizing member at the antiwar demonstrations in the US and UK, almost 72 percent of the Italian 2003 antiwar protestors belonged to the organizing circle.

RESULTS

To test the impact of digital media use on multiple engagements in protest and in organizations we estimate separate multivariate regressions for the three different datasets. Within each dataset, the several demonstrations get an equal weight as the number of observations for each demonstration varies substantially. We include three demographic variables-sex, age, and education level-in all models. In addition we introduce in each model a series of dummy variables to test for specific demonstration effects. Because our dependent variables, protest diversity and organization diversity, are raw count data with nearly identical mean and variance, a generalized linear model based on Poisson probability function is appropriate. Also we employ robust standard errors, which is the accepted procedure in order to control for unobserved heterogeneity typically occurring in data coming from clusters. Tables 3 and 4 contain the results of these analyses.

To what extent is the amount of different protests people participated in and different organizations they are member of facilitated by their use of digital media? The figures in the tables are regression coefficients (B) with a negative sign indicating a negative association and a positive sign a positive relation. The estimated size of the coefficients can be interpreted as odds ratios (since the model is log-linear). Alternatively, the estimates can

be transformed in "expected counts" of the dependent variable which provide an intuitive interpretation. We rely on the direct interpretation of the estimates in the discussion below and then illustrate the strength for the core covariates in terms of expected counts. Next to the coefficients, robust standard errors (SE) are presented. Finally, the tables contain levels of statistical significance. Given the large amount of cases in IPPS (N=±4,500; differences are due to non-response on specific items), we observe that nearly all coefficients are statistically significant. Even in both of the other datasets with fewer observations (MIPS N=±800 and BPPS N=±970), we reach similar levels of statistical significance for our variables of interest.

< TABLE 3 and 4>

First of all, the models show that there is a large variation in diversity between the different demonstrations. Almost all demonstration dummies, across nations and issues, and both in the protest diversity and the organization diversity models, yield statistically significant differences. In Table 3 in the protest diversity model for IPPS, for instance, the evidence shows that, compared to the very contentious Italian antiwar protest, demonstrators in all other seven countries showed less protest diversity. In the organization diversity model for the MIPS dataset (Table 4), to give another example, the Sans Papiers demonstrators and the Antiwar 2006 demonstrators reported more diverse organizational affiliations than the protesters of the Vlaamse Mars. The Sans Papiers and Antiwar 2006 demonstrators display more diverse organizational affiliations than the Inbev and the VW Vorst marchers as well; the last two events do not reach statistically significant differences from the Vlaamse Mars. Many of the demonstration dummies' coefficients are not only statistically significant but also vary substantial in size which indicates that there are substantial differences across

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countries, issues, and time periods. In the MIPS data comparing protests in Belgium across an array of different demonstration issues we see, for example, that protesters participating in typical new social movement events (Sans Papiers and Antiwar 2006) are more likely to have a more diverse profile, both in terms of protest participation (Table 3) and organizational affiliation (Table 4), than protesters of old social movement events (Inbev, VW Vorst, Vlaamse Mars). As the variation between demonstrations is substantial this provides a rigorous test for our claim that digital media use determines diverse engagements in general, irrespective of the type of demonstration.

Before we turn to the main variables of interest, let us discuss the three sociodemographic variables. The sociodemographics in both the protest diversity and the organization diversity models send a mixed message. Sex and educational level only play a small role in both models with only few statistically significant results and small estimated sizes. Education level has a statistically significant, positive effect on protest diversity across demonstration issues (MIPS dataset, Table 3) and a negative effect when explaining organization diversity across time in the Belgian antiwar demonstrations (BPPS dataset, Table 4). Age, by far, is the strongest sociodemographic predictor of organization and protest diversity. It consistently points in the same direction: older demonstrators display more protest and more organization diversity although the estimate remains rather small. That age matters makes sense, as acquiring multiple engagements is the result of a protest "career" that takes some time to develop. Younger people cannot have gone through such a long militant career and, consequently, they are on average less diversely active.

The most important result for our quest here is that there are considerable effects of political ICT use on both types of diversity. Both tables support the claim that digital media

use enables the development of affiliations across different protest issues and diverse organizations. Not all ICT parameters are statistically significant in all models but many of them are. They all go in the expected direction and in many cases the strength of the effect is contributing substantially to the model. As hypothesized, the more one uses the Internet for obtaining political information and for engaging in social change, the more diverse an activist's profile. The results regarding the protest diversity model are somewhat stronger than those for the organization diversity model. Digital media use for political reasons leads more to activism for different issues than that it leads to membership in different organizations. This makes sense as the Internet as a "fluid" medium probably especially stimulates informal and short-term engagements instead of long-lasting and formal organizational commitments. With regard to the Internet use for political information, we find a very clear relationship in all datasets and all models: the more intense (frequent) an activist uses the Internet (email and websites) to get political information the more he or she participates in protest on different issues and the more diverse his or her organizational affiliations.

Regarding the use of Internet for social change, in the protest diversity models the variable is statistically significant in all three datasets. For the IPPS data in Table 3, using the Internet for social change leads to a larger value in the expected counts of protest diversity by a factor of 1.22 *ceteris paribus*. In the organization diversity models Internet for social change is not statistically significant in the MIPS and BPPS models but the parameters points out that the relationship goes in the expected direction and only just fails to reach the significance threshold. In short, considering the two first key independent variables we can conclude that our expectations are corroborated. Digital media use—informing oneself politically via ICT and relying on ICT to strive for social change—statistically significantly

contributes to multiple engagements, be it in protest or in organizations. This relation is robust and holds when controlled for sociodemographic background across nations, across issues, and across time.

So far, we only answered our first research question and showed with direct evidence that ICT use, as hypothesized, enables activists to develop a diverse set of engagements. Yet, we set this paper off with a second research question as to what extent these multiple engagements afforded by ICTs lead to *linkage* between movement organizations and protest events. ICT use for political reasons creates linking *capacities*, we showed above, but we have not yet demonstrated that these capacities are actually *used* to link networks. Therefore, we look at the two other key independent variables in Tables 3 and 4: forwarding email and being a member of the organizational circle. Unfortunately, we only asked the question whether demonstrators had received and forwarded an email about the demonstration in which they were participating in the five MIPS demonstrations. So, our evidence is not as broad as before. But the variable is crucial as it taps not only the potential but the *actual* use of Internet to bridge networks. In the protest diversity model (Table 3) getting and forwarding specific mobilization messages is not a statistically significant factor. However, in the organization diversity model (Table 4) the email-bridging variable is a statistically significant and fairly strong predictor, it increases the expected counts by a bit more than .6 (or, in other words, the odds of organizational diversity goes up by about 36%). This indicates that especially people using email to get and send mobilizing messages display more diverse organizational affiliations. Using email is thus conducive to effectively connect with the different networks one is part of. This suggests that email forwarding is somehow an organizationally embedded rather than an individual practice. Either way, these results produce (indirect) evidence that ICTs are not

only conducive to creating potential links between organizations but that these technologies are also effectively used by activists to link different networks.

The models in Tables 3 and 4 contain a second variable that yields indirect evidence that ICT use may lead to the kind of bridging that integrates organizational networks: membership in the organizational circle. The organizational circle variable is a consistent, positive and statistically significant covariate in all six models. People who are part of the (broadly defined) group who staged the demonstration, compared to the other participants, do have more experience with a diversity of demonstrations and they belong to more movement organizations. This variable has a substantive impact in all our models. Across the models, belonging to the organizational circle is expected to add nearly one additional protest type or organizational membership, *ceteris paribus*. The centrality of these activists in the web of networks makes it more likely that the linkage they provide between protest or organization networks will be effectively used for bridging at the organization level. Moreover, the value of these bridging activities (measured variously in terms of message coherence, clarity of information, reach of communication) will likely be higher due to linking from a more central node in the network than when coming from more peripheral nodes (that are not members of the organizational circle). Core militants are crucial bridgers as they link more distant or peripheral groups directly to the centre of contention.

To illustrate how much our variables of interest matter in terms of the size of these effects, we present a graph (Figure 1) with the expected counts for protest diversity of four "ideal types" of protesters in the IPPS dataset: the average protestor (i.e. median values on all variables, thus a highly educated male Italian who does not use the Internet for social change and only occasionally uses email or websites to obtain political information), then

adding Internet for social change, then adding daily usage of email and websites for political information, and finally also adding organizational circle membership. The graph below shows clearly that the protesters who are member of the organizational circle, who extensively make use of the Internet for social change and for obtaining political information are expected to participate in more than five different types of protests. This is more than twice as much as the average protestor who is estimated to have participated in a bit more than two events.

<Figure 1>

The previous analyses show that people belonging to the organizational circle do, indeed, display more diverse protest attendance and associational membership. But is this more the case for activists at the organizational core of protests than for more peripheral by-standers? If core activists are more likely to display associations between ICT use and multiple engagements, this pattern could have implications for the question of whether ICTs enhance or undermine the coherence (e.g., frame consistency, organizational coordination) of collective mobilization. Therefore, we test for the two-way interaction between Internet use for political reasons and core activism on protest and organization diversity. We perform *post-hoc* tests relying on the mean estimates on the original scale produced by the regressions in the previous tables and thus controlling for all other variables in the models. These tests compare the bridging capacity (protest or organization diversity) of members and non-members of the organizational circle across different levels of Internet use. A "Bonferroni correction" was used to adjust the observed significance levels for the fact that multiple contrasts are being tested. Table 5 contains the results.

<TABLE 5>

We each time took the most intense Internet users among the members of the organizational circle as the reference category; this category is indicated by a superscript [a] in the table. The other parameters and their significance must each time be read in comparison to this reference category. For example, the first figure in the table indicates that the estimated mean of protest diversity (on the original scale from 0 to 10), among IPPS demonstrators, of members of the organizational circle that use Internet for social change is 3.13. This figure differs significantly from the protest diversity of people who are not member of the organizational circle (2.07), of people who are member of the organizational circle but do not use Internet for social change (2.57), and of people who are neither members of the organizational circle nor use the Internet for social change (1.70). Technically, the interaction effects can be observed by comparing the parameters *within* the 'yes' column for organizational circle membership: comparing within this column allows us to see whether, within the members of the organization circle, political Internet users display more protest and organization diversity. This is indeed true in many cases though not in all. Of the 14 possible interaction effects in the table, 10 turn out to be statistically significant. The most frequently statistically significant interaction effects involve using the Internet for political information variable (always significant). Using the Internet for social change is a less strong interactor. By and large, the results in Table 5 make us conclude that core activists that use the Internet have more diverse affiliations than their fellow core members that rely less on the Internet. This finding strongly suggests that it is indeed Internet use that permits core activists to hold diverse engagements and to commit themselves to different causes, to attend protest on different issues, and to combine diverse organizational affiliations. We argued above that core activists most likely engage in more

and in more important bridging activities than less central activists. Together with the finding that ICT use permits these core activists to be diversely active, this leads to the conclusion that ICTs not only foster multiple engagements but also, through creating overlapping activisms, effectively provide linkage to social movements and networks for social change.

CONCLUSION

This study sought to find out (1) to what extent multiple engagements in social movements and in contentious events are facilitated by the use of digital media and (2) to what extent the resulting overlaps in activism create ties between networks for social change. The main claim of the paper is that ICT use facilitates the maintenance of multiple engagements. Due to their asynchronous and flexible logic which affords people to stay in touch with more, more distant, and more diverse others, ICTs permit activists with multiple engagements to manage their various commitments. To tackle the second research question, we relied on the literature claiming that social networks are essential resources for social movements as well as for protest events. One of the main linking mechanisms within the social movement sector is overlapping personnel and engagements. If people participate in different movement organizations they establish a link between these organizations and their members. If people participate in different protest events they provide linkage between these events and between the people participating in them. The more diverse the engagements of activists, the more a movement or event can reach out and touch different constituencies. The concept of overlapping activism links the primary and the secondary research question. If overlaps occur more at the periphery than the core of protest networks, the result may be loss of coherence in the organization and framing of events.

However, if the greatest ICT use and network diversity occurs generally among activists most closely associated with organizations coordinating the protests, then there probably exists a greater potential for organization bridging (with reduced brokerage costs).

We put these ideas to the test by drawing on ample evidence gathered through protest surveys fielded in 14 different demonstrations and totaling almost 6,500 useful questionnaires in eight countries. As these demonstrations present a very large variety of protest events including differences between nations, between issues, and between different points in time, we believe we have set up rigorous tests for our propositions.

By and large, our core claim is supported by the strong set of associations between the political use of digital media and multiple engagements. People who use digital media for social change and who inform themselves politically via the Internet have a strong tendency to hold more diverse associational memberships and to have hit the street for more diverse protest issues. We cannot be sure the direction of causality only works this way, though, it may also be the other way around where people start relying on ICT to manage their varied commitments. The relationships between ICT use for political reasons and multiple engagements principally hold when controlled for sex, age and education. More importantly, we found the same consistent and robust pattern among activists in the eight nations, among activists on different issues, and among participants in different demonstrations around the same issue over time.

Our findings also offer indirect evidence that these overlapping activities effectively lead to bridging between organizational networks. This sheds light on the second research question. The core activists closest to the organizational center of a contentious event are

more likely to use ICTs for political reasons, and these same people are disproportionally engaged in other movement organizations and committed to other protest issues. This finding reinforces our claim that digital media are important assets for both internal and external linkage. Since activists with multiple networks in organizations and protests actively use the Internet to forward email messages pertaining to mobilization, we have some evidence that ICTs not only offer potential bridges, they are actually used in network bridging.

Our study goes a good deal further than previous studies of ICTs and networks in social movements which have overwhelmingly focused on the Global Justice Movement, creating the impression that its inclusive ideology and non-hierarchical structure matches the Internet's egalitarian and open logic. While this may be true to some extent, we have demonstrated in this paper that ICTs also play an integrating and diversity-enabling role within other movements and protest events not directly related to or thematically resembling the GJM.

In a broader perspective, our findings raise questions as to how ICTs affect participation and mobilization dynamics in general. On a micro-level, digital media networks can make more diverse people available for different mobilization efforts. The present study could not establish whether this increased availability leads to more net participation; we could only show that it leads to more diverse participation. Their activist life does not depend on a single organization or cause but is formed in a multi-issue and multi-organizational field. Technologically equipped activists can flexibly tune in and out of ongoing struggles and switch to other causes.

On a meso-level, our findings imply that the direct, resource-intensive role of movement organizations in producing protests and contentious events may be diminishing. Due to ICTs people can master their networks more effectively than before. The locus of control shifts from the organizational to the individual level. It is through individuals, not only through organizations, that the mobilization message gets spread and spills over from one network to the other. It is through multiply active individuals, not only through organizations, that networks of social change are internally integrated and can reach out to a distant segment of only loosely connected potential supporters. ICTs give multiple activists the instrument to deal with their multiple activities on their own with less cueing and leadership from conventional organizations, leaders, and institutions, and ICT permit these relatively autonomous activists to engage in collective action while being less reliant on organizational and central guidance.

The implications of these dynamics for organizational membership and structure in general are interesting next questions. For example, Bimber, Flanagin and Stohl (2005) argue that collective action itself is changing in many cause sectors due to the increasing reluctance of many (particularly younger) individuals to make formal commitments to joining organizations. Yet many of those potential constituents are comfortable opting in and out of issue networks via digital media technologies. This puts pressure on many traditional organizations to change their relationships with members, and, in turn, change the expectations they have about receiving material support or consistent attendance from those who affiliate with them. Some organizations such as the National Rifle Association in the United States resist these changes and continue to command loyalty from members. Other organizations such as the Sierra Club and other old-line environment groups suffer the graying and eventual shrinking of memberships, and may lose organizational resource

capacity. Some organizations such as MoveOn have blurred the lines between interest organization, movement organization and party wing, morphing from issue to issue, cause to cause, and adopting loosely tied relations with affiliated supporters, while learning to operate in less structured internal and external environments. Further research can be helpful in seeing how these patterns are associated with ICT use and play out in different organization and movement sectors.

One particularly fruitful area for further investigation along these lines is whether our findings hold across all ideological types of movements and affiliated organizations, and whether it holds for non-social movement campaigns too. We suspect that movements/organizations imposing strict ideological and membership requirements on members, and organizations committed to more hierarchical forms of organization are less likely to have members who display the kinds of semi-autonomous networking behaviors described above. The 2008 presidential election campaign in the United States, for example, seems to exemplify this distinction. More research is needed, but at first sight it appears as if the McCain campaign made the strategic decision to mobilize its base using more conventional top-down communication and mobilization strategies that left its digital networking potential importantly underexplored. The balance between maintaining a hierarchical campaign organization that mobilizes the base and broadening the networking opportunities for more peripheral voter populations seemed to have worked out very differently on the Democratic side in the Obama campaign that relied heavily on email, YouTube and other sites, and raised record sums of small donations from a record-setting number of online supporters. As with social protest mobilization, parties and interest groups are likely to experience organizational pressures—even, and perhaps especially—

from core members who seek greater degrees of communication autonomy to help define goals, strategies, and participate in mobilizing others.

In conclusion, this study suggests that widespread ICT adoption in the social movement sector may have profound consequences for how social movements and their constituents interact, pointing to a possible shift in the burden of mobilization and activism from organizations towards individuals. More work is needed of course, but we hope to have demonstrated that it is likely that digital media are changing the dynamics of social movements, contentious politics, and activism.

Table 1. Descriptive figures and response rates for each demonstration

	International Peace Protest Survey (IPPS)								(BPPS)	Multi Issue Protest Survey (MIPS)					Totals
	BE	**NL**	**CH**	**ES**	**DE**	**US**	**GB**	**IT**	**Antiwar 2004**	**Sans Papiers**	**Antiwar 2006**	**InBev**	**VW Vorst**	**Vlaamse Mars**	
Movement type				New					New	New	New	Old	Old	Right	
Date				15 Feb 2003					20 Mar 2004	25 Feb 2006	19 Mar 2006	28 Mar 2006	2 Dec 2006	6 May 2007	
Aim				Stop war against Iraq					Against occupation of Iraq	Rights and respect illegal immi-grants	Against occupation Iraq	Against restruc-turing beer multi-national	Against restruc-turing VW car factory	More autonomy for Flemish region	
#Participants x1000	75	70	45	800	500	1,000	1,000	3,000	7	10	5	2	15	1.5	
#Oral surveys	196	100	181	-	-	-	504	-	-	-	-	-	878	554	2,413
#Postal surveys															
Distributed	1,100	1,000	1,200	1,200	1,500	1,500	1,400	1,025	700	858	915	722	878	554	14,552
Completed	508	541	637	445	780	698	544	1,002	262	149	316	98	270	235	6,485
Response (%)	46	54	53	37	52	47	39	98	37	17	34	14	31	42	43

Note: BE = Belgium, NL = The Netherlands, CH = Switzerland, ES = Spain, DE = Germany, US = United States of America, GB = United Kingdom, IT = Italy; BPPS = Belgian Peace Protest Survey

Table 2. Descriptives of key dependent and independent variables

			Dependent Variables				Main independent variables				
			Protest Diversity		Organization Diversity		Internet for Social change	Internet for Political information		Forwarding email	Member of Organizing circle
Statistics		N	M	SD	M	SD	% usage	M	SD	% forwarded	% member
IPPS	Belgiu	510	2.60	2.154	1.50	1.700	50.2	1.62	1.960		50.7
	Netherlands	542	1.44	1.728	1.38	1.548	42.1	1.50	1.762		41.2
	Switzerland	637	2.34	2.145	1.54	1.785	41.4	1.84	1.804		49.7
	Spain	445	2.09	1.911	0.95	1.573	41.6	1.32	1.900		54.7
	Germany	781	2.39	1.714	0.91	1.205	30.0	1.71	1.786		40.3
	U.S.	705	2.28	2.094	3.05	2.703	73.0	3.34	2.095		37.1
	U.K.	547	1.61	1.826	1.35	1.829	36.2	1.49	1.879		36.6
	Italy	1016	3.46	2.222	1.18	1.655	45.8	2.32	2.267		71.4
	Total	*5183*	*2.24*	*2.095*	*1.49*	*1.922*	*45.2*	*1.98*	*2.066*		*49.0*
MIPS	Sans Papie	130	3.54	2.309	1.95	2.100	52.3	2.63	1.941	28.8	58.1
	Antiwar2006	298	4.56	2.220	2.54	1.992	76.9	3.17	2.077	37.3	78.1
	InBev	92	1.84	1.745	1.49	1.418	41.8	1.24	1.623	29.9	93.9
	VW Vorst	254	2.72	2.221	1.64	1.488	46.3	2.14	2.154	33.6	78.9
	Vlaamse Mars	235	1.72	1.280	1.59	1.316	56.6	3.20	2.283	31.6	88.8
	Total	*990*	*3.08*	*2.309*	*1.93*	*1.752*	*58.1*	*2.66*	*2.177*	*33.2*	*79.9*
BIPS	antiwar200	510	2.60	2.154	1.50	1.700	50.2	1.62	1.960		50.7
	Antiwar2004	250	3.55	2.105	2.16	1.823	63.0	2.41	1.955		73.6
	Antiwar2006	298	4.56	2.220	2.54	1.992	76.9	3.17	2.077		78.1
	Total	*1058*	*3.40*	*2.314*	*1.95*	*1.869*	*61.0*	*2.23*	*2.099*		*63.9*

Note: M = Mean, SD = Standard Deviation. *Protest diversity* is a scale ranging from 0 (except for the demonstration one is participating in, did not protest for any other issue) to 10 (hit the streets for ten different issues). *Organization diversity* goes from 0 (not an active member in any of the organizations listed) to 16 (being an active member in 16 different organizations).

Table 3. Poisson Regression Predicting Protest Diversity

Variable name	Values and reference (ref.) categories	International Peace Protest Survey		Multi Issue Protest Survey		Belgian Peace Protest Survey	
		B	(SE)	B	(SE)	B	(SE)
(Intercept)		.488***	(.071)	-.327*	(.146)	.540***	(.130)
Internet for social change	Yes *(ref=no)*	.192***	(.028)	.153**	(.059)	.194***	(.051)
Internet for political information	Daily use of both *(ref=no use)*	.038***	(.007)	.060***	(.011)	.048***	(.011)
Forward email about demonstration	Not received/not forwarded			-.016	(.058)		
	Received/not forwarded			.051	(.045)		
	Received/forwarded *(ref.)*						
Member organizational circle	Yes *(ref=no)*	.412***	(.026)	.272***	(.067)	.408***	(.053)
Sex	*(ref=male)*	.043	(.024)	.053	(.044)	.009	(.039)
Age	(young-old)	.006***	(.001)	.006***	(.001)	.008***	(.001)
Education	(none-university)	.003	(.008)	.049**	(.016)	.001	(.015)
IPPS Antiwar 2003	Belgium	-.234***	(.041)				
	Netherlands	-.794***	(.056)				
	Switzerland	-.306***	(.041)				
	Spain	-.440***	(.049)				
	Germany	-.195***	(.037)				
	U.S.	-.433***	(.043)				
	U.K.	-.613***	(.054)				
	Italy *(ref.)*						
MIPS Belgian multi issue	Sans Papiers			.682***	(.086)		
	Iraq 2006			.673***	(.077)		
	InBev			.316***	(.083)		
	VW Vorst			-.250**	(.091)		
	Vlaamse Mars *(ref.)*						
BPPS Antiwar Belgium	Antiwar 2003					-.340***	(.049)
	Antiwar 2004					-.109*	(.047)
	Antiwar 2006 *(ref.)*						
N		4539		827		985	
Loglikelihood ratio chi-square		1610.859***(df=13)		490.558*** (df=12)		456.440*** (df=8)	

Note: Figures are standardized beta estimates (B) and robust standard errors (SE). Significance (two-tailed tests): * p <.05, ** p <.01, *** p <.001.

Table 4. Poisson Regression Predicting Organization Diversity

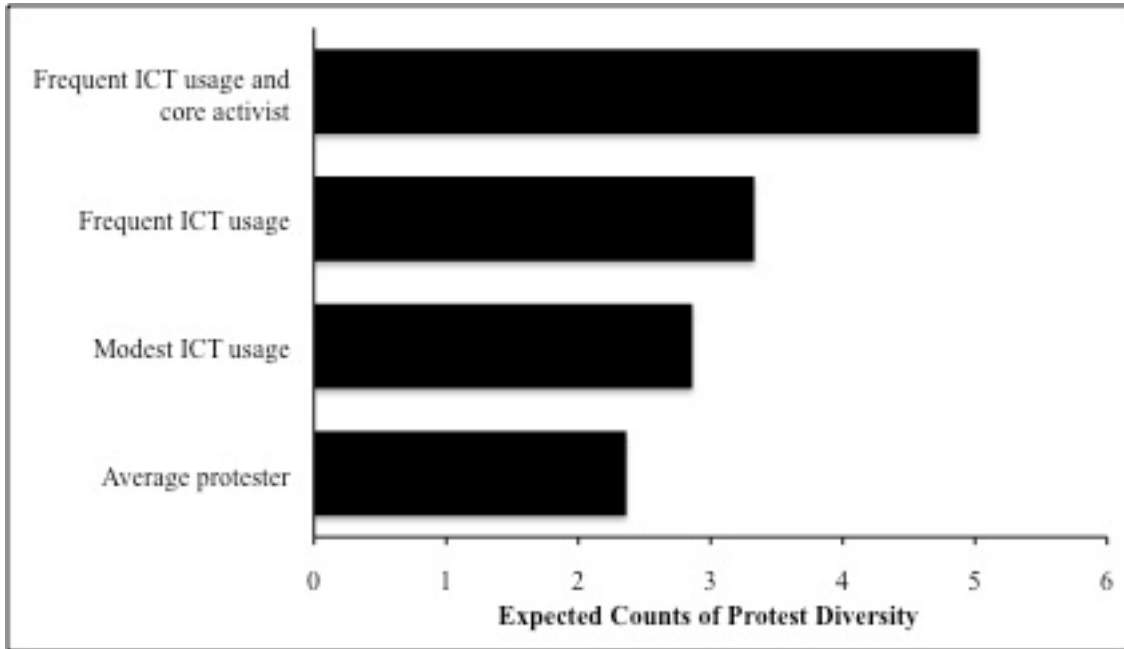| Variable name	Values and reference (ref.) categories	International Peace Protest Survey		Multi Issue Protest Survey		Belgian Peace Protest Survey	
		B	(SE)	B	(SE)	B	(SE)
(Intercept)		-.761***	(.109)	-.380*	(.180)	.230	(.184)
Internet for social change	Yes *(ref=no)*	.182***	(.040)	.089	(.074)	.117	(.074)
Internet for political information	Daily use of both *(ref=no use)*	.085***	(.009)	.090***	(.016)	.089***	(.016)
Forward email about demonstration	Not received/not forwarded			-.350***	(.088)		
	Received/not forwarded			-.126*	(.061)		
	Received/forwarded *(ref.)*						
Member organizational circle	Yes *(ref=no)*	.386***	(.036))	.317***	(.083)	.410***	(.072)
Sex	*(ref=male)*	.099**	(.034)	-.045	(.062)	-.040	(.060)
Age	(young-old)	.011***	(.001)	.006***	(.002)	.010***	(.002)
Education	(none-university)	-.010	(.012)	.025	(.018)	-.055**	(.021)
IPPS Antiwar 2003	Belgium	.279***	(.069)				
	Netherlands	.251***	(.068)				
	Switzerland	.332***	(.066)				
	Spain	-.158	(.096)				
	Germany	-.035	(.072)				
	U.S.	.800***	(.061)				
	U.K.	.228**	(.082)				
	Italy *(ref.)*						
MIPS Belgian multi issue	Sans Papiers			.261*	(.126)		
	Iraq 2006			.396***	(.082)		
	InBev			.005	(.087)		
	VW Vorst			-.073	(.094)		
	Vlaamse Mars *(ref.)*						
BPPS Antiwar Belgium	Antiwar 2003					-.276***	(.073)
	Antiwar 2004					.000	(.071)
	Antiwar 2006 *(ref.)*						
N		4554		789		968	
Loglikelihood ratio chi-square		1912.002***(df=13)		244.174*** (df=12)		326.075*** (df=8)	

Note: Figures are standardized beta estimates (B) and robust standard errors (SE). Significance (two-tailed tests): * *p* <.05, ** *p* <.01, *** *p* <.001.

Table 5. Interaction effects. Multiple comparisons of mean estimates between member of the organizational circle and independent ICT variables

			International Peace Protest Survey		Multi Issue Protest Survey		Belgian Peace Protest Survey	
Member of the organizational circle			Yes	No	Yes	No	Yes	No
Protest diversity	Internet for social change	No	2.57***	1.70***	2.77	2.11***	3.33***	2.22***
		Yes	3.13[a]	2.07***	3.21[a]	2.44***	4.04[a]	2.69***
	Internet for political information	0	2.59***	1.72***	2.33***	1.77***	3.14**	2.09***
		1	2.59**	1.72***	3.01	2.29***	3.48	2.31***
		2	2.68*	1.78***	2.65*	2.01***	3.41	2.27***
		3	2.55***	1.69***	2.93	2.23***	3.69	2.46***
		4	2.99	1.98***	3.17	2.41***	3.79	2.52***
		5	3.37	2.23***	3.46	2.63	4.08	2.71***
		6	3.16[a]	2.10***	3.55[a]	2.70***	4.22[a]	2.81***
	Forwarding email	0			2.92	2.22***		
		1			3.10	2.35		
		2			2.95[a]	2.24*		
			N=4539		N=827		N=985	
Organization diversity	Internet for social change	No	1.61***	1.09***	1.83	1.33***	2.03	1.34***
		Yes	1.95[a]	1.33***	1.98[a]	1.44***	2.33[a]	1.54***
	Internet for political information	0	2.59***	1.72***	1.42***	1.03***	1.73**	1.14***
		1	2.59***	1.72***	1.54**	1.13***	1.75**	1.15***
		2	2.68***	1.78***	1.65*	1.20***	1.84**	1.22***
		3	2.55***	1.69***	2.18	1.59	2.44	1.61**
		4	2.99**	1.98***	1.98	1.45**	2.22	1.47***
		5	3.37	2.23***	2.37	1.73	2.62	1.73**
		6	3.16[a]	2.10***	2.43[a]	1.77**	2.88[a]	1.91***
	Forwarding email	0			1.58***	1.15***		
		1			1.96	1.43***		
		2			2.22[a]	1.62***		
			N=4554		N=789		N=968	

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Note: Figures are mean estimates based on the original scale of the dependent variable in the left column. Significance (two-tailed tests, with a Bonferroni correction): * *p* <.05, ** *p* <.01, *** *p* <.001. [a] This is the reference category. ICT variables: *Internet for social change* (0=no, 1=yes); *Internet for political information* (0=never, to 6=both websites and email on a daily basis); *forward email* (0=no, 1=received, but not forwarded, 2=received and forwarded).

Figure 1. Expected counts of protest diversity for four types of demonstrators (IPPS dataset)

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