

## **Social Networks Matter. But How?**

Florence Passy  
Political and International Studies  
University of Lausanne  
Switzerland

forthcoming in Mario Diani & Doug McAdam, eds., *Social Movement Analysis: The Network Perspective* (Oxford University Press) 2002.

Word count: 9'297  
(main text)

Social networks do matter in the process of individual participation in social movements<sup>1</sup>. Many of the African-Americans activists involved in the civil rights movement during the 1950s and later were members of Baptist churches before they devoted their time and energy to the fight against racial discrimination in American society (McAdam 1982; Morris 1984). The young students who worked on the Freedom Summer Project in 1964 enjoyed social links which greatly facilitated their commitment to that risky campaign (McAdam 1988). Most of the women who contributed to the emergence of the women's movements in the United States, and probably in other countries as well, were socially embedded in dense networks, mainly on the radical left (e.g. Freeman 1973). Similar processes occurred in European countries. For example, social ties crucially expanded individual support for what became one of the biggest street demonstrations in Dutch history, when 550,000 peace supporters went to The Hague to protest against the deployment of NATO cruise missiles in the country (Klandermans and Oegema 1987). Interpersonal ties have also played a key role in more radical forms of protest, such as terrorism. They were crucial to the involvement of activists in Italian and German left-wing underground organizations (della Porta 1995). Social networks also enable individual participation in non-democratic regimes when there is a window of opportunity. The Velvet Revolutions in Eastern Europe during the late 1980s mobilized supporters through existing networks, mainly churches and intellectual circles (e.g. Opp and Gern 1993). Finally, the crucial role of social networks in processes of individual participation is apparent not only in contemporary mobilizations like those just mentioned but also in other historical contexts as well. For example, Gould's (1995) study of the Paris Commune shows that organizational linkages among residential areas as well as interpersonal ties facilitated not only enlistment in the National Guard but also the stabilization of new recruits in the revolutionary army.

In brief, social networks play a crucial role in the process of individual participation in social movements, and numerous further studies that emphasize this aspect can be cited (e.g. della Porta 1988, 1995; Diani 1995; Fernandez and McAdam 1989; Friedman and McAdam 1992; Gould 1995; Klandermans 1997; Klandermans and Oegema 1987; Kriesi 1993; Oberschall 1973, 1993; Marwell and Oliver 1993; McAdam 1982, 1988; McAdam and Paulsen 1993; Rosenthal et al. 1985; Snow et al. 1980). The aim of this paper is not simply to provide further empirical evidence of the key role of social interactions in a given process of individual participation; it is rather to address the question of how networks intervene in this process. As I shall try to show, networks have multiple functions and intervene at different moments in the process of individual participation. Following the findings of scholars who have underscored the importance of networks for individual participation but who, at the same time, have stressed our still limited knowledge of the dimensions of networks that actually influence participation (Kim and Bearman 1997; Gould 1995; Heckathorn 1993; Marwell and Oliver 1993; McAdam and Paulsen 1993), this paper will seek to specify the various roles that networks play in the process of individual participation.

Why is it so important to disentangle the various dimensions of networks? As McAdam and Paulsen (1993) stressed a few years ago, although there is a growing body of studies attesting to the role of networks, they suffer from considerable theoretical inaccuracy that casts some doubt on the ultimate usefulness of this concept for the study of social movements. We are now aware that social ties are important for collective action, but we still need to theorize on the actual role of networks. Three theoretical reasons point up the need to clarify the concept of networks and their role in individual participation. First, specifying the dimensions of social networks gives us a better grasp of the mechanisms and dynamics that induce people to become involved in collective action, and in the end it provides us with a more complete explanation of the entire process of individual participation. To join

collective action is a long process which involves both social structures and teleological decisions. Social networks intervene throughout this process, at the beginning by building or reinforcing individual identities that create potential for participation, and at the very end when individual preferences and perceptions (e.g. individual costs of action, chances of success, the risk involved) eventually prompt people to take action. Second, specifying the role of networks helps us to integrate structural and rationalist theories. While structuralist approaches emphasize the role of identities, values and social networks as enabling or constraining participation, rationalist explanations stress the role of human agency. These two theoretical traditions are less opposed to each other than appears at first glance. To be sure, they are based on different philosophical traditions, but they in fact explain two different stages in the process of individual participation. While structuralists point to the formation of a potential for participation and recruitment through networks at the beginning of the process, rationalists have developed sophisticated models to grasp individual decisions which come at the end of the participation process. The concept of social networks provides the theoretical link between these two distinct moments. One of the multiple functions of networks intervenes at the end of the participation process, when individuals define their preferences as to whether they will join collective action or otherwise. Individual decisions are shaped, at least in part, by interactions with other actors. Individuals incorporate and make sense of their multiple social interactions which influence the definition of individual preferences. Thus, networks provide a bridge between structuralist and rationalist accounts. Third, specifying the role of networks allows us to bring meanings and culture back into the explanation of individual participation. Social networks are not only instrumental ties enabling or constraining participation: “a social network is a network of meanings”, as White (1992: 67) put it. Ties are imbued with stories. Therefore social networks (as islands of meanings) shape the individual preferences and perceptions that form the basis for the ultimate decision to

participate. Thus, networks shape both stable aspects such as values and identities and more volatile aspects such as perceptions and preferences.

In sum, specifying networks will strengthen our knowledge of collective action by clarifying mechanisms and dynamics, by bridging structure and agency, and by bringing meanings and culture back into our micro-models of collective action through a phenomenological conception of networks. After theoretical discussion of three functions of social networks in the process of individual participation, and after some brief remarks on method, I shall illustrate these functions by means of survey data on participants in two new social movement organizations.

### **Three Functions of Social Networks**

Social networks intervene at different moments in the long process of individual participation. As many scholars have pointed out, people engage in collective action because they share certain norms and values related to a specific area of political contention. In this perspective, participation in collective action is an identification process (e.g. Andrew 1991; Calhoun 1989; Fernandez and McAdam 1989; Freeman 1973; McAdam 1982; McAdam and Paulsen 1993; Morris 1984; Melucci 1996; Whittier 1995). Since identities are created and shaped through social relations, networks play a crucial role. They build and reinforce the identities of individuals and provide them with a political consciousness that allows them to get ideologically closer to a given political issue. In this case, networks intervene in the early stage of the participation process. Social interactions are certainly not the only channels of identity and political consciousness building. Primary socialization and past experiences, amongst other factors, matter as well. However, social interactions play a key role in this respect. The cultural orientation of individuals is not a simple reflection of their social position; it develops in a web of social interactions. The social networks in which actors

interact convey meanings (e.g. symbols, rituals, narratives) that build and solidify identities and shape the actors' cognitive frames, thereby enabling them to interpret social reality and to define a set of actions that involve them in this perceived reality (Somers 1992). Once individuals have been integrated into formal or informal networks, they find themselves in an interactive structure that enables them to define and redefine their interpretive frames, facilitates the process of identity-building and identity-strengthening, and creates or solidifies political consciousness towards a given protest issue. By favouring identification with certain political issues, this function of networks forms the initial condition for the establishment of the framing process that occurs between an individual and a social movement (McAdam and Paulsen 1993; Snow et al. 1986). In other words, this function of networks, which I call the socialization function, creates an initial disposition to participate.

To identify oneself with a cause, in our case with a specific political protest, is not a sufficient condition for an individual's potential to participate to be actualized. Collective action belongs to the category of human behaviour labeled "non volitional": that is to say, the initial disposition to participate will remain latent or unrealized as long as there is no opportunity for it to be converted into action (Ajzen and Fishbein 1980). Social movement organizations, public demonstrations, riots and specific movement campaigns provide individuals culturally close to a given political contention with an opportunity to convert their dispositions to participate into concrete action. Social ties are one of the major channels through which potential activists are connected with an opportunity for participation. Again, social networks are not the only channels that can perform this task. For instance, movement organizations, by their own actions or advertisement, as well as media reports about movements, may also be important channels through which new supporters are attracted. However, networks play a mediatory role by connecting prospective participants to an opportunity for mobilization and enabling them to convert their political consciousness into

action. As many studies have shown, individuals with friends or acquaintances already involved in social movements are more inclined to take part in collective action (e.g. della Porta 1988, 1995; Gould 1993, 1995; Klandermans 1997; Kriesi 1993; McAdam 1986, 1988; Snow et al. 1980). This role of social networks - what I call the structural-connection function - takes place before prospective participants join a social movement organization.

Before prospective activists actualize their potential for participation in a specific political contention - that is, after “push” and “pull” factors have intervened (respectively, socialization and structural linkages with the opportunity for mobilization) - they make a series of decisions. Joining collective action involves individual costs which vary according to factors such as the intensity of involvement, the type of protest, and the type of regime under which the action takes place. Whatever the costs, these always constitute a barrier against participation in collective action. Those who are ready to join a specific political contention undertake a decision-making process by assessing various parameters regarding protest itself (e.g. the risks involved, the chances of success, the likelihood of government reform in the absence of protest) and their own willingness to take action (e.g. utility of their involvement in bringing about social changes). Rationalist scholars, who have underlined this aspect of collective action and developed sophisticated models of individual decisions (e.g. Chong 1990; Macy 1991; Marwell and Oliver 1993; Mueller and Opp 1986; Olson 1965; Opp 1989; Sandler 1992), try to explain behaviour with reference to universal human attributes (at least most of them). Structuralist scholars have been sceptical of this view of action, since it overlooks the impact of structural factors on human behaviour (e.g. institutional frameworks, social interactions, individual roles). In addition, some rationalists have themselves criticized collective action models which assume that individuals take isolated and autonomous decisions. In the light of findings by game theorists that individuals make interdependent decisions (e.g. Axelrod 1984) - “ego” as a rational actor must take into account what “alter”

does (or will do) - a number of social movement scholars have proposed collective action models which incorporate social interactions as well. The basic idea is that cooperative social behaviour is an outcome of rational self-interested actors, because they must consider others' intentions and actions. Gerald Marwell and Pamela Oliver have been among the first to analyse these matters and to combine individual and relational variables (Marwell and Oliver 1993; Marwell and al. 1988; Oliver 1984; Oliver and al. 1985, 1988). Their critical mass theory incorporates the influence of social networks into a decisional model. Other authors have developed new decisional models to carry this theory forward (e.g. Gould 1993; Heckathorn 1993; Kim and Bearman 1997; Macy 1991; Opp 1989). All these scholars have stressed the crucial nexus between individual decisions and social relations: the decision to join collective action is influenced by the action of other participants. In other words, they emphasise a function of social networks which I call the decision-shaping function.

Although I take account of the final step of individual participation and the influence of social interactions in this stage of the process, I adopt a perspective different from that of the rationalist scholars mentioned above. Rational choice interpretations of the role of social interactions rely upon an instrumentalist conception of networks. This observation has been already made by Emirbayer and Goodwin (1994) in their stimulating paper on social networks and the role of culture and human agency. Rationalists conceive social influences in overly narrow terms: ego's behaviours are strategically adopted as a reaction against alter's intentions and actions. For example, the critical mass theory postulates that individuals decide whether to participate by looking at other people's behaviours, which enables them to anticipate the costs and potential outcomes of protest. Critical mass theorists define social networks only in instrumental terms. Contrary to the theses of the structuralists, who often overlook human agency in favour of social structures, agency is at the core of rationalist theories but is conceived in essentially instrumental terms. Individuals decide strategically

according to the behaviours of others. Whilst a structuralist perspective usually encounters the problem of determinism, whereby agency and individual freedom do not exist or exist only to a very limited extent, a rationalist perspective entirely ignores the construction of meanings which arise from social interactions and shape individual freedom.

I put forward a phenomenological perspective that considers the constant work of definition and redefinition of the social world by individuals, as well as their self-positioning within this world, which at least in part influence their decision-making process. As Alfred Schutz (1967: 230) pointed out, « it is the meaning of our experiences and not the ontological structure of the objects which constitutes reality ». Social relations create and sustain a structure of meanings that contributes to definition of individual perceptions or preferences. Perceptions change according to events in a person's life, and according to external events, but also as a result of everyday interactions. Perceptions are then constantly redefined by individuals, and this process is largely shaped by social networks. They are shaped but not determined by social interactions. Far from merely reacting to interpersonal links and connections, individuals interpret such links and try to make sense of their interactions with others. They incorporate concrete interactions into their self and adapt the social knowledge they acquire from prior interactions to new information drawn from recent ones, thereby unleashing their own creativity. The way they formalize structures of meaning depends on this creative process of social learning, which takes place during moments of freedom (Emirbayer and Goodwin 1994). Preferences are then a product of the ability of individuals to make sense of the constant ebbs and flows of social interactions. Furthermore, as Pizzorno (1996) has pointed out, this product becomes meaningful to individuals once perceptions and preferences have been communicated and interpreted. This is a twofold process which takes place during social relations, operating downstream when networks produce meanings that are integrated into the self, and upstream when perceptions are communicated to others.

Thus social networks also intervene at the very end of the process of individual participation by shaping the individual preferences or perceptions that form the decision-making process and bring potential activists to collective action. This function of networks occurs just before individuals enter collective action. It bridges the gap between structure and agency, and links, at least to some extent, structuralist and rationalist accounts of individual participation. Some scholars outside the rationalist research tradition have also pointed out the impact of networks on the decision to participate in collective action, but they are exceptions. Doug McAdam (1982) is among those who have gone farthest in specifying the decision-shaping function of networks. More recently, together with Ronelle Paulsen, McAdam has taken his reflections on the multiple roles of networks in the process of individual participation a step further (McAdam and Paulsen 1993). According to their microstructural model, social networks strongly shape the individual decision to participate. More specifically, the ultimate decision to participate is closely related to individual identities. People will join a social movement if this decision resonates with their identities, if someone can sustain their mobilization identity, if there are no countervailing identities, and so on. In their model, however, McAdam and Paulsen largely overlook the decision parameters stressed by rationalists, such as the effectiveness of the collective action or the risks involved in participation. Their microstructural model of recruitment emphasizes the crucial role of relational structures in the process of individual participation, but it ignores human agency.

In this paper, both human agency and social networks occupy centre stage. The latter are conceived in their structural role of, for example, bringing prospective participants closer to a protest opportunity, but also in cultural terms. As White (1992: 65) has put it, social networks are “phenomenological realities”. They are islands of meanings which define and redefine individual identities through their interactions with other actors or groups, but also by shaping more volatile perceptions or preferences. In other words, this conception of social

interactions as networks of meanings brings culture, but also human agency, back into the process of individual participation. Structural constraints and individual freedom are here closely interwoven in the cultural dimension of social interactions.

## **Methods**

Individual participation is not a unique and universal process. On the contrary, it varies according to numerous factors. Processes of individual participation under authoritarian regimes are certainly different than those that occur in democratic states. Repression, but also the liveliness of the civil society, modifies the processes of individual participation as well as the role of networks in these processes (e.g. Opp and Gern 1993). Interpersonal contacts play a greater role under repressive regimes. In political regimes of this kind, protest groups often take the form of clandestine organizations, and interpersonal ties help the covert recruitment of new supporters. Not only the political context, but also the types of protest activities in which individuals decide to become involved, occasion variation in the process. Joining a formal organization is not the same as committing oneself to a specific action campaign (e.g. the Freedom Summer Project) or a one-day street demonstration (e.g. the Hague peace demonstration of 1983). Similarly, the public visibility of social movement organizations and their action repertoire generate important variations in participation processes. It is my intention in this paper to empirically assess the role of the three functions of networks mentioned above, but also the variations in participation processes. I shall not consider the influence of the political context (authoritarian versus democratic regimes) or the types of protest activities (formal organization versus more specific protest activities), although I would stress the influence of social movement organizations on individual participation. I shall focus on two characteristics of movement organizations that introduce variation into participation processes: their action repertoire (legal versus illegal forms of action) and their

public visibility (high versus low). Cross-referencing these two dimensions yields a conceptual space comprising four distinct types of organization: legal movement organizations with high visibility (e.g. World Wildlife Fund, Greenpeace, Amnesty International), illegal organizations with high visibility (e.g. ETA, IRA, Rote Armee Fraktion), legal organizations with low visibility (small and local organizations like the Bern Declaration), and illegal groups with low visibility (small and clandestine organizations). These four situations should prove to be characterized by different participation processes in which the role of networks varies, particularly in their structural-connection function, but also in their decision-shaping function. For instance, networks should play a greater role in the recruitment process for movement organizations with low visibility (both legal and illegal) than they do in the case of groups with high visibility, for which other channels are able to bring potential members to the organization. Similarly, social connections should prove to be more important in the recruitment of new members, but also in shaping the individual decision-making process in the case of illegal organizations (both with high and low visibility). This type of political participation entails high risks; and for the assessment of the chances of success of terrorist actions or the risk involved in participation, social interactions should be crucial in bypassing the costs of this type of commitment. Several scholars have examined the role of networks in clandestine organizations (e.g. della Porta 1992, 1995), but studies have rarely examined the impact of public visibility on processes of individual participation. Here I shall compare two processes of individual participation in two organizations using a legal and peaceful action repertoire but with a clearly distinct degree of visibility in the public space.

The first organization arose from Protestant milieus in 1970 and belongs to the development-aid branch of the Swiss solidarity movement: the Bern Declaration.<sup>2</sup> This organization, which has about 18,000 members, is run by a small staff of professionals on a

relatively low budget. Even though the Bern Declaration is present and quite active in both the French and German parts of the country, it is a fairly small organization with low public visibility.<sup>3</sup> The second organization chosen for comparison is a well-known association in the ecology movement with high public visibility: the World Wildlife Fund (WWF). The WWF has developed steadily since its foundation (in 1961) to become one of the largest organizations in the Swiss ecology movement. With more than 210,000 members, almost 100 employees, and an annual budget of 28 million Swiss francs, the WWF is today not only one of the major environmentalist organizations in Switzerland, but one of the largest social movement organizations overall in the country. With regard to public visibility, I thus compare very distinct participation processes, and on which networks, specifically the structural-connection function, should have differing impacts.<sup>4</sup>

Qualitative methods are better suited than quantitative ones to analysis of structures of meaning in social phenomena (e.g. Bryman 2000; Denzin 1989). Life histories or in-depth interviews are particularly able to capture structures of meanings. When individuals talk about themselves, they express the meaning of their practices and convey the subjective interpretation of their acts (Denzin 1989). I conducted in-depth interviews with members of the Bern Declaration, but unfortunately not with WWF members. While I shall occasionally refer to the qualitative data set, so that rigorous comparison can be made between the two participation processes empirical illustration of the three functions of social networks in individual participation will essentially rely on quantitative data. The data are taken from two surveys of members of the Bern Declaration and the WWF.<sup>5</sup>

The survey data used raise the problem of retrospective bias, given that they were collected after individuals had joined the organization. Memory distortion is the major problem that arises when individuals are asked to respond to questions on past experiences and feelings. First, social psychologists tell us that memory fades, provoking selective

recollections (e.g. Baddeley 1979). Moreover, this does not occur at random. Second, when individuals recall past events, they reinterpret them. This reinterpretation is done according to present experiences, the aim being to maintain social desirability and to reduce cognitive dissonance. For these various reasons, retrospective data pose validity and reliability problems. A better research design for the analysis of individual participation consists in interviews administered before and after individuals have joined the protest. However, this research design is in most cases impossible to plan in non-experimental settings. How can the individuals who will join the protest be selected? Generally, they become visible to researchers only after they have participated. Very few scholars have been lucky enough to be able to use a before-after research design (see Klandermans and Oegema 1987; McAdam 1988). Although the problem of retrospective bias is a serious one, I have indications that I can trust the data. Firstly, most of the findings are consistent with previous studies, specifically those with a before-after research design<sup>6</sup>. Secondly, according to empirical tests conducted by Coen van Rij (1994) in his study of individual participation in trade unions, the reliability problem is less dramatic than one might think. Van Rij tested the reliability of a variety of questions, and like Alwin and Krosnick (1991) he argued that the reliability of retrospective data is not much lower than that of comparable non-retrospective questions.<sup>7</sup>

The final methodological remark concerns the dependent variable. Instead of assessing the role of the three functions of social networks on individual participation, I shall look at the intensity of participation. In other words, the aim of the paper is to understand how networks influence the intensity of participation in social movements, rather than concentrate on the simple fact of participating. The umbrella concept of participation covers various levels of commitment to social movements implying different degrees of effort. Scholars usually focus on participation as such rather than on the diverse forms it can take.<sup>8</sup> To measure the intensity of participation, I use two concepts often emphasized in the literature. First, the

notion of effort as operationalized by Oliver and Marwell (1992), who distinguish members who “give time” from those who “give money”. This allows us to separate people who engage in an active process of participation by spending time in a social movement organization from those who remain passive and limit themselves to giving financial support. However, this dimension does not distinguish among different levels of participation within the category of activists. The concept of duration proposed by Klandermans (1997), which I operationalized through the frequency of involvement, offers a means to separate two types of activists: those who are irregularly active (by collaborating on a specific campaign or participating in annual meetings) and those who participate on a regular basis. In sum, in the analyses that follow, I shall examine three different levels of participation and the corresponding categories of members: subscribers (passive members who contribute financially to the organization), adherents (irregularly active members), and activists (regularly active members).

### **The Role of Networks in Two Distinct Individual Participation Processes**

How do the three functions of social networks intervene in individual participation? What is the impact of each function on the whole process? How does the importance of these functions vary according to the public visibility of the opportunity for mobilization? These are the central questions addressed in this part of the paper, which uses the data described in the previous section to illustrate the theoretical arguments put forward above. Let us start with the socialization function of networks, which, I argue, takes place at the beginning of the participation process. My hypothesis is not that networks are the only channel through which individuals are socialized to a specific protest issue; it is rather that embeddedness in formal or informal networks close to that issue helps individuals to create a salient identity which is an important cultural resource for joining the protest, and which facilitates the emergence of a political consciousness related to specific political issues (e.g. Andrew 1990; Kriesi 1993;

McAdam and Paulsen 1993; Melucci 1996). As a corollary, I also hypothesize that individuals who have been strongly socialized and who identify closely with a protest issue are likely to become more intensely involved in a social movement.

These two hypotheses are confirmed by the survey data. Firstly, very few members of the Bern Declaration and the WWF were not embedded in a dense relational structure before they joined the organization.<sup>9</sup> Most of them were already members of numerous social movement organizations (formal networks), and they had many interpersonal ties (informal networks) with individuals who were either already involved in the solidarity or ecology movements or ideologically close to the political issues addressed by those two movements. Of course, social networks are not the only channel of socialization, but this finding emphasizes the importance of prior embeddedness in networks for the creation of an initial disposition to participate. Thus, formal and informal networks as envelopes of meanings form a space of socialization and identity-building for prospective members. It is interesting to note that, as far as formal networks are concerned, Bern Declaration and WWF members displayed a similar relational structure. Both types of participant were strongly rooted in organizations belonging to the new social movements, and within this movement family they were active in both ecology and solidarity groups (specifically, development-aid and human-rights organizations). The overlapping of political issues between solidarity and ecology movements that, about a decade ago, gave rise to the concept of “sustainable development” constitutes an ideological bridge between the two types of protest. This cultural bridge enables these two networks to socialize individuals and provide them with a political consciousness towards solidarity and ecology issues. Besides sharing a similar embeddedness in the new social movements, Bern Declaration and WWF members were rooted to the same extent in conventional political and religious networks. The only significant difference between them was the larger proportion of WWF members belonging to youth and student

associations. This difference is in part explained by the fact that the WWF organizes holiday camps for youngsters which are publicized mainly through these types of association.

As argued above, inclusion in networks creates cultural proximity between an individual and a given protest movement, and hence affects the intensity of participation. Obviously, not all types of formal networks are able to build or reinforce the individual identities crucial for the creation of an initial disposition to participate. Only culturally close networks - that is, networks with similar cultural frames - can produce this initial disposition.<sup>10</sup> As Table 1 (Models 1) shows, individuals embedded in formal networks culturally close to the Bern Declaration and the WWF tend to participate at a higher level than individuals socially rooted in networks with no ideological connections with the solidarity or ecology movements.<sup>11</sup> In this initial stage of the participation process, social networks shape individual identities and create a positive association between individual cognitive frames and movement cultural frames. Thus, only individuals embedded in culturally close networks and who have created identities that link culturally with the movement participate with higher intensity in both organizations. Life histories conducted with the Bern Declaration members showed that this phase of socialization occurs at the beginning of the process, and that the longer participants are involved in culturally close social networks, the higher their level of participation in the organization. It also reveals that individuals who do not have competing identities, that is, those who with mainly salient and meaningful embeddednesses, tend to engage at a higher level (Passy 2001).

Table 1 about here

The only difference in this socialization function between the two participation processes examined relates to the role of interpersonal ties (informal networks). The latter

increase the intensity of participation by both Bern Declaration and WWF members, but in the case of the WWF the impact is weaker and disappears once formal networks are controlled for. Thus, while interpersonal ties play a role in the socialization process in the case of the WWF as well, formal networks are much more important. The socialization function plays a quite similar role in both processes and explains differential participation to the same extent. The explained variance of this function is the same for both the highly visible organization and for the much less visible one.

I now turn to the structural-connection function of networks as it operates in the two organizations studied. A number of works have shown that the linkage between social movement organizations and prospective participants is more likely to occur through interpersonal (i.e. informal) ties than through organizational (i.e. formal) ones (e.g. della Porta 1988; Gould 1995; McAdam 1986; McAdam and Paulsen 1993). Accordingly, I hypothesized that individuals who have social ties with people already involved in a movement organization are more likely to become involved in that organization. Furthermore, the type of interaction yields different structures of meaning about political commitment. I thus expected the intensity of participation to vary according to the nature of the ties that link prospective members to their recruiters. More specifically, I first argued that, contrary to Granovetter's (1973) well-known theory of the role of weak ties for recruitment in the labour market, strong ties have a crucial impact on participation in social movements, mainly because they provide individuals with trust. As Pizzorno (1986) has pointed out, trust is crucial to the understanding of political behaviour in situations of uncertainty. Before people join a movement organization, they are often in a state of uncertainty because they lack information and knowledge about the organization. Recruiters are usually an important channel of knowledge about the protest. When recruiters are close friends (as opposed to acquaintances), potential participants tend to trust them and to be convinced that a particular

organization is the one most appropriate for conversion of their political interests into a strong degree of commitment. Second, I assumed that the recruiter's level of participation in the organization affects that of prospective members: the more intense the involvement of recruiters, the stronger the commitment of newcomers. This is because centrally located recruiters are more apt to reduce the uncertainty emphasized by Pizzorno. Furthermore, core activists are usually "true believers" better able to convince new members to contribute as much as possible to the organization's activities. Finally, the type of mobilization opportunity joined by prospective members should influence the role and, above all, the importance of the structural-connection function of networks in individual participation. As far as the public visibility of the organizations is concerned, I expected the role of networks to be less crucial for visible organizations than for less visible ones. Other recruitment channels exist for visible organizations like the WWF, which are able to attract new members through their own activities or advertisement and above all through the publicity given to their claims and actions by the media. By contrast, the media should be a less important recruitment channel for small social movement organizations with low visibility like the Bern Declaration.

The survey data largely supported these four hypotheses. Firstly, social networks are important channels for the recruitment of participants in both organizations. More than half of the Bern Declaration and WWF members were connected to the opportunity for mobilization through social ties.<sup>12</sup> This percentage was slightly smaller in the case of the highly visible ecology organization. Nevertheless, even in this case, social interactions played a crucial role in connecting members to the protest. The media are also a fairly important recruitment channel for the WWF, at least compared to the Bern Declaration. Thirty per cent of WWF participants were connected to the organization through this channel, while only eighteen per cent joined the Bern Declaration in this way. Interpersonal ties seem to be more important than formal links in this connecting process, and this is particularly the case of the

WWF, to which only a very small proportion of members were connected through formal links. By contrast, formal networks (specifically, religious organizations) played a significant role for the Bern Declaration, which has historical links with Protestant milieus.<sup>13</sup>

As Table 1 (Models 2) shows, for both organizations it is the fact of being recruited by informal ties rather than formal ties that increases the level of participation. However, as argued above, it is the nature of ties that affects the level of participation rather than the mere fact of being connected to the opportunity for mobilization through interpersonal ties (Models 3). First, at least in the case of the Bern Declaration, being recruited by a close friend (strong acquired ties) gives rise to strong activism. By contrast, recruitment through family ties (strong ascriptive ties) leads to lower levels of participation, while recruitment by acquaintances (weak ties) does not seem to affect the intensity of participation. It is important to note that the role of strong ties in this function of networks is more important for the less visible organization (the Bern Declaration) than for the highly visible one (the WWF). We know that trust is a critical factor behind participation in collective action, especially in situations of uncertainty. In highly visible organizations like the WWF, prospective participants are less prone to uncertainty because they know about the organization through the media, and through the organization's own activities, which are generally well publicized. Thus, the role of strong ties is less crucial in this type of participation process than it is in a process of individual participation, where prospective members know almost nothing about the opportunity for mobilization. In the latter case, strong ties seem to be more important than they are for highly visible organizations.

Second, Table 1 (Models 3) confirms that the level of participation depends on the position of the recruiter within the organization. Participants recruited by a core activist joined the organization at the highest level of commitment. In the case of both participation processes, being structurally connected to the opportunity for mobilization by highly

committed participants substantially increases the level of involvement by new recruits. In fact, “true believers” seem to be the recruiters most able to induce new members to enact the highest level of involvement. Nevertheless, this factor affects differential participation in the ecologist organization to a much lesser extent than it does in the case of the Bern Declaration. As I expected, for both processes of participation studied, the nature of ties is more important than the mere fact of being connected to the opportunity for mobilization through interpersonal ties. However, the impact of the structural-connection function of social networks on differential participation is of much less importance for the WWF than for the Bern Declaration.

This empirical finding confirms the hypothesis that public visibility affects the structural-connection function of social networks. This function is much more important when prospective members join an organization with less public visibility. As Table 1 (Models 3) shows, the explained variance of differential participation by this function of networks is larger in the less visible organization than in the highly visible one. For less visible movement organizations, interpersonal relationships play a crucial role in structurally bridging potential participants to an opportunity for participation. By contrast, in the case of organizations with important media exposure, like the WWF, informal networks are also important, but to a lesser extent. For this type of organization, other recruitment channels intervene in this phase of the participation process, above all the media. The process of structural connection of prospective participants to the opportunity for mobilization is much more diffuse, that is taking various forms in the case of highly visible organizations than in that of less visible ones.

Although the socialization function of networks intervenes in rather similar fashion in both processes of individual participation, mainly through formal ties culturally close to the opportunity for mobilization, and this function explains the same proportion of variance in

differential participation in each process; the structural-connection function varies substantially from one process to the other. The variation observed in the latter function is reflected in the explained variance of networks in both participation processes. As Models 4 in Table 1 show, social networks play a weaker role in the highly visible organization than in the less visible one.

The decision-shaping function of networks intervenes in the later stage of individual participation. Individuals define preferences and perceptions concerning both a specific political protest and themselves. This decision-making process enables (or prevents) the conversion of the individual's potential for participation into actual action. Of course, numerous perceptions and preferences are involved in the decision process, and it is almost impossible to take all of them into account in micro-models of participation. I include in the present model four types of individual perception stressed by previous collective action studies: interest in the political issue (e.g. Marwell and Oliver 1993; Kim and Bearman 1997); the individual and the collective effectiveness of the action (e.g. Klandermans 1984, 1997; Marwell and Oliver 1993; McAdam 1982, 1986; Oliver 1984; Opp 1989); the ability of political authorities to solve the problem at hand (e.g. Piven and Cloward 1977); and personal availability, that is, the amount of time at a person's disposal to devote to collective action (McAdam 1986; Marwell and Oliver 1993). As regards the latter aspect, I consider only subjective availability to be a perception, treating objective availability as a factual observation. I do not take account of the risks involved in collective action, which have been often emphasized in the literature (e.g. Hirsch 1990, McAdam 1986), because participation in moderate and reformist organizations like the Bern Declaration and the WWF carries virtually no risks. I therefore assume that this perception does not play a significant role in the decision to join such organizations.

Evaluating this function of social networks is not an easy task. From a quantitative point of view, panel surveys are certainly the most appropriate way to do so, because they offer the advantage of measuring interactions at t1 and evaluating their effect at t2. Unfortunately, for the reasons given above I do not have this kind of data available. Another way to assess this function is to run a LISREL analysis which enables one to determine the indirect effect of social networks on individual participation. This method of evaluating the third function of social networks is somewhat artificial because it implies a dynamic view within a static design. However, using indicators of networks measured before involvement in both organizations (t1) and perceptions measured after an individual has become involved (t2), at least yields an illustration of this function of networks, although it is not a real test of the theory.

I expected that the entire set of perceptions considered in this model to be shaped by social interactions. More specifically, I predicted that the interest in the specific protest issue (i.e. development aid and environmental protection) would be an important intermediary variable in the decision-shaping role of social networks. It would influence the definition of the other perceptions included in this micro-model of participation in social movements. The interest in the protest issue is defined through the ebbs and flows of social interactions, and in turn shapes perceptions of the individual and collective effectiveness of the action, the ability of political authorities to solve the problem at hand, and, finally, personal availability. Thus, interest in the protest issue should play an important intermediary role in this third function of social networks. Social ties should therefore influence the definition of individual perceptions not only directly but also indirectly via interest in the protest issue.

The LISREL models presented in Figures 1 and 2 confirm the first hypothesis regarding the decision-shaping function of social networks.<sup>14</sup> Except for subjective availability, the full set of perceptions is significantly shaped by social networks. Table 2,

which summarizes the impact of networks on individual perceptions and on differential participation as yielded by LISREL analysis, shows that of all the perceptions included in the model of individual participation, individual effectiveness is the one that is most strongly shaped by social interactions. Of course, as explained above, and as the correlation coefficients in Table 2 show, this perception, as well as all other types of perception or preference definition, are only in part shaped by social networks. That said, individual effectiveness is mainly affected by the interactions of prospective members with their recruiters, specifically in the case of the Bern Declaration. In the less visible organization, the interaction between prospective members and their recruiters tends substantially to increase the sense that their participation in the protest serves to bring about social change. Thus, indirectly but strongly, recruiters influence the level of participation by increasing the feeling that if individuals engage in protest, their participation is not insignificant; on the contrary, it helps bring about social and political reforms. Life histories confirm the influence of this factor. Although prospective members usually knew virtually nothing about the organization, they joined it with a high level of participation because their recruiters provided them not only with information but above all the trust necessary to convert their political awareness into action. Even if the information about the organization was only partial or irrelevant, recruiters were able to heighten individuals' perceptions of their own effectiveness (Passy 2001; Passy and Giugni 2000). In the highly visible organization (the WWF), the role of recruiters was less crucial in this respect. I pointed out above that the role of recruiters is much less important for this organization than for the Bern Declaration. This weaker impact in the case of the ecology organization clearly impinges upon the decision-shaping function.

Figures 1 and 2 about here

As regards the perception of collective effectiveness (i.e. the effectiveness of the organization in bringing about social change), we see that social ties influence this perception in both processes, but it does so differently. While it was when Bern Declaration members came into contact with the opportunity for mobilization that this perception was partly shaped, it was not thus shaped during the recruitment of WWF members. It is again apparent how the weaker impact of interpersonal contact in the structural connection process impinges upon the definition of individual perceptions. In short, recruiters play a much less significant role in the organization with high public visibility.<sup>15</sup> The perception of collective effectiveness for WWF participants was developed, at least in part, during their prior embeddedness in interpersonal networks.

Table 2 about here

Finally, in both processes the perception of the ability of political authorities to solve problems pertaining to development aid (in the case of the Bern Declaration) and the environment (in the case of the WWF) is influenced by the interactions between prospective participants and their recruiters, who induced them to be more optimistic as to the role of the authorities in solving this kind of problem. The only perception that is apparently not shaped by social relations is personal availability. One explanation for this may be that social ties do not shape this perception, which directly relates to real personal constraints.

The second hypothesis regarding the decision-shaping function of networks is also supported by the LISREL analysis. Firstly, social networks impinge upon the interest in the political issue. This finding confirms Kim and Bearman's (1997) and other scholars' assertions concerning the construction of interest (e.g. Marwell and Oliver 1993). Interest is a constructed perception which is not given a priori. However, the important point here is that

interest in a political issue strongly affects the definition of the other perceptions included in this participation model (see last column in Table 2, and also Figures 1 and 2). Political interest shapes the perception of individual effectiveness, of collective effectiveness, and of the ability of political authorities to bring about social change. These three types of perception are thus directly shaped by social networks, but also indirectly via the impact of interest in the issue. Thus, the decision-shaping function of social networks manifests itself in different ways.

Besides illustrating the two hypotheses regarding the decision-shaping function of networks, the LISREL analysis underscores another finding, which should be stressed if we are to gain proper understanding of the mechanisms driving individual participation in social movements and the role of social ties in the process. This concerns the extent to which social networks and individual effectiveness are interwoven. As Figures 1 and 2 show, of the set of perceptions included in the model, individual effectiveness is the best predictor of the intensity of participation.<sup>16</sup> This perception is strongly shaped by social ties, directly but also indirectly, via two factors: interest in the political issue and perception of the organization's effectiveness. On the one hand, as we have just seen interest in the political issue is profoundly shaped by social interactions in both participation processes. This preference in its turn affects the entire set of perceptions of the model (except for subjective availability), but more strongly influences the effectiveness of involvement (individual and collective). Thus, as said, individual effectiveness is influenced indirectly by social ties via interest in the political issue. On the other hand, the perception of collective effectiveness is directly shaped by networks, but more weakly so than interest in the political issue and individual effectiveness. By contrast, this perception, which in its turn strongly influences individual effectiveness (see Figures 1 and 2), is closely determined by interest in the political issue. Once again, individual effectiveness is indirectly shaped by networks via the definition of

collective effectiveness. This finding illustrates how the impact of social ties on individuals' perceptions manifests itself in different ways. Moreover, it shows that there is a privileged path (highlighted with bold arrows in Figures 1 and 2) leading to strong participation in social movements. Of all perceptions, individual effectiveness is the factor in the decision process that most closely influences the level of participation in both the Bern Declaration and the WWF. Prospective members with a strong feeling that if they engage in protest, their participation will serve at least to a certain extent to bring about social change will actualize their potential for mobilization at the highest level of involvement. Individual effectiveness is also one of the perceptions of the model that is most influenced by social networks, directly but also indirectly via interest in the political issue and the perception of the organization's effectiveness. This last result highlights the close interweaving between social ties and individual effectiveness. In other words, it stresses the interconnectedness of relational factors and human agency, and demonstrates that both structuralist and rationalist accounts are indispensable to explanation of individual participation.

## **Conclusion**

Social networks matter, but they do so by performing various functions in the process of individual participation. They intervene at least three different ways. First, they intervene in the socialization and construction of identities. In this function, networks yield structures of meaning that enable individuals to create (or to solidify) identities and to establish cultural proximity with a specific political contention, usually in the long run. Here networks create an initial disposition to participate by developing specific meaning structures. As we have seen, only social networks culturally close to a given protest issue are able to form this individual potential for participation. Close embeddedness in such relational structures tends to push prospective members to the highest level of participation. Second, networks intervene before

prospective members join a social movement organization by providing those culturally sensitive to the issue with an opportunity to participate. Here networks structurally connect potential participants to a social movement organization. For this function of networks in particular, the structure of meanings arising from the relations between recruiters and recruits affects the intensity of participation. Trust, which is so important for entry into the public space (either through conventional action or through protest), is a key concept in explanation of why certain types of social ties are more important than others for individual participation. Social ties provide individuals with specific meanings structures which significantly affect their perceptions of participation in social movement organizations. In this respect, close friends (especially in the case of organizations without salient public visibility), and participants already involved in the organization at the highest level of participation, are better able to provide prospective members with trust than other types of ties. Finally, networks intervene when people decide to join a movement organization. They influence the definition of individual perceptions which enable potential participants to decide on their involvement and its intensity. Again, networks as envelopes of meanings impinge upon the meanings of the action, which in turn affect individual participation.

Survey data provide empirical support for the theoretical definition of these three functions of networks in the participation process. As said, quantitative methods and data are not the most convenient basis for empirical assessment of these three functions of social networks, especially the decision-making one. Qualitative data would have shed clearer light on how social interactions provide individuals with structures of meaning that help them to define individual perceptions and preferences. Moreover, qualitative data allow scholars to take serious account of the notion of time, in that the definition of individual perceptions does not take place once and for all but is a continuous process occurring in the ebbs and flows of social interactions. Nevertheless, although the data set used here is not fully

convenient and certainly underestimates the weight of social ties in the definition of preferences, it confirms that networks play an important role in this phase of the participation process.

Social networks indeed matter, but the way in which they influence individual participation varies according to the nature of participation processes. Here I have compared two processes of individual participation which differ according to their degree of visibility in the public space. As I hypothesized, the degree of public visibility affects the participation process and impinges upon the intervention of social networks in this process. Specifically, it influences the structural-connection function of social ties. Whilst this function is crucial in the less visible organization, it plays a less important role in the highly visible one. For highly visible organizations such as the WWF, other channels can structurally bridge prospective members with the opportunity for mobilization. The media play an important role in this respect. In other words, the process of structurally bridging potential participants to an opportunity for mobilization manifests itself in different ways in highly visible organizations, which is not the case of organizations with low public visibility. Whilst the nature of the organization causes variation in the participation process, other characteristics of mobilization processes give rise to variation in individual participation and in the role of networks. As said, the nature of the political regimes in which political protest takes place and the type of social movement activity in which prospective members engage should engender variation in the participation process. In the future, scholars working in this area of research should multiply empirical assessment of participation processes by highlighting variations among them. This would help scholars to avoid the universalistic view of social processes and achieve better understanding of the mechanisms that underlie these processes (Tilly 1995).

The specification of networks in the process of individual participation put forward in this paper has also sought to avoid a universalistic and disembodied view of social phenomena. Moreover, it should also help to avoid a catch-all view of social ties in this process. More specifically, showing how social networks intervene in the process of individual participation increases our knowledge of collective action by shedding light on its mechanisms and dynamics. It enables us to integrate the structural and rationalist perspectives so often seen as antithetical, and it brings meanings and culture back into our micro-models of collective action. The latter undertaking is possible once we consider social networks as phenomenological realities rather than treating them in instrumental terms (White 1992). Networks are important not only because they provide individuals with an environment that facilitates recruitment to social movements but also because they are envelopes of meanings able to create a structure of meanings about the future commitment of individuals. This conception of networks allows serious account to be taken of the concept of human agency - that is, individual freedom - in the participation process whereby individuals make sense and incorporate in their self their multiple and concrete interactions with others by giving free rein to their own creativity.

## References

- Ajzen, Icek, and Fishbein, Martin 1980. Understanding Attitudes and Predicting Social Behavior. Englewood Cliffs: Prentice Hall.
- Alwin, Duan.F, and Jon A. Krosnick 1991. "The Reliability of Survey Attitude Measurement. The Influence of Question and Respondent Attributes". Sociological Methods and Research 20: 139-81.
- Andrews, Molly 1991. Lifetimes of Commitment. Cambridge: Cambridge University Press.
- Axelrod, R. 1984. The Evolution of Cooperation. New York: Basic Books.
- Baddeley, Alan 1979. "The Limitations of Human Memory: Implications for the Design of Retrospective Surveys," pp.13-27 in Louis Moss and Harvey Goldstein (eds.) The Recall Methods in Social Surveys. London: University of London Institute of Education.
- Barkan, Steven E., Steven F. Cohn, and William H. Whitbaker 1995. "Beyond Recruitment: Predictors of Differential Participation in a National Antihunger Organization." Sociological Forum 10: 113-33.
- Bryman, Alan 2000. Quantity and Quality in Social Research. London: Routledge.
- Calhoun, Craig 1989. "Protest in Beijing: The Conditions and Importance of the Chinese Student Movement of 1989." Partisan Review 56: 563-80.
- Chong, Dennis 1991. Collective Action and the Civil Rights Movement. Chicago: University of Chicago Press.
- Coen van Rij, Johann 1994. To Join or Not to Join. An Event-history Analysis of Trade-Union Membership in the Netherlands. PhD Thesis. University of Amsterdam.
- della Porta, Donatella 1988. "Recruitment Processes in Clandestine Political Organizations: Italian Left-Wing Terrorism." Pp. 155-72 in Bert Klandermans, Hanspeter Kriesi and Sidney Tarrow (eds.) From Structure to Action. Greenwich: JAI Press.
- della Porta, Donatella 1992 (ed). Social Movements and Violence. Greenwich (Conn.): JAI Press.
- della Porta, Donatella 1995. Social Movements, Political Violence, and the State. Cambridge: Cambridge University Press.
- Denzin, Norman K. 1989. Interpretive Biography. London: Sage.
- Diani, Mario 1995. Green Networks. Edinburgh: Edinburgh University Press.
- Emirbayer, Mustafa, and Jeff Goodwin 1994. "Network Analysis, Culture, and the Problem of Agency." American Journal of Sociology 99: 1411-54.
- Fernandez, Roberto, and Doug McAdam 1989. "Multiorganizational Fields and Recruitment to Social Movements." International Social Movement Research 2: 315-43.
- Freeman, Jo 1973. "The Origins of the Womens's Liberation Movement." American Journal of Sociology 78: 792-811.
- Friedman, Debra, and Doug McAdam. 1992. "Collective Identity and Activism: Networks, Choices, and the Life of a Social Movement." Pp. 156-73 in Aldon D. Morris and Carol McClurg Mueller (eds) Frontiers in Social Movement Theory. New Haven: Yale University Press.
- Gamson, William A. 1992. "The Social Psychology of Collective Action." Pp. 53-76 in Aldon D. Morris and Carol McClurg Mueller (eds.) Frontiers in Social Movement Theory. New Haven: Yale University Press.
- Gamson, William A. 1995. "Constructing Social Protest." Pp. 85-106 Hank Johnston and Bert Klandermans (eds) Social Movements and Culture. Minneapolis: University of Minnesota Press.
- Giugni, Marco and Florence Passy (eds) 2001. Political Altruism ? Boulder: Rowman and Littlefield.
- Gould, Roger V. 1993. "Collective Action and Network Structure." American Sociological Review 58: 182-96.
- Gould, Roger V. 1995. Insurgent Identities. Chicago: Chicago University Press.
- Granovetter, Mark 1973. "The Strength of Weak Ties." American Journal of Sociology 78: 1360-80.
- Heckathorn, Douglas D. 1993. "Collective Action and Group Heterogeneity: Voluntary Provision Versus Selective Incentives." American Sociological Review 58: 249-68.
- Hirsch, Eric L. 1990. "Sacrifice for the Cause: Group Processes, Recruitment, and Commitment in a Student Social Movement." American Sociological Review 55: 243-54.
- Kim, Hyojoung and Peter S. Bearman 1997. "The Structure and Dynamics of Movement Participation." American Sociological Review 62: 70-93.
- Klandermans, Bert 1984. "Mobilization and Participation. Social-Psychological Expansions of resource Mobilization Theory." American Sociological Review 49: 583-600.

- Klandermans, Bert 1997. The Social Psychology of Protest. Oxford: Blackwell.
- Klandermans, Bert, and Dirk Oegema 1987. "Potentials, Networks, Motivations and Barriers: Steps Toward Participation in Social Movements." American Sociological Review 52: 519-31.
- Kriesi, Hanspeter. 1993. Political Mobilization and Social Change. Aldershot: Avebury.
- Kriesi, Hanspeter, Ruud Koopmans, Jan Willem Duyvendak and Marco Giugni 1995. New Social Movements in Western Europe. Minneapolis: University of Minnesota Press.
- Macy, Michael 1991. "Chains of Cooperation: Threshold Effects of Collective Action." American Sociological Review 56: 730-47.
- Marwell, Gerald, Pamela Oliver, and Ralph Prahl 1988. "Social Networks and Collective Action. A Theory of Critical Mass. III." American Journal of Sociology 94: 502-34.
- Marwell, Gerald, and Pamela Oliver 1993. The Critical Mass in Collective Action. Cambridge: Cambridge University Press.
- McAdam, Doug 1982. Political Process and the Development of Black Insurgency, 1930-1970. Chicago: University of Chicago Press.
- McAdam, Doug 1986. "Recruitment to High Risk Activism: The Case of Freedom Summer." American Journal of Sociology 92: 64-90.
- McAdam, Doug. 1988. Freedom Summer. New York: Oxford University Press.
- McAdam, Doug, and Ronelle Paulsen 1993. "Specifying the Relationship between Social Ties and Activism." American Journal of Sociology 99: 640-67.
- Melucci, Alberto 1996. Challenging Codes. Cambridge: Cambridge University Press.
- Morris, Aldon 1984. The Origins of the Civil Rights Movement. New York: Free Press.
- Mueller, Edward N., and Karl-Dieter Opp 1986. "Rational Choice and Rebellious Collective Action." American Political Science Review 80: 471-87.
- Oberschall, Anthony 1973. Social Conflict and Social Movements. Englewood Cliffs: Prentice-Hall.
- Oberschall, Anthony 1993. Social Movements. New Brunswick: Transaction Books.
- Oliver, Pamela E. 1984. "If You Don't Do It, Nobody Will. Active and Token Contributions to Local Collective Action." American Sociological Review 49: 601-10.
- Oliver, Pamela E., and Gerald Marwell 1992. "Mobilizing Technologies for Collective Action." Pp. 251-73 in Aldon D. Morris and Carol McClurg Mueller (eds.), Frontiers in Social Movement Theory. New Haven: Yale University Press.
- Oliver, Pamela E., Gerald Marwell, and Ruy Teixeira 1985. "A Theory of Critical Mass. I. Interdependence, Group Heterogeneity, and the Production of Collective Action." American Sociological Review 91: 522-56.
- Oliver, Pamela E., Gerald Marwell, and Ruy Teixeira. 1988. "The Pradox of Group Size in Collective Action: A Theory of the Critical Mass. II." American Sociological Review 53: 1-8.
- Opp, Karl-Dieter 1989. The Rationality of Political Protest. Boulder: Westview Press.
- Opp, Karl-Dieter and Christiane Gern 1993. "Dissident Groups, Personal Networks, and Spontaneous Cooperation. The East German Revolution of 1989." American Sociological Review 58: 659-80.
- Passy, Florence 1998. L'action altruiste. Genève: Droz.
- Passy, Florence 2001. "Socializing, Connecting, and the Structural Agency/Gap. A Specification of the Impact of Networks on Participation in Social Movements." Mobilization 6: 173-92.
- Passy, Florence and Marco Giugni 2000. "Life-spheres, Networks, and Sustained Participation in Social Movements. A Phenomenological Approach to Political Commitment." Sociological Forum 15: 117-44.
- Piven, Frances Fox, and Richard A. Cloward 1977. Poor People's Movements. New York: Vintage.
- Pizzorno, Alessandro 1986. "Sur la rationalité du choix démocratique." Pp. 330-69 in Pierre Birnbaum et Jean Leca (eds.) Sur l'individualisme. Paris: Presses de la Fondation nationale des sciences politiques.
- Pizzorno, Alessandro 1996. "Decisioni o interazioni? La micro-decisione del cambiamento sociale." Rassegna italiana di sociologia 37: 107-32.
- Rosenthal, Naomi, Meryl Fingrutd, Michele Ethier, Roberta Karant, and David McDonald 1985. "Social Movements and Network Analysis: A Case Study of Nineteenth Century Women's Reform in New York State." American Journal of Sociology 90: 1022-55.
- Sandler, Todd 1992. Collective Action. Ann Arbor: University of Michigan Press.
- Schutz, Alfred 1967. Collected Papers. The Hague: Martinus Nijhoff.

- Somers, Margaret R. 1992. "Narrativity, Narrative Identity, and Social Action: Rethinking English Working-Class Formation." Social Science History 16: 591-630.
- Snow David A., and Robert D. Benford 1992. "Master Frames and Cycles of Protest." Pp. 133-55 in Aldon D. Morris and Carol McClurg Mueller (eds.) Frontiers in Social Movement Theory. New Haven: Yale University Press.
- Snow, David A., Louis A. Zurcher, and Sheldo Ekland-Olson 1980. "Social Networks and Social Movements: A Microstructural Approach to Differential Recruitment." American Sociological Review 45: 787-801.
- Snow, David A., E. Burke Rochford, Steven K. Worden, and Robert Benford 1986. "Frame Alignment Processes, Micromobilization, and Movement Participation." American Sociological Review 51: 464-81.
- Tarrow, Sidney. 1992. "Mentalities, Political Cultures, and Collective Action Frames: Constructing Meanings through Action." Pp. 174-202 in Aldon D. Morris and Carol McClurg Mueller (eds) Frontiers in Social Movement Theory. New Haven, CT: Yale University Press.
- Tilly, Charles 1995. "To Explain Political Processes." American Journal of Sociology 100 : 1594-1610.
- White, Harrison C. 1992. Identity and Control. Princeton: Princeton University Press.
- Witthier, Nancy 1995. Feminist Generations. Philadelphia: Temple University Press.

## Appendix A: Operationalization of variables

### Intensity of participation (dependent variable):

A question was asked that covered the range of activities carried out in the Bern Declaration and the WWF: (1) paying membership fees, (2) subscribing to the annual fund raising, (3) participating in campaigns, (4) attending the annual meeting, (5) helping with the organization of campaigns on a regular basis, (6) being a member of working groups, and (7) being a member of the central or local committees. The first two activities only involve financial contributions to the organization, the next two involve active participation on an irregular basis, and the last three call for active and regular participation. The variable has three categories:

- a) Subscribers: activities 1, 2, or both;
- b) Adherents: activities 3 or 4 but not more, regardless of whether they also engage in activities 1 or 2;
- c) Activists: activities 5, 6, 7, regardless of whether they also engage in one or more of the other activities.

### Social networks:

#### 1) Socialization

- Formal networks. Question: “In the following list, are there organizations or movements to which you have belonged in the past?” List of types of organizations. For the Bern Declaration, networks close to the movement are identified by religious and new social movements. For the WWF, networks close to the movement are identified as youth and students groups, as well as new social movement organizations. The latter include the following thematic areas: ecology, antinuclear, development aid, human rights, political asylum and immigration, antiracism, peace, women, gay and lesbian.
- Informal networks. Question: “Are your friends or acquaintances engaged/interested in Third-World questions?” Ordinal variable of increasing level of engagement/interest.

#### 2) Structural connection

- Formal networks. Question: “Can you say how you came into contact with the Bern Declaration for the first time? Was it through...[list of potential recruiters]? From this list I selected formal networks, that is, recruitment through churches and organizations for the Bern Declaration, and through firms (“the company where I work (or worked)”) and organizations for the WWF.
- Informal networks. Question: “Were there one or more persons you knew personally before you joined the organization (relative, friend, acquaintance), who were members and who encouraged you to join the organization?” I further specified the relation between recruiters and recruits according to two criteria:
  - a) The nature of the relationship: strong acquired ties (close friends), strong ascriptive ties (relatives), weak ties (acquaintances, colleagues, neighbours);
  - b) The level of involvement of recruiters in the organization (subscribers, adherents, activists).

### Individual-level variables:

#### 1) Perceptions

- Individual effectiveness. Question: “How do you evaluate the contribution of your engagement in the organization (the Bern Declaration or the WWF)?”. Ordinal variable of increasing effectiveness.
- Collective effectiveness. Question: “Do you think that the action of the Bern Declaration is effective in ameliorating the situation of Third-World countries ?” and “Do you think

that the action of the WWF is effective in ameliorating the situation of the environment ?” Ordinal variable of increasing effectiveness.

- Ability of authorities to bring about social change. Question: ”Here is a list of authorities, organizations, and citizen groups that worry about (or should worry about) the situation in Third-World countries. Can you indicate to what extent these authorities, organizations, and citizen groups are, in your view, able to ameliorate the situation of Third-World countries?” The same question was put to members of the WWF in regard to environmental protection. I first created two intermediate dummy variables, one by aggregating respondents who thought that the authorities (national or international) were either totally able or quite able to ameliorate the situation, the other by aggregating respondents who thought that citizen organizations were able or quite able to do so. I then created the dummy to be used in the analyses by combining these two intermediate variables. The latter equalled one when respondents thought that the authorities were unable to ameliorate the situation, while citizens organizations were able to do so.
- Subjective availability. This was the only variable that measured differently in both surveys. Question for members of the Bern Declaration: “ Of the following reasons, which are the ones that explain why you sometimes do not take part or, more exactly, that you do not take part to a greater extent ?” Ordinal variable of increasing agreement with the reasons listed. I selected from the list the following reason: “my available time is limited.” Question for members of the WWF “Getting involved in a movement organization could be a time consuming activity. What is your perception of your time spent by being engaged in the WWF?” Ordinal variable of decreasing subjective availability.
- Interest in the issue. Question: “What role do Third-World questions have in your life?” “What role do environmental protection questions have in your life? Ordinal variable of increasing importance.

## Appendix B: Descriptive statistics of variables

Table B1: The Bern Declaration survey

Variable	Type	Minimum	Maximum	Mean	Standard deviation
<b>Dependent variable</b>					
Intensity of participation	ordinal	1	3	1.34	.62
<b>Social networks variables</b>					
<i>Socialization</i>					
Formal networks close to the movement	ordinal	0	2	.54	.60
Other formal networks	ordinal	0	7	.52	.98
Informal networks	ordinal	1	4	2.51	.90
<i>Structural connection</i>					
Organization (formal networks)	dummy	0	1	.35	.48
Organization member (informal networks)	dummy	0	1	.36	.48
Activist	dummy	0	1	.18	.38
Adherent	dummy	0	1	.05	.22
Subscriber	dummy	0	1	.13	.34
Strong acquired ties	dummy	0	1	.14	.35
Strong ascriptive ties	dummy	0	1	.06	.24
Weak ties	dummy	0	1	.17	.37
<b>Individual-level variables</b>					
<i>Perceptions</i>					
Interest in the issue	ordinal	1	5	3.36	.87
Individual effectiveness	ordinal	1	5	2.71	1.12
Collective effectiveness	ordinal	1	5	4.00	.92
Ability of political authorities	dummy	0	1	.47	.50
Subjective availability	ordinal	1	5	1.87	1.17

Table B1: The WWF survey

Variable	Type	Minimum	Maximum	Mean	Standard deviation
<b>Dependent variable</b>					
Intensity of participation	ordinal	1	3	1.93	.90
<b>Social networks variables</b>					
<i>Socialization</i>					
Formal networks close to the movement	ordinal	0	2	.73	.78
Other formal networks	ordinal	0	7	1.79	1.18
Informal networks	ordinal	1	4	2.85	1.73
<i>Structural connection</i>					
Organization (formal networks)	dummy	0	1	.09	.32
Organization member (informal networks)	dummy	0	1	.34	.47
Activist	dummy	0	1	.15	.36
Adherent	dummy	0	1	.04	.19
Subscriber	dummy	0	1	.20	.40
Strong acquired ties	dummy	0	1	.15	.35
Strong ascriptive ties	dummy	0	1	.16	.37
Weak ties	dummy	0	1	.10	.30
<b>Individual-level variables</b>					
<i>Perceptions</i>					
Interest in the issue	ordinal	1	5	4.17	.78
Individual effectiveness	ordinal	1	5	3.31	1.15
Collective effectiveness	ordinal	1	5	4.02	.79
Ability of political authorities	dummy	0	1	.35	.48
Subjective availability	ordinal	1	5	2.73	1.28

**Table 1:** The Impact of the Socialization and Structural-Connection Functions on Intensity of Participation (Multiple Regression)

	Bern Declaration				WWF			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
	Beta							
<b>Socialization Function</b>								
<i>Formal networks</i>								
Embedded in networks close to the movement	.15***		.16**	.16***	.20***			.16***
Embedded in formal networks (others)	-.02		-.01	-.01	-.15***			-.14***
<i>Informal networks</i>								
Embeddedness in informal networks	.18***		.12**	.12**	.02			.08
<b>Structural-Connection Function</b>								
<i>Formal networks</i>								
Recruited by formal networks	.07	.07	.07	.04	.03	.01	.00	.00
<i>Informal networks</i>								
Recruited by a member of the organization		.24***	.05	.08	.22***	.10	.13	.13
Recruited by a subscriber			-.06	-.08		-.05	-.09	-.09
Recruited by an adherent			.01	-.01		.02	.00	.00
Recruited by an activist			.29***	.25***		.19**	.16*	.16*
Recruited through weak ties			.00	.01		.05	.03	.03
Recruited through strong acquired ties			.12**	.12*		.03	.03	.03
Recruited through strong ascriptive ties			-.09*	-.07		.00	.00	.00
	<b>R<sup>2</sup>=.06</b>	<b>R<sup>2</sup>=.07</b>	<b>R<sup>2</sup>=.16</b>	<b>R<sup>2</sup>=.21</b>	<b>R<sup>2</sup>=.06</b>	<b>R<sup>2</sup>=.06</b>	<b>R<sup>2</sup>=.09</b>	<b>R<sup>2</sup>=.13</b>

\* P=.05, \*\* P=.01, \*\*\* P=.001

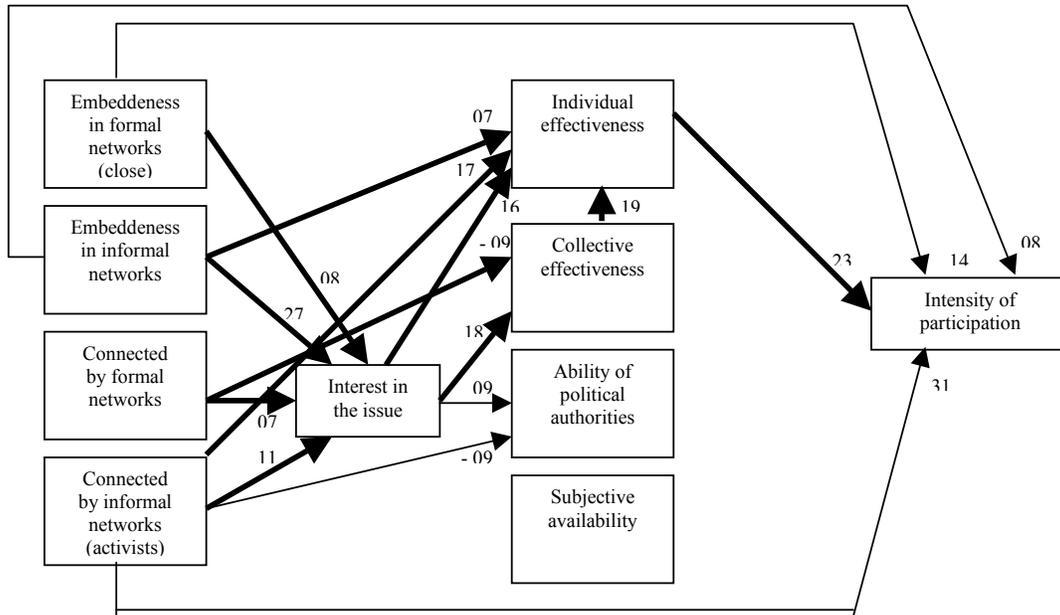
**Table 2:** Direct and total effects of networks on individual perceptions and differential participation in the Bern Declaration and the WWF as resulting from the LISREL analysis (standardized solutions)

	<b>Bern Declaration*</b>					<b>WWF**</b>				
	Socialization by formal networks	Socialization by informal networks	Recruited by formal networks	Recruited by informal networks (Activist)	Interest	Socialization by formal networks	Socialization by informal networks	Recruited by formal networks	Recruited by informal networks (Activist)	Interest
<b>Direct Effects</b>										
Interest in the issue	.08	.27	.07	.11	-	.10	-.08	.04	.02	-
Individual effectiveness	-.01	.07	.03	.17	.16	-.01	.10	.07	.07	.18
Collective effectiveness	.06	.06	-.09	-.05	.18	.00	-.07	.01	-.02	.12
Ability of political authorities	-.02	.04	.01	-.09	.09	.05	.02	.05	-.07	.12
Subjective availability	-.02	-.02	.01	-.03	.05	.02	-.01	.06	.05	.01
Intensity of participation	.14	.08	.02	.31	.06	.10	.08	-.05	.23	.17
<b>Total Effects</b>										
Intensity of participation	.15	.13	.03	.35	.12	.12	.08	-.01	.26	.23

\* Degrees of freedom = 5; Chi square = 6.809; Goodness of fit = 0.998; Probability = 0.235; N = 559

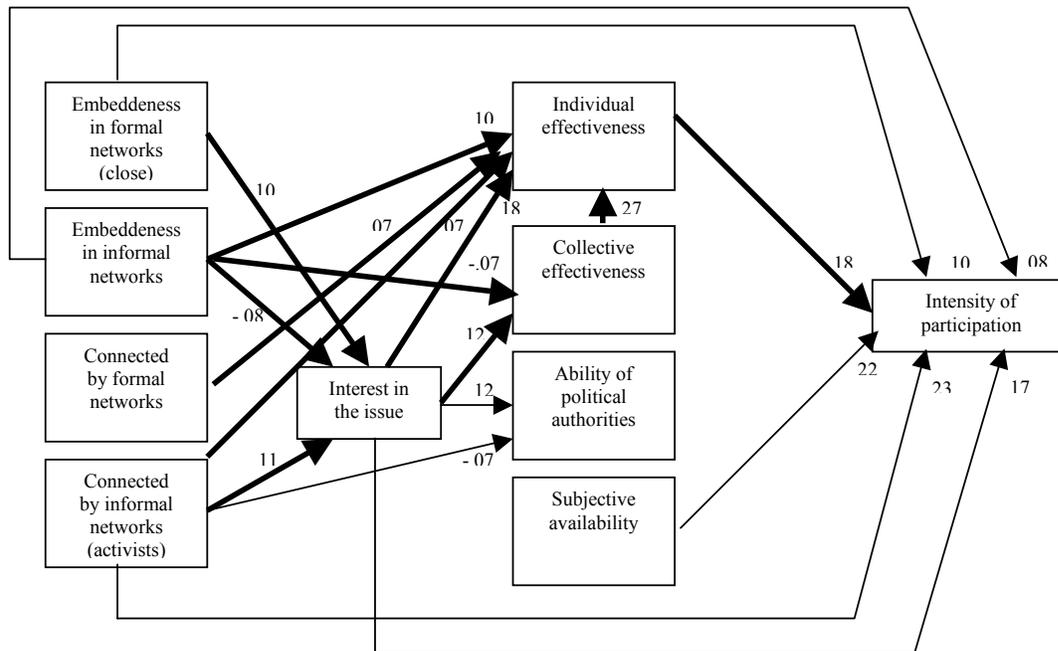
\*\* Degrees of freedom = 5; Chi square = 6.838; Goodness of fit = 0.998; Probability = 0.233; N = 524

Figure 1: LISREL estimates of structural equations model of differential participation in the Bern Declaration (standardized solutions).



Degrees of freedom = 5  
 Chi square = 6.809  
 Goodness of fit = 0.998  
 Probability = 0.235  
 N = 559

Figure 2: LISREL estimates of structural equations model of differential participation in the WWF (standardized solutions).



Degrees of freedom = 5  
 Chi square = 6.838  
 Goodness of fit = 0.998  
 Probability = 0.233  
 N = 524

## Notes:

<sup>1</sup> I thank Doug McAdam and Mario Diani for helpful critiques of earlier drafts of this paper.

<sup>2</sup> The solidarity movement covers a wide range of organizations active in four issue fields: development aid, immigration and asylum, human rights, and antiracism. One of its peculiarities is the fact that people mobilize on behalf of others. For an extensive discussion of this movement see Passy (1998) and Giugni and Passy (2001).

<sup>3</sup> The organization is fairly active in lobbying state representatives, as well as local and national administrations.

<sup>4</sup> A simple but significant indication of the public visibility of the WWF is provided by a survey showing that the organization logo is the most widely known in Switzerland after Coca-Cola's (Interview with a staff member of the Swiss section of the WWF).

<sup>5</sup> The sample of members of the Bern Declaration comprised 646 respondents who returned a structured questionnaire sent to 1,200 members of the organization. Subjects were selected at random in each of the two linguistic regions of Switzerland (German-speaking and French-speaking). I applied the same research design to the WWF survey, with one exception: given the small percentage of activists in the WWF as compared to the large number of members who simply give financial support to the organization, I inflated the number of activists. The WWF sample comprised 670 members.

<sup>6</sup> For example, the findings on the role of social and cultural characteristics and of social networks in the process of individual participation are consistent with these studies.

<sup>7</sup> For example, he found that the variation in responses was rather low for factual information (year of joining a trade union); 46 per cent of the trade unionists gave the same reply when they were interviewed twice, and in 25 per cent of cases there was a variation of one year in their replies. He found similar results for attitudes (attitude towards trade unions): 92 per cent of the trade unionists gave consistent answers between surveys conducted at different times.

<sup>8</sup> For exceptions see Barkan et al. (1995), Klandermans (1997), Kriesi (1993), McAdam (1988), and Oliver (1984).

<sup>9</sup> Eleven per cent of the members of the Bern Declaration and only 4 % of the members of the WWF were not embedded in social networks (formal or informal) before joining the organization. See Appendix A for measures of covariates and Appendix B for descriptive statistics.

<sup>10</sup> On cultural frames see Gamson (1992, 1995), Snow and Benford (1992), Snow et al. (1986), and Tarrow (1992).

<sup>11</sup> The formal networks closest in cultural and ideological characteristics that help socialize potential participants in the solidarity movement are new social movement organizations and churches. On the one hand, because the solidarity movement belongs to the new social movements family, that is they mobilize along the same cultural cleavage (Kriesi et al. 1995), this movement family is well suited to socializing prospective members of the solidarity movement. On the other hand, historically many solidarity organizations have been born from Christian groups and they convey the notion of solidarity (Passy 1998). The culturally closest networks in socializing potential participants of the ecology movement are new social movement organizations, environmental parties, and student and youth organizations. Youth and students groups are particularly important for ecologist organizations which organize holiday camps for young people (e.g. the WWF). Many of those organizations increase young peoples' awareness of ecological issues and send them to holiday camps to clean rivers, beaches and so forth.

<sup>12</sup> Fifty-nine per cent of the Bern Declaration members and 49% of the WWF members were connected to the organization through social ties.

<sup>13</sup> Only 5% of the WWF members and 23% of the Bern Declaration members were structurally connected to the organization by formal networks.

<sup>14</sup> To keep the models readable, Figures 1 and 2 show only statistically significant coefficients. LISREL models were run with AMOS software.

<sup>15</sup> This statement finds further support when we compare the total effect of this factor (recruitment by informal networks) on both processes of participation (see Table 2).

<sup>16</sup> The perception of individual availability seemingly plays a different role in each participation process. In fact, this indicator is not similarly measured in each process, so I cannot risk interpretation of this finding. Probably the variation between the two processes is due to the measurement of this perception.