

Multimodal Political Networks

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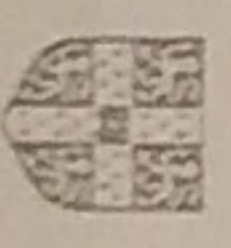
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Agents and Events in Collective Action Fields

In Chapter 5, we focused on the link between ordinary citizens and associations, and the broad communities defined by such intersection. Generating different projections of 2-mode data into 1-mode matrices, we showed how the combination of memberships in different types of groups and organizations provides a key to identify similarities and differences in the structure of civic fields in different countries. For example, we explored how the associations normally linked to new politics issues were connected to each other in different patterns in different national contexts. And we did the same for the historically complex connection between unions and political parties. At the individual level, we found cross-national variation in the way people's ideological positions affect their embeddedness in specific structural positions. The availability of several waves of cross-sectional survey data also enhanced the comparative dimension across both space and time, a feature which is so rarely present in network studies. Altogether, we showed how this approach facilitates mapping the profile of political communities at the national level.

At the same time, data from standard individual surveys are not detailed enough to measure all the dynamics of interest to analysts of collective action. To begin with, it might also be interesting to explore the intersection of individuals and groups using more detailed information, concerning not only the organizational types, but the specific organizations that individuals are involved in. Our understanding of collective processes would also be sharper if we were able to include information on the involvement of both individuals and organizations in the promotion and running of public events. The political process can indeed be conceived as the concatenation of discrete political events. Such events may consist of policy decisions (see e.g., Knoke et al. 1996); of protest actions (e.g., Kriesi et al. 1995); or of largely ritualistic public events with a strong symbolic component, such as

the May Day Celebrations, through which actors reinforce specific values systems or collective identifications (see e.g., Tarrow 2013). From the point of view of individuals, political events play an important role in increasing participants' political skills and identification with some collective actor. Regular involvement in such events may actually generate some kind of informal social organization, as individuals engage in sustained interactions around a common purpose. Referring specifically to demonstrations, Diani suggested that regular participation creates communities that may perform the same socializing functions performed for other people and/or in other contexts by associational life. He also pointed at the analogies between what he termed "protest communities" and cognate concepts such as "epistemic communities" and "communities of practice" (Diani 2009:65–66; see also Hassan and Staggenborg 2015). This line of reasoning need not be restricted to grassroots activism only. As other sections of this book suggest (see in particular Chapters 3 and 8), it also applies to communities of political elites, officials of mainstream political organizations, or civil servants.

Apart from providing a setting for the political socialization of individuals and, in the case of their sustained involvement, for the coordination of collective action, events are also a key entity of organizational action. Whether of the policy or the protest kind, events are one of the major ways through which organizations pursue their goals and translate their agendas and principles into action. By taking the same side, sharing resources and actions in a number of events, organizations forge alliances and consolidate patterns of cooperation. Sustained participation in events also represents the basis for the development of significant ties between individuals and organizations alike. At the same time, individuals and organizations create links between the events in which they participate. Activists and protest groups engage in multiple events, thus weaving them into broader action campaigns and ultimately in large-scale social movements; parliamentary bills that are voted by the same parties are more likely to be part of a broader political agenda than scattered proposals that attract the support of volatile coalitions, forged by an occasional convergence of interests. From the foregoing it follows that events represent important components of collective action fields, despite lacking agentic capacity. The extent to which individuals and organizations converge around certain events may provide important information on the structure of political fields in addition to what we get from the analysis of the interplay of individuals and associations. To pursue this, we need to employ a 3-mode approach.

Thus far, network concepts (not to mention network imagery) have been used mostly in a disjointed way, either focusing on individuals and the mechanisms through which they participate in public life (for an overview: Tindall 2015), or on organizations and the processes through which they coordinate to affect the occurrence and outcomes of specific public events

(for an overview: Diani and Mische 2015). Even those rare network analysts who have paid attention to events as distinct objects of analysis (Bearman and Everett 1993; Wada 2004; Diani and Koussis 2014) have relied on 2-mode data. However, it is important to try to combine these different layers into a unified analytical model. In this chapter, we show how working on 3-mode data can help us to capture the multiplicity of nodes and relational levels that constitute collective action fields. In this case, the three modes consist of individuals (more specifically, the core activists of a number of voluntary associations), the associations themselves, and the public events (of both a protest and civic nature) in which both individual and organizations are, or may be, involved. We look at their interdependence from a 3-mode perspective, namely, by treating them as a single network consisting only of ties across modes. In doing so, we look at both a restricted and a general 3-mode model (Fararo and Doreian 1984). The former assumes that only nodes located on logically adjacent levels (in our case, individuals and organizations, and organizations and events) be connected. The latter also allows for nodes at the lower level to be connected to nodes at the higher level.

In our case, the general 3-mode model entails the not unreasonable assumption that individuals may actually participate independently in public events, and even promote them at times. We then look at the differences in the connections between individuals and events, depending on whether they are mediated or not by the organizations to which individuals belong. This enables us to illustrate the opportunity of looking at the paths between nodes located at different levels: not only organizations may connect individuals to events, events can represent an opportunity for individuals to engage with organizations, or individuals can make organizations engaged in/connected to events they might otherwise ignore.

One challenge to conducting this type of analysis stems from the scarcity of appropriate datasets. Some datasets focusing on activists may contain data on individuals' involvement in both associations and protest activities (see e.g., Walgrave and Rucht 2010). However, they rarely provide information on the connections existing between the organizations to which individuals belong, or about the involvement of those organizations in the promotion of events. To conduct the type of analysis proposed here, one needs independent data on individual involvement in organizations and events, and organizational involvement in events. Our chapter draws on data on civic organizations in Bristol, the United Kingdom, that were collected in the early 2000s in the context of a larger study of civic networks in British cities. So far, these data had been only analyzed as 1-mode data or 1-mode projections of 2-mode data (Diani 2015; Diani and Bison 2004). For the present purpose, we were able to use information on 150 core activists of 97 out of the 134 organizations contacted for the original study (they are listed in Appendix 1). They were interviewed through the distribution of individual questionnaires. This paralleled the questionnaires on organizations' properties and activities, which were

submitted to the organizational representatives.¹ The organizations contacted were active on three main sets of issues, relating to environment, ethnic minorities and migration, and social exclusion and urban regeneration. In particular, data were collected about the involvement of both organizations and individual activists in 17 main public events or campaigns over the 1990s. These public events could be classified as either of a civic (8 cases) or a protest (9 cases) type. Civic events are gatherings in which no contentious claims are voiced against any specific social or political actor, but the focus is instead on strengthening public commitment to a set of principles or policies (e.g., in the events promoting EU's Agenda 21 on environmental issues) or strengthening the collective identity of a specific community (e.g., in the local festivals held in specific neighborhoods). Protest events are, by contrast, contentious gatherings aiming at stopping specific policies or implementing new policies, or challenging the legitimacy of specific actors, through the identification of specific opponents (see Appendix 2 for a full list).

A note of caution is in order: this is a complex research strategy at multiple levels. It requires considerable investment and energy to build a proper dataset that adequately covers these three levels. In particular, given the increasing pressure coming from researchers on members of civic organizations, collecting systematic data at the individual level may require careful consideration of issues of access (Kriesi 1992; Melucci 1992). Second, it is always important to connect structural properties and substantive features of the actors involved (see Ziberna and Lazega 2016 for a recent illustration of this approach). The question is to what extent the relational positions and mechanisms, identified through this type of analysis, enable substantive interpretations of collective dynamics in civic fields. More specifically, do network properties reflect homophily dynamics among the network nodes? How do differences in organizational profiles, issue priorities, action repertoires, beliefs, and identities shape network patterns? In the course of our discussion, we'll refer repeatedly to these questions. We'll also contrast the insights generated by this particular strategy with those that emerged from earlier explorations of the same data, largely limited to 1-mode data on interorganizational ties (Diani 2015). Given the exploratory nature of the exercise we will not attempt, as we did in other chapters, to test substantive hypotheses; we will rather focus on the expectation that bringing in a 3-mode perspective, and in particular taking into account ties across levels (the "general 3-mode model" in Fararo and Doreian 1984), will

¹ While in an earlier project on Milanese environmental groups (Diani 1995) individual questionnaires were collected from at least 50% of those organizations' core members, this target proved impossible to reach in the British study. This accounts for the fact that one third of the organizations originally interviewed are not included in the present analysis. It also suggests caution in the substantive interpretation of the findings, apart from the illustration of a distinctive analytic strategy.

allow us to identify additional homophily mechanisms operating in that specific network.

RESTRICTED 3-MODE NETWORKS

We start our exploration of civil society structures from Fararo and Doreian's (1984) restricted model, namely, under the assumption that nodes at one level be only connected to nodes at the next level. Figure 6.1 represents a simplified version of a 3-mode network in which persons (indicated by IND* on the left) join organizations (O*), and organizations promote or participate in events (E*). Sometimes, we face multiple involvements. In our example, organization 3 is involved in several events, one of which (E2) is shared with another organization (O2). Likewise, individuals may be involved in several organizations: this is the case of IND3 (active in O1 and O2) and IND4 (active in O2 and O3).

In substantive terms, the restricted model reflects a style of interest representation centered on the intermediary role of interest organizations: aggrieved citizens identify the groups or associations that best serve their interests and join them (or create new ones, if necessary); on their part, organizations engage in a multiplicity of public events to try and affect the political process. Such "events" may range substantially in scope and level of investment required; many – actually, most – of them are very specific to the agenda of a specific group. For example, an animal protection association will pursue its interests through lobbying, policy makers, sensitizing public opinion, coordinating voluntary work in animal shelters, and so on. While all such activities may take the form of public events (although they do not have to), they do not necessarily reach the prominence that might encourage the establishment of broader coalitions or the involvement of multiple partners. When we refer to events in this chapter, in contrast, we refer to gatherings of public relevance that might at least in principle involve multiple actors.

In our unit of analysis, one-quarter of 97 organizations were not involved in any of the 17 major public events that Diani identified in Bristol between the



FIGURE 6.1. An illustration of the restricted 3-mode model

Restricted 3-Mode Networks

TABLE 6.1. Organizations' involvement in public events

No events	23	24%
Civic events only	49	50%
Protest & civic events	25	26%
Total	97	100%

TABLE 6.2. Density of ties across modes in the restricted 3-mode network (overall density = 0.016)

	Individuals	Organizations	Events
Individuals	0.000	0.021	0.000
Organizations	0.021	0.000	0.153
Events	0.000	0.153	0.000

1990s and early 2000s, another quarter were involved in both civic and protest events, while the remaining half participated in civic, uncontroversial events only (Table 6.1). Attendance at the listed events ranged between 36 organizations that participated in Women's Day and 4 that supported the Claimants' campaign, challenging New Labour's "welfare to work" policies (Appendix 2). Of the 150 active members interviewed, half (74) were involved in more than one organization. Table 6.2 reports the densities of ties between different types of nodes within blocks of the simplified 3-mode matrix, which overall consisted of 264 nodes broken down in three internal subgroups. Table 6.2 tells us that about 2 percent of the possible ties involving individuals and organizations were actually there (306 memberships or close friendships out of a theoretical limit of 14,550 [150 × 97]). Unsurprisingly, the share of actual ties linking organizations to events was higher, at about 15 percent (252 out of 1,649 [97 × 17]).

At the same time, density is not the only measure of cohesion. Traditional 1-mode notions of cohesion also include reciprocity and transitivity. Such measures of cohesion tell us about how dense ties are locally; whether ties cluster in dyads or triads, for example. Measures of reciprocity and transitivity typically take the form of a proportion: the number of closed configurations over the number of potentially closed configurations. For example, reciprocity can be defined as the number of reciprocated dyads over the number of dyads with at least one tie, and transitivity can be defined as the number of transitive configurations over the number of two-paths between nodes. In previous analyses of the larger dataset from which our data originate, we have looked at the distribution of triadic formations across 1-mode civic networks (Baldassarri and Diani 2007).

Reciprocated and transitive configurations are rarely appropriate for multi-modal networks, however. Instead, a number of other configurations have been

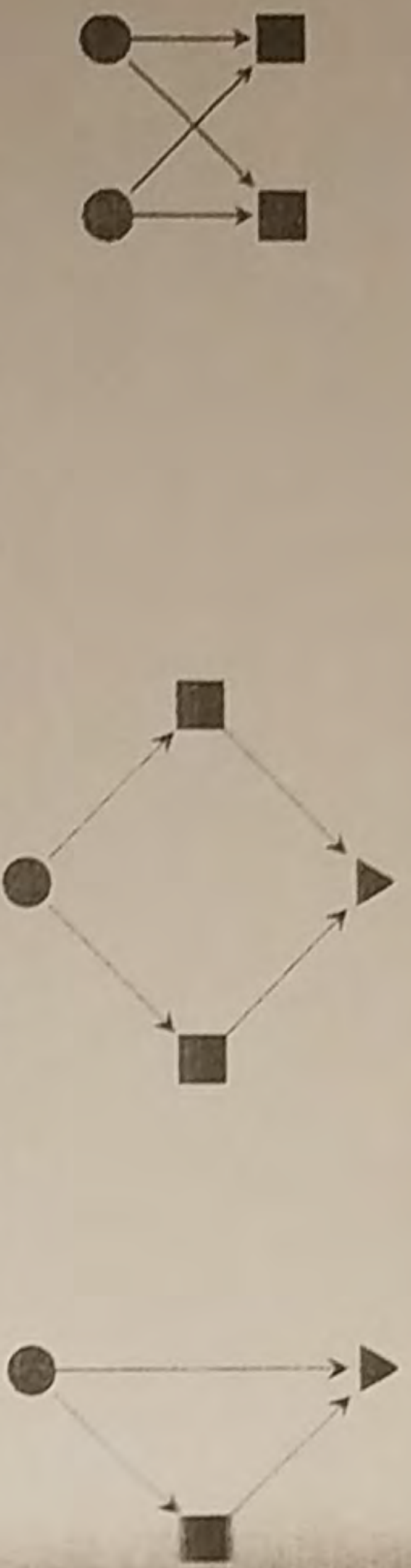


FIGURE 6.2. Shared and congruent four-cycles, and mixed transitive ties

proposed that better match the structure of multimodal networks. The most common measure proposed for studying cohesion in 2-mode networks is the four-cycle (Robins and Alexander 2004). The term “cycle” is used here in an inclusive way to indicate closure.² However, over restricted 3-mode networks, the term four-cycle is ambiguous, as it can refer to two distinct configurations as shown in Figure 6.2. A 2-mode four-cycle (Figure 6.2(a)) involves nodes in 1-mode (the circles) jointly affiliating with nodes in the other (the squares), for example, individuals affiliated in organizations. In that case, the pattern $IND1 \rightarrow O1 < IND2 \rightarrow O2 < IND1$ defines a 2-mode four-cycle that we call “shared,” as they may be seen to represent shared choices or appearances. A 3-mode four-cycle (Figure 6.2(a)) involves one node (let’s say, an individual activist) affiliating with two nodes in a second mode (organizations) that are both affiliated with a fourth node in a third mode (an event). In that case, the pattern $IND1 \rightarrow O1 \rightarrow E1 < O2 < IND1$ defines a 3-mode four-cycle that we call “congruent,” as it reflects a congruence in $IND1$ ’s choices or appearance.

Similarly to reciprocity and transitivity, the proportion of such shared and congruent four-cycles can be calculated as the number of closed cycles over the number of potentially closed cycles; but whereas the denominator consists of paths of at least length 1 in the case of reciprocity, or length 2 in the case of transitivity, for four-cycles the path length must be of length 3. By examining the degree of four-cycle cohesion in a multimodal network such as this one, we can examine the degree to which individuals cluster in their choices of organizations or the degree to which organizations cluster in their attendance at events. High proportions suggest that individuals affiliate with the same organizations as their co-members, or that organizations attend many of the same events as others that with whom they share at least one event.

Applying these metrics of multimodal cohesion to our network, we find the proportion of shared four-cycles between individuals and organizations to be very low (9.3%). This is mostly due to nearly half of individuals (74/150) affiliating with only one organization, and rarely more (maximum degree is 8;

² Strictly speaking, a directed two-mode network, say when ties represent individuals’ choices of organizations, cannot contain cycles.

TABLE 6.3. Incumbents of four communities in the restricted 3-mode network

	Community 1	Community 2	Community 3	Community 4
Individuals	38	36	54	22
Organizations	17	24	34	22
Events	1	1	2	13
Total nodes	56	61	90	57

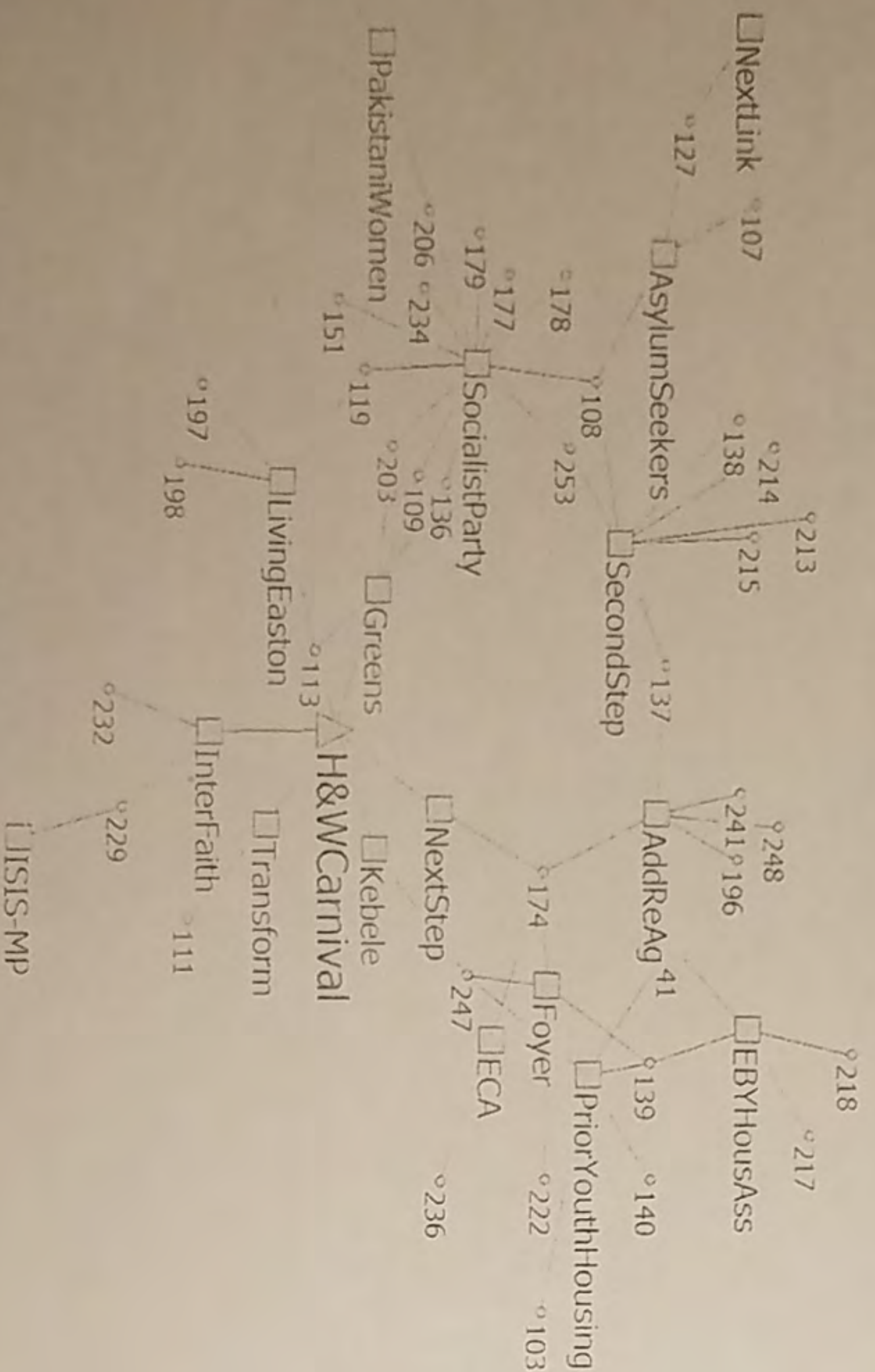
the mean is 2.04). We might interpret this as a reluctance of individuals to affiliate with multiple organizations due to the costliness of this activity, even if some others affiliated with their organization do. And yet the proportion of shared configurations between organizations and events is considerably higher (32.9%). This suggests that organizations that meet at one event are quite likely to meet at any other events at least one of them is attending. Then we find quite low congruence (18.3%), again likely driven by differences in the degree distribution across the network. Are there still discernible communities despite the loose cohesion, particularly between the first two modes?

In the previous chapter, we ran three different methods to identify political communities as we were looking at one single type of network tie (individuals in organizations) and wanted to obtain a relatively robust estimate of how nodes came to occupy specific network positions. Here we are in a different situation as we want to explore whether – and if so, to what extent – moving from the restricted model to other models leads us to identify different relational patterns or different homophily mechanisms. For the sake of simplicity, we are going to use just one particular clustering method (Newman community detection) and focus instead on the differences, if any, in the properties or composition of different communities between one type of 3-mode model and another one. For the sake of consistency, we search only for four communities. As we shall see, this solution generates four communities internally cohesive and with a size big enough to allow for some basic analysis.

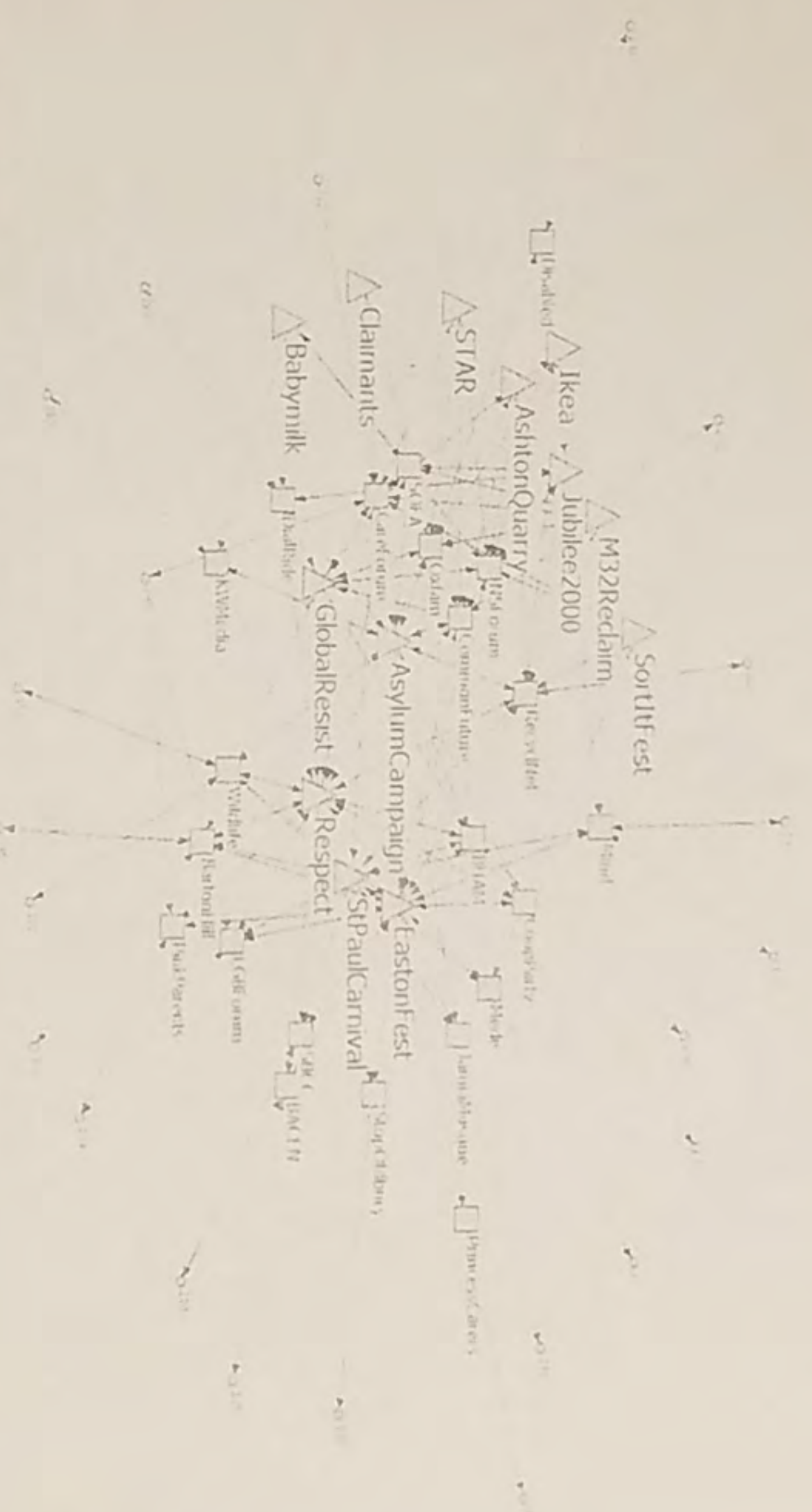
Applying the method to the restricted 3-mode network identifies multiple levels of aggregations. Table 6.3 shows the four community solution. Each community includes between 22 and 54 individuals and between 17 and 32 organizations, which allows for some basic descriptive statistics. Instead, both protest and civic events are concentrated in one community (#4), with 13 events out of 17. The fact that some organizations only engage in civic events while others also participate in public protests does not seem to have an effect on the structural position of events. The latter generate an amount of ties which is sufficient to bring civic and protest events together in the same community. This is consistent with earlier findings pointing at the fact that in Bristol, in contrast to Glasgow, involvement in protest or nonconfrontational events had the same impact on the structure of the civic sector (Diani 2015:148). All communities show high internal cohesion, while no ties across them match the overall density of the network (Table 6.4).

TABLE 6.4. Density of ties within/between communities in the restricted 3-mode network

	Community 1	Community 2	Community 3	Community 4
Community 1	0.0416	0.0026	0.0046	0.0066
Community 2	0.0026	0.0361	0.0040	0.0089
Community 3	0.0046	0.0040	0.0355	0.0101
Community 4	0.0066	0.0089	0.0101	0.0802

FIGURE 6.3. Community 1, restricted model
Legend: Circles: individuals; squares: organizations; triangles: events

Although all communities are more cohesive than the network as a whole, community 4 is by far the most dense. Let us compare it visually to community 1. The structure of community 1 (Figure 6.3) consists of two subclusters of nodes with a limited number of bridges, depending on the multiple memberships of some activists (such as #137 in the top part of the network, and #119, #109, #136 in the bottom part) and a few organizations (e.g., the Greens or Living Easton, a community organization, at the bottom of the graph). The single event is a civic one, the Harcliffe and Withywood carnival, in which several organizations are involved, but its role in integrating the community is less than the role of some activists' involvement in multiple organizations. In contrast, the involvement of some organizations in multiple events represents the strongest integrative factor in community 4 (Figure 6.4). They still tend to cluster together depending on

FIGURE 6.4. Community 4, restricted model
Legend: Circles: individuals; squares: organizations; triangles: events

their protest or civic, noncontentious nature, with the former located on the left of the graph, the latter on the right. However, it is remarkable the presence of organizations that are active in both types of events, as we already noted). As for individual activists, they tend to concentrate on the periphery of the network, indication of a low propensity to engage in multiple memberships.

What is the profile of the incumbents of the different communities? To what extent, in other words, does the restricted 3-mode model enable us to identify homophily mechanisms within civil society? In general, the different communities seem to stand out because of the properties of their activists (Table 6.5) rather than those of their organizations (Table 6.6). Activists in community 1 are significantly ($p < 0.05$) more committed than the others to promote social rights, they are (relatively) more left wing, and confide more in unions and people and less in churches and neoliberal actors and institutions. They are also disinclined to think of themselves as proud citizens. By contrast, the only distinctive properties of organizations in community 1 are higher levels of identification as part of broader movements, and the fact of relying on a relatively sizable membership (Table 6.6), while activists in that community reflect perfectly the overall profile of activists in the city. The finding, that identification with a movement corresponds to high involvement in both protest and noncontentious, civic events is consistent with the fact that in Bristolian civil society the idea of "movement" seems to refer primarily to a specific way of coordinating collective action—including the one aimed at service delivery rather than focusing on its contentious, antagonistic forms (Diani 2015).

The other two communities also stand out because of the properties of their individual activists: community 3 consists disproportionately of activists,

TABLE 6.5. *Profile of communities in the restricted 3-mode network (individuals)*

	1	2	3	4
Action repertoire				
Pressure				
Critical consumption & cultural performances		-		
Conventional protest				
Radical protest			+	
Support candidates in elections				
Beliefs				
Strong commitment to social rights	+	-		
Leftist orientation on Left-Right scale (0-9)	+	-		
Trust in				
Christian churches	-		+	
Churches in general			+	
Public institutions			+	
Unions	+			
Labour party			+	
Left-of-labour socialist groups				
Neoliberal actors and institutions	-	+		
Greens		-		
Media				
People	+	-	+	
Identity				
Proud citizen	-		+	
Middle class identity (0-7)				
British identity				
N	38	36	54	22

prioritizing electoral participation and displaying higher levels of trust in a range of institutional actors as well as in their fellow citizens. They seem particularly inclined to join organizations that identify as environmental and hold strong interest in environmental issues, yet without feeling particularly strongly as part of broader movements. Finally, community 2 hosts activists that are relatively sceptical toward social rights and left-wing positions as well as the Greens, and more sympathetic toward neoliberal institutions. The organizations they belong to do not display any distinctive trait.

The overall indication emerging from the analysis so far is that assuming a restricted 3-mode network model (i.e., a substantive model of civic collective action focused entirely on the representative roles of organizations) generates a portrait of the civic sector as quite homogeneous in terms of organizational properties. In contrast, activists tend to show a more distinct profile across

TABLE 6.6. *Profile of communities in the restricted 3-mode network (organizations)*

	1	2	3	4
Identities				
Voluntary association				
Environmental group			+	
Identify as political group	+			
Charity identity				
Opponents				
Subcultures				
Dissenters				
Movement identity				+
Ties to established actors				
Greens				
Labour				
Unions				
Organizational traits				
Huge membership				+
Founded before 1996				
Public funding				
Issues				
Global issues				
Ecology issues			+	
Ethnic & migrants				
Exclusion				
Opinions				
No decline in participation				
Events				
Civic events				
Protest events				
	17	24	34	22

communities – with the exception of community 4, where the ties securing internal cohesion revolve around organizational involvement in events. In terms of agendas, the environment is the only issue that seems to affect the organizational profile of specific communities. This is yet again largely consistent with the account that Diani (2015, Chapter 5) provided of the Bristolian civic sector: an analysis of structural equivalence in the network, based on interorganizational alliances³, also showed environmentalism to be one of the very few factors affecting the structure of the civic sector.

³ It's worth noting that in Diani's (2015) original study interorganizational alliances were identified by asking organizations' representatives to name their closest allies in the previous years, i.e., following a 1-mode logic.



FIGURE 6.5. An illustration of the general 3-mode model

GENERAL 3-MODE CIVIC NETWORKS

Both the restricted 3-mode model and Diani's (2015) earlier 1-mode analysis of Bristol civic networks assigned a central role to organizations. However, we can provide a more nuanced account of civic collective action if we allow for individuals to play an independent role in civic life. One important way this may happen is through their direct involvement in public events. Individuals' role in events is manifold. Depending on their personal resources and skills, they may contribute significantly to their agenda and shape; by participating in events that are not directly sponsored by their own organizations, they may establish links between these and the promoting groups; through the attendance of several events, they may establish a meaningful connection between these events, thus rendering them part of broader collective action campaigns. Figure 6.5 displays a stylized representation of what we'll call the general 3-mode model.

On average, individual activists attended six events. One-tenth did not attend any, one-fifth attended more than 10 (Table 6.7). Taking these connections into account, the overall densities change drastically, as the densest sector of the 3-mode matrix turns out to be the one linking individuals to events (almost 40% of possible ties are actually present, while organizations participate in the average in only 15 percent of the events – Table 6.8).

A general 3-mode structure also affords an additional four-cycle to be identified: a shared four-cycle between individuals and events (see Figure 6.2). Here we find that there is considerably more shared four-cycle cohesion across these modes (56.7%). This suggests that, while individuals may not be motivated to incur the costs of multiple membership in different organizations (see the discussion in the previous section), if they are motivated to attend events at all then they are likely to attend the same events as other individuals they meet at any of those events. This complements the cohesion analysis done on the restricted 3-mode network above.

The question is whether taking into account the ties created by activists' direct involvement in public events reveals homophily mechanisms that were

General 3-Mode Civic Networks

TABLE 6.7. Individual attendance of public events

	%
No events	11
1–5	36
6–10	35
11–17	18
N	150

TABLE 6.8. Densities in the 3-mode general model (overall density = 0.043)

	Individuals	Organizations	Events
Individuals	0.000	0.021	0.370
Organizations	0.021	0.000	0.153
Events	0.370	0.153	0.000

TABLE 6.9. Incumbents of four communities in the general 3-mode network

	Community 1	Community 2	Community 3	Community 4
Individuals	43	34	32	41
Organizations	26	28	16	27
Events	4	4	5	4
Total nodes	73	66	53	72

missed in the simpler, restricted model. Running the Newman community detection procedure again for four communities generates clusters with a more balanced profile than the previous one (Table 6.9). The communities host a number of activists ranging from 32 to 43, while organizations vary from 16 to 28. Most conspicuously, this time each community is characterized by a similar number of events in which individual and organizational actors are involved. Like in the restricted model, all communities show densities above the network average, while flows across communities are consistently less dense, if not necessarily negligible (Table 6.10).

Let us look in greater detail at the profile of the different communities. Community 1 consists of organizations with an above average interest in environmental issues, limited ties to center-left parties like Labour or the Greens, but also a reluctance to portray themselves as voluntary associations (Table 6.11). Activists in the same community only stand out for their lower interest in social rights, and their more moderate self-placement on the left-right scale (Table 6.12). Actors in this community are involved in events that

TABLE 6.10. *Density of ties within/between communities in the general 3-mode network*

	Community 1	Community 2	Community 3	Community 4
Community 1	0.0780	0.0309	0.0362	0.0272
Community 2	0.0309	0.0807	0.0369	0.0261
Community 3	0.0362	0.0369	0.1045	0.0341
Community 4	0.0272	0.0261	0.0341	0.0630

TABLE 6.11. *Profile of communities in the general 3-mode network (organizations)*

	1	2	3	4
Identities				
Voluntary association	-			
Environmental group		-	+	
Identify as political group		+		
Charity identity				
Opponents			+	
Subcultures			+	
Dissenters			+	-
Movement identity				-
Ties to established actors				
Greens	-			
Labour	-			
Unions				
Organizational traits			+	
Huge membership			+	
Founded before 1996			-	
Public funding				
Issues				
Global issues	+	-	+	
Ecology issues				
Ethnic & migrants				
Exclusion				
Opinions				
Participation no decline				
Events				
Civic events			-	
Protest events				
N	26	28	16	27

TABLE 6.12. *Profile of communities in the general 3-mode network (individuals)*

	1	2	3	4
Action repertoire				
Pressure			+	
Critical consumption & cultural performances				
Conventional protest				
Radical protest			+	
Support candidates in elections				
Beliefs				
Strong commitment to social rights	-		+	
Leftist orientation on Left-Right scale (0-9)	-		+	
Trust in				
Christian churches				
Churches in general				
Public institutions				
Unions				
Labour party				
Left-of-labour socialist groups				
Neoliberal actors and institutions		-	+	
Greens				
Media				
People				
Identity				
Proud citizen				+
Middle class identity (0-7)				+
British identity				
N	43	34	32	41

are all of the noncontentious, civic type (community festivals, see Figure 6.6). Altogether this comes akin to a style of civic action focused on environmental issues affecting local communities from a relatively moderate perspective. Community 3 presents what is in many ways the opposite profile: organizations in that position define themselves as environmentalist but also as representatives of critical dissenters, opposing the mainstream. This translates into a disproportionate interest in global rather than environmental issues, and in the reluctance toward institutional involvement, whether in the form of participation in civic events (often sponsored by institutions) or of limited dependence on public funds (Table 6.11). Activists in that position are inclined to use both conventional and radical action repertoires; they are committed to social rights and more left-leaning than the average, and show particular trust in the Green party (Table 6.12). As Figure 6.7 shows, activists and organizations converge on protest events that often combine global and local issues (such as the Barmy milk campaign against Nestlé's practices in developing countries, or the M32 Reclaim the streets actions).

identity of activists as proud, middle-class citizens (Table 6.12). They mobilize on protest activities but of the single-issue kind (concerning quarries and road building but also developing countries' debt) while mobilizing in parallel on broader campaigns of the civic kind such as the environmental Agenda 21.

Tables 6.13 and 6.14 summarize our finding so far, reporting which variables were significant predictors of the traits of incumbents of different communities in different models. They show that taking into account individuals' involvement in events has a double, diverging effect on our ability to identify homophily mechanisms in civic networks. On the one hand, it appears to weaken the link between activists' traits and their location in specific communities. As Table 6.13 shows, the overall number of individual properties that turn out to significantly predict location in one or the other communities decreases compared to the restricted model. In other words, individual choices of events to get involved in seem to go beyond the connections to events created by organizations. This points at the specific role that individuals play as connective entities in networks, thanks to their individual choices. At the same time, adding information on individual choices brings about a greater differentiation between events, which in turn corresponds to a more specific profile of organizations located in different communities (Table 6.14). Rather than noting the mere difference between organizations involved or not involved in

TABLE 6.13 Variables differentiating organizations in different communities in the restricted and the general 3-mode network

	3-mode restricted	3-mode general
Identities		
Voluntary association		X
Environmental group	X	X
Identify as political group	X	X
Opponents		X
Dissenters		X
Movement identity	X	X
Ties to established actors		
Greens		X
Labour		X
Organizational traits		
Size of membership	X	X
Public funding		X
Issues		
Global issues		X
Ecology issues	X	X
Events		
Civic events		X

TABLE 6.14 Variables differentiating individuals in different communities in the restricted and the general 3-mode network

	3-mode restricted	3-mode general
Action repertoire		
Pressure		X
Conventional protest	X	
Radical protest		X
Support candidates in elections	X	
Beliefs		
Strong commitment to social rights	X	X
Leftist orientation on Left-Right scale (0-9)	X	X
Trust in		
Churches (Anglican or Catholic)	X	
Other churches	X	
Public institutions	X	
Labour party	X	
Unions	X	
Neoliberal actors and institutions	X	
Greens	X	X
People	X	
Identity		
Proud British citizen	X	X
Middle class		X

events, we are now able to identify specific clusters of events with which relatively specific organizations are associated.

INDIVIDUALS AND ORGANIZATIONS IN EVENTS: BRINGING MORE TIES INTO THE FRAME

The approach presented so far has rested on two basic assumptions. First, we have only looked at ties linking directly one mode to another: individuals joining organizations and organizations promoting events in the restricted model, to which we have added individuals promoting/participating directly in events in the general model. Second, we have focused on homophily mechanisms in our attempt to interpret the communities within civil society, characterized by dense ties between individuals, organizations, and events. This perspective has proved analytically useful. We have in particular seen how shifting from a restricted to a general model allows us to better specify the impact of shared properties over the organizational profile of communities (see Table 6.11). In this section, we offer some thoughts about one possible expansion of this approach, namely, going beyond direct ties.

In principle, any mode in a 3-mode network potentially lies on a path between the other modes (Fararo and Doreian 1984, 154). It may, in other

words, be seen as a mediator between the other two, creating a link which parallels the one represented by direct connections. Individual involvement in events well illustrates the difference between direct ties and what we are going to call "mediated" ties. The participation of individuals in events on a personal basis, regardless of whether their organizations promote them or not, is recorded in 2-mode matrices of the format IE (in our case, 150×17 ; see also Table 6.8). We may refer to it as the "direct network" linking individuals and organizations. In contrast, in the restricted model, individuals are drawn to some events, or made aware of them, only through the intermediation of the organizations they belong to. We refer to this as the "mediated network." In this case, we may obtain a 2-mode matrix of individuals by events through a matrix multiplication $[I \times O] \times [O \times E] = [150 \times 97] \times [97 \times 17] = IEm$. The resulting matrix 150×17 is the same size as the matrix IE recording the direct involvement of persons in events, but assumes that a tie between an individual and an event is only possible through the mediation of the organization(s) to which an individual belongs (as from the restricted model). Hence the m in the matrix name, to differentiate it from the original IE matrix.

Table 6.15 reports some basic indicators of cohesion: the direct network has a smaller number of isolates; the overall density is significantly higher (0.37 vs. 0.22) and the average distance between nodes shorter; thus fragmentation is lower in the direct network. Altogether, this confirms that the direct involvement of individuals in public events does not simply conform to the options offered by the organizations but follows partially different and broader paths.

Comparing data from the mediated and the direct network enables us to address some recurring questions in the collective action literature. One example is the extent to which participation in protest events overlaps with, or differs from, that in uncontested civic events, and the impact that this has on the structure of collective action campaigns (see Diani 2015, chapter 6, for a discussion, as well as Sampson et al. 2005). By participating in several events, individuals act as bridges between them, establishing both cognitive and emotional connections: events are no longer treated as isolated, discrete occurrences, but as elements of broader initiatives or campaigns (Diani 2009). One important question is whether we can identify homophily mechanisms bringing

TABLE 6.15. Properties of direct and mediated individuals-events networks

	Direct (IE matrix)	Mediated (IEm matrix)
Isolates	11%	16%
Density	0.37	0.22
Average Distance	2.16	2.45
Diameter	4.00	5.00
Fragmentation	0.18	0.28
Transitivity	0.62	0.56

TABLE 6.16. Distribution of ties among protest and civic events in the mediated network

	Civic	Protest	# of Obs
Civic	0.281	0.165	
Protest	0.165	0.322	
R-square	Adj R-Sqr	Probability	
0.237	0.234	0.0000	272
Regression coefficients			
Independent	Un-standardized coefficient	Standardized coefficient	Significance
Intercept	0.165322	0.000000	0.9998
Civic	0.115492	0.321422	0.0048
Protest	0.156888	0.476404	0.0000

together or keeping apart events based on the patterns of participation of activists in those events? To do so, we need to build 17×17 networks of events by multiplying the $[17 \times 150]$ transposes of the IE and IEm matrices with the original matrices. The analysis shows that homophilous tendencies are much stronger in the mediated network than in the direct network. In the mediated network (Table 6.16) there is a clear tendency of civic and even more so protest events to be more directly related to events of the same type than to others (as suggested by Figure 6.4). In other words, if activists are involved in events through their organizations, it is more likely that these multiple involvements be homogeneous, connecting with a greater frequency protest events to other protest events, or civic events to other events. In contrast, the direct network (Table 6.17) shows no homophilous tendencies when it comes to the relation between types of events. Looking at individuals' direct involvement in events without the filter of their organizations suggests that, at least in the Bristolian collective action field, the boundaries between protest and civic events are not so deep. The two seem to be perceived as compatible and complementary by many of the core members of the voluntary and community sector.

Of course, what we presented above is just one illustration of the potential analyses we may conduct comparing direct to mediated networks. Other combinations of matrices, generating additional mediated networks, are also possible. Individuals may also become connected to (or at least made aware of the existence of) organizations through their participation in events: for example, they may attend events out of personal interest, or because invited by their friends or acquaintances, and later become more involved with the promoting organizations. In this case, we would look at a matrix IOm (150×97), resulting from the following matrix multiplication: $[I \times O] \times [TOE] = [150 \times 17] \times [17 \times 97]$, where TOE is the transpose of matrix OE recording organizations' involvement in events. Reversing again the perspective, from the point of view of organizations,

TABLE 6.17 *Distribution of ties among protest and civic events in the direct network*

	Civic	Protest	
Civic	0.313	0.313	
Protest	0.313	0.384	
R-square	Adj R-Sqr	Probability	# of Obs
0.062	0.058	0.248	272
Regression coefficients			
Independent	Un-standardized coefficient	Standardized coefficient	Significance
Intercept	0.313101	0.000000	0.9824
Civic	0.000021	0.000067	0.4648
Protest	0.071310	0.248169	0.0526

the extent to which they are capable of addressing concerns shared by, or anyway communicate with, the broader civic sector may be estimated in the light of the connections they can make to individuals attending the events they are participating in. In this case, the 97×150 matrix O_{lm} , measuring the contacts to individuals from organizations, originates from the following multiplication: $[OE] \times [TEI] = [97 \times 17] \times [17 \times 150]$, where TEI is the transpose of the matrix recording individuals' involvement in events. As before, O_{lm} is the transpose of lOm . Finally, organizations may also profit from their members' activities to engage with events they are unable or unwilling to participate in directly, or be made aware of such events by the fact that their members participate in them on an individual basis. In this case we would have a 97×17 OEm matrix, generated through the following multiplication: $[TIO] \times [IE] = [97 \times 150] \times [150 \times 17]$, where TIO is the transpose of the matrix recording individual membership in organizations. The extent to which events may be attractive to civic organizations may also depend on the range of organizations to which individuals, participating in events, belong. Here we would have a 17×97 EOm matrix, obtained with the following multiplication: $[TEI] \times [IO] = [17 \times 150] \times [150 \times 97]$, where TEI is the transpose of the matrix recording individual participation in events. Again, EOm is the transpose of OEm . All these different combinations point at as many potential lines of connectivity within a collective action field, in addition to the ties connecting individuals, organizations, and events directly.

CONCLUSIONS

In this chapter we have discussed how to bring public events, and the complex networks that develop around them, into the analysis of civic networks. While individuals and organizations are both key agents in the political process, events provide settings to develop and/or consolidate connections between them. At the same time, by getting involved in multiple events, individuals

Conclusions

and organizations create connections between events, assign them a shared meaning, and weave them into broader political agendas and longer term campaigns. Accordingly, exploring the connections between individuals, organizations, and events may highlight aspects of civic life that would be overlooked by an analysis restricted to individual or organizational agents.

Looking at data from Bristol's civic sector has generated a number of findings that have broader implications for the analysis of civic political networks. First, taking into account multiple relational levels enables us to identify within local civil society specific communities that tend to be more complex and differentiated, in terms of homophily mechanisms, than the ones that we identify when looking at a smaller number of relational levels. While the profile of individual activists seems sharper in the restricted model (Table 6.14), the profile of organizations in different communities is sharper (Table 6.13) in the general 3-mode model, and so are actors' associations with specific sets of public events. If we contrast our findings to the profile of the civic networks that Diani (2015) built on the basis of the ties perceived as most important by each organization, we find both significant differences and similarities. In that study, which focused primarily on interorganizational ties, different structural positions obtained with CONCOR differed very little on the same list of variables that here have proved on several occasions to shape relational patterns. Moreover, the approach outlined here also enabled us to check to what extent civic events of a routinized, institutional nature are attended by the same actors involved in protest ones or not, for example, as an indicator of the depth of the boundaries between routine and contentious politics. In the specific case of Bristol, while routine and contentious public events may be unevenly distributed across communities, looking at activists' autonomous involvement in events (Table 6.17) suggest that ultimately activists tend to be involved in initiatives across the civic vs. protest divide. This is consistent with Diani's earlier findings (2015), which also suggest a quite different pattern for a city like Glasgow, where civic and protest events attracted more differentiated sets of actors.

Of course, these findings should not be taken as sources for any generalization, and not even as conclusive statements about the peculiar traits of politics in a specific city. Rather, they illustrate the potential of a multimodal strategy of network research. If we compare the findings generated by 3-mode models to those obtained with a 1-mode approach to the same data (Diani 2015), we do not find major inconsistencies between the different procedures. We find, however, a more fine-grained account of the homophily mechanisms at work in the Bristol network, that had not been captured by previous analyses. Moreover, comparing findings from the restricted and the general 3-mode model highlights different aspects of civic life in the city, regarding the interdependence between individual patterns of participation, organizational activities, and public events.