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## **Associations between Associations**

### **The Structure of the Voluntary Association Sector**

Sigrid Roßteutscher  
Jan W. van Deth

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## Abstract

Civil society is characterised by a virtual endless number of very different clubs, organisations, groups, and associations. Usually, simple additive measures and factor analytical techniques are used to analyse the structure of the voluntary sector and to obtain indicators for social engagement. In this paper, we present several alternative explorative approaches (principal components analysis, cluster analysis, multidimensional scaling) in order to overcome the conceptual and empirical difficulties of conventional methods. Data are taken from a comprehensive study of the entire voluntary sector in a medium-sized German city. A taxonomy of voluntary associations is presented based on the common latent structures found in different analyses.

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## 1 Introduction

Civil society is characterised by a virtual endless number of very different clubs, organisations, groups, and associations, which are expected to perform important functions. With the revival of Tocquevillian and communitarian ideas in the last decade membership in voluntary associations is generally considered to be of crucial importance for a minimum level of social cohesion and civic virtue. Besides, the quality and strength of democracy appear to depend on the existence of a wide variety of voluntary associations. Consequently, a decline in membership in these associations, clubs, groups, and organisations is seen as the cause of a number of serious social and political problems, as well as the cause of the apparent impotence of democratic political systems to deal with these problems.<sup>1</sup>

More recently, advocates of social capital and civil society acknowledged that not all associations might be equally well equipped to function as “schools of democracy” and as an aid to social and political problems. Current approaches focus on certain types of associations, which are supposed to be benevolent for democracy whilst other types have no particular democratic value or even present a “dark side” of social capital; i.e. are suspected to be harmful to the future of democracy (e.g. Putnam 2000, Warren 2001, Fiorina 1999). Who are the good groups, and who are the bad ones? If the current debate is correct, a crucial problem in dealing with the universe of associations is to find associations between associations; that is, to find out which associations belong together because they share certain aspects.

As usual, various strategies are available to deal with long and heterogeneous lists of associations and to reduce the bewildering amount of information.<sup>2</sup> Firstly, theoretical approaches can be used to construct a priori typologies of organisations (cf. von Alemann 1987, von Beyme 1980: 64ff, Ellwein 1983: 152, Kriesi et al. 1995: 85) or are applied in combination with historical analyses of the development of organisations since the late 19<sup>th</sup> century (cf. Zimmer 1996: 91ff). Besides, simple statements about a distinction between “political” and “social” organisations (Morales 2001b: 17) are presented. Secondly, statistical approaches are available based on data-reduction techniques and the construction of taxonomies instead of typologies (cf. Wessels 1997, and van Deth and Kreuter 1998). Habitually, simple additive measures and factor analytical techniques are used to analyse the structure of the voluntary sector and to obtain indicators for social engagement. Relying on standard survey methods, respondents are invited to indicate whether or not they are “a member” or “belong to” some specific organisation. Since membership in different kinds of organisations seemingly implies very different types of engagement, the practice of constructing simple additive scales based on the average number of memberships of each respondent is questionable. If membership in voluntary associations is to serve as an indicator for, say, social cohesion or the chances for democratic

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<sup>1</sup> See for overviews of the recent literature in this area, for instance, Schuller et al. (2000), Warren (2000), or Putnam (2000).

<sup>2</sup> In this paper we use phrases like voluntary associations, clubs, or organisations as synonyms and avoid specific terms such as interest groups, intermediary organisations, social movements, civic associations, third sector

decision-making, we must start with a closer look at the relationships between memberships in different kinds of organisations. In other words: the search for latent structures underlying data on membership in voluntary associations seems a conditio sine qua non for any further analysis in this area.

In this paper, we present several alternative statistical approaches (principal components analysis, cluster analysis, multidimensional scaling) in order to overcome the conceptual and empirical difficulties of conventional methods used in this area. Data are taken from a comprehensive study of the entire voluntary sector in Mannheim – a medium-sized German city.<sup>3</sup> These data focus on organisations and organisational features and not on individual members in these organisations or citizens in this city. On the basis of the fields covered by specific voluntary organisations (that is, their areas of activities) a taxonomy of associations is presented based on the similarities revealed by the latent structures found in different analyses. In this way, the organisations are used as the main unit of analysis here and not individual members or citizens. Before we turn to these organisational data common approaches relying on interviews with citizens or members are considered briefly.

## 2 A Latent Structure?

In several surveys on memberships in voluntary associations, respondents are confronted with a list of organisations and asked to identify of which, if any, of these organisations they are a member of or belong to. The number of memberships each respondent mentions provides a simple and straightforward measure of the degree of social engagement. Simply adding the number of associations, however, is based on the (implicit) assumption that each type of membership should contribute the same weight to the single score for each respondent. This seems a rather heroic assumption given the heterogeneity of the voluntary sector.<sup>4</sup> It is certainly not self evident that membership in organisations as different as sports clubs, trade unions, and health organisations can be simply added in order to measure the level of social engagement. Besides, that level depends heavily on the actual question format applied and the number of alternative organisations offered to the respondent. Putnam points out to the old pollsters' wisdom that

“... the harder you probe, the more responses you get. Thus the number of organizational memberships that a poll uncovers is heavily dependent on the number of probes. So true is this that to the question ‘How many groups do you find the average American belongs to?’ it is only a slight exaggeration to respond ‘As many as you’d like, if I ask hard enough’” (2000: 416).

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organisations, non-governmental organisations, non-profit organisations etc. See Warren (2001) or Zimmer (1996) for systematic overviews of different types of organisations.

<sup>3</sup> These data are collected in Mannheim and Aberdeen as part of a project funded by the Anglo-German Foundation for the Study of Industrial Society (Grant 1277). We gratefully acknowledge this support. Beside, these activities are part of the international network on ‘Citizenship, Involvement, Democracy’ (CID), funded by the European Science Foundation (see: [www.mzes.uni-mannheim.de/projekte/CID](http://www.mzes.uni-mannheim.de/projekte/CID)).

<sup>4</sup> These types of questions not only imply problems between but also within categories. For instance, a member of one sports club gets the same score on this item as a member of three different sports clubs (cf. Van Deth and Kreuter 1998: 154). From the scarce available empirical evidence Morales concludes that “multiple membership” is “... sufficiently widespread to give it more consideration ...” (2001a: 12).

The examination of the empirical validity of these types of claims by Morales (2001a: 9ff), however, shows a more complicated picture. Obviously, the degree of engagement depends on the list of organisations presented in standard surveys – particular effects can be observed with different question formats in different countries. Moreover, if the length of the item list or number of probes of organisations would encourage respondents to present themselves as ‘joiners’ (as Putnam seems to imply), we should find the curious empirical result that the further down one comes on the list of associations, the higher the number of respondents who ‘confess’ membership should be.

In order to assess the empirical validity of these types of claims, we analysed the responses to a list of 28 different organisations included in the questionnaire of the German CID-Survey (see footnote 3). In this study, individual respondents in a representative sample of the German population were asked “... whether they belong to or are a member of one of the following organisations ...”. A list of 28 different organisations was presented to each respondent without further explications. For our analyses, these 28 organisations are grouped into seven categories each consisting of four organisations according to the order of these organisations in the questionnaire. The frequencies in the left column of Table 1 show the level of involvement as a percentage of the respondents that are engaged in one of these four arbitrary selected organisations. Since we find highly deviating percentages for each of the seven categories, the specific place these organisations occupy in our listing does not seem to be relevant for the level of involvement. However, the mean level of involvement among the respondents is indeed associated with the length of the list of voluntary associations: the further we go down on the list, the higher is the average number of memberships. In fact, there is an evident – and rather trivial – monotonous relationship between the number of items presented and the average level of engagement, starting with an average of .357 memberships for the first four organisations and going up to 1.340 memberships when all 28 organisations are presented. This effect is clearly illustrated by the average cumulative levels of involvement depicted in the next to last column of Table 1. A kind of ‘saturation effect’ can be noticed if we compute the average number of memberships per respondent and per total number of organisations presented (right hand column of Table 1). After going through about ten associations this average number of memberships remains more or less constant (about .05).

Since the potential artefacts related to the use of simple listings of associations appear to be obvious, a more important question arises: how to measure the level of involvement in voluntary associations with these responses? Simply adding voluntary associations mentioned by the respondents results in scores that are highly depended on the number of items presented and are biased due to the fact that quite dissimilar activities are just counted without knowing what their common denominator might be. Dimensional analyses that uncover the structure(s) underlying different kinds of memberships might help us to design more adequate measures.



**Table 1: Item Rank of Voluntary Associations and Frequency of Involvement**

Item Rank	Involvement per Category <sup>a</sup>	Mean Involvement	
		Cumulative <sup>b</sup>	Average <sup>c</sup>
1-4	31.3	.357	.087
5-8	12.5	.495	.062
9-12	9.7	.600	.050
13-16	10.3	.709	.044
17-20	15.7	.852	.044
21-24	27.8	1.189	.049
25-28	31.3	1.340	.048

Source: German CID-Population Survey 2001 (N=3004)

<sup>a</sup>: Percentage of respondents being a member in at least one of the four organisations

<sup>b</sup>: Number of organisational involvements (average per respondent)

<sup>c</sup>: Number of organisational involvements (average per respondent and per total number of organisations presented)

Responses to survey questions about membership in voluntary associations of individual citizens have been analysed by several researchers using factor analytical techniques.<sup>5</sup> Wessels (1997) attempted to reduce data to a limited number of theoretically relevant types. On the basis of a principal components analysis of data from the second wave of the World Values Surveys for several countries, he proposed three distinct 'dimensions': one for traditional political associations (unions, professional organisations, political parties), one for new social movements (environmental organisations, peace groups, Third World and human rights organisations, animal protection groups), and one for social organisations (welfare organisations, religious groups, community groups, youth organisations, women's organisations, sports clubs, health organisations, educational organisations). Challenging these results and stressing the need for equivalent measures in comparative research, van Deth and Kreuter (1998) criticise Wessels' procedure and technique. Reproducing Wessels' findings appears impossible, although a three-dimensional structure can be detected with similar substantive interpretations as Wessels presents. The first component van Deth and Kreuter extract refers to themes belonging to a new politics agenda (organisations in the field of the environment,

<sup>5</sup> These studies mainly use data from the international surveys like the World Values Surveys and the Eurobarometers. See for overviews of the results of these empirical studies van Deth (1996), van Deth and Kreuter (1998), Morales (2001a), Morales (2001b), or Gabriel et al. (2002).

animal rights, Third World, human rights, and peace), the second one indicates activities in the field of social welfare (religious, social, and women's organisations), and the final component involves traditional interest groups (professional organisations and political parties).

Although the substantive interpretations of both three-dimensional structures seem fairly plausible and differ little, it should be noted that distinct sets of items and countries are used. For an assessment of the cross-national equivalence of the various measures the crucial question is whether the results obtained for the pooled data set of all the countries can be found within each country separately. That is definitely not the case. In fact, none of the structures found can be reproduced in all countries (van Deth and Kreuter 1998: 145). A systematic search for equivalent measures using less restrictive one-dimensional multiple scaling techniques instead of components analyses, finally results in three distinct scales which are very similar to the extracted dimensions mentioned. The first scale refers to movement membership (Third World and environmental groups, in some countries enlarged with peace and animal rights organisations). The second one is a social welfare scale (social and religious groups, in some countries enlarged with women's organisations). The third scale consists of traditional interest groups (political parties and professional organisations, in some countries enlarged by trade unions) (van Deth and Kreuter 1998: 145-6).

In a more recent attempt to find a minimum set of identical memberships in voluntary associations in 13 democratic societies Gabriel et al. (2002) had to delete a number of specific organisations in order to obtain equivalent measures. In these analyses of the World Values Surveys, too, the use of factor analytical techniques appeared to be hardly useful and had to be replaced by less restrictive one-dimensional multiple scaling techniques. Finally they presented three small identical and equivalent scales: leisure time and sports (single item), interest groups (unions and professional organisations), and social-cultural organisations (religious and church organisations, art and education, and charity organisations) (Gabriel et al. 2002: 42-9).

From these analyses of survey data from individual citizens it is clear that reducing long lists of voluntary associations is very difficult from several points of view. Beside, the pitfalls and complications attached to the use of straightforward questions on membership in voluntary associations are instantly recognisable (cf. Morales 2001a and Morales 2001b). Yet, a major aspect of the application of conventional data-reduction techniques in this area is overlooked in actual discussions. What kind of reasoning lies behind the use of factor-analytical or correlational data-reduction techniques? Obviously, we want to find out whether the number of specific organisations can be reduced to more comprehensive concepts like 'social movements', 'interest groups' or 'leisure-time organisations'. In general, the data reduction techniques mentioned are based on the idea of a regrouping of the original variables in 'factors' in such a way that the correlation among the variables within that factor is higher than the correlation among variables in other factors. Applied to membership in voluntary organisations, this means that we arrive at a regrouping of the various organisations in such a way that people involved in one organisation are more likely to participate in another organisations belonging to the 'factor' found. For instance, a 'factor' social movements consists of – for instance – members of peace groups and members of environmental groups,

because being a member in a peace group increases the likelihood of being a member in an environmental group (and vice versa). For similar reasons, members in hobby clubs and members in music organisations could establish a ‘factor’ leisure-time activities and the two resulting ‘factors’ – social movements and leisure-time groups – are evidently distinct.

This line of reasoning, however, seems inappropriate for the analysis of memberships in voluntary associations. One might even present the reverse argument and point out to the possibility that being a member in one type or organisation makes it unlikely that one is a member in another organisation belonging to the same category. For that reason, members in a peace group are less likely to be a member in environmental groups exactly because they already belong to a social movement. The ultimate consequence of this argument is that a lack of correlation should be used to construct ‘factors’ covering variables that have more in common than other variables. Factor-analytical techniques are, of course, based on the strict opposite of this line of reasoning. Therefore, the use of these kinds of data-reduction techniques might be a major cause for the failure to construct plausible and stable latent structures underlying responses to questions about memberships in voluntary associations.

Moreover, if we are interested in finding associations between associations it is definitely not self-evident to start with information about individual membership. Typologies and taxonomies based on membership patterns, group associations via individual preference structures or joining behaviour, but not on associations between associations. In effect, the major reason for grouping associations through membership patterns is the availability of survey data from individual members or citizens and the scarcity of useful data on organisations. However, if we use a more straightforward way and rely on organisational data the validity of standard data-reduction techniques is even more doubtful. Latent structure models presume, that – beyond a number of attitudes or responses – there is a common denominator, a latent structure, which ‘unfolds’ from individuals’ responses to single indicators. Typically, one hopes to detect a ‘deeper’ dimension of, say, authoritarianism or liberalism from responses to concrete attitudinal items. Conceptually, one assumes that the hidden structure organises and determines individual thinking and action. We already discussed that this assumption is problematic when concerned with individual joining behaviour. In dealing with organisations, this assumption is even more implausible. What should be the ‘hidden construct’, the latent structure beyond organisational activities? Can we really conceptualise organisations as entities that function equivalently to individual minds? Despite the complications outlined above, it might be plausible that a joiner of a peace organisation is more likely to join an environmental group (and less likely to join a sports club) because he or she has a preference for the agenda and activities of the ‘new politics’ realm (and less preference for traditional leisure activities). We easily can imagine the values guiding such choices of associative engagement. In fact, the results of data reduction methods using individual data (Wessels 1997, van Deth and Kreuter 1998, Gabriel et al. 2002) confirm the validity of this line of reasoning.

The universe of organisations is differently structured. A peace organisation is a peace organisation, and, normally, environmental issues are not on its agenda. Similarly, a sports club offers a wide range of sporting activities but singing in choirs will not belong to its range of regular activities.

Conceptually and theoretically, it might be meaningful and plausible to distinguish a 'new social movement' sector from a 'traditional leisure' sector, because both sectors can be expected to i) attract different types of joiners; ii) choose different organisational structures; iii) deal with different substantial concerns and interests of members, and iv) have different consequences for the functioning of contemporary democracies. However, standard data-reduction methods are unlikely to detect the similarities between organisations or the associations between associations, because sports clubs will not mention 'music' as one of their activities and peace organisations will not refer to environmental concerns.

In order to assess the consequences of applying factor-analytical techniques to explore latent structures among voluntary associations we will, firstly, not rely on conventional survey data from individual members or citizens. As an alternative, we will use data obtained directly from different organisations about their activities – that is, the units of the following analyses will be the distinct organisations instead of individual members. These data are obtained in our study on the voluntary sector in a medium-sized German town (see Section 3 below). Second, we will analyse these organisational data in the conventional way first and therefore start with factor analytical techniques. Thirdly, we will use cluster analyses and multidimensional-scaling techniques as alternative strategies to uncover latent structures underlying the same organisational data used for the factor analyses. Finally, a comparison of the results obtained with these three different approaches – factor analyses, cluster analysis, multidimensional scaling – to analyse organisational data is presented and suggestions are discussed to characterise different types of voluntary associations.

### 3 The Mannheim Voluntary Sector

The Mannheim study on the voluntary sector was conducted as a comparative project in Mannheim and Aberdeen (see footnote 3 above and Berton et al. 2001 for more information on rationale, research questions and methodology). Within the international context of the CID-Project, we developed a research design that was capable of generating a high level of comparable data taking great care at all stages of the implementation of the research design to ensure that national teams used strategies and methods in identical ways. At its conclusion, this comparative project will have assessed how different societal contexts, cultural traditions, and institutional arrangements affect the voluntary sector on an organisational or institutional level as well as on the level of the attitudes and values of the main participants (i.e. volunteers, activists). The innovative parts of the project can be summarised as follows:

- Holistic mapping of all organisations. The project aimed at drawing a 'map' of all voluntary associations in a specific city. This contrasts with the typically restricted focus on larger, more institutionalised, and officially registered organisations (such as the German Vereinsregister). Such comprehensive mapping allows us to assess the density, shape, and impact of the entire voluntary sector.
- Assessing the link between organisations and activists/volunteers within these organisations. This project moves beyond the 'regular' single focus on organisations, or (representative) samples of activists and volunteers. The research design provides the opportunity to evaluate the impact of the organisational context on individual activity profiles and attitudes of activists.

At the first stage we mapped the entire associational sector in Mannheim. Although we cannot categorically claim to have identified all voluntary associations in this city it is clear that we have come close to achieving such a goal. Voluntary associations were located via a wide variety of sources and our mapping was planned and implemented in four distinct stages:

- Stage 1: Contacting – of all local authorities, journalists, other local bodies and voluntary sector umbrella organisations in order to obtain basic information about the community organisations.
- Stage 2: Documentation – of various local authorities and voluntary sector umbrella organisations newsletters, citywide and local newspapers, neighbourhood leaflets, and magazines and other information mechanisms that link groups together.
- Stage 3: Searching – of local archives and registers (the German Vereinsregister), local directories of organisations, large institutions, the telephone directories and yellow pages, and a detailed and extensive internet and world wide web search was undertaken (these searches targeted both local web addresses and national addresses looking for national level organisations with local branches or chapters).

Stage 4: Contacting distributor organisations – during the mapping process several informal networks or umbrella organisations refused to provide name and addresses of their affiliates. For instance, the local self-help sector in Mannheim valued its anonymity very highly. For these organisations, distributor organisations were approached.

Especially the last stage presented a number of complicated problems. It was clear that Mannheim has a very vibrant self-help sector, but through our initial mapping stages (1 to 3) we discovered only a fraction of these types of organisations (usually the most well-known, for instance Anonymous Alcoholics). Subsequently, contacts with an informal (volunteer) co-ordinator of the entire self-help sector consisting of 120 groups were established, who agreed to distribute the questionnaires on our behalf. Consequently, we faced the dilemma of either using the self-help co-ordinator as our distributor, or probably miss the largest part of this sector. The former option was chosen. Similar problems were encountered with many religious organisations (Mannheim has 31 catholic and 42 protestant churches). We contacted all churches to ask for names and addresses of groups active in the congregation (e.g. crèche groups, youth groups, church choirs, bible reading circles, women groups etc.) and in many instances access to the names and addresses was denied. This problem was solved in the same way as before.<sup>6</sup>

As a consequence of this strategy, two distinct numbers of cases are available for the Mannheim study. Firstly, there is the hard 'n' of 3,075 organisational names and addresses of the contact persons identified. This hard 'n' includes the 184 distributor organisations. Secondly, there is a soft 'n' of 5,002 groups, which consists of the 3,075 hard addresses and 1,927 groups, which could only be reached via our distributors.<sup>7</sup> The main characteristics of the study are summarised in Figure 1.

After mapping was completed all organisations received a short questionnaire. The questionnaire sought information on issues such as organisational demographics (name, year founded, membership and/or supporter size, staffing levels, income and expenditure), sources of income (membership, grants, legacies, charitable trust), main objectives, organisational type (does the organisations have a formal membership, or a 'looser' structure), organisational structure (including management and internal democratic procedures, as well as gender distribution and extent of membership participation), external organisational activities (nature, type and frequency of contact with local authorities, other public bodies and other organisations), and organisational outputs (service provision to 'clients', other membership services and benefits).<sup>8</sup>

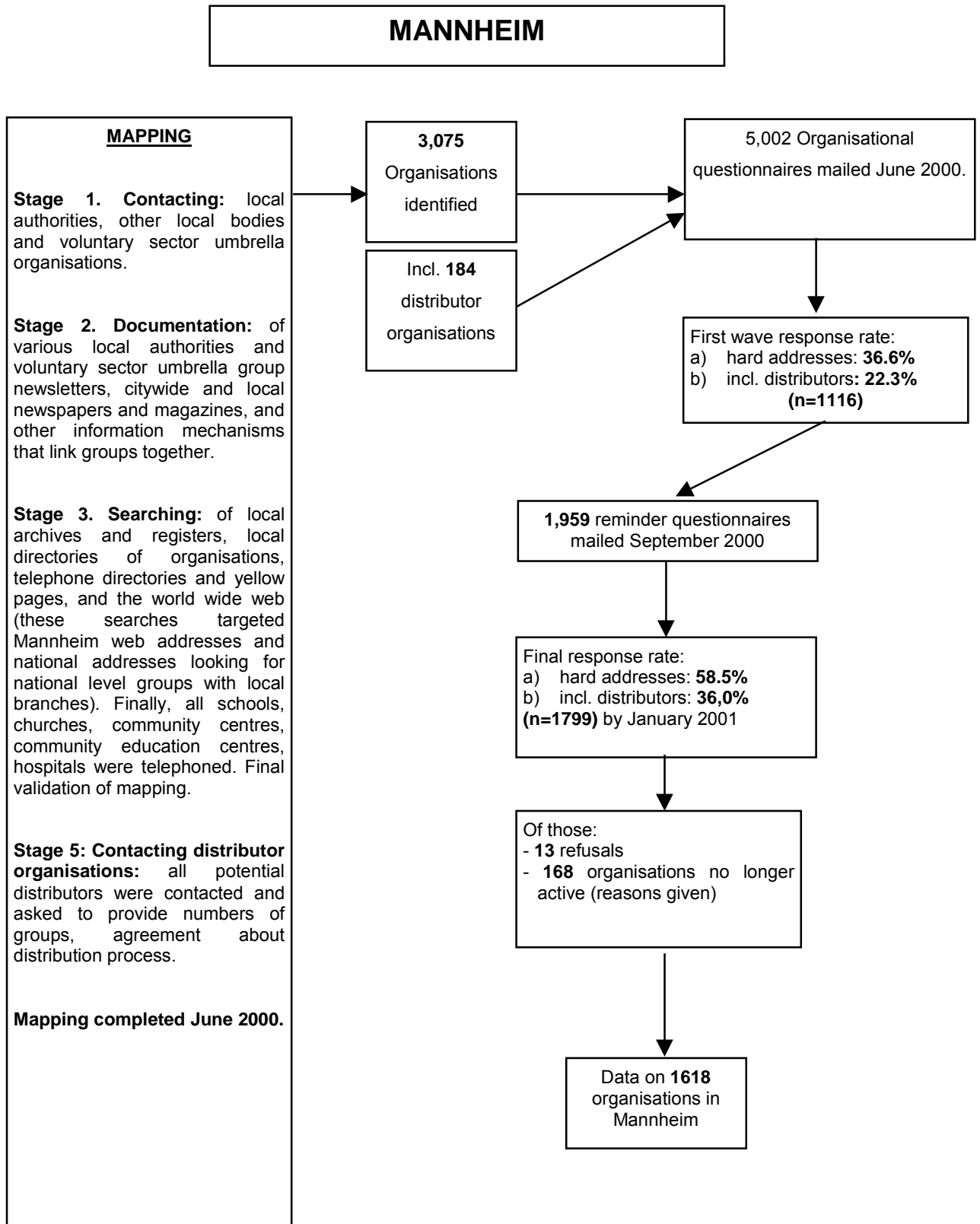
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<sup>6</sup> We are fully aware that this procedure is not risk-free. However, the chances of reaching a larger number and more diverse range of groups is greater through this avenue, than any other alternative could provide. We also might have to accept much lower response rates, because some of the 184 distributors would selectively distribute the questionnaires or would not distribute them at all.

<sup>7</sup> In these last cases the number of groups comes from information given by the distributor.

<sup>8</sup> Notice that the use of a questionnaire to collect this information does not change the fact that the organisations remain our principal units of analyses and that no information from individual members is taken into account .

**Figure 1: Methodology and Response Rates of the Mannheim Organisation Study**



The questionnaire sent out to all 5002 organisations located in Mannheim contained a straightforward question on sectoral activities. The responses by the organisations in this survey are used for our search to uncover a possible latent structure underlying the voluntary sector in this city. The specific variant of this instrument used for the project in Mannheim looks as follows:<sup>9</sup>

Please indicate (by ticking the appropriate boxes) in which sectors your association/group has been active during the last year:

- |   |  |  |
|---|--|--|
| 1 <input type="checkbox"/> charity/welfare      | 12 <input type="checkbox"/> lodge                | 24 <input type="checkbox"/> child care/other children's services |
| 2 <input type="checkbox"/> health               | 13 <input type="checkbox"/> parents              | 25 <input type="checkbox"/> community development                |
| 3 <input type="checkbox"/> disabled             | 14 <input type="checkbox"/> culture, music       | 26 <input type="checkbox"/> politics                             |
| 4 <input type="checkbox"/> pensioners, elderly  | 15 <input type="checkbox"/> hobbies              | 27 <input type="checkbox"/> business relations                   |
| 5 <input type="checkbox"/> veterans, victims    | 16 <input type="checkbox"/> research             | 28 <input type="checkbox"/> labour relation                      |
| 6 <input type="checkbox"/> religious activities | 17 <input type="checkbox"/> economic development | 29 <input type="checkbox"/> professional relations               |
| 7 <input type="checkbox"/> education            | 18 <input type="checkbox"/> environment          | 30 <input type="checkbox"/> consumers' interests                 |
| 8 <input type="checkbox"/> poverty              | 19 <input type="checkbox"/> animal rights        | 31 <input type="checkbox"/> family                               |
| 9 <input type="checkbox"/> ethnic concerns      | 20 <input type="checkbox"/> peace                | 32 <input type="checkbox"/> employment and training              |
| 10 <input type="checkbox"/> sports              | 21 <input type="checkbox"/> humanitarian aid     | 33 <input type="checkbox"/> housing                              |
| 11a <input type="checkbox"/> youth              | 22 <input type="checkbox"/> women                | 34 <input type="checkbox"/> crime                                |
| 11b <input type="checkbox"/> children           | 23 <input type="checkbox"/> human rights         | 35 <input type="checkbox"/> local social politics                |
|   |  | 36 <input type="checkbox"/> social contacts                      |

If more than one: which sector has been most important? Please note the number of the sector (e.g. note '10' if sports has been the most important sector): .....

The frequencies of all 37 areas indicated for all combinations of responses are presented in Appendix 1. From the table in this Appendix it is clear that the number of specific areas mentioned varies clearly.

## 4 Alternative Statistical Approaches

### 4.1 Correlations: Principal Components Analysis

Although we argue that standard data-reduction techniques based on factor-analytical techniques or correlations between variables should reveal sub-optimal results, we will begin our analyses with the procedure which is most commonly used to find types of associations: principal components analysis. This will give us a kind of 'base-line solution' that can be used to assess the advantages of relying on

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<sup>9</sup> These questions are included in the brief common-core questionnaire for organisations in various European cities as question 3(a) and 3(b) respectively. Modifications from the common-core questionnaire in Mannheim and Aberdeen are the addition of the categories 'social contacts' and 'local social politics' and the split of the category 'youth, children' into two distinct categories.



more appropriate methods. The results of the principal components analyses for the responses presented by the organisations are summarised in Table 2.

The first result to note is that principal components analysis as a standard data-reduction technique is not very successful in reducing the data. 37 different organisational activities are grouped into 12 different dimensions. It is also no surprise to find that we cannot obtain two or three master dimensions such as 'traditional', 'modern', 'social', or 'political', which dominate the universe of associative activity. The results of principal components analysis reflect the diversity of organisational life and present a variety of mini-groups and ungrouped activities. There are several clear exceptions: first, we find a strong and clear-cut dimension that organises concerns around family and the upbringing of children (children, parents, youth, child care, family). There is further a relatively clear dimension of city politics, which consists of activities such as community development, local social policy, crime prevention, politics and housing (with politics and housing being strongly related to other dimensions as well). Moreover, an interest group or economic concerns dimension is found, with group activities such as business, professional and labour relations, economic development, employment and training (yet, the two latter are also strongly related to educational concerns). Next we find a dimension of social or welfare politics, which consists of activities concerned with poverty, humanitarian aid, ethnic concerns and welfare/charity (again the latter two share strong communalities with other factors). Further, a new politics dimension appears: groups concerned with human rights, peace, and women; whereas politics and labour relations relate strongly to this dimension as well. Each of the four subsequent 'mini groups' consists of no more than two activities: health concerns (health, disability including social contacts), educational concerns (education, research activities), environmental concerns (animal protection, environment), and leisure concerns (sports, hobby, including some stronger correlation to activities concerning culture/music and social contacts).

Several activities remain isolated: religious concerns, veterans, and lodges. These three activities are differently rooted in Mannheim's voluntary sector. While veterans and lodges are clearly marginal parts of the organisational sector, religious concerns belong to the most frequently mentioned activities. In other words, the quantitative diffusion of these three concerns cannot explain for their 'outsider' position. However, in the case of religion some connection to other activities is visible: religious activities correlate with welfare activities, concerns with elderly/pensioners, and culture/music activities.

Finally, there is a group of activities, which are related to several dimensions: concerns with elderly/pensioners, culture/music activities, and consumer interests. For example, concern with the elderly is correlated equally strong with health concerns, religious activities, and concern with veterans and war victims. These results mirror the heterogeneous and diverse character of the voluntary sector. Even an item battery with 37 categories could not prevent that similar categories are populated by clubs of a very different nature: concerns with elderly and culture/music provide clear examples of this heterogeneity. The category of culture/music is chosen by a range of organisations from church choirs (hence the correlation with religious activities), to traditional choir societies (Gesangsverein, hence the

**Table 2: Dimensions of Organisational Activity in Mannheim (Principal components analysis with varimax rotation, number of factors extracted not specified, only values above .30 are documented)**

	1	2	3	4	5	6	7	8	9	10	11	12
Children	.83											
Parents	.77											
Youth	.68											
Child Care	.65											
Family	.63											
Comm. Devel.		.72										
Loc. Soc. Pol.		.63										
Crime		.61										
Politics		.55			.41							
Housing		.55				.33						
Business Rel.			.75									
Profess. Rel.			.75									
Labour Rel.			.60		.35							
Econ. Devel.		.30	.47					.36				
Employment			.45					.35				
Poverty				.70								
Humanit. Aid				.69								
Ethnic Conc.		.31		.51								
Welfare				.49							.47	
Human Rights					.74							
Peace					.66							
Women					.50							
Health						.73						
Disabled						.69						
Social Cont.						.41				.36		
Research							.74					
Education							.63					
Animal Prot.								.76				
Environment								.68				
Hobby									.68			
Sports									.60		-.32	
Religion										.69		
Veterans											.81	
Lodges												.91
Elderly						.41					.47	.33
Culture/Music							.28		.39	.41		
Consumer Int.								.34				.31

relationship to leisure concerns), and to so-called 'high-culture' concerns of arts and theatre societies (hence the correlation with educational concerns).

In conclusion, the results of principal components analyses are not very satisfying in two respects: data-reduction is limited, and the clarity and uni-dimensionality of the resulting 'factors' is modest only. This should not come as a surprise, since we argued that for theoretical and conceptual reasons principal components analysis is not the most appropriate method to detect associations between associations. In the subsequent sections we will thus turn to methods and procedures, which are more suitable to deal with organisational data and similarities between associative concerns.

## 4.2 Self-Classification and Similarities between Organisations

The results of principle components analysis based on the answers to a battery of potential activities of which the organisations could tick as many as they wished (see question format at the end of Section 3). However, the question format consisted also of a follow-up question, which asked all organisations that indicated multiple activities to tell us about their most important activity. Subsequently, we will use this self-classification of organisations as the baseline for finding associations between associations. In effect, the unsatisfactory results of the principal components analysis might partly be due to the fact that all concerns of organisations are given equal weight without considering that there are activities, which are organisations' core activity, and complementary activities of lesser centrality to the self-definition of organisations. The alternative classification procedures presented below are crucially based on this distinction between core and complementary activities. In order to apply this distinction a new data matrix was constructed which plots most important (core) activities against all other (complementary) activities mentioned by organisations. This matrix is presented in Appendix 2.

By using this data matrix – which correlates core with complementary activities of organisations – we hope to overcome two crucial problems, attached to standard data-reduction techniques. First, on the basis of the self-definition of organisations, organisations that are somehow concerned with, for instance, music/culture can be distinguished from organisations, which indicate that music/culture is their core concern. Second, the grouping of associations can be based on patterns of activities – it considers the full range of potential complementary activities and is no longer restricted to correlations between single 'variables'. For example, we expect to detect similarities between peace and environmental organisations not because both activities are highly correlated (which is not the case, see results of the principal components analysis; see Section 4.1), but because both types of organisations show similar patterns of complementary activities; i.e. mention politics, community development or youth and education as their complementary activities.

### 4.2.1 Distances: Cluster Analyses

Cluster procedures belong to the classical canon of statistical, explorative data analyses, which have been revived by life style, approaches in the last decades (e.g. Giegler 1982, Gluchowski 1987,

Lüdtke 1989). Cluster analysis, according to Vester et al. (1993: 117f), is the only procedure, which allows the relational positioning of single dimensions and cases. To make this clearer, cluster analysis works by calculating distances or similarities, via default in Euclidean measures, between cases across all included indicators. Therefore, we start with the assumption that all types of organisations (classified through their self-definition of core activities) differ or are the same with respect to their profile of activity. At first the cluster programme produces a similarity matrix of all cases (37x37). During a second phase the cluster programme searches for those two cases (here organisations) where the distance between them, measured over all activities, is smallest. The third phase combines the two cases with the second smallest distance with a third one, and so forth. By default the procedure does not stop until all cases are combined within one single 'cluster'. Thus, it is not the algorithm that decides where the best solution is to be found but rather the researcher. This may be a purely theoretical decision – for instance, if one knows already how many clusters are of interest – or guided by statistical considerations. Generally speaking, one chooses the solution, which precedes a high 'jump' in the coefficient that expresses similarities between two cases, which are judged appropriate for clustering (cf. Aldenderfer and Blashfield 1984 or Everitt 1980).

Because a different amount of clusters refers to a different phase within the clustering process and, therefore, to a different composition of the single clusters, cluster analytical solutions are not stable.<sup>10</sup> Unfortunately, solutions with the same amount of clusters can also be different in outlook depending upon the method of 'linkage' chosen. Thus, a 'single linkage' (an overlap between the 'new' case and only one case in the already existing cluster is enough for the merge of both) can produce significantly different results from, for example, a 'complete linkage' procedure, where the new case is only joined when it matches all cases already within the cluster. Both variants, finally, can provide different results from the third alternative of 'average linkage', which combines cases based upon arithmetic average of similarities. Subsequently, we will discuss results using the more rigid demands of average and complete linkage methods.<sup>11</sup> The results of these computations for the organisational sector in Mannheim are presented in Figure 2 and 3.

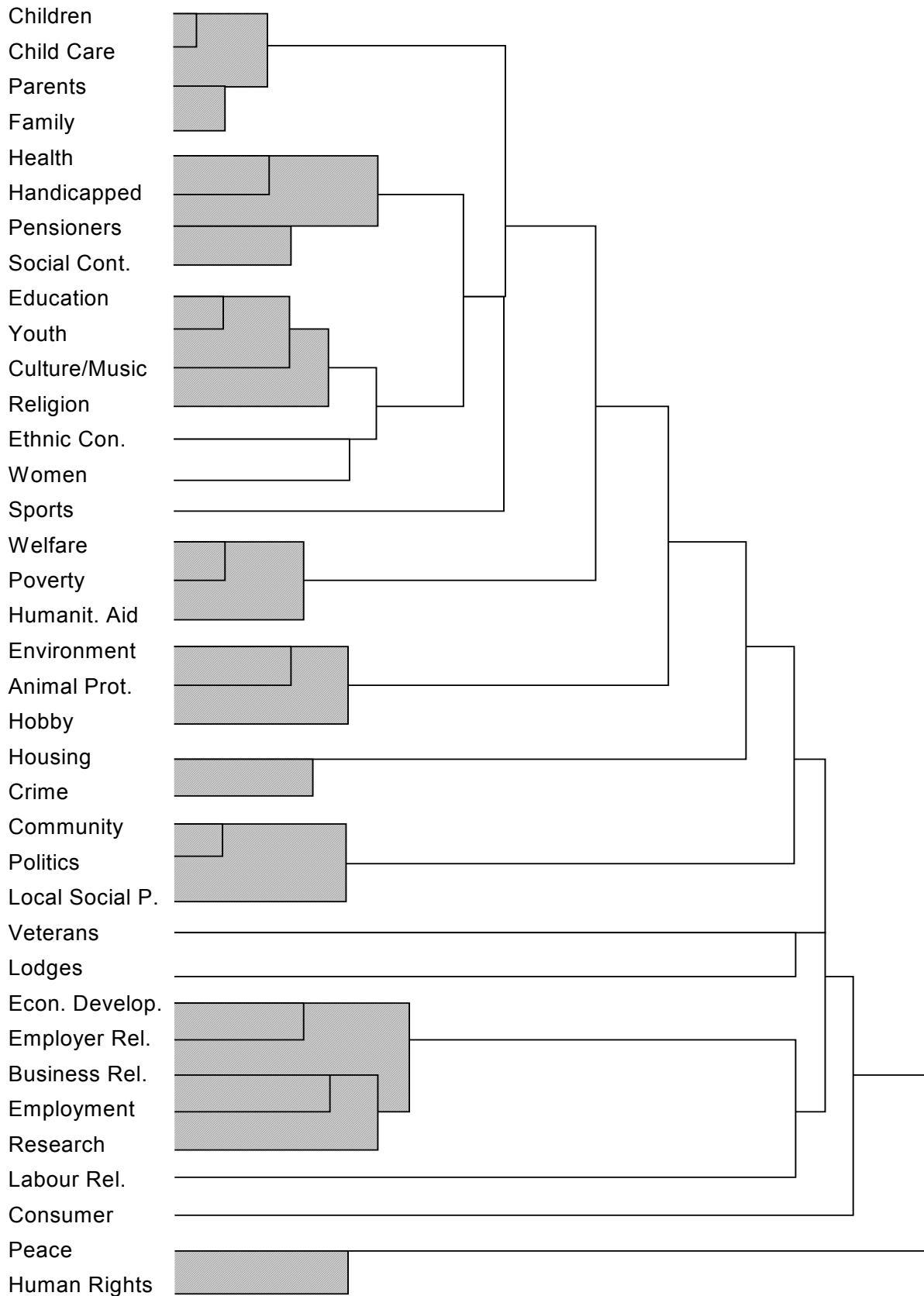
As can be seen in Figure 2 and 3, both methods provide a clear 'cluster' of associations active in the areas of family and of children (children, child care, parents, family). In effect, similarities between these kinds of associations are very high, which is signalled by the fact that this is the first cluster combined. There also is high similarity between activities concerning community development, politics, and local social policy (city politics), and welfare concerns (welfare, poverty, humanitarian aid). Both methods also cluster 'housing' and 'crime' (daily life/living concerns), the new politics' concerns of human rights and peace organisations, and the environmental concerns of animal protection and environmental organisations. However, in both instances these concerns are related

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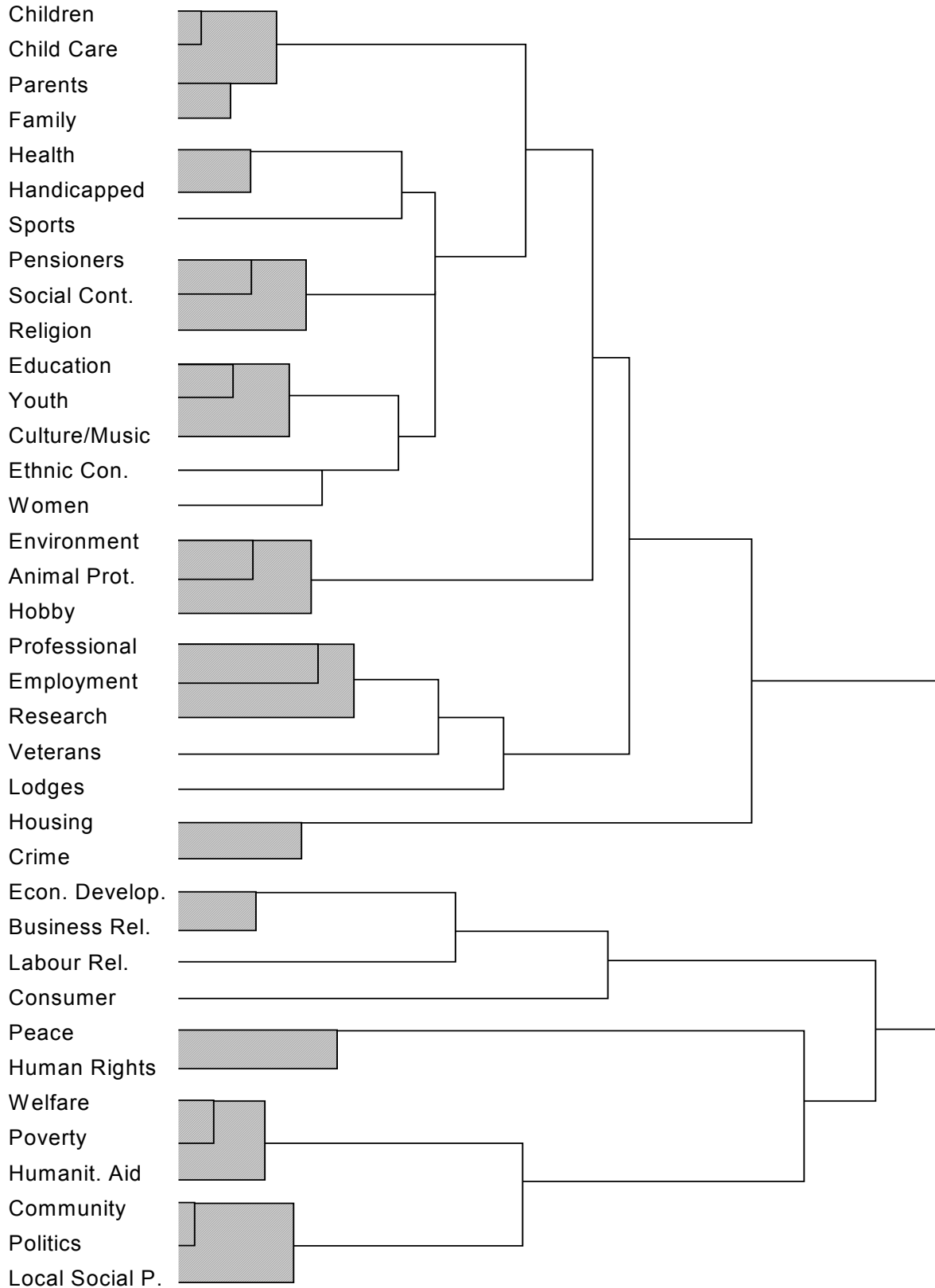
<sup>10</sup> Actually, this is also the case with factor analyses. Different rotation methods or the decision whether to rotate or not can produce significantly different results.

<sup>11</sup> Average linkage methods exist in two variants: within and between groups measurements. Both variants have been calculated and the results are virtually identical (cf. Aldenderfer and Blashfield 1984: 38ff, Everitt 1980: 20ff).

**Figure 2: Hierarchical Cluster-Analysis of Organisational Activities in Mannheim (average linkage, between groups)**



**Figure 3: Hierarchical Cluster-Analysis of Organisational Activities in Mannheim (complete linkage)**



clearly to the activity profile of hobby organisations. Likewise, both methods reveal high similarity between educational organisations, youth organisations, and culture/music concerns (youth), which – in the case of average linkage methods – is complemented by religious organisations. Both average and complete linkage methods combine professional relations, employment, training, and research into a single cluster, but only average linkage methods add the concerns of employers and economic development to a common cluster of economic activities. There also is a health cluster, which consists of health and disability organisations, but only average linkage methods add organisations for elderly/pensioners and social contact to a larger cluster of organisations. The complete linkage method combines organisations for elderly/pensioners and social contacts with religious organisations.

#### 4.2.2 Similarities: Multidimensional Scaling

Instead of correlations or straightforward distances between activities of specific organisations the idea of similarity can be used in a different way. From this perspective, two organisations are considered to be more similar than other organisations if the specific areas they mention as their field(s) of activity are more similar than the activities of these other organisations. For that purpose the (37 x 37 square) frequency matrix of core and complementary activities mentioned by the responding organisations is used once again. From the perspective of similarity between organisations, however, absolute frequencies are not of prime importance here. Instead, the relative frequencies – that is, the percentage of complementary area  $j$  among all the complementary areas mentioned by organisations active in core area  $i$  – are computed as the starting point for our further analyses (see Appendix 2).

The next step is to define similarity between the 37 areas of activities. Irrespective of their nature or labelling, similarity between different areas can be defined on the basis of the profile of the distributions of the further areas mentioned: the more similar these profiles are, the more similar the areas must be. This means that two areas are considered to be more similar if they ‘generate’ more similar profiles among the other activities they mention.<sup>12</sup> In this way, similarity is defined as substitutability. The formula for the similarity measure ( $\delta_{ij}$ ) applied here is the difference between two vectors of complementary activities:

$$\delta_{ij} = \sum \left| \frac{n_{ip}}{n_i} - \frac{n_{jp}}{n_j} \right|$$

where  $n_{ip}$  = the number of organisations mentioning area  $i$  as well as area  $p$

$n_i$  = the total number of organisations mentioning area  $i$

for  $p = 1$  to  $37$  (and  $p \neq i$  and  $p \neq j$ )

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<sup>12</sup> This measure is analogous to the ‘dissimilarity index’ defined by Blau and Duncan (1967: 67) in their seminal work on intergenerational change in the occupational structure. Since the application of their definition results in a non-symmetrical similarity matrix, the absolute values of the differences are used here instead of the differences. The resulting measure has all seven properties usually mentioned for proximity measures (i.e., ordered pairs, non-negative numbers, function, reflexivity, symmetry, triangle inequality, and identity).

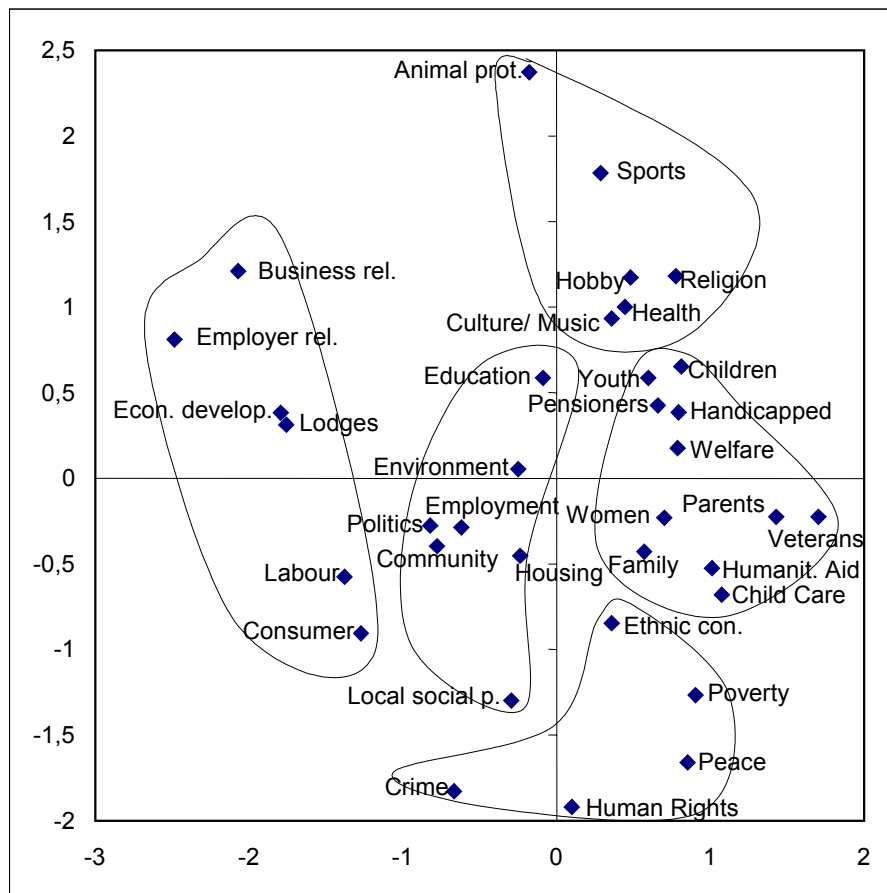
For the further exploration of the similarities between the areas mentioned by the organisations so-called smallest space analyses (or non-metric multidimensional scaling analyses) are carried. In these models, similarities are transformed into distances: the larger the similarity between two object is, the closer they should be together in a R-dimensional space to be constructed. By searching for low-dimensional spaces multidimensional scaling can provide both a reduction of the data available and facilitate substantive interpretations of the latent features of the objects concerned (cf. Kruskal and Wish 1978 or Borg 1981). For our analyses of activities of voluntary associations, the similarity measures ( $\bar{d}_{ij}$ ) are treated as Euclidean distances and the transformation of the similarities into distances is based on the assumption of ordinal relationships among the similarities. In this way, the non-metric advantages of this method are optimally used.

It cannot be expected that 37 points can be depicted in a low-dimensional space easily. Therefore, it comes as a surprise that a three-dimensional solution already meets reasonable technical criteria in terms of fit and stability of the solution. Inspection of this configuration, however, makes clear that a two-dimensional space offers a fairly good summary of the positioning of the areas of activities mentioned by the organisations (that is, the points are not spread over the three-dimensional space, but are more or less lying on a plane). Furthermore, the interpretation of only two of the 37 points raises some substantive complications: 'research' and 'social contacts' appear, respectively, in an open space between 'animal rights' and 'business relations', and between 'environment' and 'women'. Since these activities are mentioned by a small number of organisations only, they are removed from the final solution. A two-dimensional solution for the resulting 35 areas of activities of voluntary associations is presented in Figure 4.

The two-dimensional plot of the 35 areas of activities show a few 'regions' in a straightforward way. The eastern part of the space is occupied by socio-economic interest groups (business relations, employers, economic development, lodges, labour relations, and consumers' interests). To the opposite of interest groups are groups aiming at two kinds specific subject matters: one for specific activities (animal rights, sports, hobby, health, culture/music) and another one for specific categories of people (child care, youth, pensioners, handicapped, charity/welfare, women, family, parents, veterans, human aid, child care). The southeast region of Figure 4 is occupied by groups dealing with general social problems (ethnic concern, poverty, peace, human rights, crime). Finally, we find in the centre of the space groups dealing with direct (local) problems (education, environment, politics, community development, housing, local social problems). As usual, these interpretations should be considered with care when dealing with particular borders and grouping items into broad regions. The positioning of single items in Figure 4 seems plausible even if we do not draw lines to demarcate regions. For instance, 'education' is – as one might expect – close to 'youth', 'children', and 'culture/music'. In a similar way, 'politics' and 'community development', and 'business relations' and 'employers' are not far away from each other.



**Figure 4: Areas of Activities of Voluntary Organisations in Mannheim (Smallest Space Analysis - ALSCAL)**



- Stress: .173 (2 dimensions; 'research' and 'social contacts' deleted)

- Rsq: .849

## 5 A Taxonomy of Voluntary Associations

What are major differences and what are major similarities between the results obtained with the four distinct methods searching for associations between associations? Figure 5 summarises the grouping of the activities of the organisations in Mannheim. First, each column shows the common clusters or dimensions of organisations for each method. Second, the identical placement of organisations is indicated by, respectively, three or four of the methods.

Let us start with apparent and crucial differences: most often, differences concern a deviation between multidimensional scaling and all other methods applied. To begin with the most obvious deviation: multidimensional scaling, on the one hand, and all other methods on the other, operates on the basis of a somewhat different logic. Multidimensional scaling places organisations close together

that are all concerned with specific groups of individuals; that is, group-specific concerns ranging from parents, children, youth, women to veterans, are plotted close to each other. The remaining organisations are plotted on the basis of a range of substantive concerns, which are further divided into socio-economic interests, specific activities, social problems, and local problems. Moreover, multidimensional scaling suggests the most economical solution, leading to a total of five large clusters of concerns, while principal components analysis and the two variants of hierarchical cluster analyses result in a minimum of nine to a maximum of eleven distinct types of concerns. This evident reduction of the number of groups or clusters in multidimensional scaling leads to the quasi-automatic result that several types which emerge from all alternative data-reduction methods are not reproduced by multidimensional scaling. This is most obvious in the case of general and group specific welfare concerns, which are identified as distinct types by principal components analysis and cluster analyses, but not by multidimensional scaling.

Apart from this evident difference between the four methods applied, there are several aspects common to all methods when the results are compared:

i) principal components analysis as well as cluster analyses suggest the similarity of activities around family and raising of children. In the case of multidimensional scaling the specific family concerns (i.e. parents, children, family, child care) are recognised as similar, but are integrated into the greater cluster of group specific concerns;

ii) all four methods clearly demarcate leisure concerns from other concerns. While both multidimensional scaling and factor analyses group leisure concerns of all kinds into one common group<sup>13</sup>, the variants of cluster analysis differentiate between sports activities ('low culture'), on the one hand, and the 'high culture' activities of culture/music, education and youth;

iii) there also is a clear cluster of concerns, which we labelled 'old', or 'city' politics. Issues of community development, local social policy, politics, and housing (in some instances including crime prevention, according to multidimensional scaling including environment and education) are recognised as similar. Only the two variants of cluster analysis suggest a further distinction into politics in general (community development, local social policy, politics), and neighbourhood concerns (housing, crime prevention);

iv) principal component and cluster analyses suggest two distinct types of 'new' politics concerns: issues of peace and human rights are separated from animal rights and environmental concerns. Presumably, the main reason for this further distinction is the

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<sup>13</sup> The common positioning of leisure activities with animal rights and health in the case of multidimensional scaling, reflects the nature of the organisations who ticked these concerns as most important. The issue area of animal rights is populated partly by typical 'Tierschutz' (animal protection) associations and partly by hobby breeders and pet sports associations. Moreover, the health sector consists of many self-help groups who see social contacts and 'Geselligkeit' as part of their core activities. The ambiguity or double-meaning of these particular sectors is obvious in all scaling results (see e.g. the contamination of the 'new' politics concerns of environment and animal rights with hobby concerns in the results of cluster analyses).

Figure 5: Four Methods Compared

	Principal Components analysis	Hierarchical Cluster (average linkage)	Hierarchical Cluster (complete linkage)	Multi-Dimensional Scaling
<b>1. Family and the Upbringing of Children</b>	Parents Children Family Child Care	Parents Children Family Child Care	Parents Children Family Child Care	Parents Children Family Child Care
	Youth			Youth Women Elderly Disabled Veterans Welfare Humanit. aid
<b>2. Leisure Activity</b>	(Culture/music) Hobbies	Culture/Music	Culture/Music	Culture/Music
		Youth (Religion) Education	Youth Education	Hobbies Health Animal rights
	Sports	Sports	Sports	Sports
<b>3. 'Old' or 'City' Politics</b>	Comm. Devel. Local Soc. Pol. (Politics)	Comm. Devel. Local Soc. Pol. Politics -	Comm. Devel. Local Soc. Pol. Politics	Comm. Devel Local Soc. Pol. Politics
	(Housing) Crime	Housing Crime	Housing Crime	Housing
				Environment Education
<b>4. 'New' Politics</b>	Peace Human Rights Women	Peace Human Rights	Peace Human Rights	Peace Human Rights
				Ethnic Conc. Poverty Crime
	Animal Rights Environment	Animal Rights Environment (Hobbies)	Animal Rights Environment (Hobbies)	
<b>5. Economic and Social Exclusion: General Welfare</b>	Poverty Humanit. aid (Welfare) (Ethnic Conc.)	Poverty Humanit. Aid Welfare	Poverty Humanit. Aid Welfare	Lodges
<b>6. Economic and Social Exclusion: Target Groups</b>	Health Disabled	Health Disabled Elderly (Social Cont.)	Health Disabled	

<b>7. Interest Representation</b>	Professional rel. (Econ. Devel.)	Professional rel. Econ. Devel.	Professional rel. Econ. Devel.	Professional rel Econ. Devel.
	Business rel.	Business rel		Business rel.
	(Emp+Training)	Emp+Training	Emp+Training	
	Labour relations	Research	Research	Labour rel. Lodges Consumer Int

Common cluster/dimension per method
Identical across four methods
Identical across three methods

contamination of animal rights and environment with the hobby concerns of pet sports, hobby gardeners, and 'rabbit breeder' associations (see also footnote 13);

v) all methods except for multidimensional scaling recognize a cluster of general welfare concerns, which consists of poverty, humanitarian aid, and charity/welfare;

vi) all methods except for multidimensional scaling separate general welfare concerns from a second cluster which groups the welfare concerns of specific target groups (health, disabled, partly including the elderly). Regarding both types of welfare concerns, multidimensional scaling produces a 'blind' spot, because these issues are all included into one common area of specific group concerns;

vii) finally, all methods produce a common cluster of traditional socio-economic interest representation. However, the composition of the cluster varies between methods. Common to all is the inclusion of professional relations and economic development. Three out of four add business relations and employment and training to this cluster. The economical solution of multidimensional scaling, moreover, enlarges this group even further by adding consumer interests and lodges.

To summarise briefly, the solutions suggested by the four different methods applied are not identical, but the degree of overlap is surprisingly high. Rarely if ever, we find openly contradictory results. Most comforting is the fact that very similar numbers and types of concerns emerge across methods. As a rule, deviations concern the composition and inclusiveness of these common types of activities. From a methodological point of view, the most interesting result is the apparent adequacy of principal components analysis. Although significant substantial and methodological arguments

suggest the inappropriateness of factor analytical techniques for detecting associations between associations (see Section 2), the empirical results do not confirm these suspicions. Notwithstanding large differences concerning both the logic of the statistical procedures and the basic matrix of associational activities applied, the results of principal components analysis and cluster analyses are almost identical. In effect, if there is one method, which clearly deviates from others, it is multidimensional scaling.

The deviating position of the solutions obtained with multidimensional scaling is even more surprising because cluster procedures and multidimensional scaling share several major properties: i) both methods are based upon the same matrix which plots associations' core concern against the entire range of (potential) complementary concerns (see matrix in Appendix 2), ii) both procedures calculate measures of proximity or distance of core concerns across the entire range of these complementary concerns, and iii) both belong to the canon of explorative statistical methods. From a methodological point of view, principal components analysis is the outlier, because it has no explorative character and is based on metric-correlations between variables (instead of non-metric measures of proximity or distance). Furthermore, principal components analysis is exclusively based on relationships between all areas of activities without any differentiation between core and complementary activities. In short, the relatively high similarity between results of factor and cluster analyses, on the one hand, and the differences between multidimensional scaling and these three alternative variants, on the other hand, cannot be explained by a methodological familiarity between these last three methods.

The differences between the solutions presented by multidimensional scaling and its three alternatives are clear but not unbridgeable. Moreover, they can be explained by two crucial features of the multidimensional scaling solution. First, the strong reduction of information of the multidimensional scaling solution – combining 35 activities of organisations in five main areas only – in comparison to the solutions suggested by principal component and cluster analyses. This makes it difficult to find similarities with the relatively high number of dimensions and clusters of these alternative methods. Second, the multidimensional scaling solution relies heavily on the inclusiveness and particularity of one single type: group-specific concerns. This type – which does not emerge through the alternative methods – binds a high number of activities into one area, thus leading to the most significant substantive difference across methods: the apparent lack of discrimination between general welfare activities and group-specific welfare activities.

## **6 Measuring Associative Activities**

Different methodological devices are applied here for one substantive reason: to reduce the unmanageable number of 37 different issues of associative concern into a manageable and meaningful taxonomy of associative activities. Doing empirical analyses in the areas of participation, social engagement, civil society or social capital, one typically examines questions such as: Is there a different participatory impact of horizontally organised organisations in comparison to vertically

organised organisations? Has organisational size in terms of members or resources a different impact on activists' "habits of the heart"? Does social participation enhance political participation? etc. Frequently, the actual orientation of associations (whether they are predominantly concerned with issues such as welfare, leisure or interest representations, etc.) fulfils the function of an additional or control indicator next to the researcher's core interest: if social participation enhances political participation, is this true for all types of associations or are activities in leisure organisations a better vehicle for participation than activities in interest organisations? However, even if one is mainly interested in issues of associative activity, there is no escape from reducing and summarising the available information, in particular, if issue concerns are measured with a battery of no less than 37 potential options.

Can we use the methodological comparison of different methods of data reduction for the construction of a meaningful taxonomy of voluntary associations based on their activities and concerns? As discussed above, there are many similarities across methods, but the solutions are not identical. How to proceed? As there is no clear guide-line concerning 'the' proper method and even procedures which are a priori labelled as inappropriate (principal components analysis) turn out with acceptable and comparable solutions, we suggest two criteria to select the common aspects of the various solutions: a criterion of stability across methods and a criterion of unambiguity of cluster or group composition. These criteria are applied in a lexicographical way to arrive at a taxonomy of voluntary associations (see Table 3).

The first criterion of stability across methods is used as the starting-point for the construction. Ideally, solutions should be identical across all four methods applied. Solutions, which are stable across three out of four methods, are acceptable. If clusters with similar types of concerns consist of different numbers of issue concerns, we will select those activities, which emerge in all four methods. For example, all procedures suggest that there is a common type of concerns around family and raising children. All solutions group the issue concerns of parents, children, family, and childcare together. Moreover, two solutions add the concerns with 'youth' to this cluster, but in the case of cluster analyses 'youth' belongs to a different cluster of activities. This brings us to the second criterion: the unambiguity of cluster or group composition. According to this second criterion we will exclude items such as 'youth' from the taxonomy, because in some solutions it is part of the 'family'-type, while other solutions group 'youth' together with certain leisure activities, and so the criterion of unambiguity is not met. Similar problems occur in the area of leisure activities: all solutions recognise the particularity of leisure activities. However, in case of cluster analyses sports associations appear separated from other leisure organisations, while principal components analysis and multidimensional scaling recognise the similarity between culture/music, hobbies, and sports. According to the criterion of stability across methods, only the concerns of sports and culture/music can be selected. All other activities of organisations emerge only through a maximum of two methods. Moreover, hobby, youth, education, health, and animal rights – all suggested as part of leisure activities by some of the solutions – do not meet the criterion of unambiguity, because they belong to different clusters of activities. Accordingly, sports and culture/music are the stable and unambiguous elements of the

**Table 3: A Taxonomy of Organisational Concerns**

	<b>Activities/Concerns Included</b>	<b>Number of Cases</b>	<b>Percent*</b>
<b>1. Family and Raising Children</b>	Parents Children Family	100	8.3
<b>2. Leisure Activity</b>	Child care Sport	188	15.6
	or: Sport	188	15.6
	Culture/music	141	8.7
<b>3. 'Old' or 'City' Politics Concerns</b>	Community Develop. Local Social Politics Politics	60	5.0
<b>4. Neighbourhood Politics</b>	Housing Crime	25	2.1
<b>5. 'New' Politics Concerns (1)</b>	Human Rights Peace	8	0.7
<b>5. 'New' Politics Concerns (2)</b>	Animal Rights Environment	24	2.0
<b>6. General Welfare Concerns</b>	Charity/Welfare Humanitarian Aid Poverty	53	4.4
<b>7. Target Group Concerns</b>	Disability Health	102	8.5
<b>8. Interest Representation</b>	Business Relations Professional Relations Economic develop. Employ + Training	56	4.7
<b>All Types**</b>		757	63.0

\* percent of associations with valid response on Q3a (see Section 3; excluding 'other', more than one mentioned, all equally important, no information given).

\*\* including culture/music as a second representation of leisure activities

leisure sector. To complicate things further, a taxonomy which consists of sports and culture/music as a representation for leisure activities contradicts the cluster solutions which differentiate between 'low' (sports) and 'high' (culture/music, youth, education) cultural activities. The 'cleanest' and most appropriate solution for these problems would be to select 'sports' as a single representation of leisure activities.<sup>14</sup> The second best solution would be to select both sports and culture/music as two independent representations of leisure activities, thereby reflecting the difference between 'low' and 'high' culture evident in some of the solutions obtained. The least adequate solution would be the treatment of both activities as a common representation of leisure-time activities, thereby stressing the fact that sports and culture/music are recognised as leisure activities by all four methods, but ignoring the distinction between 'low' and 'high' culture made by cluster procedures.

If we proceed according to the two criteria mentioned, a taxonomy of organisational activities emerges (see Table 3). The grouping of associations in this table according to the similarities between their activities, covers 63 percent of the organisations that gave a valid response to the question about their activities and concerns.

## 7 In Conclusion

The taxonomy of organisational concerns reduced 37 single-issue concerns into eight (or nine, if one includes 'culture/music' as a second representative for leisure activities) different types or clusters of associative concerns. Evidently, a more parsimonious solution would have been preferable. However, the taxonomy reflects the diversity and multi-faceted nature of the civil society sector, which prevents an empirical grouping along one or two master-dimensions. Moreover, the limited reducibility has been a result of previous attempts using measurement instruments with far less options than our extensive 37-item battery. Based upon eight substantial choices in the World Values Surveys, different researchers suggested a three-group typology (Wessels 1997, van Deth and Kreuter 1998, Gabriel et al. 2002). Compared to the relative efficiency of these suggestions with a reduction quota of 8:3 (2.67), the solution suggested here is clearly superior (37:8 or 9 corresponds to a ratio of 4.63 or 4.11 respectively).

Presumably, a more serious challenge is the fact that the taxonomy results in a sub-optimal use of available cases. As much as 63 percent of all association who gave a valid response to the question about its most important concern are included; i.e. another 37 percent (or 445 associations) remain outside our taxonomy. Parts of this problem could be solved by re-integrating some of those activities, which show a wide distribution among associations. Typical examples are religious organisations. No less than 110 organisations claim that religion is their most important concern. From an empirical point, religion is a very particular case, with a very diffuse position in the universe of

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<sup>14</sup> This option is chosen also on the basis of very different analyses of the World Values Surveys (see Gabriel et al. 2002: 45)



associational activities. According to the solution obtained by principal components analyses religion is an independent dimension, related equally strongly to concerns with charity/welfare, the elderly, and culture/music. One variant of cluster analyses (average linkage) recognises a familiarity between religious concerns and education, youth, and culture/music, while the second variant (complete linkage) clusters religion together with activities for the elderly and social contacts. Multidimensional scaling, finally, presents similarities between religion, hobby, health, and culture/music activities.

These apparent inconsistencies in the positioning of religious activities and concerns reflect the fact that religion is a sub-unit of civil society, which - to a very large extent - reproduces the diversity of civil society itself. Religious organisations can be welfare organisations (typically Diakonie or Caritas), they can be youth groups (such as YMCA), they can focus on 'culture/music' (the numerous church choirs) etc. This wide range of complementary concerns is the major cause for religion's unclear position in the universe of associations. However, we easily could argue that the particularity of the religious sector justifies its treatment as an additional and independent type of organisational concerns, thereby increasing the percentage of associations included in our taxonomy from 63 to 72 percent. Similar arguments could be made for the educational sector which shows a similar pattern and consists of 90 associations – the inclusion of the educational sector would increase the proportion of covered associations to 80 percent). However, there is a price to pay for this gain in coverage: with each additional category, the usefulness of our taxonomy as a data- and information - reduction device decreases.

The fact that the suggested taxonomy excludes about one third of the associations might be less of a challenge as one expects on first sight. Consider a typical research question in our area: "Does social participation enhance political participation? Is this true for all types of associations or are activities in some organisations a better vehicle for participation than activities in others?" Empirically, one would tackle the main question on the basis of all information available. The second sub-question is a substantive specification of the core question. One is now interested in differentiated and focused analyses of the impact of specific associations. Consequently, there is no need to rely on the entire range of available organisations, but in a relevant selection of organisational types of particular empirical or theoretical significance. For this purpose, our taxonomy is perfectly well equipped. It offers both a wide range of organisational concerns and a sufficient number of cases. Moreover, the suggested taxonomy is robust (because only solutions which are stable across at least three out of four methods were accepted), and unambiguous (because all issue concerns with contradictory dimensional or cluster behaviour are excluded). Whether this robust and unambiguous taxonomy can provide explanations in substantive terms will be the main issue of our future research. This means, of course, that our taxonomy still has to pass the crucial test of being applied to 'real' research questions.

There is, finally, a puzzle, which this paper could not solve. How can it happen that a method such as principal components analysis, which all methodological arguments would depict as inappropriate and inferior to its potential alternatives, results in solutions, which are surprisingly similar, and of comparable quality to solutions suggested by a priori superior and more appropriate procedures? The intuitive reflex to exclude factor analytical techniques from the canon of acceptable

data-reduction devices to find associations between associations, is obviously wrong. However, this empirical result does not disqualify the well-known methodological suspicions against factor analytical methods. The fact that, methodologically and theoretically speaking, principal components analysis is inappropriate and inferior for the analysis of associations between associations remains unchallenged. The apparent discrepancy between these general methodological and theoretical arguments and practical empirical results, leads to the confirmation of an old truism among empirical social scientists: never rely on a single method. Only multi-method approaches permit the optimal use of single methods' strengths and weaknesses, and lead to the desired outcome; i.e. a robust and unambiguous taxonomy of associational concerns.

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**Appendix 1: Matrix of All Activities of Organisations (row percentages; multiple responses possible)**

	N	1 W	2 H	3 D	4 P	5 V	6 R	7 E	8 Po	9 Ec	10 S	11 C	12 Y	13 Pa	14 C/M	15 Ho	16 Res	17 ED	18 En	19 AP
1 Welfare	325	100	30,5	26,5	45,5	4,3	35,7	36,9	26,2	28,3	15,4	42,8	43,4	28,9	39,4	14,2	4,3	7,4	15,1	3,1
2 Health	315	31,4	100	40,0	37,1	3,2	13,0	29,5	15,2	16,8	27,0	34,9	35,2	24,4	18,4	12,4	7,0	6,0	14,0	4,1
3 Disabled	211	40,8	59,7	100	53,6	6,2	18,0	30,8	23,7	26,1	17,1	37,0	37,4	28,9	20,9	10,0	7,1	9,5	17,5	3,3
4 Pensioners	332	44,6	35,2	34,0	100	6,3	30,4	31,6	19,0	21,7	20,5	38,3	40,4	22,6	32,8	14,8	3,6	6,0	15,4	3,6
5 Veterans	27	51,9	37,0	48,1	77,8	100	25,9	37,0	37,0	29,6	25,9	33,3	33,3	37,0	29,6	14,8	,0	3,7	7,4	3,7
6 Religion	288	40,3	14,2	13,2	35,1	2,4	100	39,2	16,3	16,0	11,5	37,5	31,6	24,7	38,2	8,7	2,1	3,5	8,7	,3
7 Education	478	25,1	19,5	13,6	22,0	2,1	23,6	100	14,6	22,8	14,9	35,6	40,8	24,7	41,2	13,8	13,2	16,9	18,0	2,9
8 Poverty	138	61,6	34,8	36,2	45,7	7,2	34,1	50,7	100	50,7	15,9	50,0	50,0	36,2	35,5	11,6	4,3	17,4	22,5	3,6
9 Ethnic Conc.	202	45,5	26,2	27,2	35,6	4,0	22,8	54,0	34,7	100	18,8	47,0	53,0	33,2	45,0	13,9	5,4	15,8	25,2	3,5
10 Sports	336	14,9	25,3	10,7	20,2	2,1	9,8	21,1	6,5	11,3	100	42,0	49,7	19,6	28,3	21,7	1,8	5,4	15,5	5,4
11 Children	469	29,6	23,5	16,6	27,1	1,9	23,0	36,2	14,7	20,3	30,1	100	75,3	44,6	34,1	16,0	3,2	4,7	17,1	3,0
12 Youth	497	28,4	22,3	15,9	27,0	1,8	18,3	39,2	13,9	21,5	33,6	71,0	100	36,0	33,6	18,1	3,6	8,0	17,9	4,4
13 Parents	249	37,8	30,9	24,5	30,1	4,0	28,5	47,4	20,1	26,9	26,5	83,5	71,9	100	40,6	17,7	4,4	5,6	16,5	2,4
14 Culture/Music	434	29,5	13,4	10,1	25,1	1,8	25,3	45,4	11,3	21,0	21,9	36,9	38,5	23,3	100	17,1	6,0	9,0	15,0	1,6
15 Hobby	183	25,1	21,3	11,5	26,8	2,2	13,7	36,1	8,7	15,3	39,9	41,0	49,2	24,0	40,4	100	6,0	3,8	27,8	12,0
16 Research	93	15,1	23,7	16,1	12,9	,0	6,5	67,7	6,5	11,8	6,5	16,1	19,4	11,8	28,0	11,8	100	23,7	20,4	5,4
17 Econ. Develop.	112	21,4	17,0	17,9	17,9	,9	8,9	72,3	21,4	28,6	16,1	19,6	35,7	12,5	34,8	6,3	19,6	100	34,8	3,6
18 Environment	174	28,2	25,3	21,3	29,3	1,1	14,4	49,4	17,8	29,3	29,9	46,0	51,1	23,6	37,4	28,7	10,9	22,4	100	18,4
19 Animal Prot.	47	21,3	27,7	14,9	25,5	2,1	2,1	29,8	10,6	14,9	38,3	29,8	46,8	12,8	14,9	46,8	10,6	8,5	68,1	100
	N	20 P	21 HA	22 W	23 HR	24 CC	25 C	26 Po	27 ER	28 LR	29 BR	30 C	31 F	32 E	33 LS	34 SC	35 H	36 Cr	37 L	
1 Welfare	325	13,8	26,2	21,2	12,9	19,4	11,1	15,1	2,8	4,0	3,7	3,7	34,2	17,2	16,6	43,1	18,5	7,7	1,2	
2 Health	315	7,3	14,0	20,6	8,9	15,6	8,3	13,3	2,9	5,7	5,1	6,3	29,8	17,1	13,3	41,3	14,9	4,8	,6	
3 Disabled	211	11,8	19,9	20,4	12,8	18,5	12,8	18,5	2,8	8,5	6,2	6,2	30,8	21,8	19,0	50,2	27,5	9,5	1,4	
4 Pensioners	332	12,7	19,3	23,8	9,9	15,7	10,8	15,7	3,3	8,1	6,3	5,1	29,2	14,5	15,4	42,2	18,7	6,3	,6	
5 Veterans	27	40,7	25,9	14,8	22,2	11,1	11,1	29,6	3,7	11,1	3,7	,0	33,3	18,5	29,6	40,7	22,2	11,1	3,7	
6 Religion	288	15,3	20,8	21,5	7,6	17,7	4,2	8,7	1,4	3,5	1,4	2,4	31,6	5,9	5,6	34,7	8,0	2,4	,3	
7 Education	478	13,2	15,1	19,5	14,0	15,5	11,7	24,1	6,3	9,4	9,0	4,6	26,2	25,5	12,6	30,1	11,7	7,1	1,0	
8 Poverty	138	24,6	44,9	30,4	25,4	29,7	19,6	27,5	,7	8,0	2,2	5,8	40,6	34,1	25,4	50,0	30,4	13,0	1,4	
9 Ethnic Conc.	202	24,3	30,7	29,2	25,7	24,3	26,2	35,6	4,5	11,9	5,9	5,4	35,1	30,7	27,7	49,0	25,7	12,4	,5	
10 Sports	336	5,7	6,3	13,4	5,1	14,0	8,0	10,7	3,0	2,7	1,5	1,8	18,8	12,5	10,1	26,5	8,6	6,5	,0	

11 Children	469	12,2	13,0	19,4	9,2	31,3	12,8	13,9	1,9	3,8	1,5	3,4	38,0	14,1	13,2	30,5	12,6	8,1	,4	
12 Youth	497	11,5	13,7	19,3	10,1	22,1	13,1	16,7	2,8	5,4	4,0	3,4	32,2	17,3	14,7	31,2	13,3	7,8	,2	
13 Parents	249	15,3	15,7	29,7	14,5	42,6	13,3	15,7	2,0	5,2	2,0	3,2	63,1	23,7	18,1	46,6	17,7	9,6	,8	
14 Culture/Music	434	12,4	13,1	16,8	10,6	16,1	11,8	17,7	2,5	4,1	2,8	3,0	23,5	13,6	12,2	31,6	9,4	5,5	,9	
15 Hobby	183	12,0	9,3	15,2	15,3	19,1	10,4	14,8	2,2	3,8	1,6	4,4	26,2	13,7	11,5	40,4	11,5	7,7	,0	
16 Research	93	7,5	6,5	10,8	6,5	4,3	7,5	24,7	8,6	6,5	11,8	5,4	15,1	26,9	4,3	25,8	10,8	4,3	1,1	
17 Econ. Develop.	112	11,6	17,0	14,3	17,9	8,0	33,9	50,9	25,9	19,6	26,8	11,6	15,2	46,4	24,1	27,7	17,0	16,1	,0	
18 Environment	174	23,0	16,1	20,1	21,8	21,3	31,6	31,6	9,8	9,8	10,3	12,6	29,9	25,3	20,7	33,3	17,8	14,9	,0	
19 Animal Prot.	47	8,5	2,1	12,8	10,6	8,5	17,0	17,0	6,4	8,5	6,4	12,8	19,1	8,5	6,4	14,9	6,4	6,4	,0	
	N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		W	H	D	P	V	R	E	Po	Ec	S	C	Y	Pa	C/M	Ho	Res	ED	En	AP
20 Peace	101	44,6	22,8	24,8	41,6	10,9	43,6	62,4	33,7	48,5	18,8	56,4	56,4	37,6	53,5	21,8	6,9	12,9	39,6	4,0
21 Human. Aid	150	56,7	29,3	28,0	42,7	4,7	40,0	48,0	41,3	41,3	14,0	40,7	45,3	26,0	38,0	11,3	4,0	12,7	18,7	,7
22 Women	198	34,8	32,8	21,7	39,9	2,0	31,3	47,0	21,2	29,8	22,7	46,0	48,5	37,4	36,9	14,1	5,1	8,1	17,7	3,0
23 Human Rights	98	42,9	28,6	27,6	33,7	6,1	22,4	68,4	35,7	53,1	17,3	43,9	51,0	36,7	46,9	18,4	6,1	20,4	38,8	5,1
24 Child Care	166	38,0	29,5	23,5	31,3	1,8	30,7	44,6	24,7	29,5	28,3	88,6	66,3	63,9	42,2	21,1	2,4	5,4	22,3	2,4
25 Community	128	28,1	20,3	21,1	28,1	2,3	9,4	43,8	21,1	41,4	21,1	46,9	50,8	25,8	39,8	14,8	5,5	29,7	43,0	6,3
26 Politics	194	25,3	21,6	20,1	26,8	4,1	12,9	59,3	19,6	37,1	18,6	33,5	42,8	20,1	39,7	13,9	11,9	29,4	28,4	4,1
27 Employer Rel.	54	16,7	16,7	11,1	20,4	1,9	7,4	55,6	1,9	16,7	18,5	16,7	25,7	9,3	20,4	7,4	14,8	53,7	31,5	5,6
28 Labour Rel.	66	19,7	27,3	27,3	40,9	4,5	15,2	68,2	16,7	36,4	13,6	27,3	40,9	19,7	27,3	10,6	9,1	33,3	25,8	6,1
29 Business Rel.	85	14,1	18,8	15,3	24,7	,0	4,7	50,6	3,5	14,1	5,9	8,2	23,5	5,9	14,1	3,5	12,9	35,3	21,2	3,5
30 Consumer	41	29,3	48,8	31,7	41,5	,0	17,1	53,7	19,5	26,8	14,6	39,0	41,5	19,5	31,7	19,5	12,2	31,7	53,7	14,6
31 Family	271	41,0	34,7	24,0	35,8	3,3	33,6	46,1	20,7	26,2	23,2	65,7	59,0	57,9	37,6	17,7	5,2	6,3	19,2	3,3
32 Employment	184	30,4	29,3	25,0	26,1	2,7	9,2	66,3	25,5	33,7	22,8	35,9	46,7	32,1	32,1	13,6	13,6	28,3	23,9	2,2
33 Local Social P.	125	43,2	33,6	32,0	40,8	6,4	12,8	48,0	28,0	44,8	27,2	49,6	58,4	36,0	42,4	16,8	3,2	21,6	28,8	2,4
34 Social Cont.	382	36,6	34,0	27,7	36,6	2,9	26,2	37,7	18,1	25,9	23,3	37,4	40,6	30,4	35,9	19,4	6,3	8,1	15,2	1,8
35 Housing	148	40,5	31,8	39,2	41,9	4,1	15,5	37,8	28,4	35,1	19,6	39,9	44,6	29,7	27,7	14,2	6,8	12,8	20,9	2,0
36 Crime	59	42,4	25,4	33,9	35,6	5,1	11,9	57,6	30,5	42,4	37,3	64,4	66,1	40,7	40,7	23,7	6,8	30,5	44,1	5,1
37 Lodges	8	50,0	25,0	37,5	25,0	12,5	12,5	62,5	25,0	12,5	,0	25,0	12,5	25,0	50,0	,0	12,5	,0	,0	,0
	N	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
		P	HA	W	HR	CC	C	Po	ER	LR	BR	C	F	E	LS	SC	H	Cr	L	
20 Peace	101	100	46,5	39,6	53,5	28,7	21,8	43,6	4,0	11,9	5,9	5,9	44,6	27,7	21,8	43,6	16,8	11,9	2,0	
21 Human. Aid	150	31,3	100	28,0	26,0	22,7	12,0	24,0	3,3	10,0	4,0	4,0	32,0	18,7	18,0	55,3	19,3	7,3	3,3	
22 Women	198	20,2	21,2	100	20,7	27,3	13,6	23,2	3,5	10,1	7,6	6,6	48,5	21,2	20,2	46,0	16,7	7,6	,5	
23 Human Rights	98	55,1	39,8	41,8	100	21,4	25,5	60,2	7,1	23,5	12,2	12,2	39,8	32,7	33,7	44,9	24,5	18,4	3,1	

24 Child Care	166	17,5	20,5	32,5	12,7	100	16,9	15,7	,6	4,2	1,8	3,6	60,2	25,3	20,5	47,6	19,9	11,4	,6	
25 Community	128	17,2	14,1	21,1	19,5	21,9	100	56,3	12,5	7,8	13,3	10,2	30,5	28,1	39,8	35,2	32,0	23,4	,0	
26 Politics	194	22,7	18,6	23,7	30,4	13,4	37,1	100	12,9	19,1	14,4	9,3	25,3	32,0	34,5	33,0	22,2	18,0	,5	
27 Employer Rel.	54	7,4	9,3	13,0	13,0	1,9	29,6	46,3	100	33,3	57,4	16,7	13,0	55,6	20,4	13,0	14,8	16,7	,0	
28 Labour Rel.	66	18,2	22,7	30,3	34,8	10,6	15,2	56,1	27,3	100	37,9	12,1	34,8	51,5	30,3	25,8	21,2	12,1	,0	
29 Business Rel.	85	7,1	7,1	17,6	14,1	3,5	20,0	32,9	36,5	29,4	100	12,9	8,2	45,9	23,5	12,9	15,3	5,9	,0	
30 Consumer	41	14,6	14,6	31,7	29,3	14,6	31,7	43,9	22,0	19,5	26,8	100	48,8	29,3	36,6	46,3	39,0	19,5	2,4	
31 Family	271	16,6	17,7	35,4	14,4	36,9	14,4	18,1	2,6	8,5	2,6	7,4	100	22,9	16,6	46,5	19,2	9,2	,7	
32 Employment	184	15,2	15,2	22,8	17,4	22,8	19,6	33,7	16,3	18,5	21,2	6,5	33,7	100	25,5	40,2	28,8	13,6	,5	
33 Local Social P.	125	17,6	21,6	32,0	26,4	27,2	40,8	53,6	8,8	16,0	16,0	12,0	36,0	37,6	100	56,0	41,6	20,8	,0	
34 Social Cont.	382	11,5	21,7	23,8	11,5	20,7	11,8	16,8	1,8	4,5	2,9	5,0	33,0	19,4	18,3	100	22,3	6,8	,8	
35 Housing	148	11,5	19,6	22,3	16,2	22,3	27,7	29,1	5,4	9,5	8,8	10,8	35,1	35,8	35,1	57,4	100	19,6	1,4	
36 Crime	59	20,3	18,6	25,4	30,5	32,2	50,8	59,3	15,3	13,6	8,5	13,6	42,4	42,4	44,1	44,1	49,2	100	,0	
37 Lodges	8	25,0	62,5	12,5	37,5	12,5	,0	12,5	,0	,0	,0	12,5	25,0	12,5	,0	37,5	25,0	,0	100	

**Appendix 2: Matrix of Core and Complementary Activities of Organisations (row percentages; multiple responses possible)**

Core Activities	Complementary Activities																			
	N	1 W	2 H	3 D	4 P	5 V	6 R	7 E	8 Po	9 Ec	10 S	11 C	12 Y	13 Pa	14 C/M	15 Ho	16 Res	17 ED	18 En	19 AP
1 Welfare	30	100	36,7	46,7	40,0	,0	30,0	23,3	36,7	26,7	3,3	43,3	46,7	33,3	20,0	13,3	6,7	,0	6,7	,0
2 Health	71	16,9	100	31,0	14,1	,0	1,4	11,3	,0	,0	2,8	16,9	14,1	19,7	2,8	,0	8,5	,0	2,8	2,8
3 Disabled	31	29,0	45,2	100	16,1	3,2	9,7	16,1	3,2	3,2	19,4	25,8	22,6	38,7	19,4	12,9	9,7	,0	3,2	3,2
4 Pensioners	47	34,0	25,5	29,8	100	2,1	31,9	23,4	17,0	12,8	2,1	6,4	,0	2,1	19,1	6,4	,0	2,1	8,5	,0
5 Veterans	4	25,0	,0	,0	50,0	100	,0	25,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0
6 Religion	110	33,6	9,1	4,5	27,3	2,7	100	32,7	10,0	10,9	2,7	34,5	31,8	20,0	32,7	7,3	,0	2,7	3,6	,0
7 Education	90	16,7	8,9	4,4	10,0	,0	13,3	100	12,2	20,0	10,0	26,7	34,4	20,0	28,9	7,8	12,2	20,0	10,0	,0
8 Poverty	7	85,7	14,3	14,3	28,6	,0	28,6	,0	100	42,9	14,3	28,6	28,6	14,3	,0	,0	,0	,0	14,3	,0
9 Ethnic Conc.	11	36,4	9,1	9,1	18,2	,0	9,1	18,2	18,2	100	18,2	27,3	9,1	18,2	27,3	9,1	,0	,0	,0	9,1
10 Sports	188	2,7	22,9	4,8	14,9	,5	2,7	3,2	0,	1,6	100	35,6	44,1	8,5	6,9	12,8	,0	,0	6,9	3,2
11 Children	64	15,6	14,1	9,4	6,3	,0	28,1	31,3	6,3	9,4	18,8	100	48,4	48,4	28,1	20,3	,0	,0	20,3	,0
12 Youth	39	17,9	12,8	2,6	7,7	2,6	10,3	33,3	12,8	10,3	17,9	41,0	100	23,1	38,5	23,1	,0	5,1	10,3	7,7
13 Parents	5	20,0	40,0	40,0	,0	,0	,0	40,0	,0	20,0	,0	40,0	40,0	100	,0	,0	,0	,0	,0	,0
14 Culture/Music	141	19,1	2,8	2,1	20,6	,7	19,1	25,5	1,4	9,9	5,7	17,0	23,4	5,0	100	9,2	2,1	2,1	2,8	,7
15 Hobby	26	7,7	7,7	,0	11,5	,0	,0	3,8	,0	,0	15,4	3,8	15,4	,0	,0	100	,0	,0	30,8	19,2
16 Research	25	4,0	,0	4,0	,0	,0	4,0	68,0	,0	4,0	,0	4,0	,0	8,0	16,0	,0	100	8,0	8,0	,0
17 Econ. Develop.	8	12,5	,0	,0	,0	,0	,0	37,5	12,5	12,5	12,5	12,5	,0	,0	25,0	,0	25,0	100	25,0	,0
18 Environment	18	11,1	27,8	11,1	11,1	,0	,0	27,8	5,6	5,6	,0	33,3	38,9	,0	5,6	22,2	5,6	11,1	100	33,3
19 Animal Prot.	6	,0	,0	,0	,0	,0	,0	50,0	,0	,0	,0	16,7	50,0	,0	,0	50,0	16,7	,0	66,7	100
Core Activities	Complementary Activities																			
	N	20 P	21 HA	22 W	23 HR	24 CC	25 C	26 Po	27 ER	28 LR	29 BR	30 C	31 F	32 E	33 LS	34 SC	35 H	36 Cr	37 L	
1 Welfare	30	6,7	30,0	26,7	3,3	13,3	3,3	,0	,0	3,3	,0	3,3	33,3	16,7	13,3	40,0	16,7	3,3	,0	
2 Health	71	,0	5,6	14,1	4,2	2,8	,0	5,6	,0	1,4	,0	1,4	23,9	5,6	2,8	33,8	4,2	,0	1,4	
3 Disabled	31	,0	3,2	3,2	,0	12,9	,0	3,2	,0	,0	,0	3,2	19,4	22,6	9,7	48,4	38,7	,0	,0	
4 Pensioners	47	2,1	14,9	4,3	4,3	,0	6,4	4,3	,0	4,3	4,3	,0	6,4	2,1	8,5	31,9	19,1	4,3	,0	
5 Veterans	4	50,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	
6 Religion	110	13,6	16,4	21,8	3,6	15,5	,9	2,7	,9	1,8	,9	,9	32,7	2,7	,0	22,7	1,8	1,8	,0	
7 Education	90	6,7	8,9	7,8	11,1	8,9	3,3	20,0	3,3	4,4	5,6	,0	15,6	32,2	10,	23,3	1,1	3,3	,0	
8 Poverty	7	14,3	28,6	,0	14,3	14,3	14,3	,0	,0	,0	,0	,0	14,3	14,3	14,3	42,9	42,9	,0	,0	
9 Ethnic Conc.	11	,0	18,2	18,2	36,4	18,2	,0	36,4	,0	,0	,0	,0	27,3	27,3	,0	36,4	27,3	,0	,0	
10 Sports	188	,5	,0	12,8	,0	4,8	,0	1,1	,5	,0	,5	,0	6,9	1,6	1,1	11,7	,0	,0	,0	

11 Children	64	9,4	6,3	10,9	6,3	42,2	4,7	1,6	1,6	1,6	1,6	,0	32,8	4,7	6,3	26,6	3,1	1,6	,0	
12 Youth	39	7,7	7,7	10,3	10,3	17,9	5,1	12,8	,0	5,1	2,6	2,6	17,9	15,4	12,8	17,9	5,1	5,1	,0	
13 Parents	5	,0	,0	40,0	,0	40,0	,0	,0	,0	,0	,0	,0	60,0	20,0	20,0	20,0	,0	,0	,0	
14 Culture/Music	141	2,8	1,4	3,5	2,8	1,4	2,8	5,7	1,4	,7	,0	,0	6,4	2,8	2,1	13,5	,0	,0	,0	
15 Hobby	26	,0	3,8	,0	,0	,0	,0	,0	,0	,0	,0	,0	3,8	,0	,0	7,7	,0	,0	,0	
16 Research	25	4,0	,0	4,0	,0	,0	4,0	12,0	4,0	4,0	4,0	,0	8,0	4,0	,0	8,0	4,0	,0	,0	
17 Econ. Develop.	8	12,5	,0	,0	12,5	,0	25,0	25,0	62,5	,0	25,0	,0	,0	50,0	12,5	12,5	,0	12,5	,0	
18 Environment	18	11,1	,0	11,1	5,6	5,6	38,9	22,2	,0	5,6	,0	11,1	11,1	,0	,0	11,1	,0	5,6	,0	
19 Animal Prot.	6	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	16,7	,0	,0	,0	,0	,0	,0	
Complementary Activities																				
Core Activities	N	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
		W	H	D	P	V	R	E	Po	Ec	S	C	Y	Pa	C/M	Ho	Res	ED	En	AP
20 Peace	5	20,0	,0	20,0	20,0	20,0	,0	60,0	20,0	40,0	,0	20,0	20,0	20,0	20,0	20,0	20,0	,0	,0	,0
21 Human. Aid	16	68,8	12,5	12,5	12,5	,0	25,0	37,5	81,3	37,5	,0	31,3	37,5	12,5	43,8	,0	,0	12,5	6,3	,0
22 Women	29	24,1	20,7	10,3	13,8	,0	20,7	34,5	6,9	20,7	6,9	24,1	13,8	20,7	17,2	6,9	6,9	,0	6,9	,0
23 Human Rights	3	33,3	,0	,0	,0	,0	33,3	33,3	66,7	66,7	,0	,0	,0	,0	,0	,0	,0	33,3	,0	33,3
24 Child Care	19	10,5	10,5	5,3	5,3	,0	10,5	15,8	5,3	5,3	15,8	84,2	21,1	47,4	15,8	,0	,0	,0	5,3	,0
25 Community	21	23,8	9,5	14,3	14,3	,0	,0	23,8	9,5	28,6	23,8	38,1	42,9	19,0	33,3	4,8	,0	23,8	52,4	4,8
26 Politics	33	33,3	9,1	18,2	27,3	3,0	6,1	33,3	9,1	42,4	12,1	39,4	51,5	9,1	21,2	,0	12,1	27,3	30,3	3,0
27 Employer Rel.	13	,0	7,7	,0	,0	,0	,0	61,5	,0	7,7	30,8	,0	38,5	,0	15,4	,0	,0	53,8	15,4	,0
28 Labour Rel.	20	5,0	25,0	35,0	55,0	,0	15,0	75,0	20,0	25,0	,0	5,0	30,0	5,0	15,0	5,0	,0	45,0	20,0	,0
29 Business Rel.	21	4,8	14,3	,0	9,5	,0	,0	23,8	,0	,0	,0	,0	,0	4,8	9,5	,0	19,0	23,8	19,0	4,8
30 Consumer	3	33,3	66,7	,0	,0	,0	,0	33,3	,0	,0	,0	,0	,0	,0	33,3	33,3	,0	,0	33,3	,0
31 Family	12	25,0	25,0	33,3	8,3	,0	8,3	25,0	16,7	,0	,0	66,7	33,3	50,0	25,0	8,3	,0	,0	16,7	8,3
32 Employment	14	7,1	,0	7,1	7,1	,0	,0	50,0	14,3	14,3	,0	7,1	28,6	,0	,0	,0	14,3	7,1	7,1	,0
33 Local Social P.	7	57,1	28,6	57,1	57,1	,0	,0	,0	42,9	28,6	14,3	57,1	57,1	14,3	28,6	14,3	,0	14,3	14,3	,0
34 Social Cont.	34	26,5	11,8	14,7	41,2	,0	20,6	20,6	2,9	17,6	26,5	29,4	26,5	11,8	38,2	26,5	2,9	5,9	11,8	,0
35 Housing	23	21,7	,0	8,7	13,0	,0	13,0	13,0	8,7	13,0	13,0	8,7	13,0	8,7	21,7	8,7	4,3	4,3	8,7	,0
36 Crime	2	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0
37 Lodges	5	40,0	,0	20,0	,0	,0	,0	40,0	,0	,0	,0	,0	,0	,0	40,0	,0	,0	,0	,0	,0
Complementary Activities																				
Core Activities	N	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
		P	HA	W	HR	CC	C	Po	ER	LR	BR	C	F	E	LS	SC	H	Cr	L	
20 Peace	5	100	60,0	,0	100	,0	,0	100	,0	20,0	,0	,0	20,0	,0	,0	20,0	20,0	,0	,0	
21 Human. Aid	16	6,3	100	6,3	6,3	6,3	6,3	6,3	,0	,0	,0	,0	12,5	,0	6,3	25,0	6,3	6,3	6,3	
22 Women	29	3,4	3,4	100	13,8	17,2	3,4	24,1	,0	3,4	3,4	10,3	24,1	10,3	6,9	41,4	13,8	3,4	,0	
23 Human Rights	3	33,3	33,3	,0	100	,0	,0	66,7	,0	,0	,0	,0	,0	,0	,0	33,3	,0	,0	,0	



24 Child Care	19	,0	,0	10,5	,0	100	,0	,0	,0	5,3	,0	,0	36,8	5,3	10,5	10,5	,0	5,3	,0	
25 Community	21	,0	9,5	9,5	9,5	28,6	100	52,4	4,8	4,8	4,8	14,3	19,0	9,5	33,3	28,6	33,3	38,1	,0	
26 Politics	33	24,2	15,2	15,2	24,2	3,0	57,6	100	12,1	15,2	6,1	12,1	21,2	21,2	42,4	21,2	21,2	18,2	,0	
27 Employer Rel.	13	,0	7,7	,0	,0	,0	53,8	69,2	100	,0	61,5	,0	,0	61,5	23,1	,0	7,7	7,7	,0	
28 Labour Rel.	20	20,0	20,0	50,0	40,0	10,0	5,0	50,0	15,0	100	45,0	15,0	25,0	55,0	25,0	10,0	15,0	5,0	,0	
29 Business Rel.	21	,0	,0	,0	,0	,0	9,5	,0	19,0	4,8	100	9,5	,0	23,8	,0	,0	4,8	,0	,0	
30 Consumer	3	,0	33,3	33,3	33,3	,0	33,3	,0	33,3	,0	33,3	100	33,3	33,3	33,3	33,3	33,3	,0	,0	
31 Family	12	8,3	,0	16,7	8,3	33,3	8,3	,0	,0	,0	,0	8,3	100	8,3	,0	8,3	8,3	8,3	,0	
32 Employment	14	,0	,0	7,1	7,1	,0	,0	7,1	14,3	14,3	21,4	,0	,0	100	7,1	14,3	7,1	7,1	,0	
33 Local Social P.	7	14,3	14,3	14,3	,0	14,3	71,4	57,1	,0	,0	14,3	,0	14,3	28,6	100	14,3	42,9	28,6	,0	
34 Social Cont.	34	5,9	14,7	20,6	2,9	5,9	2,9	5,9	,0	2,9	2,9	2,9	11,8	,0	8,8	100	5,9	,0	,0	
35 Housing	23	,0	8,7	8,7	,0	8,7	8,7	4,3	,0	,0	,0	8,7	13,0	13,0	13,0	30,4	100	4,3	,0	
36 Crime	2	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	50,0	100	100	,0	
37 Lodges	5	20,0	60,0	,0	40,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	,0	20,0	,0	,0	100	