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E U I W O R K I N G P A P E R N o . 4 3

BOUNDARY SPECIFICATION AND STRUCTURAL
MODELS OF ELITE SYSTEMS: SOCIAL CIRCLES
REVISITED.

by

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1. Introduction

Elites of structurally differentiated systems are generally defined as the set of incumbents of the highest positions of authority who are consequential for the collective decisions of the larger system. In local communities as in national societies the structurally differentiated subsystems are the institutional sectors like the economy, the polity or the cultural sector.

Seen from the perspective of the role prescriptions for the varying positions, authority relations are well-defined only within organizations and not across them. Insofar as the local community is constituted as a corporation, the city councillors and higher public bureaucrats can make decisions binding the community at large. They possess the final implementative resource of authority for the whole of the local community, and not only for one sector. When regarding only the role prescriptions of the normative system, then the incumbents of political positions are located at the center of the elite system.

The important point here is that an elite delineated by the positional approach is not just a set of persons but a normatively defined system with a structure of its own. To distinguish this structure from the structural models which I shall discuss later, the term "normative structure" will be used.

The above-given definition of an elite system has an important second element. The incumbents of authority positions must be influential in the decision making process. It is this second element which has caused almost all the problems in respect of an adequate operationalization of the otherwise well-defined elite concept.

The classical approach to solve this problem is to discuss the old-established question of what power really means, followed by a theory-guided decision of how to delimit the boundaries for the elite system. One solution was to ask knowledgeable about the power reputation of the original set of the positional elite and to modify this set accordingly. An alternative approach is to start with a sample of important issues and to delineate the elite as the participants in the respective decisions. In its most extreme form,

the decisional approach runs the risk of completely de-emphasizing the authority part of the elite definition. But since participating in decision processes is part of the role prescriptions of the integrative core of the normative structure, some overlap of the decision making elite with the positional elite seems unavoidable.

Laumann et al. (1980) distinguish three possibilities of specifying systems boundaries: The focus may be on actors, activities resp. events, or relationships. The positional elite is defined to actors, and additional information on the power reputation of the actors does not change this focus on them. The decision making elite is defined to issues. But when the original sample is composed of position holders who are asked about their participation in the resolution of certain issues, then, of course, the focus is primarily on actors again, and only secondarily on events.

The third possibility of defining system boundaries would be the focus on relationships; but this approach is not practised in elite research. One should not forget, however, that the other two approaches have implications for relations within the elite system. Thus, it is very likely that a joint involvement in a certain activity leads to communications between the respective actors. In addition, the positional elite is partly integrated by authority relations, even if one does not know in what way the normative structure constrains actual relationships.

Whenever one has applied one of the possible three focuses to specify the system boundaries, then a structural description of the resulting system is only meaningful in respect of the other two elements. "The choice of a definitional focus ... fixes certain features of the network while leaving the remaining features free to vary" (Laumann et al. 1980:8). Our structural description of an elite system should be based on networks of relationships within a well-defined set of elite actors.

The critical question is, what relations one best chooses for the purpose of describing an elite system. According to the definition of an elite system, collective decisions are processed by this system and the chosen relationship should, therefore, map crucial aspects

of this process. This criterion applies to influence relations. Two approaches of studying influence will be compared in this paper. In the first approach, influence is measured only indirectly via communication about issues, and an appropriate structural concept for this type of relationship is that of a social circle. By an alternative approach influence is measured more directly via the dependence of the actors. We shall compare the social circles with the structurally equivalent positions within a network of dependence relations.

There doesn't exist anything like the "real elite" which can or cannot be found by different techniques. But different techniques have varying consequences for empirical findings. At the present stage of elite research it seems necessary to become more sensitive to these consequences and this can best be achieved by applying different models to the same data set.

The data of the following analysis are drawn from a restudy of the elite of Altneustadt, seven years after the original study of Laumann and Pappi (1976). First I shall describe how the positional elite was specified. In the next section, the social circle concept is applied to this elite and, in the fourth section, it will be compared with the alternative approach of grasping the power structure via dependence relations. In the concluding section, some implications of the results will be outlined with regard to the prevailing elite models, especially the pluralist and power elite model.

2. The Positional Elite

Altneustadt is a medium-sized German city with clearly differentiated institutional sectors. As in the first study, the concept of institutional elites was used as starting point for delineating the elite system. Each sector has its own leadership positions and the set of all persons holding leadership positions form the positional elite.

The institutional elites are overlapping, because most of the elite members perform multiple leadership roles. We, therefore, defined the principle leadership position of an elite member as that one,

which ranked highest within the respective institutional sector. With regard to the principle leadership position the mayor e.g. is considered to be a member of the political system; even if he does own a small factory.

The different institutional sectors were collapsed into the following six categories: (1) the city and county administration, the city councillors and party representatives of the two major parties: the (2) CDU as the majority party and the (3) SPD as the opposition party, (4) the economic sector, (5) the sector of voluntary associations, and the (6) cultural sector with the leading personnel of the churches - the Catholic Church being the dominant one - and the educational system. The first three groups are at the center of the normative structure.

"Sector experts" were asked which persons or positions were most important for community affairs. The less important persons were eliminated from the list. The starting population for the survey consisted of 83 persons.

These persons were distributed across the institutional sectors, as shown in Table 1. Being well-defined as incumbents of authority positions, these same people may not be identical with the most influential persons. Remember that the knowledgeable were only used as sector experts. Therefore, a power reputation question was asked during the interview. The selected 83 persons themselves are used as experts to assess the influence of their elite colleagues. A list of the 83 position incumbents was presented with a request to identify those who are influential in Altnestadt.

This question generates a network of power perception among a closed set of people. The problem, of course, is whether the limits of the system defined by the researcher are also meaningful for the respondents. To present a list of position holders is a self-conscious act of the researcher to define a common frame of reference with the respondents. But given this frame of reference and a certain type of relationship, the respondents should have the possibility to correct the list, if deemed necessary. Even if the target population is delineated by characteristics of the nodes of the network, minor corrections are meaningful for particular networks when the contents

T a b l e 1

The institutional affiliations (principle leadership positions)
of the positional elite

Institutional Sector	Target population	Nonresponse	Additions ¹⁾	Completed Interviews
Public Administration	7	2	1	6
CDU	12	-	-	12
SPD	7	-	1	8
Economy	23	3	-	20
Voluntary Associations	17	1	-	16
Culture	17	1	-	16
N	83	7	2	78

1) Three or more nominations for power reputation.

of the relationship are taken into account by the respondents.

Our respondents were asked which influential persons they found missing on our list. Persons who received at least three nominations were added to the target population. According to Table 1, only two persons had to be supplemented to the surveyed population. With 7 cases of non-response, mainly from the peripheral sectors, 78 interviews could be completed.

3. The Local Elite as a Social Circle

Kadushin (1968:692) defines a social circle as a network of people sharing a common interest; the network allows for indirect communication links and the social circle is not supposed to be formally organized. The boundaries of a circle are not clearly recognizable and this causes some problems for the operationalization of the concept.

In an American and an Australian national elite study the authors operationalized the concept (cf. Moore 1978; Higley and Moore 1981). In both cases the starting population consisted of a sample of the positional elite which was supplemented by persons receiving at least three nominations as interaction partners or influential leaders. The respondents from the original sample and the supplementary group were asked in which national issue debate they were involved in most. The discussion partners of this issue were recovered by some sociometric questions and formed, together with the respondents as choosers, the network to be analysed. In the American study the network is composed of 480 respondents - out of 545 interviewees - and 396 non-respondents and the Australian network has 363 choosers and 383 chosen persons who were not included in the sample. The choosers could be selected, too, but it is remarkable how many people outside the sample received nominations. A list of the target population was not presented to the respondents and that may explain the recovery of a network with relatively open boundaries.

Social circles are parts of the larger network interconnected by short chains of interaction. The links between the nodes of the net-

work are generated by communication and are treated as being symmetric. In the national elite studies a link is supposed to be present "if at least one individual in the pair reports talking to the other and absent if neither named the other as interaction partner" (Moore 1979:679). An alternative would be to take only reciprocated choices into account. The advantage of the weaker criterion is that non-respondents can be included in the network. Thus, for instance, two respondents may have an indirect link through a non-respondent who was nominated by both of them. The only problem is that direct links among the non-respondents are made impossible by the study design. These peripheral members of the network cannot build up closely connected cliques among themselves.

The clique concept used are maximal complete subgraphs of directly connected nodes - at least three of them - which are identified in a first step by the COMPLT-algorithm developed by Alba (1972). To allow for indirect links and yet guarantee large densities, those cliques are merged whose members overlap to a high degree. The cut-off criterion, used in the national elite studies, was two-thirds. "When two-thirds or more of the members of a smaller group were also members of a larger group, the two groups were merged." (Moore, 1979: 679).

The typical result of a COMPLT analysis along these lines is the identification of a large central circle and of some smaller ones. This central circle is composed of 227 persons in the US and 418 in Australia. This result is interpreted to mean that both national elites are highly integrated systems. Higley and Moore (1981) advanced the new model of a consensually integrated elite for this type of situation.

It is sometimes argued that a snowball technique will naturally lead to the finding of an integrated network structure (cf. Laumann et al. 1980:8). Moore is eager to stress that this is not the case. Her main argument is that the different discussion topics which generate links could have led as well to a "finding of small, issue-based groups" (1979:677). But one could, of course, argue to the contrary that the merging of links, irrespective of discussion topics, into one large network wipes away all issue specific contours and

identifies a core region of persons active in several issue areas. This is of no disadvantage for the procedure, because mediating between different issue publics is one of the principal functions of the integrative core of an elite system.

In our application of the social circle concept the respondent was not allowed to choose the discussion topic most important to him, but was asked to nominate his discussion partners for the four issues identified by the researchers. These issues had raised some controversy in the community. They were selected in such a way that each institutional sector had at least one issue which especially touched upon its interests. In the resulting network a link is supposed to be present if a nomination was made by either dyad member for at least one issue.

Even if communication is intrinsically a symmetric relationship it makes a difference who addressed whom to exchange opinions or to influence the other partner. One implication of the normative elite structure is that the peripheral members have interests which they try to realize through contacts with the integrative core. Thus, one would assume that they address the integrative core more often than the other way round. To allow for this asymmetry the respondents were asked who initiated contact with them about a certain issue. This was placed as an open question at the very beginning of the interview, before the list of the target population was presented.

The resulting asymmetric communication network contains 304 links, 178 to the target population of 85 - the two supplementary persons were added here to the target population - and 126 to 85 persons outside. Judging from the way the question is asked it is not surprising that the discussion of the major local issues is not restricted to the positional elite or to the more influential persons. We shall see whether centrality in the discussion network is at least a characteristic of the powerful.

In Table 2 the network is blocked according to the six institutional sectors, with two additional blocks of non-respondents who could be or were nominated, first the 7 non-respondents of the target population

The densities of asymmetric discussion links among institutional sectors and outsiders

Nominators	Nominated Initiators						Nonrespondents			mean of out degree:
	Public Administration	CDU	SPD	Economy	Voluntary Associations	Culture	of target population	outside target population		
Public Administration	.10	.08	.08	.03	.05	.03	.02	.05	8.67	
CDU	.03	.05	.0	.03	.01	.02	.01	.02	3.17	
SPD	.00	.07	.21	.03	.02	.02	.00	.05	7.63	

Economy	.06	.08	.01	.03	.01	.00	.02	.01	3.30	
Voluntary Associations	.04	.05	.05	.02	.02	.00	.00	.02	3.38	
Culture	.04	.05	.02	.02	.01	.01	.00	.00	2.06	
Mean of indegrees	3.33	4.83	3.12	1.85	1.19	0.88	0.71	1.48		

and then 85 additional people outside, who received the above-mentioned 126 choices. The density measure is the ratio of the present links to the possible links.

The expectation that the core of the normative structure is more likely the target for communication attempts than the source of it is not corroborated by the data. The two parties and the administration are more often reported as initiators than the other elite groups. This is partly due to their tendency to nominate other members of the integrative core of the normative structure as initiators. But apart from this tendency, the three groups of the integrative core nominate the other three groups of the positional elite less often as initiators than the other way round. Thus the integrative core is not only the main target for influence attempts but its major source, too, due to its higher activity level.

When we now try to identify social circles, all links will be treated as symmetric. The overall density of this symmetric network is still rather low (0.021), but one has to recollect that the non-respondents could not choose each other. With this correction the density of the asymmetric network is 0.023 and that of the symmetric network 0.029.

Three social circles are identified, two small ones with 3 respectively 4 members, and a larger one with 44 members. This larger one can be interpreted as the central circle of the Altnestadt elite. Viewed from the perspective of the normative structure one would expect public bureaucrats and politicians to be over-represented in the central circle, but that all sectors could send at least some spokesmen of their interests to this center.

As shown in Table 3, the core of the normative structure is indeed over-represented in the central circle, but this same phenomenon applies to the other three institutional sectors of the positional elite, too. The most remarkable finding of Table 3 is that the SPD as the opposition party in the city council is more over-represented in the central circle than either the public administration, the CDU, or the economy.

T a b l e 3

Sector composition of the central circle and other elite members in Altneustadt

Sector	Central Circle			Sum %
	Members %	Peripheral Members %	Nonmembers %	
Public Administration	6.8	2.6	2.0	3.5
CDU	13.6	3.9	6.0	7.1
SPD	13.6	1.3	2.0	4.7
Economy	22.7	7.9	8.0	11.8
Voluntary Associations	11.4	7.9	10.0	9.4
Culture	11.4	6.6	12.0	9.4
Nonrespondents of target population	2.3	1.3	10.0	4.1
Nonrespondents outside target population	18.2	68.4	50.0	50.0
N	44	76	50	170

Peripheral members of the central circle have one or more connections to central members, but they were not nominated unanimously by a clique of members. Otherwise they would be part of the central circle, too. The high proportion of non-respondents among the peripheral members is, therefore, not astonishing. Most of these persons received only one nomination, and if the nominator is a member of the central circle, the nominated non-respondent is automatically a peripheral member. When he is nominated by respondents outside the central circle, then he becomes a non-member.

The central circle is indeed a relatively dense part of the larger network. Its internal density is 0.178, compared to a density of 0.016 for the non-members. The diameter of 8 as the longest geodesic within the central circle, however, seems to be of a rather long distance for indirect communication.

In order to function as an integrative core the central circle should not be specialized to discuss only one special issue, but the scope of the current discussions should be broader than that of specialized interest groups. Whether a person is reported as being active in more than one issue debate is used as an indicator in this respect. The overall discussion network contains 170 nodes but 22 of these are isolates. They are respondents who admitted that nobody had initiated discussions with them and who did not receive nominations as initiators either. Omitting these 22 persons, 54 are reported as being active in more than one issue debate and 94 only in one debate. This ratio of 0.57 becomes 2.38 for the members of the central circle.

The members of the central circle who were recruited from the positional elite are generalists to a higher degree than the members from outside the original target population. This latter group comprises 8 out of the 44 members of the central circle and these 18 per cent may be regarded as a rather high percentage because the original population was identified quite carefully. But the criterion of having a reputation of being powerful is, of course, not the same as being active in political discussions. Quite characteristically, 6 out of the 8 outside members of the central circle are typical one-issue men. They received nominations for only one issue debate

and the nominations for the other two are spread quite unevenly across the issues, too. Thus, I conclude that the central circle of Altneustadt's elite does function as an integrative core for general political discussions. That this is not a specialized discussion for a few issues is mainly due to the most central members in this network who are incumbents of leadership positions. The leaders of both parties belong to this central group. But other members of the central circle are more specialized. The boundaries of the central circle appear to be as open as those of the discussion network as a whole.

Higley and Moore use the number of nodes one can reach in one or two steps as an indicator of centrality in the discussion networks of American and Australian elites (cf. 1981:591). I computed the same measure for Altneustadt and shall compare the indicator with the indegrees of the power reputation network. This procedure will reveal the systematic differences between the alternative techniques to operationalize elite systems.

4. The Power Elite in a System of Dependencies

As mentioned in the introduction, a direct approach to measure influence is to recover it from an interactor dependency matrix. The more A is dependent on B, the more B can influence A, other things being equal. I interpret the network of power reputation as a proxy measure of interactor-dependencies. When I am asked as a member of an elite system which of my colleagues are generally very influential, then my answers will recover not only the judgements of an external expert but that of a system member who reveals on whom he feels dependent. The local elite as a social system can be defined as a set of leaders who think of themselves as mutually dependent with regard to community politics.

Dependency is intrinsically an asymmetric relationship. A can be more dependent on B than B on A. When the elite actors think of themselves as mutually dependent, then only in the sense that some direct

or indirect dependencies of varying sizes larger than zero exist.

The degree of dependency is measured only very crudely by the power reputation question. A respondent could or could not mention another elite member, depending on his personal threshold level. Even with this crude measure, there is no justification to symmetrize the matrix.

As previously mentioned, the respondents first had to choose their nominations from a list of the positional elite and were then allowed to supplement names which were not on the list. 24 additional people were nominated, two of them by three or more respondents. These latter two were included into the target population, the other 22 are non-respondents, of which two received two and 20 only one nomination. Only 6 out of these 22 were also named as discussion partners for the other network. The network of power reputation is, therefore, a relatively closed one, partly due, of course, to the list we presented. But it is also important that the frame of reference of the researchers is accepted to a very high degree by the respondents.

The collapsed cliques of a social circle are a special structural model to analyse network data. According to Burt's distinction (1980) this is an example of a relational model, where the actors are aggregated into groups when they entertain cohesive relations among themselves. An alternative would be a structural model where not only internal cohesiveness but also the pattern of relations to outgroups is taken into account. With such a positional model we can identify structurally equivalent actors within the total network. An example for this approach is the block model analysis developed by White et al. (1976).

The power structure model can be operationalized as a block of actors who are mutually dependent upon themselves and on whom the members of the larger elite system depend. By using a block model analysis I will look for a block of the power reputation network with high internal density and with an above average share of the power nominations of all other blocks.

The 22 non-respondents outside the target population who received one or two power nominations will be included in the analysis. With the CONCOR-algorithm it is possible to start from a correlation of the columns or indegrees so that it is meaningful to include the non-respondents chosen by the respondents.

The result of the block model analysis shown in Table 4 is very clear. The densities in the first column are highest: this means that the first block is not only internally cohesive but is also perceived as the most powerful by all other blocks. The members of this small group are not a random sample of the positional elite but are recruited from the top positions of the institutional sectors, with one important exception: There is not one leader of the opposition party who is a member of the power elite. The membership composition is as follows: The three top public bureaucrats, three CDU leaders including the mayor, two owners of larger local business firms, two presidents of voluntary associations, and the incumbent of the highest local authority position of the Catholic Church.

The blocks are ranked from left to right according to their mean number of indegrees. This time, persons outside the target population do only belong to the peripheral blocks.

It is remarkable how evenly the members of the central circle are distributed over the blocks. Even if the percentage of central circle members is highest for the power elite, one gets the impression that the two approaches aim at quite different power centers.

This difference between the two approaches can be studied more systematically when we compare the centrality of the elite members within the communication network with the indegrees of the same persons in the power reputation network. One would expect powerful persons outside the integrative core of the normative structure to be less well-connected in the communication network where routine politics are processed, whereas some very active and well-connected politicians may lack more substantial resources needed for their admittance to the inner circle of the powerful. These anticipated discrepancies between the two measures will not be too extensive, because the leading politicians of the dominant party should be both, central and powerful.

T a b l e 4

Density Matrix of Power Reputation Blocks and
Composition of Blocks

Nominator Blocks	Nominated Blocks						
	1	2	3	4	5	6	
1	.364	.140	.131	.095	.085	.043	
2	.314	.074	.035	.037	.045	.026	
3	.439	.126	.074	.129	.063	.021	
4	.426	.165	.139	.114	.063	.041	
5	.193	.131	.073	.037	.035	.030	
6	.294	.169	.093	.076	.122	.041	
N	11	11	18	22	16	21	99 ¹⁾
n in central circle	7	5	3	7	4	6	32 ¹⁾
n not in target population	-	-	1	3	9	9	22

¹⁾ Persons who did not receive power nominations are omitted.

The measures were correlated for 184 persons, the union of the set of nodes of the power reputation and of the discussion network, and for 67 persons who form the intersection of elite members having indegrees larger than 1 in both networks. In Figure 1 the relationship is shown only for the intersection, that is the original target population, without the isolates in one or both of the two networks.

The overall correlation is a moderate $r = 0.43$ for the large group and an even smaller $r = 0.33$ for the intersection. These moderate to low correlations fit the general interpretation quite well that the two measures touch different aspects of influence. According to our expectation, the elite members with relatively more power reputation than centrality do not stem, with one exception, from the integrative core of the normative structure. Interestingly enough, the exception is the Landrat of the county of Düren, whose office is outside the city of Altneustadt.

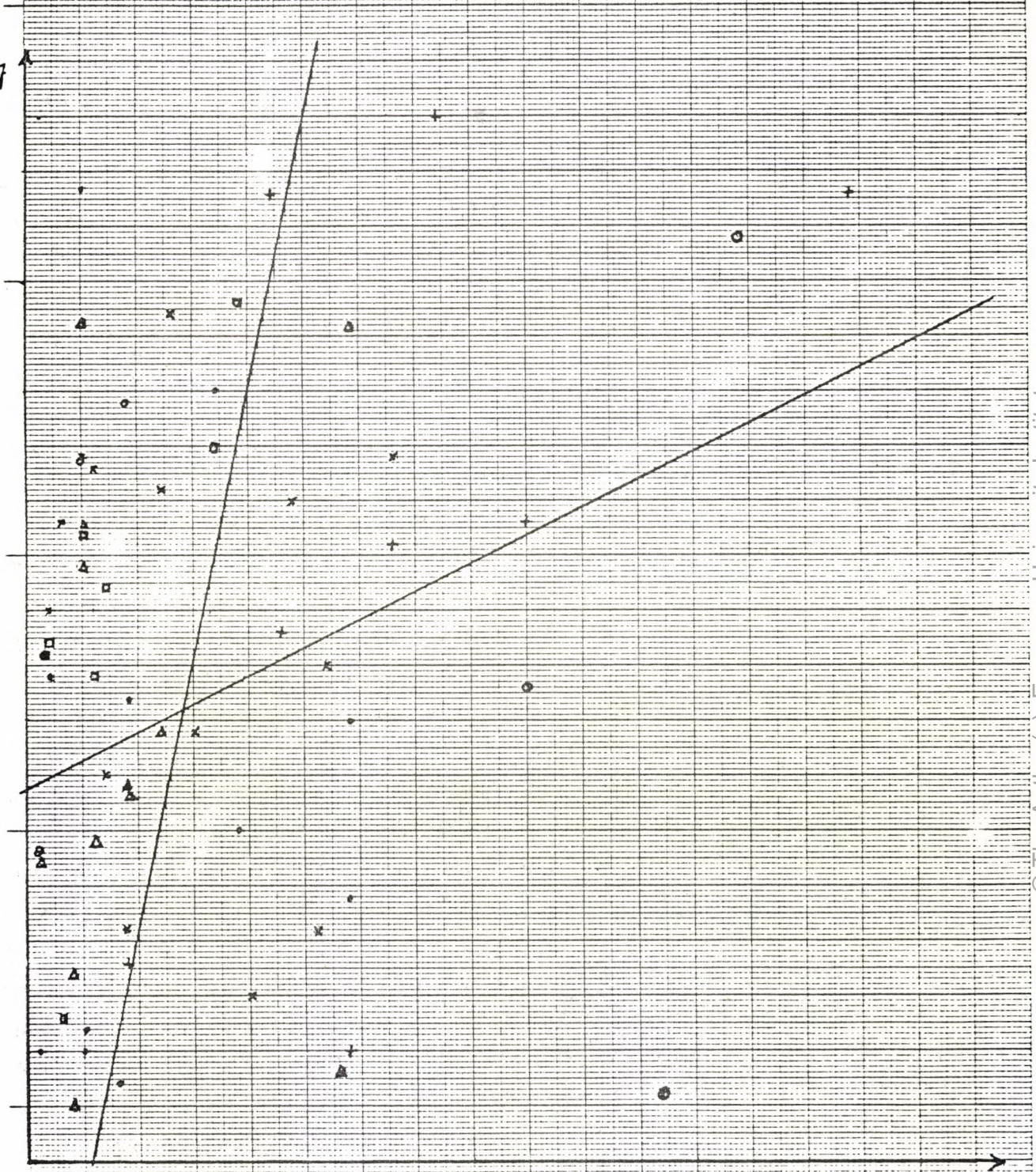
Among the well-connected relatively powerless persons the SPD politicians play a prominent role, whereas for the CDU leaders power reputation and communication centrality are more in line. Of the 9 persons ranking high on both measures, 5 are CDU leaders, 2 are businessmen, one is the highest public bureaucrat of the city and one is coded as a member of the sector of voluntary associations, even if one of his positions is that of FDP party leader. The elite members who rank low on both measures stem mainly from the peripheral sectors of culture and voluntary associations. Compared to these two less prominent sectors, the members of the economic sector impede any attempt to classify them. They are quite evenly scattered across the diagram.

When comparing the two measures one should not forget that a high rank on the power reputation scale depends solely on the answers of the other elite members, whereas high centrality can be a consequence of one's own name-dropping procedure. A person can become central because he himself nominates many other important persons. This is a consequence of the way in which the communication network is symmetrized. The degree of centrality within the communication network appears to be inflated to an unknown degree.

Figure 1

Centrality in discussion network and power reputation of the positional elite

Centrality \uparrow



Power reputation

- Public Administration
- + CDU
- SPD
- * Economy
- △ Voluntary Associations
- Nonrepresentative
- Culture

5. Discussion

Can the elite system of Altneustadt be characterized as a consensually integrated elite or as a system dominated by a power elite? It would, of course, be very disappointing to learn that the answer is completely predetermined by the applied analysis strategy.

Higley and Moore characterize the consensually integrated elite as "an inclusive network of formal and informal communication, friendship and influence-wielding among top position holders in all major elite groups ..." (1981:584). Because influence-wielding is not a symmetric relationship, I argue that the central circle of a general symmetric discussion network cannot be easily interpreted as an indicator of this type of an elite model. A central circle recovered from a general discussion network, fits in my opinion, the power imagery of the pluralists. The issue specific contents are lost because the different issue debates are collapsed into one general discussion. What remains is the everyday process of political discussion in a pluralist system devoid of deep cleavages.

Such a central circle can coexist with the power elite we identified. This group must not necessarily be united in its major policy options; it may function more like a clearing house for the interests of the different institutional sectors than as a closed group which can enforce its well co-ordinated politics upon the rest of the elite and the community at large. But this group is located at the apex of the power pyramid. If an elite is defined as consisting of positional leaders who are consequential for collective decisions, then one cannot do without a measure of dependency. The hierarchical aspect of dependency takes priority over the centrality aspect of communication.

A dependency relation between a pair of actors has only unambiguous consequences for a successful influence-wielding when there are no alternative relations. If the less powerful can realize his interest in alternative exchange relations in which both partners are power equals, then he will refuse to exchange with the more powerful.

Generally, one could argue that an analysis of the direct and indirect dependencies only makes sense for a well-bounded system where not every actor can look for outside alternatives. If a researcher is able to construct a relatively closed network he can recover the core of the elite system by applying the positional approach to a dependency matrix. If he cannot enforce clear boundaries, then a social circle analysis is an appropriate relational model to apply.

References

- Alba, Richard D., 1972: COMPLT - A program for analyzing sociometric data and clustering similarity matrices. *Behavioral Science* 17:566
- Burt, Ronald S., 1980: Models of network structure. Pp. 79-141 in A. Inkeles, N.J. Smelser, R.H. Turner, eds., *Annual Review of Sociology*, Vol. 6. Palo Alto, Cal.: Annual Reviews Inc.
- Higley, John, and Gwen Moore, 1981: Elite integration in the United States and Australia. *The American Political Science Review* 75 (September): 581-597.
- Kadushin, Charles, 1968: Power, influence and social circles: A new methodology to study opinion makers. *American Sociological Review* 33 (No. 5): Pp. 685-699.
- Laumann, Edward O., and Franz U. Pappi, 1976: *Networks of Collective Action: A Perspective on Community Influence Systems*. New York: Academic Press.
- Laumann, Edward O., Peter V. Marsden, David Prensky, 1980: The Boundary Specification Problem in Network Analysis. Revised version of a paper presented at a Conference on Methods in Social Network Analysis, Laguna Beach, CA, April 13-16, 1980.
- Moore, Gwen, 1979: The structure of a national elite network. *American Sociological Review* 44 (October): 673-692.
- White, Harrison C., Scott A. Boorman, Ronald L. Breiger, 1976: Social structure from multiple networks. I. Blockmodels of roles and positions. *American Journal of Sociology* 81 (January): Pp. 730-780.

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