

Balance and classification

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Abstract

This paper addresses a classic sociological concern: the entanglement of social structure and mental classifications. It shows how the network structure of affections among a set of professionals shapes and is shaped by the ways in which these people identify and label subgroups among themselves. Furthermore, it discusses how general social distinctions enter into this process, causing the structure and classifications to reproduce general social distinctions. A case study of Dutch literary criticism is used to support these claims.

The paper exploits the well-known property of balance theory to refer to tendencies at the micro (individual) level and, at the same time, to blockmodels at the meso (group) level. In longitudinal signed digraphs, tendencies at the micro level can be captured by logistic regression models predicting the sign of a relation from the (balanced, clustered, or rank-clustered) structure of the sender's (extended) ego-network. Blockmodels capture partitions of opposing plus-clusters in the overall signed network. A classification labeling subgroups reflects plus-clusters that emerge from the balance-theoretic tendencies at the individual level. Once communicated, however, the classification influences action at the micro level because the professionals tend to adjust their affections to it. General social distinctions, especially when they play a role in the discussion among professionals, enter into this process at the micro and meso level.

Introduction

Emile Durkheim distinguished between two types of solidarity: mechanical solidarity based on shared classifications and organic solidarity connected to economic specialization (Durkheim 1971, 1912¹; Durkheim and Mauss 1903); collective behavior either stems from collective classifications, e.g., collective schemes of perception and appreciation, or from economic interdependencies. According to Durkheim, mechanical solidarity characterizes primitive societies whereas modern societies are based on organic solidarity.

At present, the Durkheim's types of solidarity are taken for granted but his historical division is not. Mary Douglas, a leading anthropologist, claims that the two types of social commitment exist alongside each other in modern society (Douglas 1986: 96). In her attack on rational choice as the predominant force in contemporary society, she makes a strong case for the important role that classifications play in society. Institutions produce collective classifications that direct individuals' actions and the actions reinforce or modify the classifications and the institutions. Thus, people shape institutions and institutions shape people through classifications.

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"Naming is only one set of inputs; it is on the surface of the classification process. The interaction that Hacking describes goes round, from people making institutions to institutions making classifications, to classifications entailing actions, to actions calling for names, and to people and other living creatures responding to the naming, positively and negatively." (Douglas 1986: 101-102)

This conviction is shared by current institutional trends in sociology, for instance, by Walter Powell and Paul DiMaggio who baptized the New Institutionalism in sociology (Powell and DiMaggio 1991). They stress the importance of rules, implicit behavioral scripts, and classifications to social behavior (DiMaggio and Powell 1991), taking the professional field rather than the organization as the natural setting of a specific institutional repertoire of action and classification, which are sometimes referred to as an institutional logic (Friedland and Alford 1991).

Their choice of the word *field* reflects their affinity with Pierre Bourdieu, who conceptualizes society as a set of nested fields. Each field has its own history and forces but they are all affected by the basic forces in the most general field, called the social field or the field of power (Bourdieu 1993). General social distinctions that are connected to objective power relations – being dominant or dominated – affect the practice within each embedded (professional) field, where these effects are translated and transformed into symbolic capital leading to success or failure (Bourdieu 1990). Here, Bourdieu stresses the importance of classifications, which are part of the actors' habitus (e.g., see Bourdieu 1986).

Combining these approaches, a rather complicated model of social action emerges. In a professional field, individual action (at the micro level) is dynamically linked to collective action at the (meso) level of the field: action gives rise to classifications that denominate classes, groups or identities within the professional field and at the same time the actions conform to existing classifications. However, this cyclic process is not disconnected from general social distinctions, which direct individual action at the micro level as well as collective classifications at the meso level. How can we conceptualize and test this model in empirical research? This paper attempts to provide an answer to this question.

A structural model for action and classification

The institutional model connects several levels of analysis. At the microlevel, individual action and social-psychological processes count, whereas classifications are operative at the field (meso) level and at the macro level of the entire society in the case of general social distinctions such as gender, age, class, and ethnicity. Network theories have been proposed as a potential solution to the problem of connecting the micro and macro level (Collins 1988: Ch. 12, p. 411-448) and some structural models have been proposed but few have actually been tested.

This paper presents and tests a structural model for a particular case, namely a field in which evaluation is a major type of action: the literary field. Note that this model focuses on interaction as the central action at the individual level: one person evaluating the literary merits of another person's work. As a result, network analysis can easily be applied. Since evaluations can be modeled as affective relations with a positive or negative value (assuming that neutral evaluations are negligible), balance theory can be applied, which is known to apply to both the micro and meso (group) level.

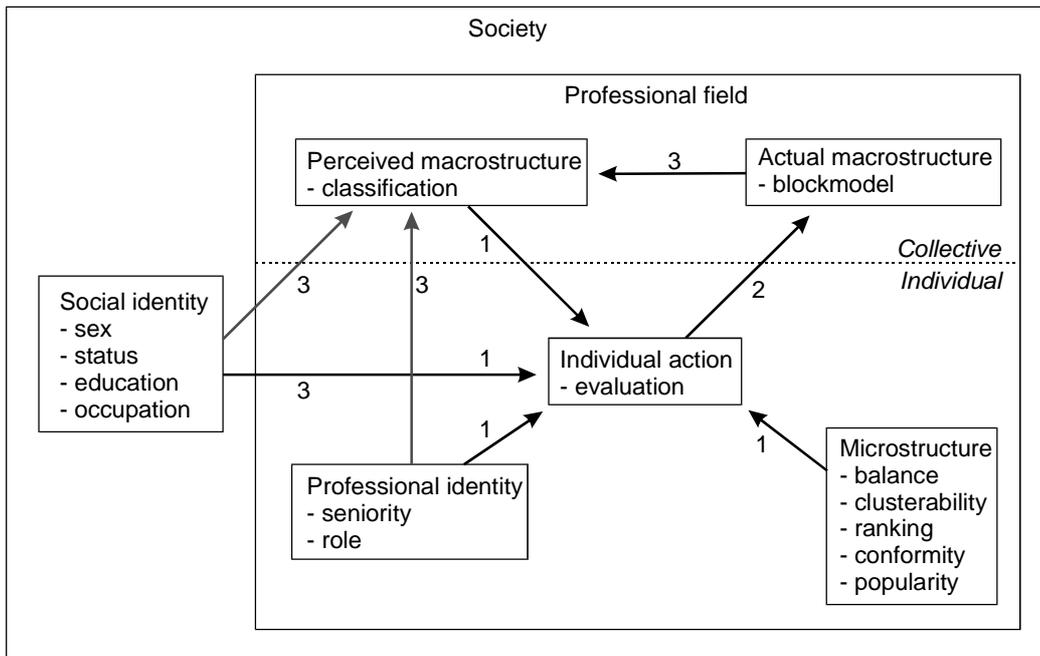


Figure 1 - A structural model of interaction and classification.

At the micro level, social-psychological theory predicts a tendency toward balance: people prefer a situation in which they agree with their friends or in which their friends' friends are their own friends (Heider 1958). Translated to networks, this implies that people prefer balanced semicycles, namely semicycles with no or an even number of negative arcs, over unbalanced semicycles. If a person is free to choose between a positive and a negative affection or judgment, he or she will choose the evaluation which will yield most balanced semicycles and least unbalanced semicycles.

In Figure 2, for instance, critic 1 is going to evaluate author 1 (gray arc labeled by a question mark) in a little network containing two authors and three critics. The solid arcs represent previous positive judgments and the dotted arcs represent negative evaluations. If the critic only takes into account his or her direct relations, a negative evaluation would create a balanced dyad, that is, a balanced (semi)cycle of length two, because author 1 has passed a negative judgment on critic 1 before. A positive evaluation would yield an unbalanced (semi)cycle, so balance theory predicts a negative evaluation here. Longer semicycles, e.g., the semicycle involving critic 1, author 2, and author 1, can also be taken into consideration. In this example, most of the longer semicycles need a negative evaluation from critic 1 to author 1 in order to be balanced. According to balance theory, we expect the critic to pass a negative judgment here.

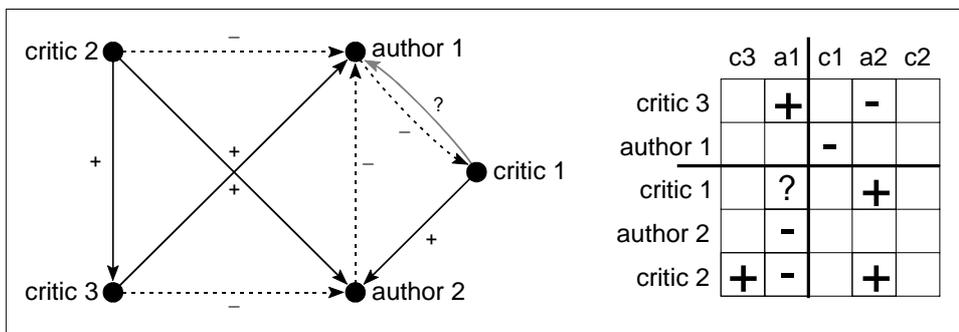


Figure 2 - A network of affect relations as a signed graph and a matrix.

In this paper, I count the number of balanced semicycles that are created if an actor passes a positive judgment and the number of balanced semicycles created by a negative judgment. I subtract the latter from the former to obtain the prevalence of balanced semicycles if a positive judgment is passed. A positive index indicates that a positive evaluation produces more balance than a negative evaluation, so balance theory predicts a positive judgment. According to balance theory, a negative index would be likely to yield a negative evaluation. In the current example, the index is -2, indicating that a negative arc is more likely because it produces more balance than a positive arc at the micro level.

In principle, the maximum length of semicycles can be raised to a level such that all semicycles and all actors in the network are included. This, I think, is not a good option if we want the semicycles to measure microstructure. For substantive and practical reasons, I restrict the analysis to semicycles of maximum length four. The shorter the semicycles, the more they represent the local structure around an actor. Since direct evaluations among authors and critics are relatively rare, however, the shortest semicycle is often of length four: including two authors and two critics. Substantially, it makes sense to pay attention to these semicycles because they express the position one critic takes vis-à-vis another critic.

In addition to balance, several other balance-theoretic models have been proposed that can be identified by particular types of semicycles, notably the model of clusterability (Davis 1967) and ranked clusters (Davis and Leinhardt 1972; De Nooy 1999b). These models are used in the analysis, but I will not go into detail here. Suffice it to say that all models predict the sign of an evaluation from the structure of the local network around the judge and the person judged. In addition, some dyadic structural effects will be included: conformity, which merely predicts that the evaluation will have the same sign as a previous evaluation, and popularity, predicting a positive evaluation of someone who receives a lot of attention (many evaluations). Reciprocity, another well-known dyadic effect, is not taken into account because very few evaluations are reciprocated in the network studied here.

Tendencies toward balance at the individual level have known consequences for the structure of the entire network. At the meso or group level, balance produces one or two clusters of vertices such that all positive lines are found within clusters and all negative lines are situated between clusters. This pattern is best represented by a matrix, in which all actors are the entries of the rows and columns and each cell represents the relation from the actor in the row to the actor in the column. In Figure 2, the matrix represents the same network as the one drawn as a sociogram. The sociogram contains a positive arc from critic 3 to author 1, so the matrix contains a plus in the cell at the intersection of the first row, representing critic 3, and the second column, representing author 1.

The matrix is sorted and two fat lines separate the first cluster, containing author 1 and critic 3, from the second cluster, containing author 2 and critics 1 and 2. This clustering or partition divides the matrix into four blocks and we can easily see that the blocks representing the relations within clusters, the so-called ‘diagonal blocks’, contain positive arcs as required by balance theory. Since the new evaluation, which is marked by a question mark, is situated in an off-diagonal block, it connects members of different clusters, so it should be negative according to balance theory. From a meso level perspective, taking into account the structure of the entire network, critic 1’s evaluation of author 1 should be negative in order to conform to a balanced macrostructure.

The partition of the matrix into clusters and blocks together with the criteria of balance theory that blocks along the diagonal contain all positive arcs and blocks off the diagonal

contain all negative arcs, is called a *blockmodel*. In our example, this blockmodel does not fit perfectly because there is one positive arc in an off-diagonal block: the positive evaluation of critic 3 by critic 2. Positive arcs in off-diagonal blocks and negative arcs in diagonal blocks contradict balance theory. If the tendencies toward balance at the individual level are not very strong, several ‘offending’ arcs are found in the blockmodel and the blockmodel may well display a structure that is not discernable in the microstructure of every individual, so the overall structure may play a role on its own.

As shown in Figure 1, the blockmodel summarizing the overall structure of the network is hypothesized to influence the classifications that are produced within the field. According to this model, members of the field try to survey the factions that develop in the network and take them into account when they classify themselves and their peers into categories. Classifications can be formal, e.g., official classifications produced in organizations, or informal, e.g., circulating in conversations and communications. In this paper, published classifications of authors according to literary style or movement are investigated. They clearly seem to be attempts at ordering the field and some of them were vehemently discussed, which shows that they were felt to be important.

Once published, the classifications feed back into the action at the micro level when people accept the identities suggested by the classifications and adapt to them. According to the homophily principle, an actor is expected to like or relate to the people that are classified similarly. The homophily principle also applies to professional (in this case literary) characteristics and social characteristics of the judge and the person judged. If like prefers like, we should expect high odds for positive evaluations between similar people and higher odds for negative evaluations between people with different characteristics. In addition, characteristics that imply ranking, e.g., social status, may lead to behavior characterized as status solidarity, status competition (Merton 1973), or status respect. In the model, I distinguish between field-specific properties, reflecting a person’s position within the professional field, and general social characteristics, which reflect distinctions in society at large.

In the model, social and professional characteristics may have a direct and indirect impact on the classifications. Affecting the interaction at the micro level, e.g., people from the same social class relate more positively, factions in the overall network shall reflect the characteristics and a classification based on this structure shall also reflect them in its clustering but not necessarily in the names that it attaches to the clusters. In addition, people may directly incorporate social and professional characteristics in the classifications they propose when they attribute literary quality and characteristics to professional or social features.

Summarizing the argument, then, I model the relation between micro, meso and macro structure as a dynamic interplay between social and professional attributes, the local structure of the network, individual interaction, overall structure of the network, and classifications. A clear-cut structure at the level of the field does not emerge automatically; it requires deliberate action, e.g., public statements on its stratification. Interpretations of the structure by individuals and their strategies determine the evolution of the network as much as it is constrained by its existing shape and by general social distinctions. This model incorporates the dynamic, cyclic character of (inter)action and classification stressed by Douglas as well as the refraction of general social distinctions within a professional field introduced by Bourdieu. It resembles the models proposed by Ronald Burt (Burt 1982) or Alain Degenne and Michel

Forsé (Degenne and Forsé 1999: 10) with an emphasis on the role of culture and social classifications rather than rational goals.

The case

In the previous sections, I hinted at the kind of network which I will use for testing the model of the micro-meso-macro link proposed in this paper. The data are evaluations among literary authors and literary critics in The Netherlands in the 1970s. In this case, the meso level is the literary field and the microstructure is the immediate context of previous evaluations involving an actor directly or indirectly. The Dutch literary field of the 1970s is an interesting case because there were several public attempts at describing its structure according to literary movement and style by its members, some of which raised reactions and one classification even stirred a debate within the field in 1977. It was a turbulent period with a large influx of new authors and critics in the system. For a more extensive description, see (De Nooy 1991 and 1999a).

The literary field is embedded in Dutch society, which passed through an important transition in this period. Due to what was called the democratization of the educational system, the number of students participating in higher education grew rapidly and children from less privileged social strata started to participate in it at an unprecedented high level. These students gained access to the universities by means of a relatively new type of secondary education (HBS) that was less elitist than the older 'gymnasium.' Many of them studied Dutch language and literature, during which they made their appearance as an author or critic in the literary field. Some of them made a living in journalism or commercial copywriting in the upcoming advertisement and market research business. They advocated the virtues of commercial or reader-oriented writing within the literary field. Although these lower class writers were initially welcomed in the literary field, most of them had fallen from grace near the end of the decade. Their disqualification seems to result from an institutional reordering of the literary field in which published classifications according to movement or style play an important role.

I selected all literary authors who appeared in at least one classification according to movement or style published in the 1970s. Most of the authors made their appearance in the 1970s, so they are beginning authors. Next, I collected all evaluations in reviews and interviews passed on or by these authors. Then, I added the critics and authors who evaluated them to the case and I collected the evaluations among them in reviews and interviews, totaling forty authors and critics (see the Appendix in De Nooy 1999a). Finally, I coded the judgments on the basis of three categories: positive (+1), neutral (0), or negative (-1). The judgment score was based on explicit evaluations of and connotations associated with the critical terms used. Neutral evaluations are disregarded in the analyses. In addition, I focus on the evaluations published in the second half of the decade (1975-1980) because the number of authors active in the first part of the decade, the number of classifications and evaluations are rather low.

Results

The analysis consists of three steps, which are identified by the numbers in Figure 1. In the first step, the sign of the evaluations is predicted from the microstructure, professional and social characteristics of the two persons involved in the evaluation, and from previously published classifications. This analysis shows the impact of these factors on the (inter)action

at the micro level. In the second step, the overall structure of the network of evaluations is determined with a blockmodeling procedure. This is done for one crucial moment within the period, namely the middle of 1977, just before the publication of three classifications and the ensuing debate on literary movements. In the third step, the classifications published in the second half of 1977 are related to the blockmodel of the overall network structure and the social or professional features of the persons classified. Can we predict the classification from these factors?

Analysis of the interaction

In the analysis of effects on individual behavior, the sign of the evaluation passed is the dependent variable. This approach is slightly different from regular statistical modeling of social networks, e.g., with p^* models (Wasserman and Pattison 1996) or Markov Chain Monte Carlo simulation (Snijders 2001), which intend to explain the presence or absence of a relation. In contrast, I assume that the relation is present – X will evaluate Y – and I try to explain the sign of the evaluation. There is a substantive reason for this approach. The appearance of a new book by an author is normally the occasion for a critic to publish a review or an interview with an author. Therefore, the publication of books largely determines the presence and absences of evaluative ties. The sign of the evaluations, however, is not fixed by these circumstances and it may well be guided by balance-theoretic considerations.

Logistic regression is used for predicting the (log) odds of a positive evaluation over a negative evaluation. A positive effect of an independent variable signifies that a higher score raises the odds that a positive evaluation is passed whereas a negative effect implies that a higher score increases the likelihood of a negative evaluation. The sign of the evaluation is predicted by a series of variables representing the microstructure, a variable related to previously published classifications, and variables related to the social or professional attributes of the two persons involved in the judgment. I will describe these variables now in more detail.

The local or microstructure of the network around the judge and the person judged is primarily measured by semicycle counts which express the amount of balance, clusterability, or ranking (the judge ranks himself or herself under the person judged) introduced by a positive evaluation in contrast to a negative evaluation. The conformity variable merely shows the sign of the previous evaluation (if any), predicting that the new evaluation will have the same sign, and popularity is measured as the number of evaluations that the person judged has previously received. For these variables, evaluations of the previous 24 months were used. Results for shorter periods, viz., 12 and 6 months, were compared and yielded similar but weaker effects because the network was even more sparse. In order to analyze evaluations in 1975, evaluations in the preceding two years were included in the data set. As noted before, semicycles up to and including length four were counted.¹

The impact of previously published literary classifications is measured as the number of times that the judge and person judged had been assigned to the same literary movement or style minus the number of times they were assigned to different style groups. This follows the logic of the variables representing balance and clusterability: if a positive evaluation conforms more to the clustering suggested by the literary classification, the variables have a positive value and a positive evaluation is expected, whereas they have negative values predicting a

¹ The tedious task of counting semicycles and calculating the variables was executed automatically by a software program (operating under Windows 95), which is available from the author of this paper.

negative evaluation if a negative evaluation produces a local structure conforming to the classification. Therefore, a positive effect of the classification variables on the sign of the evaluation shows that the evaluation conforms to the literary classification.

The social and professional attributes of the two persons involved in the evaluation are used to compute a similarity score or a ranking for the pair. If the judge and the person judged have the same sex or the same type of occupation (commercial copywriting versus other professions), they score '1' on the variables, otherwise they score '0'. A positive effect of these variables on the sign of the evaluation indicates homophily: higher odds for a positive evaluation among similar people. The type of education, the seniority (period in which the person made his or her appearance in the literary field), and the literary role (less creative as a critic to more creative as an author) are translated into a ranking of the person evaluated (the head of the arc) over the evaluator (the tail of the arc). If the evaluation is passed on a person with a more elitist education, a more creative role, or younger than the person passing the judgment, the variables have a positive score ('1'), whereas the opposite situation creates a negative score ('-1'). If the two persons have the same characteristic, a neutral score ('0') is assigned. Finally, the commercial success, indicated by the highest number of reprints of an author's books, is introduced in the analysis as a property of the person who is being judged.

As explained above, each positive or negative evaluation published in 1975-1980 is a case in the analysis. The number of evaluations found in this period is 328, but due to missing values on some of the independent variables, 237 evaluations are included in the logistic regression analysis. Repeated evaluations – a person evaluating another person more than once in this period – occur infrequently: of the 232 ordered pairs, 168 (72%) pass judgment only once and less than 3 percent produce are involved in more than three evaluations. There seems to be no need for multilevel analysis here.

Table 1 - Effects on the sign of the evaluation (logistic regression , N =237).

Independent variable	B	S.E.	Exp(B)	Sig.
To person of the same sex	1.226	.402	3.409	.002
To person with more elitist education	.580	.252	1.786	.022
To person with the same type of occupation	1.410	.365	4.095	.000
To person with less seniority	.478	.231	1.614	.039
To person with more creative role	.540	.243	1.716	.027
To person classified in the same literary group	.496	.240	1.643	.039
Commercial success (max. reprints) of head	.025	.066	1.025	n.s.
Popularity of head	.028	.037	1.029	n.s.
Conformity to previous evaluation	.283	.326	1.327	n.s.
Balance	.039	.017	1.039	.024
Clusterability	.042	.029	1.043	n.s.
Ranking (deference)	.061	.062	1.063	n.s.
Constant	-2.094	.542	.123	.000

Cox & Snell R Square .27, Nagelkerke R Square .37, accuracy of predicted sign increased from 65% (all positive) to 77%.

Table 1 summarizes the results. Although many significant effects are found, the explanatory power of the regression model is limited as expressed by the moderate values of the approximation of R square. Attributes and microstructure steer the sign of the evaluation in the predicted direction but they are far from determining it. Keeping this in mind, we see that the expected homophily effects of social identity (sex, type of occupation) and literary

classification occur. We should note that the positive effect of previous classifications only surfaces when social characteristics are included in the analysis. This indicates that classification according to literary style or movement corrects general social effects: given a slight preference for people with the same sex and occupation or with a 'better' education, common literary classification explains a positive judgment among people that differ on these attributes.

The expected status effects also appear. The odds of a positive evaluation increase if the evaluation is directed toward a person with a more elitist education or a more creative role, that is, from a critic to an author. In addition, there is a tendency for people to judge more mildly on members with less seniority, that is, people who made their appearance later in the literary field. This may relate to the idea of newcomers to be rather critical of the older and established colleagues. No effect, however, was found of commercial success, not even in interaction with social or literary background characteristics, which contradicts Bourdieu's idea of the literary field as an 'economic world reversed' (Bourdieu 1983).

Balance is the only local structural variable that exerts an influence on the evaluations: actors prefer balance over unbalance. Note, however, that conformity, clusterability, and ranking also have (marginally) significant positive effects but these effects disappear when the literary attributes (notably same role, same class, younger levy) are introduced. This suggests that these structural effects result from a general positive attitude of critics towards authors, members within a literary group, and seniors toward juniors. Interaction effects between on the one hand structural variables and on the other hand social and literary attributes do not produce interesting results. The tendency toward ranking has a significant negative interaction effect with the type of occupation variable, suggesting that the odds of passing a positive judgment among members of the same profession is lower if that would rank the sender under the receiver of the evaluation. Including these interaction effects, however, weakens the main effects of sex and seniority, which is quite incomprehensible.

Analysis of the overall network structure in the middle of 1977

The logistic regression analysis explores the relation between a literary classification, representing perceived macrostructure, and individual action. It does not, however, test the relation between a classification and actual macrostructure, that is, the overall structure of the network. Do classifications actually reflect macrostructure? In order to answer this question, we must first investigate the structure of the overall network. Which opposing factions are found and do they reflect social and literary attributes?

As noted before, we investigate the network structure in the middle of 1977, just before the publication of three classifications, which aroused a debate in the literary field. We taken into consideration the evaluations passed in the two years preceding July 1977 in order to obtain a network that is not too sparse. Figure 3 shows this network in an optimized layout. From this Figure, it is evident that the structure is quite complicated and we need a method to analyze it. I applied the optimization approach to partitioning signed networks into plus clusters developed by Pat Doreian and Andrej Mrvar (Doreian and Mrvar 1996). The penalty on a negative arc within a cluster is set higher than the penalty for a positive evaluation between groups ($\alpha = .7$) because negative evaluations seem to be more discriminating. The vertices outside the network's bi-component are excluded. Note that this method does not test whether there is a structure of opposing factions; it merely identifies the most likely factions if the researcher instructs it to find a particular number of clusters.

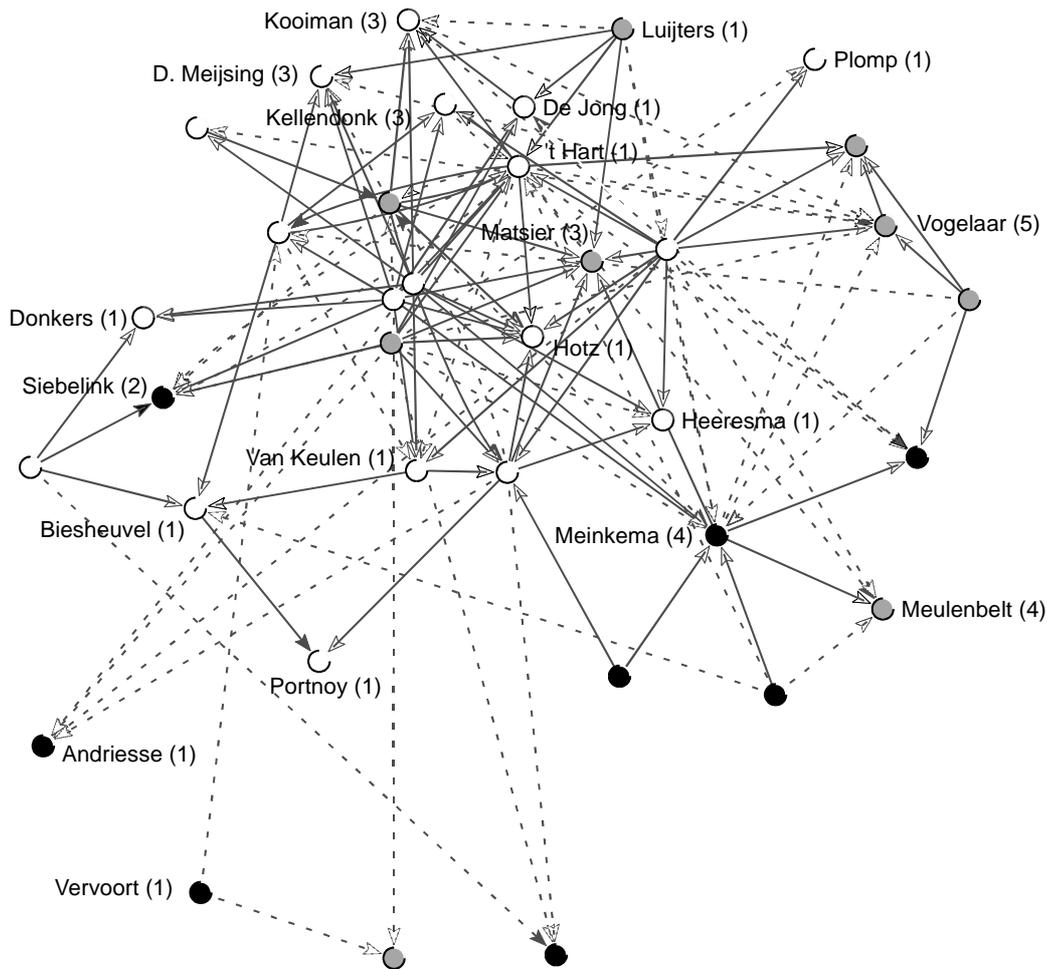


Figure 3 - Balance clusters (vertex color) and literary classes (numbers) in the mid-1977 network.

Table 2 shows the optimal solutions ranging from two to six clusters. The solutions with four or more clusters yield many solutions that display one large split and many minor splits involving just one or few people if the different solutions are combined in a hierarchical cluster analysis. In addition the error score hardly decreases with more than three clusters. Therefore, I selected the model with three clusters and I joined the six equivalent solutions into one clustering by means of hierarchical cluster analysis. The colors of the vertices in Figure 3 reflect the final clustering.

Table 2 - Balanced clusters in the network's bi-component (N= 36, alpha = .7, 10,000 iterations).

# Clusters	# Solutions	Error score	Size of clusters
2	3	12.8	13-23, 12-24
3	6	10.0	9-19-8, 7-9-20, etcetera
4	55	9.7	6-18-5-7, 8-18-8-5, etcetera
5	30	9.7	4-18-5-5-5, etcetera
6	36	9.7	2-2-18-5-5-4, etcetera

The balanced clusters show little identity with respect to the clustered persons' social and literary characteristics. The background characteristics improve accuracy of the predicted cluster in the blockmodel with no more than 7 to 9 percent. Cluster 1 contains relatively many copywriters from lower class origins and less elitist education, who started their career in the first half of the seventies. Cluster 2 is rather high class and cluster 3 is marked only by higher seniority within the literary field. We may conclude that social and literary attributes,

which have a weak effect on the evaluations, are at best very loosely associated with the overall network structure that results from these evaluations.

Table 3 - Association between balanced clusters and the persons' literary or social characteristics.

Background variable	N	Uncertainty coefficient*	Comment
Sex	36	.01	
Social class parents	27	.09	Cluster 1: lower class, cluster 2: higher class, cluster 3: middle class
Profession parents	25	.03	
Education type	29	.07	Cluster 1: less elitist education
Profession type	35	.07	Cluster 1: more commercial copywriters
Role (author-critic)	36	.02	
Levy	33	.07	Cluster 1: 1970-75, cluster 3: pre-1970

* The clustering of the authors and critics is the dependent variable.

Determinants of literary classifications

According to our model (Figure 1), classifications according to literary style or movement reflect overall group structure and social or literary features of the classified people. In order to test this hypothesis, I joined the three classifications that appeared in the second half of the 1970s. Since each classification involves a small number of authors (a maximum of fourteen), it was necessary to join the classifications in order to include as many authors as possible. The resulting classification contains 21 authors divided into five clusters, three of which are classified in an unambiguous way (cluster 5 - Vogelaar; 2 - Siebelink & G. Meijnsing; 3 - Kooiman & Kellendonk & Matsier & D. Meijnsing), and two clusters containing at least one author who was grouped differently in the three classifications (cluster 4 - Meulenbelt & Meinkema; cluster 1). In Figure 3, the names of the classified authors and their literary cluster number are included. Note that G. Meijnsing is not represented in the figure because he could not be clustered in the blockmodel.

Table 4 - Literary classification, blockmodel and background characteristics.

Variable	N	Uncertainty coefficient*	Comment
Blockmodel	20	.29	Balance cluster 2 predicts classification 1 (mainstream)
Sex	21	.15	Literary class 4 is female
Social class parents	20	.22	Literary class 3 from higher class
Profession parents	20	.05	
Education type	18	.22	Literary class 3 with elitist education
Profession type	21	.13	Literary class 1 contains the commercial copywriters
Role (author-critic)	21	.13	Author-critics in literary classes 4 and 5
Levy	21	.22	Pre-1970 levy in lit. classes 1 and 5, 1970-75 levy in lit. classes 2 and 4, post-1975 levy in lit. class 3

* Literary classification is the dependent variable.

The balance blockmodel helps to distinguish the mainstream (cluster 1, known as the 'Dutch realism'), which includes the commercial copywriters, from the smaller, more specialized literary style groups (Table 4). Two of the smaller groups are socially marked by an elitist education and higher class origins (literary class 3, the 'academists') or by a specific sex (class 4, the 'feminist writers'). The blockmodel of overall network structure has the largest – albeit moderate – impact on the classification, suggesting that people proposing classifications take into account polarized factions within the network. Due to the small number of cases,

however, it is not possible to tell whether this effect is entirely separated from the effects of the other variables. However, the fact that the association is markedly stronger than in the analysis of the blockmodel (group structure), indicates that social characteristics of the authors have a direct effect on the classifications besides an indirect effect by way of the blockmodel.

Conclusion

This paper aims to apply and test some core concepts in institutional approaches to society and professional fields. One central idea is the dynamic interplay between different levels: action at the individual level, structure and classifications at the group or field level, and general social stratification at the macro level. People's actions respond to the identities created by shared classifications and doing so they strengthen or modify the classifications. General social distinctions enter this cycle both in the individual action and in the creation of identities by means of communicated classifications.

The literary field is an interesting case for testing these ideas because the 'making of names' is paramount here. It is probably for this reason that classifications according to literary style or movement play an important role; they assign names and literary identity to authors. The results presented in this paper corroborate the dynamic interplay between interaction at the individual level and structure at the group level, namely network structure and literary structure nominated in public classifications. Local network structure guides the action of the individual, who tends to prefer a balanced situation. As a result, the overall network structure may consist of opposing factions, which are more apparent if local balance tendencies fuel a process of polarization, which seems to be the case in the period studied here (see De Nooy 1999a). Classifications partly reflect factions in the overall network structure and, in turn, they affect the action at the individual level. The cycle is closed and it may go on and on but we must realize that it does not represent a deterministic process. The effects are weak so there is a lot of room to maneuver.

Social and professional characteristics of the people involved in the action further shape the outcome of this cyclic process. Through principles of homophily and status respect, social and professional distinctions channel the action at the individual level and through a process of attribution these distinctions are incorporated in the classifications. Thus, social stratification penetrates the process structuring the literary field even though the field's members claim this to be a purely literary process. As a result, people from different social backgrounds tend to be grouped within the field, yielding them a favorable or unfavorable position. In principle, the general social hierarchy may be reversed within a professional field, but in the case studied here, the newcomers from lower class origins and nonconforming professional orientations seem to be the losers in the end. The literary field remains in the hands of the elite and the ones that respect the elite.

Perhaps it is possible to apply a similar model to other professional fields in which classifications are subject of discussion. The main lesson that may be learned from this case study is that one should model the action at the individual level as interaction. This choice allows for the application of network analysis, linking local structure to blockmodels of overall structure. This also applies to unsigned networks if one replaces the semicycle counts by other local structures such as reciprocity, transitivity, and asymmetry.

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