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CONTINUITIES IN THE STUDY OF ROLE
DIFFERENTIATION.

The University of Nebraska - Lincoln,
Ph.D., 1974
Sociology, general

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CONTINUITIES IN THE STUDY OF ROLE DIFFERENTIATION

by

Paul L. Riedesel

A DISSERTATION

Presented to the Faculty of
The Graduate College in the University of Nebraska
In Partial Fulfillment of Requirements
For the Degree of Doctor of Philosophy

Department of Sociology

Under the Supervision of Professor Jerry S. Cloyd

Lincoln, Nebraska

May, 1974

TITLE

CONTINUITIES IN THE STUDY OF ROLE DIFFERENTIATION

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CONTINUITIES IN THE STUDY OF ROLE DIFFERENTIATION

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University of Nebraska, 1974

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A variety of theoretical problems and issues in measurement regarding functional differentiation in task-oriented groups are investigated in this study. Bales' equilibrium theory has underpinned most subsequent research in this area, yet there has been no systematic refinement of that theory nor verification of a critical assumption. Parallel to those problems are some unresolved questions about appropriate measurement techniques.

Sociometric data from 88 sessions of student discussion groups were used to test several hypotheses. The basic measures of functional differentiation were obtained by use of Burke's factor-score procedure. Other variables were measured through experimental manipulation or sociometric and evaluative questions.

Evidence supported the proposition that role differentiation can be separated analytically from leadership differentiation. It is further shown that the indicators used by Bales for expressive and instrumental prominence and for function differentiation are of poor quality and should be discarded. His use of popularity

scores to measure expressive prominence is especially prone to difficulties.

A revised version of the equilibrium theory is proposed which incorporates and organizes previous research generalizations. Many of the earlier findings are not replicated, though inequality of participation and low ranking consensus continue to be important conditions in the development of functional differentiation. These factors are believed to be significant in disturbing the supposed equilibrium between instrumental and expressive problem solving.

Further testing cast considerable doubt on the accuracy of Bales' theory. According to the logic of the theory, disturbance of the equilibrium which is not accompanied by the compensation of functional differentiation results in disharmony and impairs problem solving. This implicit assumption has not been subjected to a test before. Data from the present study indicate that, under presumably disequilibrating conditions, the differentiation of leaders or roles has a minimal effect on the group's ability to deal with its functional imperatives. The credibility of the theory must therefore be questioned and re-affirmed before it can justifiably be used for the purpose of explanation.

Acknowledgements

It is difficult to acknowledge adequately the intellectual debts one accumulates in the course of a graduate career. I obviously owe a great deal to Professor Jerry Cloyd for directing the dissertation project and patiently reading the manuscript through various drafts. He and Professors Nicholas Babchuk and J. Allen Williams, Jr., share much of the credit for the readability of this final version. Any remaining obscurities are due only to my own unbridled prose. Professor Alan Bates provided candid but very helpful criticisms of the dissertation proposal which prompted me to clarify my thinking and revise the research strategy. Their multi-faceted assistance is hereby acknowledged.

I also must thank Professor Hugh Whitt and my colleague Patricia Harvey for their cooperation in making their students available to me for the experimental discussion groups. It goes without saying that the present study would have been impossible without this cooperation. My gratitude also goes to most of the 160 or so students who took part in the study by attending and doing as they were asked.

One person, more than any other, enabled me to complete this dissertation and graduate program. Through her great patience with a preoccupied researcher, her

own intellect, and her willingness to endure the penury of graduate student life Joyce Riedesel has made a unique and irreplaceable contribution to whatever I am or may be. In quite other ways, Arthur and Ruth Riedesel nurtured with love and encouragement the standards of self-discipline, open-mindedness and intellectual excellence which necessarily guide and propel the successful scholar. I cannot repay these people with words, but any fame or fortune I should acquire will always be in part theirs.

PREVIEW

CONTINUITIES IN THE STUDY OF ROLE DIFFERENTIATION

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CHAPTER ONE

The Theory of Functional Role Differentiation

I Introduction

The purpose of this dissertation is to explore theoretical gaps in the study of instrumental-expressive role differentiation. Traditional assumptions and methods of measurement are called into question and critically analyzed. These and other issues are tested through an experimental study of task-oriented discussion groups. This first chapter defines the basic terms of the field and surveys the theoretical and research literature on functional role differentiation. In the second chapter, major problem areas are identified and hypotheses are drawn. The methods of the experimental study are outlined in the third chapter. Following that are three chapters devoted to the three basic issues--the causes and conditions of role differentiation, the measurement of role differentiation, and the consequences of role differentiation. However, we must begin by explaining our terms.

II Definitions

Role. The concept of "role" is used in numerous, sometimes conflicting fashions by social scientists. Levinson (1959: 170) describes three alternative usages which all have some currency: roles as structurally

given demands (norms), roles as the group member's definition of what he is to do, and roles as the actions of individual group members. Anthropologists and structural-functionalists have made the most use of the first definition while those of symbolic-interactionist inclinations have preferred the second. However, the third usage is the one characteristically found in experimental studies of small group structure. Slater (1955: 300), for example, proposes that role be defined as "a more or less coherent and unified system of items of interpersonal behavior." The present study will take the term role to mean one's enacted behavior in a social context--one's role performance.

Role specialization and differentiation. A set of roles in one social system are specialized to the extent that their behavioral contents are dissimilar. Dissimilarities range from the trivial to those of extreme importance, though the particular focus of the researcher is central to the demarcation of the trivial from the non-trivial. We are concerned here with functional differentiation, a subtype of role specialization. Roles in a social system which vary not only in behavioral content but which also have fundamentally different consequences for the operation or maintenance of the group are functionally differentiated. Bales (1953) speaks of a group in which roles are specialized, but

not functionally differentiated, as a simply organized group. The criterion of a simply organized group is that when members are ranked with respect to their contributions to significant group functions, the rank orders are the same.

Two focuses of inquiry have been brought to bear. To ask if group members are making unequal contributions to different group functions is not to ask whether the major contributions to different functional problems are being made by the same or by different persons. The first of these questions is one of role differentiation; the second is one of leadership differentiation. This distinction is important, yet students of functional differentiation have confused the two concepts while claiming to extend a single theory. We will review the literature pertaining to both types, however, as both offer ideas about the dynamics of function differentiation.

Dimensions of functional differentiation. The separation of instrumentally- and expressively-oriented behavior has occupied the attention of most students of functional differentiation. A review of the writings of Robert F. Bales will best explain the meanings of these terms. In 1950 he published Interaction Process Analysis in which both a new category rating-system and a variety of theoretical ideas were introduced. Four

functional problems with which groups need to deal were identified: instrumental, adaptive, integrative and expressive problems. Bales further refines the scheme by extracting two axes--an expressive-instrumental dimension and an adaptive-integrative dimension. The original meanings of the first pair were expressed in this way (Bales, 1950: 51):

If the act is judged by the observer to be steered by cognitive orientation primarily to the past, or if it is felt to be caused in a nonmeaningful manner by some existing state of emotion or motivational tension in the self, and if the results which follow it are judged not to have been specifically anticipated by symbolic manipulation, we shall speak of the act as primarily expressive. On the other hand, if the act is judged to be steered by a cognitive orientation to the future as well as the past and to be caused in part by anticipation of future consequences, we shall speak of the act as instrumental.

Adaptive activity relates to the situation external to the social system; integrative activity relates to the situation within the social system. The same book also introduces the "task" and "social-emotional" terms, but in a different context. In a later paper (Bales, 1953) Bales' category system is labeled as having "Expressive-Integrative Social Emotional" and "Instrumental-Adaptive Task" areas. Through a process of terminological shorthand, the functional problems have been reduced to the instrumental versus expressive or task versus social-emotional.

In a joint publication by Parsons and Bales, the terms were more specifically defined. Parsons (1955) writes that the instrumental-expressive distinction is essentially the same as the external-internal distinction made by Homans (1950: 81ff). In Parsons' (1955: 47) words:

The area of instrumental function concerns relations of the system to its situation outside the system, to meeting the adaptive conditions of its maintenance of equilibrium and "instrumentally" establishing the desired relations to external goal-objects. The expressive area concerns the "internal" affairs of the system, the maintenance of integrative relations between the members, and regulation of the patterns and tension levels of its component units.

These notions are not developed any further by Bales or Parsons, but subsequent study into functional differentiation has been grounded on this last conception.

These dimensions have been used as theoretical constructs and have not been directly "proven" to exist. However, several factor analytic studies support the validity of the instrumental-expressive distinction. In an effort to specify a minimum number of action dimensions along which group activity takes place, Carter (1954), Mann (1961) and others have isolated factors which are clearly analogues of instrumental activity and expressive activity. These analyses typically employed a large number of items of sociometric and observational data. Such findings, while strictly empiri-

cal, support the theoretical distinction between the two functional areas.

III Original Research Findings and Explanation

Bales "discovered" functional role differentiation in the early 1950s and first reported this finding in a 1953 working paper entitled "The Equilibrium Problem in Small Groups." Although it was a serendipitous discovery, role differentiation could be fit into the equilibrium theory which Bales was developing at the time. It will be necessary to review this initial theory in order to understand its subsequent development.

Bales' method of Interaction Process Analysis (IPA) includes a dozen behavioral categories into which observed behavior is classified. It is possible to record the running sequence of act types and hence, patterns of proaction and reaction. According to Bales (1953: 121):

...an act which is a direct continuation by the same member who has produced the last act is called "proactive." An act which follows immediately the last act of another member is called "reactive."

When organized into matrices, it is possible to see the probability of a given act-type following another. In the Bales data, matrices of reactive tendencies (when action changes hands) and of proactive tendencies (when one person continues action) are quite different. When action change hands, it is assumed that the new actor

is initially reacting to the stimuli of the previous actor's last act; as he continues, however, his action tends to be directed more toward achievement of group goals. To use terms introduced in section II, proaction proved to be of a much more instrumental and adaptive quality. Reaction is of a more expressive-integrative nature, and hence the equilibrium problem becomes evident.

Instrumental-adaptive activity, though moving toward solution of group problems, is said to induce certain tensions into the social system. If the equilibrium is to be maintained, there must be sufficient expressive-integrative activity to counter the disruptive forces of goal seeking. Yet to emphasize only the latter means neglecting goal attainment. Bales (1953: 123) notes that "The dilemma of all action systems is that no one disturbance can be reduced without creating another." In this way, Bales both predicts and explains the instrumental-expressive cycle of interaction. This theory of equilibrium was later applied on the level of role behavior, but only after a series of experiments. We will make future reference to this theory but will first outline the studies.

Bales turned his attention to the total of interaction engaged in by group members--their enacted roles. He speculates that the most prominent pro-actor, if his

or her contributions are beneficial, will be reinforced and to continue doing so. The status of prominent pro-actors will presumably rise as they act to solve the functional problems of the group. This is a form of role specialization; one person, who is most active, does the most to achieve group goals and is the sociometric star as a result of his or her efforts.

However, empirical findings did not support this predicted structure. Bales reports data from five-man groups discussing human relations problems. Post-test sociometric votes for best idea contribution and group guidance were used as indicators of instrumental prominence while votes on liking and disliking were used to measure expressive prominence. However, most-active members were not rated as the best liked even though they were ranked highest on the instrumental criteria. Rather, the second-most-active persons were rated higher on the expressive criteria but surprisingly lower on "ideas" and "guidance." These facts led Bales (1953: 147) to conclude that "there must be something about high participation and specialization in the technical and executive directions which tends to provoke hostility." He believes that this differentiation is just another response to the equilibrium problem. The appearance of an expressive specialist or leader separate from the most active, instrumental leader is a

means of coping with the inherent tension between the two functions.

According to the theory which Bales then states, especially active persons in task-oriented groups upset the equilibrium by pressing too hard in the instrumental direction. If they continue at this high activity level, expressive problems become more acute. Others may resent this person's monopolization of the group's time or they may not be as motivated to pursue the group goals. As a consequence, this over-activity upsets the equilibrium. Some kind of compensation is then necessary if the group is to avoid disintegration and ineffectiveness. The differentiation of an expressive leader from the instrumental leader is a prime mechanism for re-establishing equilibrium. There is an alternative which Bales discusses also. Instead of hostility being turned on the most-active member, it may be "displaced" on the least-active member. This process is called scapegoating and is inferred from the fact that in Bales' groups the least-active members had the highest "dislike" scores.

The theory of equilibrium as it applies to leadership differentiation may be summarized in this manner:

1. The attainment of group goals and the satisfaction of individual needs are complementary but conflicting problems for task-oriented groups. Activity to deal with both of them is necessary, but it must be balanced.

Imbalance (disequilibrium) impedes the satisfaction of all functional problems

2. Uneven participation in task activity disturbs the equilibrium between instrumental and expressive functioning.

3. The disturbance makes expressive problems more pressing, resulting in special structures to deal with those problems.

4. The principal special structures are scapegoating and the differentiation of instrumental and expressive leaders.

5. If the disturbance is not dealt with, the effectiveness of the group is impaired and satisfaction of members is reduced.

The theory and generalizations upon which it is based have been enlarged through additional work by Bales and Slater (1955; Slater, 1955). In these later studies an important control variable is introduced: consensus in role perception. This was measured by the degree of agreement between group members in the sociometric ratings assigned. Bales and Slater (1955: 274) state:

Role [leadership] differentiation in the fully developed sense rests on the existence of a culture common to the members of the system. The expectations members have as to the specialized roles each will perform are only a part of the common culture, but they constitute an important part of it. Possession of a common culture, in turn, implies some degree of consensus

The content of the roles in question must be recognized in a uniform fashion if evaluations of role playing are to be possible. Specifically, group members who are asked to rate each other on the performance of an abstract function must share a common perception of what

it is they are ranking. If they actually have a consensual understanding of the criteria, non-uniformities in ranking will be due solely to differential evaluation of member activity and not to varying conceptions of the criteria for evaluation. Recognizing this important factor, Bales analyzes his experimental groups by their degree of status consensus. Seven groups are rated as high and seven as low on status consensus ratings in the 1955 papers.* Five ranking dimensions are used and each is treated as a separate role (Ideas, Guidance, Liking, Talking and Receiving). It is not always made clear, but it should be recalled that Ideas and Guidance were originally conceived as components of instrumental-adaptive prominence. They are jointly labeled as "task characteristics" in the 1955 papers, but Idea leadership is apparently taken as the preferred measure of instrumental role taking. Rates of talking and receiving were established by observation while the others are based on sociometric votes.

A number of measures show the differentiation and yet simultaneous interdependence of instrumental and expressive leaders. Table 1-1 illustrates the development of leadership differentiation over time. The overlap between instrumental and expressive leadership diminishes

*Kendall's Coefficient of Concordance (W) was computed for two of the post-test rankings and averaged to yield the status consensus score.

Table 1-1

Percentage of cases in which the same man holds top position on Liked rankings and either Idea or Guidance rankings at the same time, by sessions

Coincidence Between:	Sessions			
	1	2	3	4
Ideas and Likes	52.1	8.6	16.4	8.6
Guidance and Likes	34.3	25.0	12.1	23.6

From Bales and Slater (1955: 278).

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with time, especially with Ideas. The import of this finding is that functional differentiation is a concomitant of group structuring and organization. This time-series only represents four contact periods within a three-week time span; presumably, established groups will be differentiated to a more extensive degree.

Table 1-2 shows in more detail the relationships among the five dimensions used in the study. It enumerates the degree of overlap between the top positions. The most striking item is the low rate of overlaps with popularity. Liking (strictly speaking an indicator of expressive prominence) is then interpreted as the most highly differentiated role. If one is the best liked person (expressive specialist), one has little more than a random chance of being the instrumental specialist. Bales and Slater hold to the tenet that task specialists are the object of affective ambivalence. Generally, a separate social-emotional specialist is present so two hierarchies are identifiable: one for instrumental contributions and one for expressive contributions.

The data which Bales and Slater originally presented did not indicate uniform functional differentiation. A new series of experiments which Bales directed was able to account for some of the variation in the rate of differentiation. "Feedback" became a control variable. Bales (1956) discusses research by Leavitt and Mueller

Table 1-2

Percentage of Total Number of Sessions (56 sessions)
in which the Same Person holds Top Position
in two rank orders at the same time

High Status Consensus Groups					
	T	R	I	G	L
Talking		55.3*	69.6*	36.1	22.5
Receiving			46.4*	43.2*	33.2
Ideas				52.1*	27.5
Guidance					38.6
Liking					

Low Status Consensus Groups					
	T	R	I	G	L
Talking		57.1*	39.3	42.9*	33.2
Receiving			26.8	39.3	40.4
Ideas				55.3*	15.4
Guidance					8.9
Liking					

*Chance expectations for each cell is 24.6% for High groups and 22.5% for Low groups. Those percentages significantly higher than this chance expectation, using a Chi square criterion, are followed by an asterisk in the tables.

From Bales and Slater (1955: 289).

(1951) which showed that persons in communication structures who were least able to reciprocate (feed back) information from others showed more hostility toward others. Less hostility was evidence by persons who could "feed back acknowledgements, questions, or negative reactions to the sender." The relevance for Bales' work is direct. Talkative instrumental leaders, by their dominance of group activities, preclude extensive verbal reactions from below. Following the reasoning from the Leavitt and Mueller experiments, Bales predicted more differentiation where the feedback was limited.

Evidence collected from 30 five-man groups supported the suggestions made. Feedback ratios for all members were established by dividing the number of acts received by the number of acts received (R/I ratio). It was found that persons with low R/I ratios (talked a lot, listened less) did receive a greater degree of disliking. For these persons the correlation between activity and liking is reported to be near zero. With persons of higher R/I, the correlation becomes positive. The association between Ideas and Liking also varies between subpopulations; the higher the R/I ratio, the higher the correlation. This is consistent with the equilibrium theory summarized above. Uneven participation seems to be the prime impetus of function specialization and differentiation.