The Effects of Differential Evaluations on Status Generalization*

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This research examines the nature of the evaluation process that underlies status generalization. Expectation-states theory presents a formal theoretical explanation of how and why status characteristics initiate inequalities in power and prestige. A central concept in this formulation is the differentially-evaluated characteristic, which allows for generalization to specific performance expectations. The assumption that status generalization rests on such a systematic evaluative process, rather than on some capricious or arbitrary operation, has not been demonstrated. Experimental tests of the organizing effects of differentiated and undifferentiated or nonevaluated characteristics confirm the prediction that the existence of a differential evaluation is a necessary condition for the formation of status-based inequalities in power and prestige. The related yet qualitatively different problem of the effects of total ambiguity on actors' attributions is also examined. Experimental results suggest that this situation is not equivalent to that of either undifferentiated or equating characteristics. Discussion of the relevance of these outcomes for the explanation of status generalization directs attention toward the nature and genesis of the stereotypical beliefs peculiar to different status characteristics.

This research studies one of the most pervasive and best-documented of sociological phenomena: status generalization. People often respond to an individual on the basis of stereotypes that have collected concerning the individual's status group identification. When that response is unfavorable, we call the process discrimination. The nature of the status group may be an ethnic, religious or cultural minority, an age group, or some condition of physical or mental disability; all are empirical instances of status generalization, and it is likely that similar attributional processes underlie each.

Our research was designed to investigate two related problems. First, under what conditions will people make attributions concerning the abilities of a specific individual, given only information regarding that individual's status group identification? More specifically, what is it about status group identification that leads to inequalities in observable power and prestige? Secondly, what kind of attributions will be made under conditions of total ambiguity, that is, where no information whatsoever is available?

Research on attributional processes in the expectation-states tradition (Berger, Fisek, Norman, & Zelditch, 1977) has suggested that the presence of a differential evaluation is a necessary condition for a status characteristic to initiate inequalities in power and prestige. By differential evaluation we mean that one state of a characteristic is more highly valued than another. Height is a differentially evaluated characteristic if it is "better" to be tall than short.

While the problem of the necessity of differential evaluation is a crucial issue theoretically, it is of great practical importance as well. A fundamental issue under study here is *why* status characteristics serve to initiate inequalities in power and prestige. Are such inequalities the result of some systematic, evaluative process? Or does the power of status conceptions to organize social interaction owe to some capricious or arbitrary oper-

ation? The answers to these questions could have profound implications for social programs designed to alleviate social inequalities based on ethnicity or sex.

THE PROBLEM

It is well known that many kinds of characteristics serve to initiate general evaluations of those who possess them. In Western society, ethnicity or skin color is perhaps the best known of such characteristics, although the effects of sex, age, education and occupation are probably no less pervasive. Obviously, the nature of the evaluation may vary from culture to culture—contrast the stereotypes of the elderly in North American and Oriental cultures, for example. The *nature* of these differential evaluations is a matter of parameter estimation—of inference to empirical populations. Our concern here is with the *theoretical* relationship of the abstract concept of status to inequalities in power and prestige.

Sociologists have long been interested in the ability of such status characteristics to organize social interaction (Simmel, 1908) but only recently have come to understand how this happens (Berger, Conner & Fisek, 1974; Berger, Fisek, Norman & Zelditch, 1977). A body of literature known as expectation-states theory has presented a formal theoretical explanation of this status generalization process. The theory claims that if a status characteristic is the only means of differentiating among a group of individuals, then the hierarchy of power and prestige that develops among those individuals will be consistent with the differential states of that characteristic. This effect is postulated to occur even if the status characteristic has no explicit task relevance. Experimental evidence (Moore, 1968; Berger, Cohen & Zelditch, 1972; Freese & Cohen, 1973) confirms this prediction. (For a comprehensive review of the expectation-states literature, see Webster & Driskell, 1978.)

Our focus here is on the role of differential evaluations in the status generalization process. In its present form, expectation-states theory holds that,

given the existence of a differentially-evaluated characteristic, the formation of specific performance expectations (SPE) is essentially a systematic, evaluative process on the part of the attributor. When a differentially-evaluated characteristic becomes salient in a task situation, the expectations initiated by that differential evaluation generalize to the specific abilities that the focal actor p believes are instrumental to task success. Once these SPEs are formed, they structure subsequent interaction.

The presence of the differential evaluation, therefore, is seen as a necessary link between a status characteristic and the formation of an SPE. The reasons for this linkage become clearer when we consider the metatheories on which expectation-states theory is based, namely the social attribution and balance perspectives. Lacking information about the direct relevance of the abilities of p' and o to the task at hand, p turns to the less-relevant but readily available information contained in the status characteristic. The information conveyed by the differential evaluation associated with a status characteristic is used by p to create SPEs in an effort to structure an ambiguous setting. In fact, it is probably the differential evaluation (and not the status characteristic itself) that is generalized to form the SPE.

In the elementary status situation, therefore, we predict that the existence of a differential evaluation is a necessary condition for inequalities in power and prestige to result.[1] At the same time, we predict that a characteristic which is *not* accompanied by a differential evaluation will function as an equating characteristic; that is, there will be no inequalities of power and prestige between actors possessing different states of the characteristic.[2]

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[1] We say "necessary" because the presence of a differential evaluation is clearly not by itself a sufficient condition for the initiation of power and prestige inequalities. In Freese and Cohen's (1973) study, for example, a differentially-evaluated status characteristic (age) did *not* organize the power and prestige ordering because it was simultaneously contradicted by a general performance characteristic.

[2] Obviously, an undifferentiated or nonevaluated characteristic is not a diffuse status characteristic;

We should point out that our notion of an undifferentiated characteristic is theoretically distinct from that of an equating characteristic (cf. Webster, 1977), although their effects on interaction under certain conditions may be similar. An undifferentiated characteristic discriminates among actors without implying valued inequalities among those actors with respect to that characteristic. An empirical instance of such an undifferentiated characteristic might be hair color. Although social actors may perceive differences in hair color among the members of a group, it is unlikely that those actors will perceive that difference as holding any particular social significance. Consequently, differences in hair color would probably not lead to inequalities in power and prestige.

An equating characteristic, on the other hand, *is* differentially evaluated, but all actors in a particular task group possess the same state of that characteristic. Such a characteristic may or may not affect interaction, contingent upon the availability of other cues in the task setting. At least two studies (Freese & Cohen, 1973; Webster, 1977) have examined situations in which both differentiating and equating characteristics are present; in each case, the results suggest that the equating information is ignored in favor of differentiating characteristics with greater task relevance. Unfortunately, we have no data concerning the role of equating characteristics when (a) no other characteristics are present or (b) other available characteristics are of equal task relevance.[3]

A related problem studied here is the situation in which no information about actors is available. How do social actors make attributions of ability under conditions of total ambiguity? Some of the expectation-states literature seems to imply that actors will attribute average abilities to themselves and to others under such conditions, and that the no-information condition is a kind of baseline with which other conditions might be compared. This assumption has important implications for the development of mathematical models of the status generalization process and deserves empirical study.

This no-information condition is, in our minds, a qualitatively different problem than those with which the expectation-states literature has dealt in the past. We suspect that the only possible source for the formation of SPEs in this situation is the actor's set of self-conceptions, unlike all previously published studies, which have provided at least one objectively meaningful cue from which attributions might be made. In the absence of formal theory we will refrain from making specific predictions, but we do not necessarily expect this no-information situation to be equivalent to the undifferentiated conditions discussed above, partly because research in the area of subjective probability suggests that actors "respond differently when given no evidence and when given worthless evidence" (Tversky & Kahneman, 1974:1125), and partly because of Sell and Freese's (1977) findings of differential response patterns by high and low status actors.

METHOD

To study the effects of undifferentiated status characteristics and the effects of no information, we created 115 collectively-

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such characteristics, by definition, possess differential evaluations.

[3] Freese and Cohen (1973) created three sets of complementary conditions. In their HS and LS conditions subjects were equated on sex, differentiated on age, and received no information concerning a general performance measure; in HP and LP conditions, subjects were equated on sex and age but differentiated on general performance; in HS–LP and LS–HP conditions, subjects were equated on sex, but differentiated on both age and general performance. Their results suggest that subjects ignored the age and sex (status) information in all but the HS and LS conditions; that is, they ignored the equating information when differentiating characteristics were present.

Webster (1977) created six theoretically distinct

conditions. In four of these conditions subjects received information on two general performance measures (MI and RI) of unknown task relevance and one specific task ability measure (CS) of direct task relevance. In Experiment I, all subjects in these conditions were assigned "average" scores on the general performance measures, but opposite scores on the specific task ability. Webster's (1977:44–46) results also suggest that the equating characteristics were ignored.

oriented task groups composed of two persons, each motivated toward success. Subjects were female undergraduate volunteers, aged 18–25, paid for their participation. Depending upon which of five conditions a subject was randomly assigned to, she found that in relation to her partner she possessed (1) a nondifferentially-evaluated "alpha" state of a social characteristic; (2) a nondifferentially-evaluated "beta" state of a social characteristic; (3) a differentially-evaluated (low status) "alpha" state of a specific status characteristic; (4) a differentially-evaluated (high status) "beta" state of a specific status characteristic; or (5) no information concerning her partner.

Upon arrival each subject was seated in a small room equipped with a two-way video and audio communications system. A research aide explained that all further communication with the subject would be over this system, and after having paid her a nominal sum left the room. Throughout the experiment the subject neither saw nor had direct communication with her partner, nor was she led to expect such contact at any time in the future.

Another experimenter then appeared on the television screen and explained that the subject would be taking part in two separate studies. The first study required the subject to take a test, supposedly measuring an ability known as "Modes of Perception." This test involved determining which geometric figure predominated on an ambiguous arrangement of differently shaped figures. Fifteen test slides were presented. Upon completion of the test, a research aide collected the forms. After a short delay the experimenter came back on the screen and gave the subjects their test performance results.

Having completed the "first" study, the experimenter continued with instructions for the "second" study. The study was described as an experiment examining how effectively two people could work together on a task while communicating over a two-way video system. The task involved forming relatively "uncommon words" from groups of sixteen letters that appeared on the screen. The rules for the task were ambiguous enough to permit the formulation of almost any word. The object of the task was for the team to correctly form as many "uncommon words" as possible.

As each set of letters appeared on the screen, subjects could make suggestions for words. These suggestions were then ostensibly relayed by the research aide to the subject's partner, who could either accept or reject the suggestion. This decision was then reported to the subject who made the original suggestion. The suggestion itself represented an influence attempt requiring either acceptance or rejection. If a subject accepted a word, she was influenced; if she rejected a word, she was not influenced. The word task consisted of 30 such trials, and a measure of influence as an indicator of power and prestige was computed by finding the proportion of trials on which the subject was influenced.

The manipulation of the differential evaluation was conducted prior to beginning the word task. Scores on the "Modes of Perception" test were communicated by the experimenter to the subject. This information was presented over the television screen with scores written on a chalkboard by the experimenter. Based on these results, the subject learned that she possessed an "alpha" or "beta" perceptual style, while her partner possessed the other perceptual style.

Conditions (1) and (2) required that the status characteristic have no differential evaluation. The experimenter, therefore, emphasized that no known differences in skills or abilities were associated with either alpha or beta modes of perception. They simply represented two different styles of perceiving one's environment. In conditions (3) and (4), the status characteristic was given a differential evaluation. The experimenter explained that previous research had found a difference in the accuracy of people's perceptions. Those possessing a beta mode of perception were said to be superior in perceptual sensitivity to those possessing the alpha mode. Condition (5), the no information condition, differed from the other condi-

tions in that nothing was said concerning "Modes of Perception" or any other characteristics of the subjects.

After the test feedback, each subject was instructed on the word task that she was to perform in cooperation with her partner. Subjects, however, never interacted with real partners. All interaction was controlled by the experimenter according to a set of random word suggestions. Fifty per cent of all word suggestions by subjects were accepted according to such schedules.

After the task was finished, each subject completed a debriefing questionnaire and was interviewed at length. The purposes of these procedures were (1) to determine if a subject had violated any of the theoretical or empirical conditions of the experiment, and (2) to give a complete explanation of the experiment and its purpose.

It should be noted that the design of the experimental test departs from previous expectation-states research in two respects: first, the creation of a nondifferentially-evaluated status characteristic required the development of a new manipulation in the form of the "Modes of Perception" test; secondly, the task was constructed to more closely resemble the give-and-take of social interaction. Instead of creating a forced disagreement situation (as in previous expectation-states research), subjects worked together on a task, accepting and rejecting the suggestions of the other. This group task provides a more "realistic" interaction setting for the measurement of influence differences than the more traditional Interaction Control Machine (ICOM) scenario (cf. Berger et al., 1977:47).[4]

RESULTS

A total of 115 subjects took part in the experiment, but 29 of these were either suspicious of the experimental procedures or failed to understand the experimental

instructions.[5] Because these subjects failed to meet the conditions specified by the theory, they were dropped from subsequent analyses. This left a total of 85 subjects randomly assigned to the five conditions.

Table 1 presents the mean rate of influence (proportion of partner's suggestions that were accepted) for each of the five conditions. This influence measure (R_i) is different from the p(s) measure generally employed in the expectation-states literature in that it measures *acceptance* of influence as opposed to *rejection* of influence. R_i is, in the dyadic case, the complement of p(s) [$R_i = 1 - p(s)$], but we have chosen to report our findings in terms of R_i for two reasons. First, the use of R_i reflects the fundamental shift in the design of the experimental task from the ICOM scenario. In the ICOM setting the subject can either reject, accept, or ignore the influence attempt; in the present experiment, the subject cannot ignore the influence attempt. Because of this factor, we decided to return to the more common measure of acceptance of influence (R_i) rather than rejection of influence (p(s)). Second, R_i is the measure generally employed in behaviorist theories of small group structure (see, e.g., Gray & Sullivan, 1978) and its use here may facilitate theoretical integration.

An examination of the influence rates presented in Table 1 shows that the predictions concerning the effects of the differential evaluation were confirmed. The influence rates in the "alpha" and "beta" undifferentiated conditions are .757 and .712, respectively, a difference that is probably caused by sampling error as shown by the Mann-Whitney U-test in Table 2.

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[4] Detailed research protocols are available upon request.

[5] The data for these 29 subjects were excluded for the following reasons: failure to complete 30 trials of the experimental task because of time constraints (n = 6); suspicion of experimental procedures (n = 5); P−centric or competitive (n = 6); failure of the manipulation (n = 6); failure to understand instructions (n = 6). Although specific statements of subject exclusions are seldom reported, these figures seem to be comparable to those of similar studies, in that about 20% of the cases were excluded for cause (not counting failures to complete).

Table 1. Influence Rates by Condition

Condition	N	Trials 1–15		Trials 16–30		Trials 1–30	
		R_i	s	R_i	s	R_i	s
(1) Alpha-undifferentiated	18	.767	.17	.748	.20	.757	.18
(2) Beta-undifferentiated	20	.693	.18	.730	.15	.712	.15
(3) Alpha-differentiated	16	.813	.12	.800	.12	.806	.11
(4) Beta-differentiated	17	.694	.14	.682	.18	.688	.15
(5) No information	15	.693	.09	.671	.14	.682	.11

The "alpha" and "beta" differentiated conditions, on the other hand, had influence rates of .806 and .688, respectively. This difference is statistically significant beyond the .05 level, as shown in Table 2.

The effects of the differential evaluation are perhaps most striking during the last half of the task. Here, the undifferentiated conditions differ by less than one and one-half per cent, while the differentiated conditions are separated by nearly twelve per cent.

The no-information condition showed an influence rate of .682. This rate is not substantively different from that of the "beta" differentiated condition.

DISCUSSION

These results clearly demonstrate that the presence of a differential evaluation is a necessary condition for the creation of power and prestige inequalities based on social characteristics such as status. There was essentially no difference in influence rate between the undifferentiated conditions, while there was a large and statistically significant difference when the differential evaluation was introduced.

These findings have important implications for expectation-states theory because they provide confirming evidence for a previously untested assumption: that the ability of status characteristics to organize social interaction is a function of the differential evaluations that accompany such characteristics. Disconfirma-

Table 2. Mann-Whitney U-Test for Differences Between Conditions

Comparison	U	z	p
(1) ≈ (2)	141.5	1.13	ns
(3) > (4)	72.0	2.31	.01
(5) ≈ (4)	124.5	.11	ns

tion of this assumption might have placed the entire expectation-states explanation in jeopardy.

These findings have implications for future research and theory as well. If, as we have concluded here, it is the presence of a differential evaluation that gives status characteristics their ability to organize interaction, then we are in a position to more precisely delineate this organizing function. For example, why do some status characteristics—race, for example—seem to be so incredibly pervasive in terms of their status-organizing functions, while others—hair color, for example—do not? Our findings lead us to speculate that the status-organizing ability of a social characteristic is directly related to the strength of its associated differential evaluation, which in turn is related to the number and consistency of the beliefs associated with the various states of that characteristic. Race may be such a powerful organizing force because of the large number of consistently-evaluated stereotypical beliefs that exist concerning its states.

Our findings concerning the no-information condition are also instructive for future theory. They point out the need for further investigations of the *process* of status generalization as well as its effects (cf. Sell & Freese, 1977). Current theoretical development does not allow us to explain our findings under the condition of no information, but it seems apparent that our subjects did *not* form similar performance expectations for themselves and their partners. This finding may have relevance for the recent mathematical formulations of expectation-states theory (e.g., Kervin, 1974; Berger et al., 1977:122–134; Fox & Moore, 1979). If the no information condition is a baseline condition, then it seems likely that most of

the manipulations in this literature have affected the low-status and low performance actors only. Sell and Freese's (1977) findings of distinctly different functions for low- and high-status actors in the status generalization process support this notion, as do Camilleri and Berger's (1967) observations of different influence rates between conditions when they studied the interaction of two high-status actors and of two low-status actors.

We can offer a tentative model of expectation-state formation under conditions of total ambiguity as follows. In previous experiments subjects have always had at least one cue from which expectations for self and other could be formed. We assume that these social cues are combined with an individual's set of self-conceptions to form specific performance expectations for self and other; but due to the novelty of the experimental situation the social cues are probably more salient. If an individual is to form SPEs under conditions of no information, however, only information regarding self-conceptions is available.[6] In this situation we expect that individuals with relatively high self-esteem (and, more specifically, beliefs that they are relatively competent on verbal tasks similar to the experimental task) would form relatively high expectations for their own task performance, and probably lower expectations for their partner's performance. Similarly, we expect that individuals with relatively low self-esteem would form relatively low expectations for their own task performance and probably higher expectations for their partner's performance.

Clearly, this is leading expectation-states theory into a new realm: the effects of the interplay between identity or self-conception on the one hand, and situational characteristics on the other, in structuring inequalities in social interaction. One particular aspect of this inter-play is under examination in our own research program, and involves studying the effects of self-esteem on interaction in task groups. A related study (Martin & Greenstein, 1979) has demonstrated that at least one personality variable—need for social approval—has significant effects on interaction. The inclusion of personality and identity concepts in expectation-states formulations can definitely serve to provide a more complete explanation of social interaction in task groups.

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[6] Strictly speaking, information about self and other is also provided through the social interaction process during the experimental task. However, the tasks used in this and similar studies have been constructed to maximize ambiguity. We feel that the nature of the task is such that it would be very difficult for subjects to form SPEs on that basis alone.

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Effects of Payoffs and Resources on Coalition Formation: A Test of Three Theories*

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The minimum power, minimum resource, and bargaining theories of coalition formation were tested against each other in an experiment involving four games. In each game, the players had different resources and there were different payoffs for some of the winning coalitions. The payoffs for the coalitions were varied from game to game in a way that permitted an examination of the relative effects of payoffs and resources. Resources had little influence on coalition behavior, but payoffs affected both the formation of coalitions and the way in which the payoffs were divided. The coalition which formed most frequently in each of the games was the one with the largest payoff per member. Also, the larger the payoffs that a player had available to him in alternative coalitions, the larger the share of the payoff he tended to receive in a given coalition. None of the theories was very accurate, either in predicting which coalition would form or how the payoffs would be divided. Difficulties encountered with the theories suggest that more research should be directed toward situations in which there are differences in the payoffs for winning coalitions.

Examples of the formation of coalitions are numerous and diverse: several major stockholders of a corporation may enter into a coalition in order to elect a chairperson of the board; some of the parties in a multi-party parliament may form a coalition government; various nations may negotiate an alliance which will provide them with certain strategic military advantages. Formally, a coalition may be defined as the joint use of resources to determine the outcome of a decision in a mixed-motive situation involving more than two individuals (Gamson, 1964). During the past two decades, many experiments have been conducted on the formation of coalitions. These experiments often employ games in which resources are operationalized as weights. Each individual in a game controls a

weight, and some specified quota of these weights is needed in order to win a payoff. When no individual has enough weight to win the payoff alone, then some of the individuals must form a coalition and add together their weights. Any individuals who get together and form a winning coalition can divide the payoff among themselves however they want.

Theories dealing with coalition formation must address two fundamental questions. First, which one of the possible winning coalitions will tend to form? And, second, how will the members of the winning coalition tend to divide the payoff? The experiment described in this paper tests only those theories of coalition formation that attempt to answer both of these questions. Solutions from the theory of n-person games do not generally predict which coalition will form (Rapoport, 1970), and are therefore excluded by this restriction, although a few such solutions will be considered briefly later. Caplow's

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