THE TRANSFER OF STATUS INTERVENTIONS*

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The Transfer of Status Interventions

Abstract

A body of research within the status characteristics and expectation states program is concerned with eliminating status disadvantages in a single collective group task situation. The present work attempts to determine the extent to which such status interventions will transfer across different group tasks and partners. We argue that this problem can be solved using existing status characteristics theory if we extend the scope of that theory to situations involving series of group tasks and successive status partners. We derive a set of theoretical predictions and test these predictions in a standardized experimental setting. It was determined that (1) differences in educational attainment led to interaction inequalities in an initial collective task situation; (2) inequalities could be overcome using theoretically prescribed status intervention techniques; and (3) a significant portion of this intervention effect transferred to a subsequent setting involving a new group task and a new partner. Theoretical and applied implications are discussed.

task and a new status partner. Entwisle and Webster (1974) indirectly raised expectations for a classroom ability (story-telling) by first manipulating expectations for an unrelated task (planning a meal). Evidence was found that performance expectations for the first task were transferred to the second. Lockheed and Hall (1976) determined that after having worked in a task situation (a board game) with other females, their female subjects significantly increased the number of task-oriented acts when working in mixed-sex groups. When these mixed-sex groups engaged in a totally different (classroom) task the following day, the authors found that those with nigh participation rates on the first task tended to remain highly active on the second task, those who were relatively inactive on the first task remained so on the second.

Pugh and Wahrman (forthcoming) provided the first rigorous demonstration and test of the transfer of status interventions through the use of a standardized experimental setting. They began by demonstrating the operation of a status organizing process: When men and women worked together in a controlled experimental setting, men were less likely to defer to women in cases of disagreement than were women to men. At the same time they showed that there was no significant difference in the rate at which men deferred in interaction with other men, and in the rate at which women deferred in interaction with other women. Pugh and Wahrman then successfully intervened in this status organizing process in a second study by providing information to each interacting male and female that the female was better at a separate task than her particular male partner (or that the male was poorer than his particular female partner) and that ability at this separate task was directly related to success at the group task. As predicted, this served to neutralize the effect of the sex status upon

deference patterns. Then in a third study, Pugh and Wahrman showed, again as predicted, that this intervention involving abilities of specific males and females will actually transfer to other males and females. Men were again as likely as women to be influenced in cases of disagreement with each other.

Since each stage of the theory has been concerned with interaction on a single group task, the effects of status interventions on subsequent interactions have not yet been fully investigated. From an applied perspective, it is important to determine the utility of intervention techniques across settings. As discussed above, Pugh and Wahrman provided evidence that interventions transfer across actors. However, there remains the very critical question of whether status interventions made with respect to a particular group task and a particular partner will transfer to new group tasks as well as to new partners. Our problem may be stated thus: What does existing status theory allow us to say about this crucial question of the transfer of status interventions across group tasks?

We shall argue that using existing theory we can derive predictions that enable us to answer this question. We can do this by extending the scope of the existing theory so that it will be explicitly applicable to situations involving a series of group tasks and successive partners. With this extension we can then derive predictions which describe how status interventions introduced on one group task and with respect to one specific status partner can transfer to a subsequent group task and a subsequent status partner. This is our task. Specifically, in section II we present the status characteristics theory and our extension of its scope conditions. Following this in section III we derive predictions on the

effects of status interventions in situations involving successive group tasks and different status partners. Then in section IV we present an experimental test of these predictions and in section V we assess the results of this test and some of the theoretical and applied implications of our work.

II Status Characteristics Theory and the Extension of its Scope

The status characteristics theory takes an "expectation states" perspective on the status generalization phenomenon. According to this perspective, when actors are discriminated in terms of status characteristics in a task-oriented situation, the actors form expectation states in that situation which are based on the performance information associated with the status characteristics possessed by each actor.[1] The key concept here is that of status characteristics, any characteristic of actors around which expectations of and beliefs about them come to be organized. Examples include age, sex, race, ethnicity, education, occupation, physical attractiveness, reading ability and many others. We distinguish between specific and diffuse status characteristics.

A characteristic is a specific status characteristic if (1) it involves two or more states which are differentially evaluated and (2) associated with each state is a distinct expectation state. For example, reading ability and mathematical ability carry expectations for performance at specific types of tasks. Different levels of the characteristics are differentially evaluated and we associate beliefs about how individuals possessing the different states will perform at the specified tasks.

A characteristic is a diffuse status characteristic if (1) it involves two or more states which are differentially evaluated; (2) associated with each state are distinct sets of specific expectation states, each themselves evaluated; and (3) associated with each state is a similarly evaluated general expectation state. For example, sex is a diffuse status characteristic if (1) for a given population the states male and female are differentially evaluated; (2) males (or females) are assumed to be more mechanically and mathematically inclined than females (or males), i.e., states of specific expectation states are associated with the states of the status characteristic; and (3) males (or females) are assumed to be more intelligent than females (or males), i.e., distinct general expectation states are associated with the states of the status characteristic.

The theory restricts attention to situations which satisfy certain conditions. Actors in the situation may be either interactants or referents. The interaction process is conceived such that during any phase of the process, only two of the actors are involved in interaction with each other. These are the interactants. A referent is an actor who is a noninteractant during a given phase of the interaction, but whose status information is significant to the interacting pair. Interactants must be oriented toward the successful completion of a valued, collective group task, and understand that it is both legitimate and necessary to take into account the behaviors of others to achieve success.

The status characteristics theory provides principles for how and under what conditions status information is admitted into the situation. Further, the theory explains how the task situation becomes organized so that expectation states are formed, and how expectation states are translated into observable behavior. We shall briefly describe each of these aspects of the status characteristics theory.

Admitting Status Information into the Task Situation. The states of a status characteristic possessed by two individuals, say p and o, may be directly or indirectly related to the outcome states of a task. To cover both kinds of cases, we speak of a path of task relevance. A path of task relevance is a path between the actor and the task such that it links the state of the status characteristic possessed by the actor to an outcome state of the task, either success or failure. Such paths provide the actor with information about how well he can expect to perform at the task given the characteristics he possesses and information about how they are related to the task. If the interactants are connected to the task by a path of task relevance, the status elements and the relations of the path become salient.

However, it does not require an existent path of task relevance to make a status characteristic salient. A second way in which status characteristics become admitted as usable cues in the immediate social situation is by discriminating actors. Interactants will focus on status elements, whetner specific or diffuse, which provide a basis of discrimination among them. If such status elements are not explicitly defined as independent from the task in the situation, they become salient. It is important to note that the salience process will operate whenever a new group task is started or whenever a new actor enters the situation.[2]

Organizing the Task Situation. As a result of the saliency process some status characteristics, those that discriminate between p and o, may be salient and yet not be linked to the outcome states of the group task. We assume that if no claim is raised that such status elements are not relevant, the interactants will act as if the information embodied in these status characteristics is relevant. That is, they act as if the

burden of proof lies in showing that the salient status characteristics are not relevant to tne task, rather than requiring that their relevance be proven. Therefore, unless their inapplicability is demonstrated or justified, status characteristics and status advantages will, as a matter of normal interaction, be applied to ever new tasks and ever new situations. This burden of proof process operates whether the status characteristics are specific or diffuse.[3]

Salience and the burden of proof process provide p and o with information required to cope with their immediate task situation. However, since new actors may enter the situation and a new group task occur on completion of the previous one, we assume that the structuring of the situation normally proceeds in sequence: Any two interactants will fully structure tneir situation as they interact with each other. If the partner of any one actor, say p, then changes so that some formerly inactive person becomes an interactant, or if p is confronted with a new task, further structuring occurs through salience and burden of proof processes. More important, for each interactant, a structure achieved vis-à-vis another, or with respect to tasks in the past, remains when a new interactant is engaged or a new task is confronted that is in the same situation.

Translating Expectations into Behavior. The interactants process status information in their immediate task situation, in accord with the salience and burden of proof principles. How is this status information translated into their behavior? A central idea of the theory is that the actor functions like an information-processing mechanism, combining all units of status information to form aggregated expectation states. The information-combining process is governed by what is called the principle of organized subsets. The fundamental idea is that the

actor organizes information within consistent (like-signed) subsets and then combines the valenced subsets. The "signs" to which the principle refers are the signs of the path of relevance connecting the actor to the task. A positive sign (+) represents an expectation for success and a negative sign (-) an expectation for failure. If there is inconsistent status information, there will be two such subsets. And for each subset it is possible to determine an expectation value with e^+ representing the expectation value for p's positive subset, and e^- representing the value for p's negative subset. Because there is pressure on the actor to use all the information in the situation, he combines the values of both subsets to form expectations for self, that is, $e_p = e_p^+ + e_p^-$. In a similar manner, the actor forms expectations for others.

The power and prestige position of one actor, say p, as compared to a second actor, o, is assumed to be a direct function of the actor's expectation advantage. p's expectation advantage over o is simply the aggregated expectation state he holds for self minus that which he holds for o. The observable power and prestige order of the group refers to the distribution of chances to perform, performance outputs, communicated evaluations, and influence among its members. A position A is higher than a position B in this order if A is more likely than B to receive action opportunities, make performance outputs, and have performance outputs positively evaluated, but is less likely to be influenced in the case of disagreement with another. The greater the difference in likelihoods of initiating and receiving these behaviors, the greater the distance between positions A and B.

Many empirical tests of the status theory have focused on one component of the observable power and prestige order, the "probability of rejecting

influence" measured in a standardized experimental setting. Within this setting the actor makes a task decision and is confronted with disagreement from the other with whom he is interacting. He is then given an opportunity to change his initial decision. As this basic interaction cycle is repeated, the proportion of times the actor "stays" with his initial decision, P(S), is the observable measure of the variable "probability of rejecting influence".

Extending the Scope of the Theory: Series of Group Tasks. The main problem in this work is to extend our research so that we can more fully address theoretical and empirical questions connected with the transfer of status interventions. Although the work by Pugh and Wahrman described earlier provided much needed data on the transfer of status interventions, there are important questions on the transfer phenomenon which they did not address. In particular, will status interventions transfer across other actors when they are engaged in distinct and different group tasks? We will address this question by extending our conception of a status situation so that it includes situations involving a series of independent group tasks. We will then then apply existing theory to describe the transfer of status interventions in those situations.

To deal with situations involving two or more group tasks we must extend the class of situations to which the status characteristics theory applies. Up to now the scope of the theory has been limited to those situations involving a single "valued, collective group task". These are group tasks (1) in which the actors can distinguish a "success" or a "failure" outcome; (2) in which there is a task characteristic associated with the task such that those possessing the high state expect or are expected to succeed and those possessing the low state expect or are

expected to fail; and (3) in which it is legitimate and necessary for the actors to take each other's behavior into account.

We now extend the scope of the theory to include situations involving a temporal sequence of distinct group tasks. We assume that within this sequence, the different group tasks and their task characteristics are not explicitly dissociated from each other. Dissociated tasks are those which are held by cultural convention to be independent of one another. Further, we assume that each group task in the sequence satisfies the conditions of a valued, collective group task.

In the next section we describe some elements of the graph-theoretic model of the status characteristics theory. We then use this theory to derive a number of specific predictions for status situations involving multiple actors, multiple characteristics and multiple group tasks. These include (1) status-ordering predictions on the effects of status characteristics on the observable power and prestige order; (2) intervention predictions on the effects of specific characteristics which are introduced to overcome the effects of diffuse characteristics; (3) transfer predictions on the spread of a status intervention from one group task to a subsequent group task; and (4) reduction predictions on the diminishing impact of a status intervention in moving from the group task in which it is introduced to a subsequent group task.

III Theoretical Derivations on the Effects of Status Interventions

The status characteristics theory has been formalized in graph-theoretic terms (Berger et al., 1977) and in this section we utilize elements of that model to theoretically derive the effects of status interventions in situations involving successive tasks and successive status partners.

We shall represent these status situations with signed graphs. The assumptions of the theory enable us to describe how these status graphs are to be constructed.[4]

To illustrate the use of the graph-theoretic techniques we will construct, in abstract terms, an experimental situation designed to provide a set of predictions for the transfer effect. (Details of the actual experiment will be given in section IV.) We will then use the graph model to analyze the situation in each condition and derive predictions for behavior in each condition.

Figure 1 shows the graph for an initial group task setting. There are two interactants, p and o_1. They are working on the first group task, T_A. p possesses the low and o_1 the high state of a diffuse status characteristic, D. The minus sign on the segment connecting D(-) with D(+) indicates that these states are oppositely evaluated. By the burden of proof process (indicated by dashed lines), states of D become connected to like-signed states of the task characteristic C_A through the activation of the states of generalized expectations (Γ) associated with states of the diffuse status characteristic.

Fig. 1 here

The length of a path of task relevance is determined by counting the number of lines from an actor to a task outcome state.[5] The sign of the path is determined by taking the algebraic product of the signs of the path segments (all positive except where otherwise indicated) and the sign of the

task outcome which is the terminal point of the path. A positive path represents an expectancy of succeeding at the task. A negative path represents an expectancy of failure. The strength of a path of length i is given by a decreasing function f(i) ranging over the interval (0,1). Thus, shorter paths connecting characteristics with tasks indicate a greater task relevance (or strength of status expectancy) and a greater status-ordering effect of the characteristics. Also, the greater the number of like-signed paths connecting the actor to the task, the greater the total strength of the actor's status-based relations to the task.

Using these methods for analyzing the first group task situation we find that p is connected to the task through negative paths of length 4 and 5, with task relevance strengths of $f^{-}(4)$ and $f^{-}(5)$. His partner, o_1, is connected through paths with strengths $f^{+}(4)$ and $f^{+}(5)$. As a result we would expect p's power and prestige position to be considerably lower than that of o_1 on this first group task.

Fig. 2 Here

Suppose p now moves to a second group task setting. This is shown in Figure 2. p is now interacting with o_2 who, like o_1, possesses the nigh state of D. As in the first task setting, the burden of proof process operates to form paths of task relevance. This time the states of D are connected to states of the second group task characteristic C_B (again through the activation of generalized expectation states). We note that in terms of path signs and lengths, the second group situation is the same

as the first. Therefore, p (in relation to his partner) should still occupy the lower power and prestige position. It should be noted that no interventions to offset the effects of the diffuse status characteristic, D, have been introduced in the settings represented in Figure 2.

Fig. 3 Here

Figure 3 presents the graph for a second group task setting in which a status intervention to overcome the effects of the diffuse status characteristic has been introduced on the first group task. This intervention is produced by assigning the states of some specific status characteristic, C, to p and o_1 so as to be inconsistent with their states of the diffuse status characteristic, D. At the same time the states of C are made directly relevant to the states of the task characteristic, C_A. (C might be some performance ability which is purported to be related to the task characteristic C_A).

When making the states of C directly relevant to C_A, the second group task is in no way immediately involved. However, the specific status characteristic, C, has become relevant to T_B through the operation of the burden of proof process. In this case, states of the specific status characteristic, C, imply for individuals possessing them the ability to succeed or fail at tasks relevant to that characteristic (τ). Success or failure at specific types of tasks induces expectations for more general problem-solving ability (γ). This in turn implies success or failure on the group's immediate task, T_B.

p's second partner, o_2, possesses the same state of the diffuse status characteristic, D(+), as his first partner, o_1. (They both might be males while p is a female, for example.) As a consequence, o_1 (although no longer physically present) becomes a referent for p and information on the specific status characteristic, C, which differentiated p and o_1 remains a source of p's expectations in T_B. Because states of C were assigned inconsistently with states of D, C should reduce the effects of D. This should occur on the task in which C was made directly relevant (T_A), and on the subsequent task (T_B) involving p's new partner, o_2. As a result, even though the second group represented in Figures 2 and 3 are identical in terms of the diffuse status characteristics possessed by p and o_2, the behavior of p will not be identical in these task situations. This is because the intervention effect of C, which was introduced in the first task settings represented in Figure 3, is expected to transfer to the second task setting and alter p's behavior in that setting.

Figures 2 and 3 describe two distinct dual-task situations. In each case, p possesses the low state of the diffuse status characteristic, and in Figure 3 p also possesses the high state of a specific status characteristic. However, we can also consider the case where p possesses the high state of the diffuse characteristic, and determine in a parallel manner the effects on p of an intervention which assigns to him the low state of a specific characteristic on the first group task. We can thus define four distinct dual-task status situations. The signs and lengths of the paths of task relevance in all four of these situations are given in Table 1.

We now use the paths given in Table 1 to derive nine pair-wise predictions for status-ordering in these status situations. "P(S)", which

was defined previously as the probability of rejecting influence, is taken as our behavioral indicator of position on the power and prestige hierarchy in each situation. Our design generates eight P(S) scores, two in each of the four status situations. Predictions are of three types. First, we predict the ordering of conditions when only the diffuse status characteristic is present in the situation (Conditions 1 and 2). Second, we predict the effect of the inconsistent status information in the first group task situation, T_A, of Conditions 3 and 4. Finally, we predict the degree to which this inconsistent status information will transfer to the second task situation, T_B, of Conditions 3 and 4. Following these derivations, we shall describe an experiment which instantiates the four conditions of these dual-task status situations and which enables us to test our predictions.

Status Ordering Predictions. The first set of predictions concerns status ordering effects: When actors work together on a valued, collective task, the task-related behavior of each actor will be ordered by the diffuse status characteristics which differentiate them. Those possessing higher states of these characteristics will occupy higher power and prestige positions in the group. Those possessing lower states will occupy lower positions.

In terms of the graph model, we see that in Condition 1 of Table 1 p's expectation for self is positive (paths of $f^+(4)$ and $f^+(5)$) while that for other is negative ($f^-(4)$, $f^-(5)$). That is, p is connected to the task through positive paths while o_1 is connected through negative paths. This is the case for both tasks, T_A and T_B. We therefore predict that p will behave as a status-superior relative to o_1 in both of these task settings. In Condition 2 where states of characteristics (hence, signs of paths) are

reversed, the opposite will be true; p should behave as a status-inferior. Therefore, by virtue of these ordering effects we get for our measure of status behavior

$$\text{Prediction 1:} \quad P(S)_{1A} > P(S)_{2A}$$

$$\text{Prediction 2:} \quad P(S)_{1B} > P(S)_{2B}$$

Subscripts indicate the condition number and task, respectively.

Intervention Predictions. The second set of predictions concerns intervention effects: When actors have relatively high diffuse status, inconsistent status information in the form of a specific characteristic will serve to lower expectations. When actors have relatively low diffuse status, inconsistent information will serve to raise expectations. In Conditions 3 and 4, states of the specific characteristic were assigned inconsistently with states of the diffuse characteristic. Comparing T_A of Conditions 1 and 3 in Table 1, the paths added as a result of the status intervention ($f^-(3)$, $f^-(4)$ for p; $f^+(3)$, $f^+(4)$ for o_1) serve only to lower p's expectations for self in Condition 3 as compared to his expectations in Condition 1. The opposite is true in Condition 4 relative to Condition 2: The intervention adds positive paths for p and negative paths for o_1. Therefore, by virtue of these intervention effects, we get

$$\text{Prediction 3:} \quad P(S)_{1A} > P(S)_{3A}$$

$$\text{Prediction 4:} \quad P(S)_{4A} > P(S)_{2A}$$

If the specific status characteristic is made explicitly relevant to the group task at the outset and the diffuse information only becomes

relevant by the burden of proof process, the strength of task relevance of the specific status characteristic is greater than that of the diffuse status characteristic; its paths are shorter. As a consequence, in this situation the inconsistent status information provided by the specific characteristic will have a greater impact on the formation of expectation states than the diffuse information. Therefore, rather than equalizing P(S) values in the intervention conditions (3 and 4) we predict that the inequality will actually be reversed relative to the case in which only information about the diffuse characteristic is present. Thus, based on these differences in strengths of task relevance, we get

$$\text{Prediction 5:} \quad P(S)_{4A} > P(S)_{3A}$$

Transfer Predictions. Insofar as the above predictions are supported they will confirm and corroborate previous findings as to how diffuse status characteristics and interventions act to order interaction patterns (see Berger et al., 1974, 1977, 1980). Of primary interest in this research are the predictions for the transfer of status interventions across group tasks and partners. The next set of derived predictions concerns these transfer effects: When diffuse status differences in an initial group task setting are overcome using inconsistent status information as an intervention, the inequality-reducing effects of this intervention will transfer to a subsequent group task involving a new status partner.

Looking at the paths for T_B in Conditions 1 and 3 we find that Condition 3 has all those of Condition 1, with the addition of several paths which should serve to lower p's expectation for self ($f\bar{}(4)$, $f\bar{}(5)$) and

raise his expectation for o_2 ($f^+(6)$). These paths appear as a result of the burden of proof process which connects C (assigned in T_A) to T_B. This negative status information provided as an intervention in T_A of Condition 3 should lower P(S) values in the second group task compared to the case in Condition 1 where no intervention was made. Exactly the opposite argument holds for Condition 4 relative to Condition 2. The positive information provided in Condition 4 should raise P(S) values compared to Condition 2. Therefore,

$$\text{Prediction 6:} \quad P(S)_{1B} > P(S)_{3B}$$

$$\text{Prediction 7:} \quad P(S)_{4B} > P(S)_{2B}$$

The specific status information serves to mitigate the effect of the diffuse status information. This will be the case even though this specific information is made with reference to a different partner and a different group task.

However, based on the assumptions of the status characteristics theory, the transfer process is not expected to be complete. The theory leads us to predict that there will be a reduction in the strength of our intervention in the second group task compared to the first. That is, relative to the effect of the diffuse characteristic, the inconsistent status information should be less important in the second group task than it was in the first. While the specific status information was made directly relevant to the first task, it is not initially relevant to the second task and only becomes relevant through the burden of proof process. Also, the second partner's specific ability level is not known. Utilizing the first partner as a referent actor provides less direct information on specific abilities and produces weaker associated expectations.

In terms of paths, Table 1 shows how paths involving C are of greater length, i.e., weaker in T_B than in T_A for both Conditions 3 and 4. In T_A of Condition 3 these paths are more strongly negative for p than in T_B. In T_A of Condition 4, these paths are more strongly positive than in T_B. Thus where the intervention lowers expectations, this reduction would be greatest for the first task. Where the intervention raises expectations, this effect should be greatest for the first task. Therefore, by virtue of this reduction effect, we get

Prediction 8: $P(S)_{3A} < P(S)_{3B}$

Prediction 9: $P(S)_{4A} > P(S)_{4B}$

IV Experimental Design and Procedures

To test the predictions we devised a four-condition, dual group task experiment which was a modified version of the standard experimental situation of the expectation states program (see Berger et al., 1974, 1977, for discussions of this experimental situation). Each standard experimental situation consists of two phases. In the first, all status information is introduced. In the second phase, subjects work with a partner at a series of ambiguous, binary choice problems. For each trial the subject makes an initial choice, receives feedback on the partner's choice, and then makes a final choice. This feedback comes through an interaction control machine (ICOM) and is controlled by the experimenter so as to produce almost constant disagreement. The ICOM holds the number of action opportunities and performance outputs equal for each team member, and allows control over communicated evaluations in the form of partner's agreement or disagreement with subject's initial choice. The remaining component of the power and

prestige order, rejection of influence, is measured as the probability of the subject staying with an initial choice given disagreement, P(S), which the theory assumes to be a direct function of the subject's relative power and prestige position in the dyad.

In this study we were interested in determining whether expectations which were developed for an initial partner in the first group task would transfer to a second partner in the second group task, this second task being neither related to nor dissociated from the first group task. Therefore, our design consists of two consecutive standard experimental situations, T_A, and T_B.

Subjects were white male students, age 18-21, and were paid volunteers recruited from junior colleges. All agreed to participate in two separate studies, corresponding to T_A and T_B of our design. They were told that these were two distinct and separate studies, and that they were being asked to participate in both for the sake of convenience. Subjects were randomly assigned to each of the four experimental conditions.

Educational attainment served as the diffuse status characteristic in both TA and TB.[6] To induce <u>high</u> educational status (Condition 1), subjects were introduced to a fictitious (videotaped) 7th grade junior high school partner. To induce <u>low</u> educational status (Condition 2), subjects were introduced to a fourth year graduate student partner.

To manipulate ability levels at the specific individual task, subjects in the other two conditions (3 and 4) were given the Meaning Insight test,[7] a fictional ability purportedly measuring subjects' judgment at matching English and primitive words. Scores for both the subject and his "partner" were reported and constituted assignments to states of the specific status characteristic Meaning Insight Ability. In every case the scores were

inconsistent with states of the diffuse status characteristic. In Condition 3 the subject was high in educational status and was informed that his Meaning Insight score was "poor" (6 correct out of 25) while his 7th grade partner's was "superior" (22 correct). In Condition 4, where the subject was low on educational status, his score was superior (22 correct) and his graduate student partner's was poor (6 correct). In addition, the experimenter made ability at Meaning Insight directly relevant to the first group task by telling subjects that scores on the Meaning Insight test are a reliable predictor of performance at the group task. The scores at the Meaning Insight test and the direct relevance established between these scores and performance at the group task serve as our status intervention for this study. The design is summarized in Table 2.

Table 2 about here

Following the status manipulations, subjects worked at a series of 25 Contrast Sensitivity slides, a fictitious perceptual task. Twenty of the 25 slides were controlled disagreement trials, the resolution of the disagreements yielding a P(S) measure of expectations. Subjects did not receive feedback on their performance at this group task.

At the completion of the first study, subjects were taken to a different room to participate in a second group study which was defined as distinct from the first study. A new experimenter introduced each subject to a second partner who in every case was equal to his first partner in educational status. No mention was made of the specific status

information introduced in the first group task and no subjects in any condition were informed of any ability levels of the second partner. Subjects worked at another series of 25 slides, this time involving Spatial Judgment ability--an ability different from that involved on the first group task. In addition, a second P(S) measure was taken.

After completing the 25 Spatial Judgment trials subjects were given a questionnaire asking their perceptions of the study. Following that, each subject was interviewed in depth. After the interview, critical features of the research design, deceptions and contrived ability scores were explained fully, and any questions answered.

V Results

Ninety-eight subjects participated in the experiment. Seventeen were excluded from the analysis on the basis of problems revealed in the interviews. Nine failed to understand some part of the instructions, six lacked collective orientation and two became suspicious of experimental manipulations. Table 3 reports mean P(S) scores and variances for the remaining eighty-one subjects in the four conditions.

Table 3 about here

Table 3 shows that all nine predictions are sustained. We turn now to the statistical tests performed on the data with respect to these predictions.

Status Ordering and Intervention Predictions. Table 4 summarizes statistical tests of our first five predictions.

Table 4 about here

Considering first the effects of the diffuse status characteristic, we find generally good support for our first two predictions. The difference between high and low status conditions is clearly significant for the second task (Prediction 2) and just slightly above the .05 level for the first task (Prediction 1). Therefore we conclude that task-related behavior of actors was ordered by the diffuse status characteristic which differentiated them from their status partners.

However, while it is reasonable to reject the null hypothesis of no difference between conditions, the absolute difference in P(S) for the high versus low status positions is less than expected on the basis of previous research. Zelditch et al. (1980) and Freese and Cohen (1973) observed low diffuse characteristic P(S) values of .53 and .57 respectively, comparable to our .52. However, compared to our high state P(S) value of .59, these studies generated means of .67 and .74.

All of the intervention predictions are strongly sustained. The specific status information reduced P(S) values for those high in diffuse status by almost 17 percent ($P(S)_{1A} - P(S)_{3A}$), and raised P(S) values for those low in diffuse status by over 23 percent ($P(S)_{4A} - P(S)_{2A}$). As for our fifth prediction involving differences in strengths of task relevance, the specific characteristic in Conditions 3 and 4 should actually

reverse the P(S) values relative to Conditions 1 and 2. The observed P(S) value for T_A of Condition 4 is 33 percent higher than that for Condition 3. This compares to a difference of less than 7 percent in the opposite direction for T_A in Conditions 1 and 2. Given our intervention procedures, those low in educational status became far more likely to reject influence than those high in educational status. Tests of these predicted differences were all strongly significant. We conclude that our status intervention--assigning states of a specific status characteristic inconsistently with possessed states of a diffuse characteristic--did succeed in overcoming the effects of the diffuse status characteristic.

Taken as a whole, the diffuse characteristic and intervention predictions are strongly supported. This corroborates previous findings as to how diffuse and specific characteristics operate and provides further support for the status characteristics theory. We turn now to our primary set of predictions, those regarding the transfer of the inconsistent status information introduced to overcome the effect of the diffuse status characteristic.

Transfer and Reduction Predictions. Table 5 shows the results of statistical tests performed on our last four predictions. Predictions 6 and 7 test for a transfer effect and Predictions 8 and 9 test for a reduction of transfer across tasks.

Table 5 about here

As Table 5 shows, both of our transfer predictions are upheld. The inconsistent status information introduced in the first group task situation did affect the actor's P(S) responses in the second group situation in relation to a new partner. Subjects in the second task did not ignore the intervention and return to behavior patterns based solely upon the diffuse characteristic. Where diffuse status is relatively high, the intervention transfer effect significantly lowers P(S) values; where diffuse status is relatively low, the intervention raises P(S) values to a significant degree. Thus we reject the null hypothesis that no specific inconsistent status information will transfer into the second group task involving a different partner. On the basis of these results we conclude that the inequality-reducing effects of the status intervention which was applied in the first group task setting did in fact transfer to the subsequent group task and subsequent status partner.

However, also as predicted, the transfer is incomplete. Predictions 8 and 9, which claim a reduction of the transfer effect, are strongly supported. Where our intervention reversed P(S) values for Conditions 3 and 4 in the first task, the values are nearly identical in the second task (a difference of around 3.5 percent). Thus rejection of influence is almost equal for these conditions. The effects of the intervention in the first group task have almost exactly counterbalanced the effects of the diffuse status characteristic in the second group task situation. On the basis of these findings we conclude that there is a reduction in the effects of a status intervention as actors move to new tasks and status partners.

Other Findings. We have already observed that the absolute difference between the high and low positions on the diffuse status characteristic, as indicated by P(S) values, was less than that found in

previous research (Zelditch et al., 1980; Freese and Cohen, 1973). Specifically, the P(S) value for the high status state in our study is clearly lower than that observed in the previous research. This raises the question of whether the high state of the diffuse status characteristic was activated in the present study.

To determine whether the high diffuse status position was activated in Conditions 1 and 3, a fifth condition was run. The status situation in this condition was identical to that in our diffuse characteristic only conditions, Conditions 1 and 2, except that the subject's partner in T_A and T_B appeared to be another junior college student. Since both subject and partner had the same educational status in this condition, and since task relevance is not established, we do not expect the status characteristic of educational attainment to be activated. If the high state of the diffuse characteristic was not activated in Condition 1 of our study, the P(S) values in this No-Activation Condition should be similar to those of Condition 1.

Twenty-two subjects were run in the No-Activation Condition. Three were excluded from the analysis due to lack of collective orientation and one because he was highly suspicious of manipulations. We observed a mean P(S) of .597 (s^2 = .0125) for the first task situation, and .647 (s^2 = .0078) for the second task situation. Thus, subjects in the first task of the No-Activation Condition behaved much as did those in the first task situation of Condition 1. P(S) for the second task of the No-Activation Condition was markedly closer to the second task P(S) value in Condition 1 than in Condition 2. We conclude that it is very likely that the high state of the diffuse status characteristic was not activated in Conditions 1 and 3.

At the present time we cannot be certain of the reasons for this lack of activation. A number of possible explanations exist. One plausible explanation is that being in a junior college has become synonymous with failing to achieve an educational position that merits the right to attend the four-year college and thereby attaining the status conferred by being in the full degree program. If this is so, it will be the case that for many of our subjects, the educational difference we established between the subject and his partner were not associated with corresponding differences in performance expectations. Further research is needed to determine whether this is in fact the case.

It is important to note that transfer effects are still predicted across tasks in Condition 3, even when the high state of the diffuse characteristic is not activated. When the diffuse characteristic is not activated, the second task situation still contains one of the two sources of information on the intervention characteristic in the first task. The burden of proof process still serves to connect the subject's low state of the specific characteristic to the second task. Therefore we would still expect a transfer across tasks in Condition 3, though less robust than in Condition 4 where the diffuse characteristic provides the third link between tasks. In fact, the extent of the transfer effect in Condition 3 ($P(S)_{1B} - P(S)_{3B}$) was observed to be 5.3 percent as compared to 8.3 percent for Condition 4 ($P(S)_{4B} - P(S)_{2B}$). This difference is consistent with the above reasoning.

One other finding from the results of our study deserves mention. In Conditions 1 and 2, and in the No-Activation Condition (where no differences in P(S) values for the second task as compared to the first task was expected), P(S) values were in fact inflated in the second task

situation relative to the first. This may be due to the fact that subjects found the second task seemed easier than the first, or believed that they acquired skills on the first task which could be applied to the second.[8] In any case, this task effect does not obscure our principle results. Had the effect been more powerful, the results of the cross-task comparisons in the intervention reduction predictions (Predictions 8 and 9) could have been obscured. However, the results indicate that the inflation was small (5 percent) relative to the intervention reduction effect in Conditions 3 and 4 (21 percent and 10 percent, respectively).

Summary and Discussion

Status characteristics theory was developed to explain the process whereby groups whose members are discriminated in terms of status characteristics develop power and prestige orders. Up until now the theory has explicitly concerned itself with situations involving a single valued, collective group task.

The basic problem which guided the present research is the following: Given that an intervention succeeds in modifying the effect of a diffuse status characteristic with regard to one actor and one group task, will this modification be transferred to a second actor and second group task? We have argued that this problem can be solved by using the existing status characteristics theory, provided we extend the scope of that theory. The extension that we made admits into the domain of the theory situations involving series of collective, valued group tasks and successive status partners. Using this extension we derived a set of theoretical predictions. We then described an experimental setting which provided a test of the derived predictions. The findings of this experiment show strong support

for all of these predictions. In particular, when subjects possessed either the high or the low state of the diffuse status characteristic (relative to partner), the inconsistent status information provided by the status intervention was transferred to a new group task and a new status partner. Our work builds on the research of Pugh and Wahrman on transfer effects. However, this research goes further in that we have theoretically derived and experimentally demonstrated (1)the transfer of a status intervention to a second group task, and (2) a reduction in the effect of that status intervention in a subsequent group task setting.

With the extension of status characteristics theory to multiple group task situations we now have the means of examining how status expectations are formed, maintained and altered over time. Information about specific abilities of group members will be used not only to order interaction in the original setting, but also as the basis of forming expectations for future group members who are similar in diffuse status to the first. Thus we now can explain how any number of status characteristics, whether diffuse or specific, consistent or inconsistent, will operate to determine expectations both in the immediate setting and for future interactions. Of course, increasingly refined tests of the transfer phenomenon under various status conditions should still be executed.

This nas important implications for sociologists concerned with certain applied issues. In the absence of information to the contrary, status expectations become self-fulfilling prophesies. The contributions of men, whites and the more highly educated are more likely to be highly evaluated than the contributions of women, blacks and the less educated, regardless of the content of their contributions. However, when actors' ability levels are inconsistent with evaluated diffuse status characteristics (the smart

woman or the unintelligent white), status-based expectations are challenged. Tne diffuse status characteristic is no longer the sole basis of task expectations. As our research indicates, this is sufficient to change behavior patterns in more than the immediate setting.

In any natural setting individuals are confronted daily with numerous examples of high status actors occupying the higher positions in the social order. Males and whites predominate in the higher occupational positions. These examples serve to confirm status-based expectations. So, any sociologist desirous of effecting longer term change must be prepared to demonstrate numerous counter examples in which the lower status individuals have special competencies over a range of tasks through time. It is our hope that this research will provide a basis for introducing just such sequential interventions.

Notes

1. More thorough interpretations of "expectation states" are provided by Berger et al. (1974, 1977) and Humphreys and Berger (1981).
2. The status characteristics theory uses terms which may carry phenomenological connotations. Within this theory, central concepts such as "aggregated expectation states" are defined and used strictly as theoretical constructs.
3. See Ridgeway (1982) for a study concerned with how low status group members (women interacting with men) cope with the burden of proof process by justifying their contributions as being in the service of the collective good.
4. It is important to point out that this is an informal presentation of a formalized theory. For a full exposition of the formal theory see Berger et al, (1977) or Humphreys and Berger, (1981). For a description of estimation and testing techniques used in connection with the formal theory, see Fox and Moore (1979).
5. It is reasonable to assume that as a path gets extremely long it becomes more difficult for an actor to utilize the path in forming task-relevant expectations. For this reason, a simplifying assumption is made that paths of length greater than six are ineffective. Previous experimental results indicate that this appears to be a very plausible assumption (see Berger et al., 1977).
6. Evidence for the operation of educational attainment as a diffuse status characteristic is provided in studies by Zelditch et al. (1980), and by Moore (1968).
7. All tasks utilized in the present study are described more fully in Berger et al. (1977).

8. Recently completed work on the effects of task sequence involved the same two group tasks as the present study, but in reverse order (Markovsky and Smith, unpub.). In a condition with equal status partners, the P(S) inflation was reduced to 3 percent (.598 and .628 for T_A and T_B, respectively), a statistically insignificant difference. These results support the "easier task" explanation, although the partial reversal in P(S) values indicates that "acquired skills" may also have come into play.

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Table 1

PATHS FOR EACH TASK AND CONDITION

Condition	Task	Paths Involving the Diffuse Status Characteristic	Paths Involving the Specific Status Characteristic
1	A	p: +4, +5 o1: -4, -5	
	B	p: +4, +5 o2: -4, -5	
2	A	p: -4, -5 o1: +4, +5	
	B	p: -4, -5 o2: +4, +5	
3	A	p: +4, +5, o1: -4, -5,	-3, -4 +3, +4
	B	p: +4, +5, o2: -4, -5,	-4, -5 +6
4	A	p: -4, -5, o1: +4, +5,	+3, +4 -3, -4
	B	p: -4, -5, o2: +4, +5,	+4, +5 -6

Table 2

STATUS INFORMATION BY CONDITION

Condition	Subject's Partner	Subject's Relative Educational Status for Both Group Tasks	Subject's Relative Specific Ability (First Group Task)
1	7th grader	high	unknown
2	graduate student	low	unknown
3	7th grader	high	low
4	graduate student	low	high

Table 3

PROPORTION OF STAY-RESPONSES BY STATUS CONDITIONS AND TASK

Condition	Relative Diffuse (D) and Specific (C) Status	Task A		Task B		N
		Proportion	Variance	Proportion	Variance	
1	High D	.590	.019	.688	.019	20
2	Low D	.526	.022	.586	.019	21
3	High D, Low C	.424	.025	.634	.010	19
4	Low D, High C	.757	.010	.669	.013	21

Table 4

TESTS FOR STATUS ORDERING AND INTERVENTION PREDICTIONS

Prediction		Statistic	z	p
1	$P(S)_{1A} > P(S)_{2A}$	U = 149	1.61	< .0537
2	$P(S)_{1\bar{B}} > P(S)_{2\bar{B}}$	U = 115	2.50	< .0062
3	$P(S)_{1A} > P(S)_{3A}$	U = 73.5	3.30	< .0005
4	$P(S)_{4A} > P(S)_{2A}$	U = 40.5	4.55	< .00003
5	$P(S)_{4A} > P(S)_{3A}$	U = 16.5	4.96	< .00003

Note: "U" indicates the Mann-Whitney U statistic.

Table 5

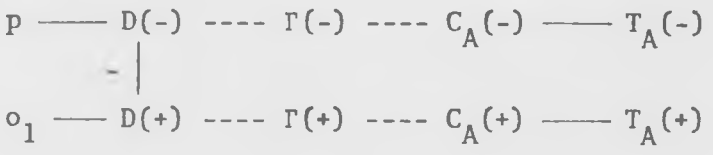
TEST FOR TRANSFER AND REDUCTION PREDICTIONS

Prediction		Statistic	z	p
6	$P(S)_{1B} > P(S)_{3B}$	U = 126	1.83	< .0336
7	$P(S)_{4B} > P(S)_{2B}$	U = 156	1.74	< .0409
8	$P(S)_{3A} < P(S)_{3B}$	T = 3	3.70	< .0002
9	$P(S)_{4A} > P(S)_{4B}$	T = 29	2.66	< .0039

Note: "U" indicates the Mann-Whitney U statistic. "T" indicates the Wilcoxon matched-pairs signed-ranks test.

Figure 1

FIRST GROUP TASK SITUATION



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p is interacting with o_1 on a group task, T_A. p possesses the low and o_1 the high state of a diffuse status characteristic, D. By the burden of proof process, states of D become connected to corresponding states of the task characteristic C_A involved in T_A.

$D(\pm)$ = states of diffuse status characteristic

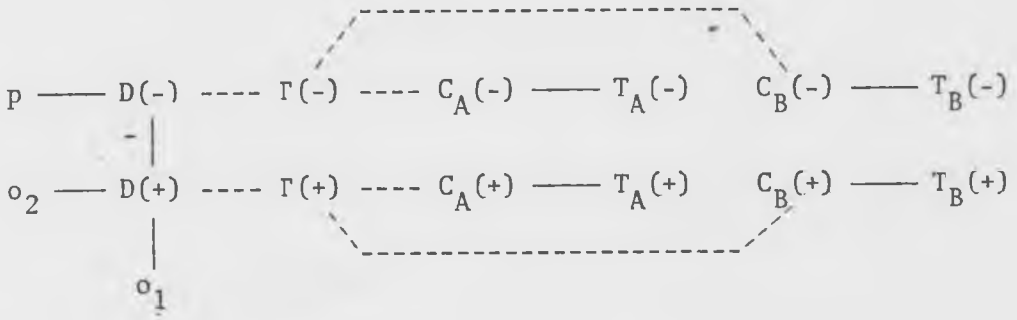
$\Gamma(\pm)$ = states of generalized expectations

$C_A(\pm)$ = states of task characteristic

$T_A(\pm)$ = outcome states of group task

Figure 2

SECOND GROUP TASK SITUATION,
NO INTERVENTION



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p is interacting with o_2 on a second group task, T_B. p possesses the low and o_2 the high state or a diffuse status characteristic, D. Previously, p interacted with o_1 on group task T_A where p possessed the low and o_1 the high state of the same diffuse status characteristic, D. By the burden of proof process, states of D become connected to corresponding states of the task characteristic C_B involved in T_B.

$D(\pm)$ = states of diffuse status characteristic

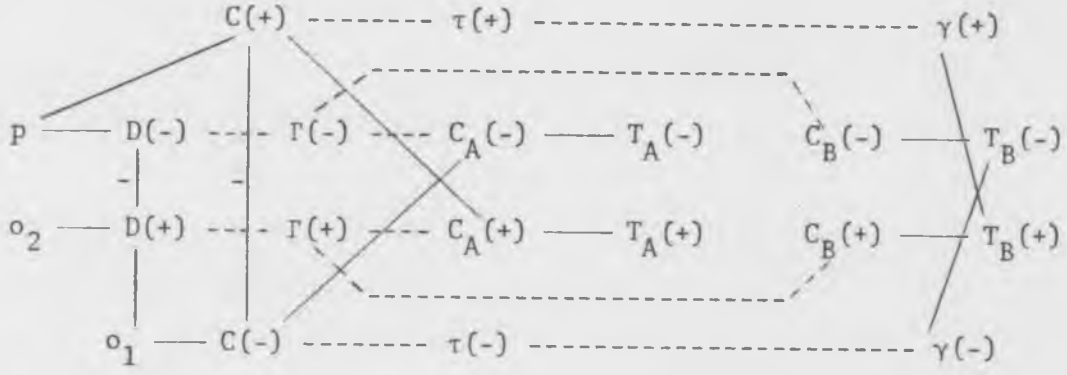
$\Gamma(\pm)$ = states of generalized expectations

$C_i(\pm)$ = states of task characteristics

$T_i(\pm)$ = outcome states of group tasks

Figure 3

SECOND GROUP TASK SITUATION
WITH INTERVENTION



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p is interacting with o_2 on a second group task, T_B. p possesses the low and o_2 the high state of a diffuse status characteristic, D. Previously, p interacted with o_1 on group task T_A where p possessed the high and o_1 the low state of a specific status characteristic, C. C was made directly relevant to C_A, the task characteristic involved in T_A. By the burden of proof process, states of C become connected to corresponding states of C_B, the task characteristic involved in T_B.

$D(\pm)$ = states of diffuse status characteristic

$C(\pm)$ = states of specific status characteristic

$C_i(\pm)$ = states of task characteristics

$\Gamma(\pm)$ = states of generalized expectations

$\tau(\pm)$ = outcome states of task associated with C

$\gamma(\pm)$ = states of abstract task ability

$T_i(\pm)$ = outcome states of group tasks