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Interactant initiated status transfer

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INTERACTANT INITIATED STATUS TRANSFER

A Thesis

Presented to

The Faculty of the Department of Sociology

San Jose State University

In Partial Fulfillment of the

Requirements for the Degree

Master of Arts

By

Robert De Kelaita

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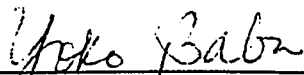
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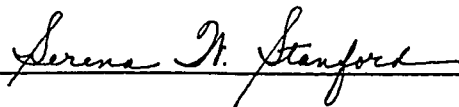


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ABSTRACT

INTERACTANT INITIATED STATUS TRANSFER

by Robert De Kelaita

This thesis addresses the topic of interactant initiated status transfer. It deals with an area not dealt with previously in any of the literature on status characteristics. It examines the expectations for performance people have when group members attempt to elevate their status relative to that of other members of the same group.

Forty female subjects were divided into two groups and provided with two separate treatments. The treatments were photographs of confederates and controlled answers to specific questions. The subjects were then asked to choose among geometric shapes, communicate their choices to their partners, and make final choices after reviewing their partners' choices. The proportions of stay responses for the two groups were then compared. The current study reveals that it is possible, using the status of an accepted higher source, to elevate one's own status relative to that of other members of the group.

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Chapter 1

Introduction

Many situations can be cited as examples where interactants within task groups use the status of others to increase their own influence relative to that of other interactants within the same group. These others, whose status is used, are known as status sources (the term status source will be defined in the section on Interactant Initiated Status Transfer). Status sources can be part of the same group as the interactants, or may belong to a different group.

The purpose of this study is to explore the possibility that differences in performance expectations which are due to differences in status characteristics can be transferred between people. This study is intended to determine whether an interactant within a collectively oriented task group can affect her¹ status relative to that of other interactants within the same group, given the scope conditions of the status characteristics theory (Berger, Fisek, Norman and Zelditch, 1977). This study is important because it comprises an extension of the status characteristics theory.

It is argued in this study that people can initiate a transfer of status. This transfer can be initiated by individuals who are either outside or inside the task group. From outside the group, status transfer can be initiated by an outsider allocating or assigning the status to one or more interactants. Inside the group, status transfer can be initiated by any interactant to any other, including herself. This transfer of status is possible due to a perceived association between the interactant and a significant other or others.

The idea of status transfer is not new. Studies have shown that status can transfer between task situations (Pugh and Wahrman, 1983; Nelson-Kilger, 1992). The point of

¹While the status characteristics theory applies to males and females equally, it is cumbersome to use both male and female pronouns. Since only females were used in the experimental part of this study, unless a specific article is discussed which uses male pronouns, only the female pronoun will be used for the rest of this document.

the present research is that regardless of the task situation, status can transfer between people. The basis for this statement is the literature on status intervention. In status intervention situations, an entity of accepted high status (such as an experimenter or school administrator) confers status upon certain interactants such that the rest of the interactants have higher levels of expectations for them. But this intervention comes from the outside of the individual interactant. The issue here is to understand whether or not an individual can elevate her own status without outside intervention.

For this research, the status characteristics theory (Berger, Fisek, Norman and Zelditch, 1977) will be utilized to experimentally examine the gains (or losses) in performance expectations interactants have of other interactants within the same group when status transfer is initiated. It is expected that interactants who successfully transfer status from a source whose status is higher than that of the interactants will be more influential in group decision making than those who do not transfer status.

Chapter 2

Literature Review

One of the main points of the status characteristics theory is its view of interaction from an interactant's point of view (Berger, Fisek, Norman and Zelditch, 1977: 34). This view of interaction is P-centric, meaning that it looks at interaction from the view point of P. It requires P to be an object of orientation to herself, hence P'. An object of orientation is, as described by the authors, a reference of one's self that an interactant uses to view the interaction. This means that P must separate herself from the interactant P when evaluating the inputs each interactant makes. One of the scope conditions of expectation states is collective orientation, which makes it legitimate and necessary for an interactant to take into account the opinions of others when completing the task (Berger, Cohen and Zelditch, 1972. Berger, Fisek, Norman and Zelditch, 1977). This scope condition requires P to take into account the ideas and opinions of all interactants in the task group, including P'. This means that P can decide to agree with P' instead of O.

In Status Characteristics and Social Interaction (Berger, Fisek, Norman and Zelditch 1977), the concept of referent actor is discussed and defined. Referent actors are seen by the authors as a natural extension of the theory. These referents are seen by the interactants as objects of orientation, but they are not necessarily involved in the interaction (Berger, Fisek, Norman and Zelditch, 1977: 30). The definition used is that "A referent actor is any actor who is accepted as a member of the task group, regardless of whether he actively takes part in the interaction." (Berger, Fisek, Norman and Zelditch, 1977: 96). Referent actors are shown to provide path links from the interactants to each task outcome through C* (Berger, Fisek, Norman and Zelditch 1977: 119). The authors consider referent actors potentially important in determining the outcome of a status organizing process (Berger, Fisek, Norman and Zelditch 1977: 170).

Humphreys and Berger (1981) define the referent actor as follows: "A referent is an actor who during a given phase is a non interactant and whose status information is significant to the interacting pair." This implies that the status characteristics of a referent can affect the interaction between P and O. The concept of non interactant implies that the referent needs not be present at the interaction site for P and O to be affected by the status characteristics of the referent.

A stage in the status organizing process is the relevance stage (Berger et al, 1977: 33). During this stage, the interactants, based on their status characteristics, develop expectations about how each will perform in the situation. The characteristics possessed by P and O become relevant to the task during this stage. Another stage in the status organizing process is the assignment stage (Berger et al, 1977: 33). This stage occurs when interactants actually put into use the effects of status characteristics. P will come to "believe that what he expects to be so is in fact so." (Berger et al, 1977: 33). An interactant who is female starts believing that the male interactant in the group is more capable, smarter and better. This stage is followed by the decision stage (Berger et al, 1977: 33), in which the interactants start behaving to ensure what they believe becomes the actual situation. P and O at this time will behave as if P is more capable smarter, or better than O. While labeled stages, these are not distinguishable in temporal terms, but most likely occur simultaneously. These stages are used to elaborate how an interactant comes to have beliefs about a situation which reflects the larger society.

Research on cue behavior indicates that interactants in a task situation use cues to communicate status (Ridgeway, Berger and Smith, 1985). These cues are divided into two groups: indicative and expressive. Expressive cues (usually involuntary and in most cases non-verbal) are those which label an interactant by her actions. Indicative cues (usually voluntary and verbal) are those which either the interactant uses to label self or others use

to label the interactant. Both can be task cues or categorical cues (Berger, Webster, Ridgeway and Rosenholtz, 1986). Task cues give information specific to the interactant's confidence level regarding the task. Categorical cues supply information as to the social status of the interactant who possesses them. These cues either weaken the power and prestige order of the group or legitimate it.

This means that in any task situation status cues are used by interactants. Interactants use these cues either voluntarily or not. Verbal cues do not necessarily constitute voluntary use of such cues. Nonverbal cues do not necessarily mean involuntary cues. This is important to understand, because it is possible that an interactant will use involuntary verbal cues to affect her status. The question becomes, is it likely that the status characteristic of an interactant or a referent can be cued into the interaction by one of the interactants, using verbal or nonverbal cues? The proposed answer is yes.

In a study of task groups, Ridgeway and Berger (1986) discuss methods of behavior interactants use to affect the power and prestige order of a group. They distinguish two types, propitiating and dominating behaviors. They define these two as controlling behaviors. Examples of propitiating behaviors include pleading, asking, and gestures that cause others to be influenced. Dominating behaviors include threatening, commanding and similar acts. These behaviors create positions of inferiority or superiority between interactants. This is different than normal task cues discussed above in that propitiating and dominating behaviors subordinate one interactant to another while status cues only give information about interactants to use during the interaction. Also, when dominating and propitiating behaviors are used, they presume an established and legitimate status order. When an interactant uses dominating behavior whose status is not legitimate, other interactants within the group will resist it (Ridgeway and Berger, 1986).

In a study of dominance in task situations, Ridgeway and Diekema (1989) found that interactants who used dominance to gain status were perceived as no more competent than the rest of the interactants in the group, in both male and female groups. They used two person task groups in which one naive subject and two confederates were used. They found that when an interactant (confederate) engaged in dominance behavior against another, the rest of the group members acted to oppose the aggressive confederate. In an evaluative study of the dominance displaying interactants, the researchers found the dominant interactants to be less liked than the neutral or non-dominant members. The results of their study clearly showed that dominance as a way to gain influence in a group was not fruitful.

A study by Webster and Sobieszek (1974) was conducted to explore sources of evaluation and status characteristics. Webster and Sobieszek contended that a source of expectations to be added to determining the power and prestige order of a group was that of the significant other or others. The ideas and opinions of the significant other were used in forming expectations for not only self, but also for others. Using 80 subjects, the experimenters divided them into four groups of twenty. Confederates were used to act as evaluators in each of the experimental settings. The experimenters developed the source of evaluation theory to show that interactants developed conceptions about themselves using sources other than themselves to create such conceptions. They were influenced by these important others. The experimenters found that if the source was perceived as having higher status than the interactants, then the influence of the source was stronger. They found evidence to support the basic notion that significant others should be included in the formulation of expectations for performance. They tested for and found evidence to support the idea that multiple significant others provide an opportunity for the interactants to decide which one of the multiple significant others they will accept as sources. They

developed a rank order which was determined by the interactants when making these decisions.

That status transfers is accepted by status characteristics theorists (Berger, Fisek and Norman, 1989: 109). This transfer occurs through the burden of proof and task relevance processes. In any situation, interactants evaluate information from the current and previous situations through the combining process. The theory, according to the authors, allows for the evaluation of a power and prestige order using the current structure. It also allows for a situation to be evaluated using status information transferred from the past. The effects of a past structure can be determined, in terms of power and prestige, on the new structure (Berger, Fisek and Norman, 1989: 111). When an interactant moves from one task to another, she is transferring with her all the status elements in the previous structure. This may include status information relative to other interactants or referents. This information is then brought into the new situation.

In a study of status transfer, Nelson-Kilger (1992) found that when an interactant achieved low status in one situation, that status order was transferred by that interactant to another, related situation. He assigned fictitious scores to female subjects so they could be assigned either high or low status in the first task. Using several conditions where high and low status situations were created, he tested and found evidence to support his hypothesis that status can be transferred from one task to another. This study supports the possibility that individuals carry with them status information from previous social situations.

In a study of sex differences in mixed sex groups, Pugh and Wahrman (1983) experimented with status transfer from one person to another, using the concept of referent actors. They used status intervention to effect a change in the situation. They also experimented with the transfer of status intervention from one situation to another, to try to improve an interactant's status. They attempted to affect the power and prestige of the

group using three strategies, verbal instructions to show that sex is not related to the task, allowing the females to demonstrate equal competence at the task, and allowing the females to demonstrate superiority. They found evidence to support the superiority demonstration argument. They conducted a second experiment in which they determined that the effects of the first experiment (demonstration of superiority) transferred to the second experiment. In the second experiment, new partners were used. This study shows that the effects of status characteristics can be induced to transfer from one task to another and from one interactant to another.

Five conclusions can be drawn from this literature review. First, status characteristics become salient during an interaction. There are stages through which the individual goes to arrive at a behavioral aspect of status characteristics. These stages are relevance, assignment and decision. The second conclusion is that status characteristics can be communicated using status cues. Third, interactants attempt to influence each other. Sometimes this influence is attempted using dominance cues. However, dominance cues are not successful at increasing one's status. Fourth, referent actors are individuals who are accepted by interactants as significant. Referent actors possess status characteristics. Since they are significant to the interactants, referents may have an impact on the interaction through their status characteristics. Fifth, status can transfer. It can transfer from one task to another and from one individual to another. From task to task, it can transfer through burden of proof and relevance processes. From one individual to another, it can transfer through conferring or intervention.

Chapter 3

Theoretical Background

Status Characteristics Theory¹

Status characteristics theory started with Berger, Cohen and Zelditch (1966). This theory dealt with the status differential found in social situations as they relate to task groups. Originally, this theory focused on two interactants within a group, oriented toward solving a common task, each possessing a single status characteristic. Based on studies conducted by the originators and others, the theory was extended to include two interactants, each possessing more than one characteristic which became activated during the interaction (Berger and Fisek, 1974). In 1977, the current form of the theory emerged, capable of explaining situations in which more than two interactants are involved in the task situation, each possessing more than one salient status characteristic.

Status characteristics theory deals with the observable power and prestige orders in small, collectively oriented task groups. The advantage of one interactant over another can be observed in such things as the number of opportunities to participate in a discussion, how often one actually participates when given the opportunity, how an interactant's performance is evaluated once the interactant has performed, and influence (given disagreement between interactants, which interactant's answer will be chosen?).

Status characteristics theory operates within four scope conditions (Berger et al, 1972, 1977 and 1981), under which the theory is expected to predict social interaction. First, the group must be task oriented. Second, the effort of the group is evaluated in terms of an outcome related to achieving or not achieving the objective of the group. The group members must believe that the task outcome can be better or worse, and is evaluated on an objective basis. Third, the group must be collectively oriented. Collective

¹ For a more detailed review of this theory, see Status Characteristics and Social Interaction (Berger et al, 1977).

orientation means that it is necessary and important to take the opinions and suggestions of all the interactants into consideration before a decision is made. Fourth, there must be a specific performance characteristic that is related to achieving or not achieving the group's objective. If the task is to solve a mathematics problem, having mathematics knowledge is desirable.

As its principle, this theory has the status organizing process. The status organizing process is a "process by which differences in cognition and evaluations of individuals or social types of them become the basis of differences in the stable and observable features of social interaction." (Humphreys and Berger, 1981). The status organizing process looks at interaction as it relates to two interactants in a group, person and other. Person is denoted P and other is denoted O. The interaction is viewed from P's point of view. Even when more than two interactants are present in the group, the interaction is viewed as dyadic, occurring between P and any O in the group. This simplification helps in understanding the working of the status organizing process. The status organizing process works within the context of a group of individuals attempting to reach a solution to a problem or to complete a task. There are two states of the task (T). Task success (T+) indicates that the interactant is expected to be successful at completing the task. Task failure (T-) indicates that the interactant is expected not to be successful at completing the task.

The status organizing process works with status characteristics. There are two types of status characteristics that are considered, diffuse and specific. A diffuse status characteristic (D) is one that differentiates the members of the group, such as age, sex and race. A diffuse status characteristic can be positive or negative. D+ indicates the interactant possesses a positively valued status characteristic. D- indicates that its possessor has a negatively valued characteristic. In some countries, a male possesses D+

while a female possesses D-. A diffuse status characteristic leads to a state known as the generalized expectation state (GES). The Greek letter gamma (Γ) is used to show GES. This expectations state occurs when the interactants within a group come to believe that a certain state of D carries with it consistent states of ability levels.

A specific status characteristic (C) is one that is related to the accomplishment of a task only. A specific status characteristic can be positive or negative. C+ indicates that the interactant possessing that characteristic has the ability to successfully accomplish the task for which the characteristic holds. C- indicates that its possessor does not have the ability required to accomplish the task at hand. For example, if the task is to solve a problem in Calculus, the interactant who possesses mathematical ability will have C+ while the interactant who does not possess mathematical ability will have C-. A specific status characteristic which is directly related to accomplishing the task is the instrumental task ability (C*). In the above example, the interactant who possesses the instrumental task ability is someone who possesses calculus knowledge instead of general mathematical ability when the task to solve is in calculus. C*+ is an indication of an advantage in relation to the instrumental ability, while C*- is a disadvantage indicator.

Status characteristics are situationally activated. A characteristic possessed by the same interactant may be high in one situation and low in another, depending upon with whom one is interacting. Being a college graduate can be a high status characteristic if one is interacting with high school students, and a low status characteristic if one is interacting with college professors. Also, a diffuse characteristic in one situation may be specific in another. If a college graduate is interacting with high school drop outs, and the task requires college education, the college graduate has a specific high status characteristic. On the other hand, if the same graduate is a female in a gender mixed group, then she has a diffuse characteristic if the task requirements are the same and everyone in the task

group is a college graduate. Each interactant can (and in real life does) possess more than one status characteristic. When an interactant possesses several status characteristics at the same time, they are identified numerically as well as alphabetically. For example, an individual may possess D_1^+ , D_2^- , C_1^- , C_2^+ , and so on. D_1 indicates the first diffuse characteristic, D_2 the second diffuse characteristic, C_1 the first specific characteristic, and so on.

Status characteristics theory begins with several assumptions. The first assumption is that of saliency. A status characteristic is salient when it discriminates between interactants, or is relevant to a situation. Through the process of saliency, a status characteristic is activated. This activation process is one by which P starts expecting a certain ability level from O, since the ability level of O is culturally associated with the status characteristic O possesses. If P believes males are superior to females at mathematics, P and O face a mathematical problem and P is male while O is female, then P, as well as O, will come to believe that P is more capable than O.

The second assumption of the theory is the burden of proof. This assumption suggests that if O possesses a certain state of D, P will expect O to possess a consistent state of C^* . Additionally, P will expect O to possess this consistent state of C^* until or unless something happens to change P's expectation. In the United States, females are expected to perform at a lower level than males in mathematics. P will expect O to perform poorer than any male interactant in the group, unless O actually performs better than the male interactants, or unless it is shown that gender is not relevant to the task. Once saliency and burden of proof work, P will expect O to perform in a certain way in the current situation and in future situations.

The third assumption of the theory is that of sequencing. Sequencing means that once a status order is started, it will remain as long the interactant remains in the group

situation. When a new interactant enters the situation, she will be evaluated based on her own status characteristics. As interactants leave and new interactants enter the group situation, expectations of the members will be formed based on the saliency and the burden of proof processes.

The fourth assumption of the theory is that of aggregated expectations. This assumption states that an interactant in a group combines all the salient information present in the task situation according to the principle of organized subsets. The interactant first combines all positive information, then all negative information. The interactant then combines the positive and the negative information to arrive at a single evaluation. For example, a male college undergraduate and a female college professor are working on a task. To arrive at an aggregated expectations state, the positively valued characteristic of being male is combined with the negatively valued characteristics of being younger and an undergraduate. For the female, the positively valued characteristic of being older is combined with the positively valued characteristic of being a professor first, then the result is combined with the negatively valued characteristic of being female.

Combining states of status characteristics is affected by two factors, attenuation and inconsistency. The attenuation effect causes a decrease in the impact of each new consistent status characteristic that becomes salient. A male college graduate has high status characteristics relative to a female undergraduate student. Discovering that he is also a manager will add less to his status advantage than if it was the only piece of discriminating information available. The attenuation effect works for positive and negative characteristics.

The second factor affecting the combining process is inconsistency. The inconsistency effect occurs when a status characteristic becomes available that is inconsistent with the information already known about an interactant. In a situation where

a male and a female are interacting, the male has status advantage over the female, since male as gender is the culturally preferred state. Discovering that the female possesses a Harvard Ph.D. will change the male's perspective regarding the female, since her higher state of education is inconsistent with her low state of gender. Because of the attenuation of consistent information, a single piece of information that is inconsistent may have more impact on an interaction than additional consistent information.

The fifth assumption under which the status organizing process operates is that of the basic expectations state. This assumption states that interactant expectations have a direct effect on the observable power and prestige order of the group. In the mathematics problem solving situation, a male and a female will both expect the male to have more ability than the female. In this case, both will actually work to make the situation come about such that the male has the advantage.

Graphic Representation of Status Characteristics Theory¹

A path diagram is used to represent the theory graphically. To construct a path diagram, alphabetical letters, algebraic signs, special characters, and lines connecting the various letters are used. The lines used to connect the letters are called paths. Paths determine expectation states if they connect an interactant to a characteristic or outcome. There are two interactants shown, P and O, although more may be included. Either interactant can possess either D+ or D-. Using the two states of D, the various relations of P and O to C* and T will be outlined. At the end of the structure is the task outcome T, which can be either T+ or T- (figure 1).

Figure 1. Basic structure of an expectation situation. No relations shown

P	D+	Γ+	C*+	T+
O	D-	Γ-	C*-	T-

Figure 2 shows a path connecting each interactant to a state of D. P is connected to D+ and O is connected to D-. The interactants are said to possess the states of D, hence the possession relation. Each interactant can (and in the real world does) possess more than one D². But here, for purposes of clarity and simplicity, only one is shown. In Figure 3, the relevance relation is shown. It is relevant to the task outcome that an interactant possesses a certain state of C*. Possessing C*+ is needed in order to get an outcome of T+. If a group is solving a winter survival problem, it is necessary to possess

¹ See Nelson-Kilger unpublished dissertation, Stanford University, 1992.

² Only diffuse (D) characteristics will be used in this and the following sections. However, the same system applies to specific (C) characteristics.

C*+ in order to get T+. An interactant must understand snow or blizzard conditions in order to survive a snow storm.

Figure 2. Possession relation

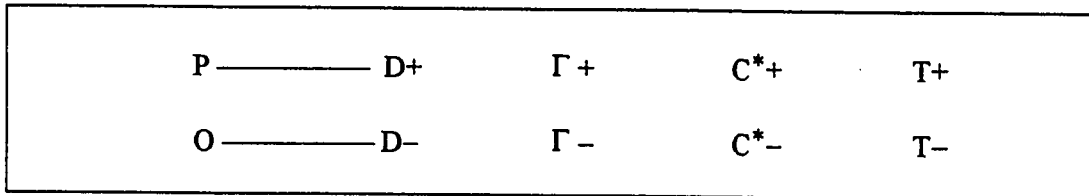
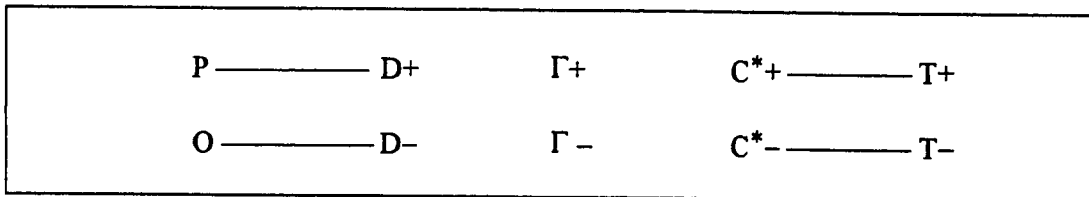


Figure 3. Possession and relevance relations



The dimensionality relation shown in figure 4 indicates that there is a difference between the state of D possessed by P and that possessed by O. The line connecting the positive to the negative state of D is the dimensionality line. The negative sign next to the line indicates the difference between the two states of D.

Figure 4. Possession, relevance and dimensionality relations

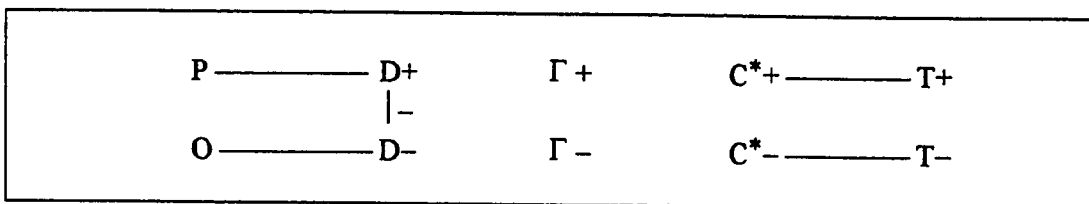
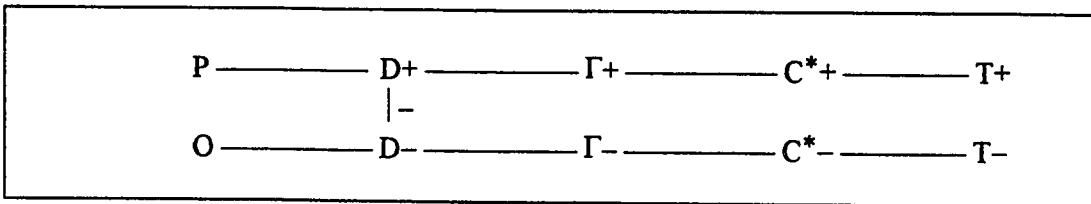


Figure 5 is a representation of a completed situational structure in which expectations for performance operate. Relevance bonds connect D to C* through Γ . This generalized expectation state (Berger et al, 1977: 101) represents what an interactant is expected to achieve or whether or not the interactant possesses the instrumental ability to succeed in the task (get to T+). If an interactant possesses D+, then the generalized expectation state for that interactant will be $\Gamma+$. From the generalized expectation structure, it can be seen that each interactant is connected to an outcome of the task through the paths. P is connected to T+ and O is connected to T-. It can also be seen that an interactant can be connected to the opposite state of the task outcome. This happens through the dimensionality relation. P is connected to T- and O is connected to T+.

Figure 5. Generalized expectation state



Mathematical Representation of Status Characteristics Theory

Situational analysis using the status characteristics theory is conducted to determine the power and prestige order in a group. To illustrate such an analysis, the structure in figure 5 will be used. It will be sufficient to explain the way the theory operates. As can be seen from the structure in figure 5, each interactant is connected to the task outcome using paths. There are three characteristics of each path which are important in determining the outcome of the structure: path length, path sign and path strength.

Path length is identified by counting the number of connecting lines from the interactant to a state of task outcome. In figure 5, the number of lines connecting P to T+ is 4, and the number of lines connecting O to T- is 4. Paths whose length is greater than 6 are said to be ineffective, because an interactant will experience difficulties in reasoning an expectation about another given long paths (Berger et al, 1977: 117). A subtle, but very important aspect of path length is the fact that P is connected to T- and O is connected to T+. This connection occurs through the dimensionality relation. The number of lines connecting P to T- is 5, so this path length is 5. Similarly, the path connecting O to T+ has a path length of 5, since there are 5 lines connecting O to T+. When determining the length and number of paths leading interactants to task outcomes, this relation must not be ignored.

Path sign is the algebraic product of the signs of the individual parts of the path and the sign of the task outcome (Berger et al, 1977: 115). A line without a sign indicates a positive sign. Figure 5 shows that the sign of the path from P to T+ is positive, since it is the product of positive signs. The path from O to T- has a negative sign. This is because there are four positive signs of the lines connecting O to T-, and the negative sign of the task. Their product is negative. The sign of the path connecting P to T- is positive, since

the product of the line segments connecting them is found by using the dimensionality line in addition to the other lines and the task outcome. The path leading from P to T- is as follows: P —D+ —D- —Γ- —C*- —T-. The path O to T+ has a negative sign, as follows: O —D- —D+ —Γ+ —C*+ —T+. The sign of a path is related to the expectation for each interactant in the group. A positive sign indicates an expectation for task success, while a negative sign indicates an expectation for task failure.

Path strength is the magnitude of the relation between the path and the task outcome. Path strength is determined by the length of the path. The longer the path the weaker the magnitude. A path of length 2 is much stronger than a path of length 3, 3 stronger than 4, and so on. Path strengths are values assigned from 0 to 1. These values are empirically determined as an estimate (Berger et al, 1977: 135-161).

Table 1. Path strength values f(i)

Path Length	2	3	4	5	6
f(i) value	.8264	.4422	.1768	.0627	.0214

Table 1 shows a path value, also known as f(i) value. The use of path value is important in determining aggregated expectations state for an interactant. The formula used to combine positive paths is shown as formula 1 (Berger et al, 1977: 124). Combining an interactant's positive paths results in what is known as the interactant's positive expectations (e_{p+}) (Berger et al, 1977: 125). The formula used to combine all negative paths is shown in Formula 2.

Formula 1. Combining positive paths for an interactant

$$f(i, j, k, \dots, n) = [1 - (1 - f(i)) (1 - f(j)) (1 - f(k)) \dots (1 - f(n))]$$

Combining an interactant's negative paths leads to determining the negative expectation for that interactant (e_p^-).

Formula 2. Combining negative paths for an interactant

$$f(i, j, k, \dots, n) = -[1 - (1 - f(i)) (1 - f(j)) (1 - f(k)) \dots (1 - f(n))]$$

From figure 5, P has positive paths of lengths 4 and 5. Combining these paths results in e_p^+ , as shown below

$$\begin{aligned} f(4,5) &= [1 - (1 - f(4)) (1 - f(5))] \\ &= [1 - (1 - .1768) (1 - .06279)] \\ &= [1 - (.8232) (.93721)] \\ &= [1 - (.7715)] \\ &= .2285 \end{aligned}$$

Using formula 2, e_p^- can be determined. Since there are no negative paths for P, this number will be zero. Formula 1 can be used to determine the positive paths for interactant O. Since there are no positive paths leading from O to T, this number will be zero. But O has negative paths, which will lead to the calculation of e_o^- , as shown below

$$\begin{aligned}
f(4,5) &= - [1- (1- f(4)) (1- f(5))] \\
&= - [1- (1- .1768) (1- .06279)] \\
&= - [1- (.8232) (.93721)] \\
&= - [1- (.7715)] \\
&= - .2285
\end{aligned}$$

For each interactant, the aggregated expectations state is determined by combining the positive and negative expectations. Formula 3 shows the aggregated expectations for an interactant.

Formula 3. Aggregated expectations for an interactant

$e_p = e_{p^+} + e_{p^-}$

Applying formula 3 to interactants P and O, P's aggregated expectations state is .2285, and O's is -.2285. From the expectations states of the two interactants, an expectation advantage for one or the other interactant can be found. An expectation advantage is the mathematical difference between two interactants' aggregated expectations states. To find an expectation advantage for P, the difference between e_p and e_o is found.

$$\begin{aligned}
e_p - e_o &= .2285 - (-) .2285 \\
&= .2285 + .2285 \\
&= .457
\end{aligned}$$

To find the expectation advantage for O, the difference between O and P expectations is found. As can be seen from the result, the number is negative. O does not have an advantage over P, but a disadvantage.

$$e_o - e_p = (-) .2285 - .2285$$

$$= (-) .457$$

From the expectation advantage, a proportion of stay responses ($P_{(s)}$) can be predicted. $P_{(s)}$ is predicted based on the difference between the expectations an interactant holds for self and other (Berger et al, 1977: 131). $P_{(s)}$ is basically a calculated probability that an interactant will decide to stay with her own first choice or change it to match that of her partner in an experimental setting, given disagreement in initial choices (Berger et al, 1977: 131-134)¹. The correspondence between predicted $P_{(s)}$ and observed $P_{(s)}$ is shown to be high and is used as a measure of the power and prestige order of the interactants. A high $P_{(s)}$ value indicates a high expectation for self relative to the other interactant (more likely to stay with her own choice). A low $P_{(s)}$ indicates the interactant's expectation for self is low relative to the other interactant (more likely to change her choice). Formula 4 shows how $P_{(s)}$ is calculated.

Formula 4. Probability of stay response for an interactant P

$P_{(s)} = m + q (e_p - e_o)$

$$P_{(s)} = m + q (e_p - e_o)$$

$$= .6 + .1 (.457)$$

¹ The experimental setting is a standardized setting used to test this theory and its extensions. It will not be discussed here. For more details, the reader is referred to Berger et al, 1977.

$$= .6 + .0457$$

$$= .6457$$

From figure 5, P is expected to have a stay response of 64.57%. In other words, P will reject O's influence in 64.57% of the cases. For comparison's sake, $O_{(s)}$ can be calculated. As can be seen from the calculation, O is expected to remain uninfluenced by P in only 55.43% of the cases.

$$O_{(s)} = m + q (e_o - e_p)$$

$$= .6 + .1 (-.457)$$

$$= .6 + (-).0457$$

$$= .5543$$

As can be seen in formula 4, two variables are used to determine $P_{(s)}$. The first one is m, which is a parameter used to estimate the population. This means that $P_{(s)}$ will be equal to m where status equals interact. To calculate m, one simply finds the average $P_{(s)}$ for an experiment. The second parameter estimated for the experiment is q. This estimate characterizes the special features of the experiment itself, such as collective orientation. To calculate q, one finds m first, then solves for q using the formula $q = [P_{(s)} - m / (e_p - e_o)]$ (Berger et al, 1977: 140).

This is a useful way to look at interactants, because it is difficult to judge the effects of status characteristics intuitively or subjectively. Using the numbers generated from the path diagram, it can be seen that a male, for example, is predicted to reject influence from a female. On the other hand, a female is predicted to change her decision to match that of a male, when a male tries to influence her. This is also easily applied to race, sex, education, physical attributes and many other areas where culturally accepted prejudices abound.

Chapter 4

Interactant Initiated Status Transfer

An important topic in the study of status characteristics is status transfer between people instead of task situations. Given a task situation that is collectively oriented, and given what is concluded from the literature reviewed, can an interactant transfer status from another individual to herself? The proposed answer is yes. Status can be transferred between people by an interactant pulling status toward herself. This claim to status is based on an individual outside the interaction.

In daily life, there are attempts by interactants within task groups to elevate their own status above that of others. These attempts involve the use of the higher status of others, whom will be referred to here as status sources. Interactants initiate a transfer of status from the sources to enhance their own status relative to that of other interactants. Using the status of someone who is accepted by all interactants in the group to have higher status than themselves can be powerful. This is especially true if the other members of the group do not have access to the higher status source. Once status is successfully transferred, the interactants can manipulate the group's actions.

Why do interactants attempt such a transfer? The most important reason, which is also a premise on which the concept of interactant initiated transfer is built, is the fact that interactants may actually believe they have the right answer among all alternatives. This belief, coupled with a perception that higher status means more attention to one's ideas, may cause some individuals to attempt to increase their status, to ensure their solution's adoption. This is especially true when the interactant also believes she has no other options to get her idea heard.

It appears that interactant initiated transfer violates the collective orientation scope condition. However, looking closer, one must keep in mind that the theory is P-centric,

meaning the interaction is viewed from P's position. The question that must be answered is whether or not an interactant can be collectively oriented and attempt to influence others using someone else's status, at the same time. Since expectations are based on situational structures, is it possible to have a situation where an interactant believes she has the right answer, and the only right answer? Yes. How? For P to be completely collectively oriented, she must take into account the views of all interactants, including her own. P must evaluate the suggestions coming from both P' and O. There is a separation that takes place between P as an interactant and P as herself (Berger, 1977: 26).

An example can be used to illustrate this argument. Due to sudden severe weather conditions, the plane transporting P and O crashed on top of a mountain. They are the only survivors, without food and shelter. They will perish unless they climb down to warmer levels very quickly. Both want to survive and realize neither one can survive without the other, so they must help each other to survive. P knows nothing about winter survival, and knows nothing about O. They are status equal. As they descend the mountain, P locates a small ice bridge that leads to a shorter cut down the mountain, and starts toward it. The following conversation takes place:

P: Look O, if we go over that ice bridge, we can climb down faster on the other side.

O: Don't do it P, that bridge will collapse and we'll get killed.

P: How do you know, it looks strong enough?!

O: I know, my father is an expert on ice formations. Let's be safer and take this way. I know it is longer, but it is safer, too.

What will P do? Will P decide to go along with O, or continue on her own way, knowing that she cannot survive alone? This is an example of a collectively and task oriented group in which an interactant tries to influence another, simply because she believes she has the right answer.

Status transfer can be initiated by any member of the group, regardless of that interactant's status. The interactant can attempt to transfer status from any source available, regardless of the status of the source. As soon as successful status transfer is accomplished, the situation in terms of the power and prestige order among the interactants changes, until new information or new transferring takes place.

At this time, it is necessary to define two terms which have been used and will be used throughout this document, interactant initiated status transfer and status source. One can easily recognize the concept of referent actor discussed earlier. Referent actors are those people who have status characteristics that have an impact on the interactants. A status source is slightly different than a referent actor.

Definitions

Interactant Initiated Status Transfer:

An attempt on the part of an interactant to transfer status from a status source to herself.

Status Source:

Any structure or individual, who may or may not be an interacting member of the group, whose status characteristics are activated during the interaction by one of the interactants. A status source is perceived by the interactants to have higher status than the interactants¹.

There are certain assumptions which are made about interactant initiated status transfer, as listed below.

Assumption 1: External Status Source

For an interactant to initiate status transfer, an external source of status must be available to that interactant. In other words, a referent actor whose status is significant to

¹ It is possible to have situations where a status source is perceived to have lower status than the interactants. However, those situations fall outside the scope of this study and will not be addressed.

the interaction must be available. External here does not mean external to the group necessarily, although possible, but external to the interaction. Looking back at the interaction between P and O on the mountain, O initiates a transfer from someone who is external to the group as well as to the interaction.

Assumption 2: Interactant Awareness of the Source

An interactant will be unable to initiate status transfer unless the others in the group agree upon the status of the source. O uses the words "my father", who is completely anonymous to P, to initiate transfer of status. P does not know anything about O's father, except that he is an expert on ice formations (his status becomes more known). O cannot claim status using her music teacher as a source and be successful at it.

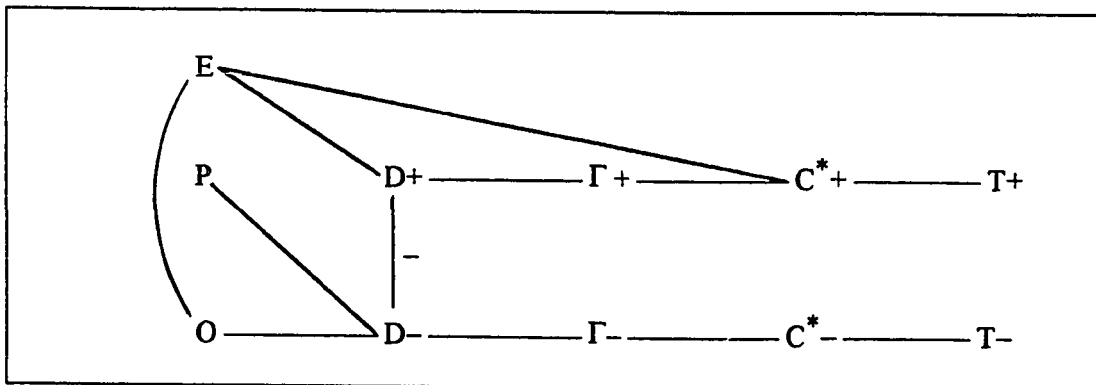
Assumption 3: Source Availability

For an interactant to successfully transfer status from a source to herself, the source must be available only to the interactant who is attempting the transfer. If P has access to O's father, then O will have a difficult time convincing P that she has additional information which P does not have. If O claims such special knowledge, P will simply go to O's father to confirm or deny what O claims.

Graphic Representation of Interactant Initiated Status Transfer

Figure 6 shows a completed structure of a situation where an interactant is initiating a status transfer from a source. The completed structure includes the normal structure of a status characteristics model plus that of the interactant initiated transfer. Graphically, interactant initiated status transfer consists of a situation in which two interactants, P and O, are shown. A source, E, who may or may not be involved in the interaction, is also included in the situation. E is included because E is perceived by P and O to possess the necessary ability for task success. That is, E is assigned the instrumental ability by P and O. E is also perceived to have higher status than both. In other words, E has D^+ and C^{*+} while P and O have D^- and C^{*-} , as can be seen from the path diagram. Actually, the interactant who is initiating the status transfer needs not believe that E possesses C^{*+} or D^+ , as long as the other believes it. For example, P must believe that E has C^{*+} and D^+ relative to P for O to succeed in transferring status from E, but O does not need to believe it.

Figure 6. A completed structure of interactant initiated status transfer



There is a line connecting O to E. This line is the transfer initiation line. This line is a path indication, which means that O may use E as a conduit to get to T+. It increases the number of paths used by O to get to T+ as well as T-, as will be seen when the path lengths and numbers are determined in the next section. In terms of the example used earlier, figure 6 may represent a situation where E is O's father while P and O may be stranded students on the mountain. Further, P and O are collectively working on a task and perceive that E possesses the necessary qualifications to complete the task successfully.

Mathematical Representation of Interactant Initiated Status Transfer

Taking the structure in figure 6 further, its mathematical implications can be worked out. The same mathematical strategy presented in Berger et al (1977) will be used. Using figure 6, as discussed earlier, one simply counts the number of paths for each interactant and for E. There are five paths leading E¹ to the task outcome. There is one path of length two, one path of length four, and one path of length five. The first and second paths lead E to T+, the third path leads E to T-. All paths leading E to T+ and T- are positive. There are two additional paths, one of length five and one of length six, both leading E, through O, to T-. Both paths are negative. There are two paths leading P to T+ and T-. They have lengths of four and five, and both are negative. Looking at the paths leading O to T+ and T-, the number of paths can be seen to be five. There are two paths leading O to T+, through E, one of length three and one of length five, which are positive. There is one path of length six leading O to T-, through E, which is also positive. There is one path leading O to T-, of length four, which is negative. Finally, there is one path of length five leading O to T+, which is also negative. The number of paths and path signs are shown in table 2. From table 2, the aggregate expectations for P and O will be calculated, as follows:

$$\begin{aligned}e^{+p} &= 0 \\e^{-p} &= -(1-[1-f(4)][1-f(5)]) \\ &= -(1-[1-.1768][1-.0627]) \\ &= -(1-[.8232][.9373]) \\ &= -(1-[.7715]) \\ &= -.2285\end{aligned}$$

¹ The paths for E are shown only for explaining how O can get to T+ and T- in more ways when there are three individuals shown than if only two are shown. They do not figure in the calculations of the expectation advantages or the stay responses. Also they will aid in understanding how the process will work when this structure is compared to another where E has D-, for example.

$$\begin{aligned}
e_p &= e^{+p} + e^{-p} \\
&= 0 + (-).2285 = -.2285 \\
e^{-o} &= 1 - [1 - f(3)][1 - f(5)][1 - f(6)] \\
&= 1 - [1 - .4422][1 - .0627][1 - .0214] \\
&= 1 - [.5578][.9373][.9786] \\
&= 1 - .5116 \\
&= .4884 \\
e^{-o} &= -(1 - [1 - f(4)][1 - f(5)]) \\
&= -(1 - [1 - .1768][1 - .0627]) \\
&= -(1 - [.8232][.9373]) \\
&= -(1 - [.7715]) \\
&= -.2285 \\
e_o &= e^{+o} + e^{-o} \\
&= .4884 + (-).2285 = .2599
\end{aligned}$$

The expectation advantage for P over O, with O transferring status from E, will be:

Expectation advantage for P over O

$$\begin{aligned}
&= e_p - e_o \\
&= -.2285 - .2599 = -.4884
\end{aligned}$$

The stay response can be predicted for P based on the empirical estimates of m and q mentioned above, which becomes as shown below.

$$\begin{aligned}
P_{(s)} &= m + q (e_p - e_o) \\
&= .6 + .1 (-.2285 - .2599) \\
&= .6 + .1 (-.4884) \\
&= .6 + (-).04884 \\
&= .5512
\end{aligned}$$

Table 2. Derived data from structure in figure 6

Path	Length	Description	sign	value
E to T+	f(2)	$E - C^{*+} - T+$	positive	.8264
E to T+	f(4)	$E - D+ - \Gamma+ - C^{*+} - T+$	positive	.1768
E to T-	f(5)	$E - D+ - D- - \Gamma- - C^{*-} - T-$	positive	.0627
E to T-	f(5)	$E - O - D- - \Gamma+ - C^{*-} - T-$	negative	.0627
E to T+	f(6)	$E - O - D- - D+ - \Gamma+ - C^{*+} - T+$	negative	.0214
P to T+	f(5)	$P - D- - D+ - \Gamma+ - C^{*+} - T+$	negative	.0627
P to T-	f(4)	$P - D- - \Gamma- - C^{*-} - T-$	negative	.1768
O to T+	f(3)	$O - E - C^{*+} - T+$	positive	.4422
O to T+	f(5)	$O - E - D+ - \Gamma+ - C^{*+} - T+$	positive	.0627
O to T-	f(6)	$O - E - D+ - D- - \Gamma- - C^{*-} - T-$	positive	.0214
O to T+	f(5)	$O - D- - D+ - \Gamma+ - C^{*+} - T+$	negative	.0627
O to T-	f(4)	$O - D- - \Gamma- - C^{*-} - T-$	negative	.1768

To further evaluate the path diagram developed in this paper, six situations are considered, including the first one considered above. They are shown in table 3. From table 3, each situational result is calculated and depicted in table 4. Pictorially, the data presented in tables 3 and 4 are shown in figure 7. Figure 7 is a comparative representation of two ways of looking at the effects of status characteristics when considered mathematically. These situations (table 3) are not shown graphically. In other words, a path diagram is not constructed for them. However, the reader will be able to use the graph structure in figure 6 to construct a path diagram for each one of them.

Table 3. Situations analyzed using interactant initiated status transfer

Situation	E	P	O
1	D+,C*+	D-	D-
2	D+,C*+	D+	D-
3	D+,C*+	D-	D+
4	D-,C*+	D+	D+
5	D-,C*+	D+	D-
6	D-,C*+	D-	D+

Table 4. Calculations based on table 3 situations (with interactant initiated status transfer)

Data	1	2	3	4	5	6
e_{-p}	0	.2285	0	.2285	.2285	0
e_{-o}	-.2285	0	-.2285	0	0	-.2285
e_p	-.2285	.2285	-.2285	.2285	.2285	-.2285
e_{-o}	.4884	.4884	.6052	.5696	.5578	.5696
e_o	-.2285	-.2285	0	-.0828	-.2923	.0828
e_o	.2559	.2259	.6052	.4868	-.2655	.4868
$e_p - e_o$	-.4844	-.0274	-.0834	-.2583	-.0370	-.7153
$P(s)$	.5512	.5973	.5166	.5742	.5963	.5285

The path diagram of interactant initiated status transfer follows the same rules as the path diagrams used in the status characteristics theory. In other words, when O initiates a transfer, the status characteristics of O, as well as those of P and E, play their

role in determining the success probability of O. This is evident from table 4. The most important factor in this determination, however, is still the path connecting O to E coupled with the belief on P's part that E possesses C*+, as indicated by the path connecting E to C*+.

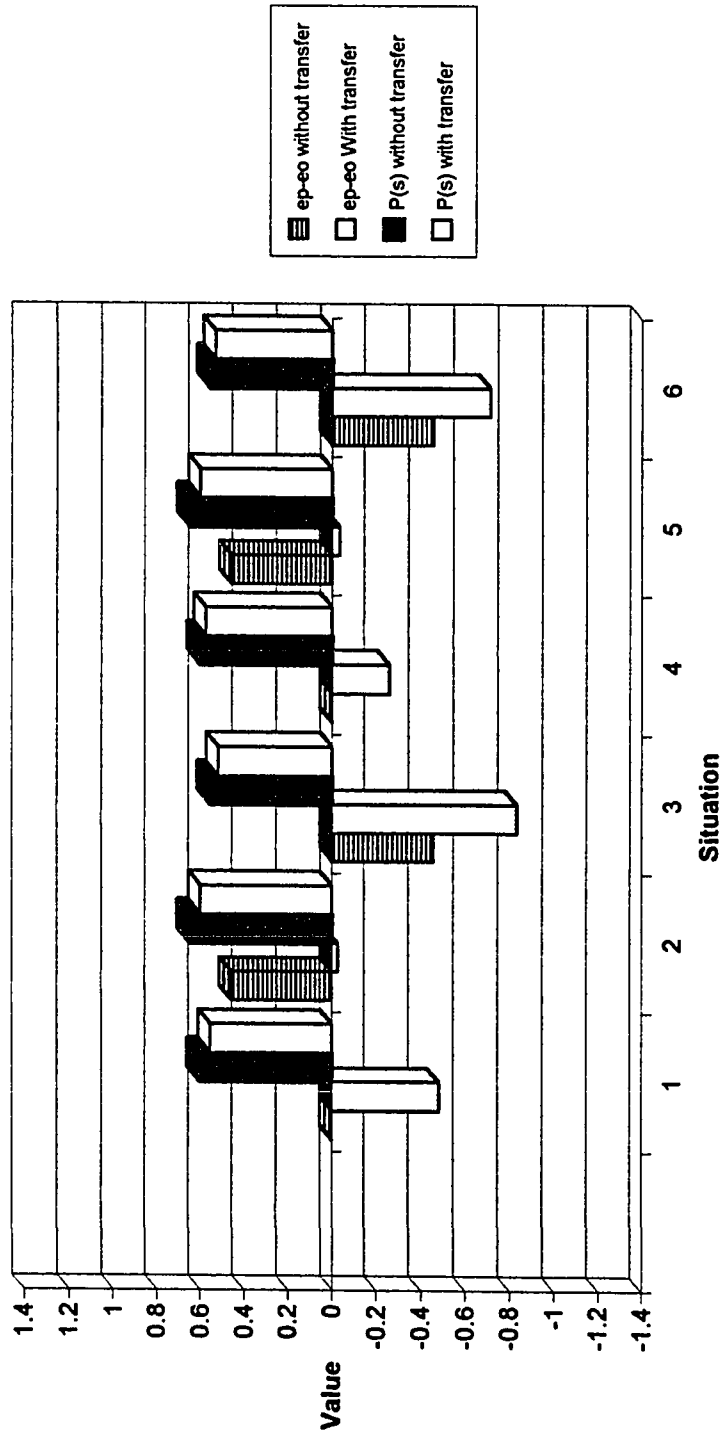
When comparing the $P_{(s)}$ values of the six situations in table 4 to the status characteristics depicted in table 3, it is obvious that the $P_{(s)}$ value is high when P has a D+ and O has a D-. Additionally, the $P_{(s)}$ value for P is highest when both P and E have D+ while O has D-. The order in which the different situations in terms of $P_{(s)}$ value can be ranked is as follows: $2 P_{(s)} > 5 P_{(s)} > 4 P_{(s)} > 1 P_{(s)} > 6 P_{(s)} > 3 P_{(s)}$. However, regardless of the value ranking for the situations in tables 3 and 4, these predicted values are lower than the predictions arrived at using the path diagram without the status transfer initiation line connecting O to E.

Using the regular path diagram employed by the status characteristics theory, the $P_{(s)}$ values for situations 1 and 4 will be equal, the $P_{(s)}$ values for situations 2 and 5 will be equal and the $P_{(s)}$ values for situations 3 and 6 will be equal. The rank order here will be as follows: $2 P_{(s)} = 5 P_{(s)} > 4 P_{(s)} = 1 P_{(s)} > 6 P_{(s)} = 3 P_{(s)}$. However, this seems unlikely in everyday activities of work places. There are many examples of seemingly equal workers having a differential in influence when the only difference is proximity to the boss. For comparative purposes, table 5 shows the predictions based on the status characteristics theory without the initiation transfer line. Figure 7 is a comparative graph of the data shown in tables 4 and 5. As can be seen from figure 7, when taking into account the status characteristics of the source, a difference in the situation can be detected. The status characteristics of each interactant and the source play their role in establishing the power and prestige order between P and O. This important aspect of the contribution of the source must be taken into account when looking at status orders within task groups.

Table 5. Calculations based on table 3 situations
(without interactant initiated status transfer)

Data	1	2	3	4	5	6
e^+_p	0	.2285	0	.2285	.2285	0
e^-_p	-.2285	0	-.2285	0	0	-.2285
e_p	-.2285	.2285	-.2285	.2285	.2285	-.2285
e^+_o	0	0	.2285	.2285	0	.2285
e^-_o	-.2285	-.2285	0	0	-.2285	0
e_o	-.2285	-.2285	.2285	.2285	-.2285	.2285
$e_p - e_o$	0	.4570	-.4570	0	.4570	-.4570
$P_{(s)}$	.6000	.6457	.5543	.6000	.6457	.5543

Figure 7. Status advantage based on data from tables 4 and 5



Chapter 5

Hypothesis

Status Transfer Hypothesis

$$P_{(s)} [\text{no status transfer}] > P_{(s)} [\text{Interactant Initiated Status transfer}]$$

This hypothesis states that the stay response of P in the tested task situations will be higher in situations where O does not transfer status than those where status transfer by O from a high status and ability E occurs.

Once a successful transfer is initiated by an interactant, the power and prestige order will be affected in favor of the interactant who initiates it. The status characteristics of the source will be "mixed" with those of the interactant who initiates it by the other members of the group, therefore increasing the status of the initiator. In other words, a combination process takes place in the minds of the others, with the resultant being an increase in the initiator's status.

The model shown in table 3 can be an ideal experimental test of this theory. However, the present study only deals with the minimal prediction that a status transfer condition in which E has higher status relative to P and O will give O a higher position in the power and prestige order of the group. The required experimental support and set up are too great at this time to test all the implications of this line of thought. To show evidence of this additional situational determinant of the power and prestige order of interactants is all this study is dealing with.

Chapter 6

Methods

To test the hypothesis listed, an experiment was used. The experiment required forty participants. Participants were female student volunteers selected from the student body of San Jose State University. Participants had no prior experience with this type of study. Those with prior experience or knowledge were to be disqualified and replaced.

Participants were recruited during class attendance time. Permission of the instructor was secured first. Each recruiting session was different, depending on the requirements of the instructor. At each recruiting session, voluntary sign-up sheets were handed out to the students. The sign-up sheet is shown in appendix A. Once the appropriate number of participants was reached, recruiting stopped. Each participant was contacted to confirm her willingness to participate in the study, and to schedule the best time for her arrival at the laboratory. Participants were scheduled for the study using the schedule in appendix B.

Participants were randomly divided into two conditions, with twenty participants in each condition. The groups were identified as condition 1 and condition 2 groups. Condition 1 group consisted of participants who were given the baseline treatment. The baseline treatment consisted of predetermined answers to a list of eight questions, and the photograph of the appropriate confederate. Condition 2 group was made up of participants who were given the experimental treatment. The experimental treatment consisted of predetermined answers to the same questions as in condition 1 group, with the exception of the answer to the last question, and the photograph of the appropriate confederate. The experiment was designed to create a status equal condition for both groups between the participant and the confederate, except for the experimental treatment.

The experiment was conducted at San Jose State University. The equipment used consisted of desks, tables, chairs and computers. One IBM compatible computer was used. All equipment needed were found in the laboratory. The computer used, however, belonged to the experimenter. This took place because color graphics were not available on the school computers.

The objective of the experiment was to create an atmosphere of realism such that participants believed their partners were simply other participants. From the initial contact, each participant was led to believe that she would be working with a partner. She and her (fictitious) partner were required to work together to complete a task. She was led to believe that she and her partner were using a computer network to communicate their choices to one another. This belief was allowed to take place from the first contact until the end of each participant's involvement.

To conduct the experiment, a computer program¹ was used along with a procedure (appendix C) for receiving and processing each participant through the experiment. It consisted of two parts, both dealing with contrast sensitivity. Only the second part was used in this experiment. The program consisted of twenty five decision making trials. The two partners in each case were required to make an initial choice as to which of two rectangles contained more white than red geometric shapes. The program was designed to measure, calculate and store the participant's responses for later analysis.

Upon completing the experiment, the exit interview was conducted. The purpose of the exit interview was to identify those participants who must be disqualified from the analysis of the results, to explain the real reason of the experiment (appendix H), to give the participants a copy of the material they signed, to return their photographs and to pay them.

¹ The program (TASK) was generated by Martha Foschi and Ricardo Foschi of the University of British Columbia.

Chapter 7

Results

The predicted $P_{(s)}$ values for both groups were derived from the theoretical formulae. For condition 1 group, the basic $P_{(s)}$ calculation was made using the expectation states theory (formula 4). To arrive at a predicted $P_{(s)}$ for condition 2 group, the same formula was used (formula 4). A one tailed t test at $\alpha = .05$ was used for the analysis. At t-critical of 1.68, the result obtained for t was 2.24. The data in table 6 summarize the results of the analysis.

Table 6. Summary of experimental results

Condition	n	$P_{(s)}$ predicted	$P_{(s)}$ actual (x)	t-critical	t	α
1	20	.64	.655	1.68	2.24	.05
2	20	.55	.530	1.68	2.24	.05

Two other t tests were conducted, using $\alpha = .05$. Since some of the participants indicated that they had been involved in another study previously, it was considered likely that experience could have contributed to the results. Therefore, the t test was conducted while eliminating from the analysis the data of those with prior experience. The null hypothesis was rejected based on that analysis, indicating support for the alternative hypothesis. Table 7 shows the results of the second t test. Additionally, a third t test was found necessary due to the fact that some of the participants were over the age of twenty four years. The possibility that age could have contributed to the results had to be tested. Once again, the results indicated that the null hypothesis must be rejected in favor of the alternative. Table 8 shows the results of the t test while controlling for age.

Table 7. Summary of experimental results while eliminating experience

Condition	n	P _(s) predicted	P _(s) actual (x)	t-critical	t	α
1	16	.64	.630	1.69	2.36	.05
2	14	.55	.480	1.69	2.36	.05

Table 8. Summary of experimental data while eliminating age

Condition	n	P _(s) predicted	P _(s) actual (x)	t-critical	t	α
1	18	.64	.636	1.68	1.92	.05
2	16	.55	.526	1.68	1.92	.05

Table 9 shows the responses of each participant through the 25 trials. Five of the trials were agreements predetermined by the program. The results of the experiment only reflect those trials where the interactant actually made decisions. Preprogrammed agreements are not included in the analysis. Figure 8 shows graphically the results obtained. As can be seen from the line graph, the average P_(s) is lower when O successfully initiated status transfer from E.

Table 9. Experimental results and P(s)

Trial Number - Condition 1

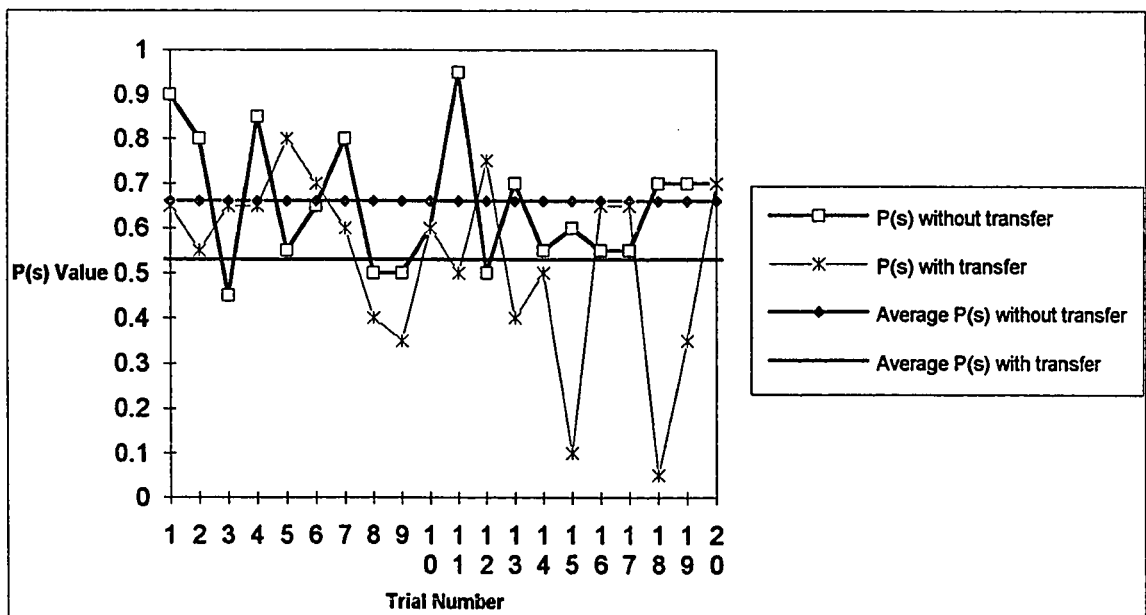
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	P(s)
1	1	1	1	-	1	0	1	1	-	1	1	-	1	1	0	-	1	1	1	1	-	1	1	1	1	0.9
2	1	0	1	-	1	0	1	1	-	1	0	-	1	1	1	-	1	1	1	1	-	1	0	1	1	0.8
3	1	0	0	-	0	1	0	1	-	1	0	-	0	1	0	-	1	0	1	0	-	1	0	0	1	0.45
4	1	1	0	-	0	1	1	1	-	1	1	-	1	1	0	-	1	1	1	1	-	1	1	1	1	0.85
5	0	1	1	-	1	0	1	1	-	0	1	-	0	1	1	-	0	0	1	0	-	1	0	1	0	0.55
6	1	1	1	-	0	0	1	1	-	1	1	-	0	1	1	-	1	1	1	0	-	0	1	0	0	0.65
7	1	0	1	-	1	0	1	1	-	1	1	-	1	1	0	-	0	1	1	1	-	1	1	1	1	0.8
8	0	1	0	-	1	0	1	1	-	1	0	-	0	1	1	-	0	1	0	0	-	0	1	0	1	0.5
9	0	0	1	-	0	1	1	1	-	0	1	-	0	1	0	-	0	1	0	1	-	1	0	1	0	0.5
10	1	0	0	-	1	1	0	0	-	1	1	-	0	1	0	-	1	1	0	1	-	0	1	1	1	0.6
11	1	1	1	-	1	1	1	1	-	1	1	-	1	1	1	-	0	1	1	1	-	1	1	1	1	0.95
12	0	1	0	-	0	1	0	1	-	0	0	-	0	1	1	-	0	1	1	0	-	1	1	1	0	0.5
13	0	1	1	-	1	0	1	0	-	1	1	-	1	1	0	-	1	1	0	0	-	1	1	1	1	0.7
14	0	1	1	-	0	1	1	0	-	0	1	-	1	0	1	-	0	0	0	0	-	1	1	1	1	0.7
15	1	0	0	-	0	1	1	1	-	0	0	-	1	1	0	-	1	0	1	1	-	0	1	1	1	0.6
16	0	1	0	-	1	0	1	1	-	1	0	-	1	0	1	-	0	0	1	1	-	0	0	1	1	0.55
17	0	1	0	-	1	1	0	1	-	1	0	-	0	0	1	-	0	0	1	1	-	1	0	1	1	0.55
18	1	0	1	-	1	0	1	0	-	0	0	-	1	1	1	-	1	1	1	1	-	1	0	1	1	0.7
19	1	1	0	-	1	1	1	1	-	1	0	-	0	1	1	-	0	1	1	1	-	0	0	1	1	0.7
20	0	1	0	-	1	1	0	1	-	1	0	-	1	1	0	-	0	1	1	1	-	1	1	1	1	0.7

Trial Number - Condition 2

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	P(s)
1	1	1	1	-	0	1	1	0	-	1	0	-	1	1	0	-	0	1	1	0	-	0	1	1	1	0.65
2	1	0	0	-	1	0	1	1	-	1	0	-	1	1	0	-	0	1	0	1	-	0	1	0	1	0.55
3	1	1	0	-	1	1	1	1	-	1	1	-	0	1	1	-	0	1	0	0	-	0	0	1	1	0.65
4	0	1	1	-	1	0	1	0	-	1	1	-	1	1	1	-	1	0	0	0	-	1	1	1	0	0.65
5	0	1	1	-	1	1	1	1	-	1	1	-	1	0	1	-	0	1	1	0	-	1	1	1	1	0.8
6	1	0	0	-	1	1	0	1	-	1	1	-	1	0	0	-	0	1	1	1	-	1	1	1	1	0.7
7	0	1	1	-	0	0	0	1	-	1	1	-	1	0	1	-	1	1	0	1	-	1	1	0	0	0.6
8	0	1	1	-	0	0	1	0	-	1	0	-	0	0	1	-	1	0	0	1	-	0	1	0	0	0.4
9	0	0	1	-	1	0	0	1	-	0	1	-	1	0	0	-	0	1	0	0	-	0	1	0	0	0.35
10	1	0	1	-	0	1	0	1	-	0	1	-	1	1	0	-	1	0	1	1	-	0	1	1	0	0.6
11	0	1	1	-	1	0	1	0	-	0	1	-	0	1	0	-	0	1	1	0	-	0	0	1	1	0.5
12	1	1	0	-	1	0	1	1	-	1	1	-	1	1	1	-	0	0	1	1	-	0	1	1	1	0.75
13	1	0	0	-	1	0	0	1	-	0	1	-	0	0	1	-	1	0	1	0	-	0	0	0	1	0.4
14	0	1	0	-	1	0	0	0	-	0	1	-	1	1	1	-	0	1	0	1	-	0	0	1	1	0.5
15	0	0	0	-	0	0	0	1	-	0	0	-	0	0	0	-	0	0	0	1	-	0	0	0	0	0.1
16	0	1	0	-	1	0	1	1	-	1	1	-	1	0	0	-	1	0	1	1	-	1	1	1	0	0.65
17	0	1	0	-	0	1	0	1	-	1	0	-	1	0	1	-	1	1	1	1	-	0	1	1	1	0.65
18	1	0	0	-	0	0	0	0	-	0	0	-	0	0	0	-	0	0	0	0	-	0	0	0	0	0.05
19	1	0	0	-	0	0	0	0	-	0	1	-	1	0	1	-	0	1	0	0	-	1	0	0	1	0.35
20	1	0	1	-	0	1	1	1	-	0	1	-	1	0	0	-	1	1	1	1	-	1	0	1	1	0.7

Note: 1 indicates a stay while 0 indicates a change response

Figure 8. Graphic representation of experimental results



Chapter 8

Conclusion

Based on the results obtained in this experiment, one must conclude that the evidence supports the idea of interactant initiated status transfer. In other words, is it possible to have, at the same time and within the same task group, interactants who are collectively and task oriented on one hand and self interested on the other? The reason for this question is simple. It is highly unlikely that members of any task group can be totally free of self interest when it comes to solving tasks (Meeker and Weitzell-O'Neill, 1977). There are extreme examples, such as in life and death situations, where the interactants are most aware of what each is contributing. In cases like this, collective interest seems to override self interest. However, in everyday situations, such as work groups, where rewards are allocated to individuals on performance basis, it is not likely that an interactant will be completely free of self interest, be it conscious or non-conscious, when completing a task. So, be it a social or a task situation, individuals usually develop an idea of where they fit, even before entering the situation. This self locating aspect of the pre-interaction phase may simply be worries about the impending interaction, or it may be a mental comparison between what is about to happen and what the individual experienced in previous, similar situations (status transfer). This anticipated relation of self to others may lead to status manipulation, even when unnecessary.

What are the implications of this study? Well, the results obtained in this study open the field to new questions which must be researched. While the idea of referent is discussed and outlined quite well, the possibility that indirect referents having impact on an interaction is not discussed (Berger et al, 1977: 96, 170). They are definitely not discussed within the context of status sources. This indirect connection between an interactant and a source of status may have additional, although possibly weaker influence

on the interactants in a group. If it is possible for indirect connections to exist, then a new area for study is opened for future research.

Status transfer initiation is only part of the status manipulation picture, however. During any task related interaction, where interactants are attempting to convince one another of the significance of their view, interactants use any methods available to make themselves successful. Sometimes it is status transfer toward themselves. Other times, however, it may be status transfer away from themselves. This status deflection is another way by which an interactant attempts to gain status, by avoiding status loss. This pushing away of undesired status may effectively lower someone else's status instead of that of the interactant. Statements like "I did not say that, Joe did" is only one example of such deflection. This status deflection is not yet studied in the laboratory. Once evidence is found for its inclusion into the status characteristics theory, it is likely that the path diagram may require modification.

The other aspect of the interactant initiated status transfer and deflection is the success rate of interactants based on their status characteristics. Can high status interactants transfer more status than low status interactants. Indeed, do high status interactants need to attempt such a transfer, since they already have high status? Social interaction is complex, and many examples can be cited to show that high status interactants do initiate and deflect status. However, the question itself raises the point to a level where research interest will hopefully take over.

Of course, interactants do not always have to initiate these status transfers and deflections themselves. Sometimes, it is done by the others within the group. For example, P and O are interactants scheduled to meet to discuss an important issue. While P is waiting for the meeting to start, she sees O come into the office with E, who is considered to be the leading expert on the issue at hand. O and E seem engaged in a friendly, but

serious conversation. They part company with a hand shake, then O enters the office and the meeting starts. What are P's thoughts, assuming she knows nothing about O?

The last, but just as important function of such transfers and deflections, is the fact that they do not only and always cause an increase in status of the person who is associated with the status source. What happens when the status of the source is lower than that of the interactants? The interactant who associates herself with the source is likely to lose status, it is conjectured at this time. Perhaps this question will also be answered with future research.

Despite the results obtained in this study, many questions remain to be answered. What happens when an interactant attempts status transfer with the knowledge of the source? What happens when the source refuses to allow a transfer? How is the power and prestige order affected in this case? Webster and Sobieszek (1974) studied the effects of high status evaluators on the interactions between group members. Their study implies, coupled with the results of this study, that situations exist where multiple status sources are available for interactants to transfer status from. Will the interactants attempt a transfer from the highest possible source, or will they simply use the most convenient one? These questions have implications related to the legitimating of the power and prestige hierarchy.

Does this transfer of status between people have undesirable effects? Perhaps not. There are times when the "dropping of a name" gets things done much faster and cheaper than the conventional method. On the other hand, this may cause conflict and resentment toward the initiator.

Can status be exchanged? The answer seems to be yes. Is it possible for a status source to run out of available status? The answer to these and many other questions must be left for future studies. However, it seems logical that status, like power, can be

manipulated like any other commodity. It seems that there are other areas in which interactants use referents (be it for their status or power) in order to advance their own causes.

The present study opens the possibility to a wide variety of research dealing with many questions. This, in turn, will hopefully lead to a large and fruitful extension of the program of research in the status characteristics theory. Due to the extent of the experiment required to complete this project, the scope of this study was limited. Future studies can be used to address issues raised by the above questions.

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Appendix A

Participant Sign-up Sheet¹

Laboratory for Sociological Research
San Jose State University

Each year the Laboratory for Sociological Research conducts a number of studies in which we invite students to participate. The studies typically involve working together in groups to solve problems. The studies last from 30 to 90 minutes and students are paid approximately \$ 10.00 for their one-time participation.

The information slip below merely gives us a list of students who might be interested in participating in one of these studies. It does not obligate you to anything. If we call you and it's a bad time or you're not interested--that's fine. If you are interested in participating, an appointment convenient for you will be set up. If you have any questions, feel free to call Paul Munroe at (408) 924-5335 for more information.

The slips will be collected today at the end of class as you leave. If you are definitely sure you are not interested, please return the blank slip so that another student may have the opportunity to participate.

Name _____ Phone # () _____ - _____

Age _____ Sex _____ Year in School? Fr. So. Jr. Sr. Grad.

Have you ever participated in a study before? YES NO

If so, Where _____

Sociology and Psychology courses you have taken _____

Best times to contact you by phone _____

¹ This form was chosen instead of one generated by the experimenter to eliminate confusion for the students. Paul Munroe was already in the process of recruiting volunteers when this experiment was in planning stages.

Appendix B
Experimental Schedule

<u>#</u>	<u>Name</u>	<u>Phone #</u>	<u>Time to Contact</u>	<u>Confirmed?</u>	<u>Date Scheduled</u>	<u>Time Scheduled</u>
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Appendix C

Experimental procedure

Caution: At anytime during the experiment, if one of the following conditions exist, terminate the experiment and proceed to the exit interview immediately:

- The participant expresses a desire to leave the experiment at anytime during the study.
- The participant displays signs of emotional discomfort with the situation, such as anger, embarrassment, nervousness or withdrawal.
- The participant does not follow instructions.
- There is an equipment or procedural breakdown.

If a participant withdraws from participation, she must be treated as if she had completed the study. In terms of the exit interview, she must receive her photographs, payment, and she must be thanked.

1. Greet each participant as she arrives, using the words:

"Hi, are you (use appropriate name). My name is Bob. I spoke with you on the phone."

After the participant responds, assign the participant the appropriate study room by pointing to the study room and using the words:

"You are seated in this room."

2. Unlock the door and ask the participant to be seated, using the words:

"Please have a seat."

3. Instruct the participant to not touch anything until she is instructed to do so. Use the following words:

"Please don't touch anything until I tell you to."

Appendix C

Experimental procedure

4. Ask the participant to complete "Agreement to Participate in Research" (appendix D) form and "Participant A" questionnaire (appendix E). Use the following words:
"I would like you to complete these forms, first. Your partner is doing the same thing. When you are done, simply open this door (point to appropriate door). I will come in to collect the forms and give you more instructions."
5. Collect completed forms and instruct the participant to remain where she is to view the instructions tape. Use the following words:
"Now, I will start an instructions tape. Please pay attention to this monitor (point to the monitor). When the tape stops, I would like both of you to remain where you are. I will come back with more instructions."
6. Leave the study room and proceed to the control room.
7. Wait one minute then start the instructions tape (appendix F).
8. During the instructions period, complete "Participant B" (appendix G) questionnaire, choose an appropriate photograph to match that of the participant, sign and date the consent form.
9. When instructions end, stop the tape. Wait one minute, then go to the participant's study room with the camera. Enter the room. Use the following words:
"OK, now we need to exchange photographs. Please back up a little so the picture is not blurred and the flash does not blind you."
10. Take the picture of the participant quickly. Use the words:
"Thanks, please stay here, I will be back with more instructions." Leave the room. Go back to control room and wait until the participant's photograph is developed.

Appendix C

Experimental procedure

11. Take confederate photograph, "Participant B" questionnaire, and go back to participant A study room. Enter room. Use the following words:
"As you heard on the instructions tape, there are two participants, A and B. You are participant A. That is important because participant A starts the interaction. I will tell you how in a minute. First I will give you information about your partner. I would like you to take no more than three minutes to review this information. When you are finished reviewing the information, you may start the interaction. To start the interaction, you simply press the enter key. The network will guide you through the first 25 trials. When you have completed all 25 trials, I would like both of you to step out into the hallway (point to appropriate door) and we will start the second part of this study. Do you have any questions?"
12. Answer any questions the participant may have. Place confederate photograph and "Participant B" questionnaire on the desk, face up, then leave the room.
13. While the participant is advancing through the 25 trials, make one copy of the "Agreement to Participate in Research" form. Add the form and the participant's photograph together and wait until the participant steps out of the room.
14. When the participant opens the door, enter the room and ask her if she is finished. If her answer is "no", terminate the experiment. If her answer is "yes", proceed with the next step.
15. Start the exit interview using the debriefing instructions (appendix H).
16. Answer any questions the participant may have.
17. Return the participant's photograph.

Appendix C

Experimental procedure

18. Give the participant a signed copy of the "Agreement to Participate in Research" form.
19. Pay the participant.
20. Thank the participant. The participant at this time is free to leave.

Appendix D

Agreement to Participate in Research

1. I have been asked to participate in a research study investigating spatial judgement.
2. I will be asked to work with a partner to evaluate geometric shapes presented on a computer screen using a computer network. I will be asked to participate in the study at San Jose State University.
3. I understand that no personal risk is associated with the study in which I have been asked to participate.
4. As part of my participation, I will experience and learn how individuals working together can improve their chances of making correct decisions.
5. I understand that there are no alternative procedures for conducting this study.
6. This study is confidential. The information I provide will not, in any way, be made available to any agency or individual, public or private. The results of the study, however, will be published so that other researchers can benefit from the available data. No personal information of any kind will be included in the results.
7. Upon completion of the study, I understand that I will receive a token payment of \$10.
8. Complaints about the research may be presented to the Sociology department chairman, Dr, Rober Gliner (408) 924-5320. Questions or complaints about research, subjects' rights, or research related injury may be presented to Serena Stanford, Ph.D., Associate Academic Vice President for Graduate Studies and Research, at (408) 924-2480.
9. No service of any kind, to which I am entitled, will be lost or jeopardized if I choose not to participate.

Appendix D

Agreement to Participate in Research

-
10. This study is not mandatory, but voluntary. I understand that I am not required to participate if I choose not to. My consent to participate in this study is given voluntarily. I may, at any time, before or during the study, withdraw from participation without any prejudice or consequence from the investigator, San Jose State University, or any other institution.
11. I have received a signed copy of this release form.
12. I understand that I must initialize each unsigned page of this release, if there are more than one page.

My signature below indicates my agreement to participate in this study.

Participant's Signature

Date

Investigator's Signature

Date

Appendix E
Participant A Questionnaire

Participant A

1. What is your name? (Optional)
2. Where do you go to school?
3. What level are you in?
4. What is your major?
5. Where are you from?
6. Have you lived in this area long?
7. Do you plan to attend graduate school?
8. Are you familiar with contrast sensitivity?

Appendix F

Experimental Instructions

"Hello, my name is Bob. Welcome to our study of contrast sensitivity. You will be told more about contrast sensitivity at the end of this instruction. This recorded instruction will explain to you what you are about to do. The study in which you are about to participate consists of two parts. Each part is made up of twenty five trials and lasts twenty five minutes. This instruction is for the first part of the study, only. The second part has another set of instructions.

There are two of you viewing this tape. Each of you is seated in a study room. One of you is designated as participant A, the other B. You are partners in this study. You are required to work together to complete a task, as a group. During the first part of the study, the way you will complete this task is through indirect communication, and using a computer network. The second part of the study will let you communicate face to face.

To complete the first part of the study, you will be asked to exchange information with each other. The information will include a photograph and answers to a list of questions. You will each have 3 minutes to study the information. Your photographs will be returned to you at the end of the study.

In the rooms, each of you has a computer. All computers in these rooms are identical and are connected, creating a computer network. You will communicate your choices to one another using these computers. You will be using a computer program that will allow you to choose between two alternatives, communicate your choice to you partner, then make a final choice from among the alternatives.

Appendix F

Experimental Instructions

This part of the study is made up of twenty five trials. In each trial, you will be presented with two slides containing geometric shapes, red and white. Your task is to decide, together, which of the two slides contains more white shapes. Here is an example of a slide with shapes on it. (EXPERIMENTER HOLDS A CARD SHOWING WHAT THE PARTICIPANT WILL BE LOOKING AT ON THE COMPUTER SCREEN. THE EXPERIMENTER WILL ALLOW A FEW SECONDS TO ELAPSE). When the slides are first presented to you, you will have ten seconds to study the slide and make your initial choices. The computer will prompt you to answer by flashing the words "initial choice" (EXPERIMENTER POINTS TO THE WORDS INITIAL CHOICE). To make your initial choice, simply wait until the words stop flashing, then use the arrow keys to move the cursor left and up to the appropriate choice you make. Align the cursor in the box you choose then press the "ENTER" key. The network is programmed to display your initial choices for each other to view, but only after both of you have made your initial choices. When your initial choices are presented to one another, the computer will display the words "partner's choice", and will identify whether or not your choices match by displaying the words "partner agrees" or "partner disagrees". (EXPERIMENTER HOLDS A CARD SHOWING WHAT THE PARTICIPANT WILL SEE ON THE COMPUTER SCREEN, AND POINTS TO WHERE PARTNER'S CHOICE WILL BE ON THE SCREEN).

Appendix F

Experimental Instructions

Once you see one another's initial choice, you will each have ten seconds to study it and make your final choice. After ten seconds, the display will flash the words "final choice" (EXPERIMENTER HOLDS A CARD SHOWING WHAT THE PARTICIPANT WILL SEE ON THE SCREEN AND POINTS TO WHERE THE WORDS FINAL CHOICE WILL BE ON THE SCREEN). To make your final choice, wait until the words stop flashing, then move the cursor to the box of your choice and press the enter key. Once you make your final choices, the network will automatically go to the next trial, until all twenty five trials are completed. There is a delay of five seconds between trials.

Your final choices will not be shown to either one of you. They will be scored, and at the end of the study, a final score for both of you as a group will be calculated. You will be able to find out what your group score is at the end of this study, and how your group score compares with the national norm for such studies.

Your task is find the best choices among all the choices that will be presented to you. You will be working as a group, so it is very important to take each other's choices into consideration before making your own final choices. The only score that will count is your group score, so agreement on your final choices is important. Each time you make a correct final choice, your group will receive two points. If either one of you makes an incorrect final choice, your group will receive no points.

Now let me tell you a little about this study. Contrast sensitivity is an individual's ability to distinguish between geometric shapes and colors. Every individual possesses this ability, some more than others. Two NASA engineers discovered contrast sensitivity in 1968, accidentally, while working on an ergonomic workspace they had developed for

what eventually became the stealth bomber. With the help of other scientists, this discovery was studied further in an effort to find business and consumer applications for it. Contrast sensitivity is now extensively used in building design, interior design, and many other fields. Now, we will continue our study by taking the pictures and answering the list of questions. Thank you for participating."

Appendix G
Participant B Questionnaire

Participant B

1. What is your name? (Optional)
2. Where do you go to school?
3. What level are you in?
4. What is your major?
5. Where are you from?
6. Have you lived in this area long?
7. Do you plan to attend graduate school?
8. Are you familiar with contrast sensitivity?

Appendix H
Debriefing Instructions

Before debriefing starts, conduct a non directed interview with the participant. Examine her awareness of the real reason for the experiment. When complete, proceed to the script below.

"I would like to explain to you the study we have just completed, at this time. This study dealt with people's reactions to certain information provided under a given set of conditions. Specifically in this case we were studying the number of times people would switch their answers from their initial choices to match that of their fictitious partners, given specific information. The contrast sensitivity ability mentioned in the taped instructions is fictitious and does not exist in real life. The purpose of the tape was to try to convince you that you were working with a partner. In fact, your partner's answers to the list of questions was designed to match yours closely, and the photograph shown to you of your partner was that of a student here at the university. So your partner was also fictitious. Finally, the 25 trials you completed were a computer generated program. The shapes were random and have no relation to any real ability people have. You were simply using a computer program. This was the only way this study could have been conducted without making you aware of the purpose of the study. If you have any questions or concerns, please let me help you resolve them. If you wish, you may contact the individuals whose names are listed on the consent forms you signed earlier, for further information. Do you have any questions?"