HOW DO STATUS BELIEFS DEVELOP? THE ROLE OF RESOURCES AND INTERACTIONAL EXPERIENCE*

Cecilia L. Ridgeway
Stanford University

Elizabeth Heger Boyle
University of Minnesota

Kathy J. Kuipers
Stanford University

Dawn T. Robinson
Louisiana State University

Status construction theory argues that interaction between people with unequal structural advantages is crucial in the development and spread of status value beliefs about people's distinguishing attributes. A central claim is that goal-oriented encounters between those who differ in material resources as well as in an easily observed nominal attribute create status beliefs about that attribute which favor the "richer" actors' attribute category. We conduct an experimental test using dyadic, same-sex encounters between participants who differ in pay level and a "mere difference" attribute; the claim is supported for males and females. Status beliefs are distinguished from own-group favoritism by their acceptance by those they disadvantage. A second experiment and other evidence suggest that the interactional hierarchy associated with pay and the distinguishing attribute in such doubly dissimilar encounters pressures low-pay subjects to accept beliefs that disadvantage them. This acceptance is key to the power of interaction to transform structural advantages into status beliefs.

How do cultural beliefs develop that attach status value to nominal distinctions among people? Status beliefs associated with characteristics such as gender or ethnicity have pervasive and sometimes painful effects on influence, respect, and power among actors (Carli 1991; Feagin 1991; Webster and Foschi 1988). The consequences of such interactional inequalities are not trivial. Interaction mediates many of the processes by which people are given access to rewards, evaluated, and directed toward or away from positions of power and wealth. As this suggests, status beliefs are an important part of the larger processes by which inequality in society is accomplished. But what social processes could foster such beliefs and make them roughly consensual in a population?

Status construction theory argues that structurally constrained interaction plays a crucial role in the construction and spread of status value beliefs (Ridgeway 1991). It does not argue that this is the *only* source of status beliefs, but that it is an important and persistent source. We present experimental tests of the theory's central claims about the power that certain types of interaction have in the creation of status beliefs about a distinguishing attribute of individuals.

Sociologists since Weber (1968) have observed that a social group's acquisition of superior material resources relative to another group is a typical precondition for the development of status beliefs favoring that group over the other. A wide variety of historical contingencies can give rise to such a precondition. The theory seeks to specify the social processes through which this precondition, once developed, could create consensual status beliefs. Once such beliefs form, a member of the materially advantaged group acquires a social advantage even over those members of the other group who are, in fact, his or her material equals.

*Address communication to Cecilia Ridgeway, Department of Sociology, Stanford University, Stanford, CA 94305-2047 (ridgeway@leland.stanford.edu). We thank Linda Molm for helpful comments on the paper and also several thoughtful *ASR* reviewers. This research was supported by National Science Foundation grant SES-9210171 to the senior author.

Status value beliefs have some distinctive aspects that should be kept in mind when considering the processes that might create them. Studies of social identity theory have documented that the creation of a "mere difference" between groups of people is sufficient to create in-group bias (Abrams and Hogg 1990; Tajfel 1978; Turner 1987). It appears that if people perceive a difference between themselves and others, they evaluate their own category as diffusely "better" and act to favor their own group over the other (Brewer and Kramer 1985; Dovidio and Gaertner 1993; Messick and Mackie 1989). With status value beliefs, however, people in *all* categories of the distinguishing attribute agree, or at least concede, that one category is better than the other(s). Thus, the beliefs of those in the devalued category are critical to the formation of status value beliefs; they must overcome their powerful tendency to prefer their own group and come to believe that, like it or not, as a matter of social reality the other group is more socially worthy and "better." Interactional contexts, according to the theory, may encourage this transformation by creating local realities for participants in which the distinguishing attribute appears to be consensually status valued before such consensuality actually exists more broadly.

As this suggests, another distinctive aspect of status value beliefs is that they are beliefs about what "most people" think. The power of status beliefs derives from the appearance of consensuality that objectifies them, making them seem like social facts that must be accepted, regardless of whether the belief holders themselves approve of the status beliefs (Berger and Luckmann 1967). Therefore, for people in both advantaged and disadvantaged categories, the formation of status beliefs turns on believing that *most others* agree that people of one category are more worthy and competent than those of another category.

Status construction theory argues that interaction under the structural constraints of certain types of encounters is sufficient to create in its participants status beliefs about a salient nominal characteristic on which they differ. We derive hypotheses representing these claims; in two experiments we test these hypotheses and further specify the role of interactional experiences in the formation of status beliefs, particularly by those they disadvantage. We present supplemental evidence from a third experiment as well.

STATUS CONSTRUCTION THEORY

Status construction theory has a macro-micro-macro form that specifies how structural characteristics of the population constrain (1) who encounters whom, (2) what happens in those encounters, and (3) the diffusion processes these encounters jointly create that can result in consensual status beliefs. The theory is an abstract model of the social processes *sufficient* to create status beliefs, although these are unlikely to be the only means by which such beliefs could develop (Ridgeway 1991). But, if the processes described in the theory can be shown to produce status beliefs and if they can be plausibly thought to be present in society in regard to a given socially salient characteristic such as gender or race, then they are likely to be important for maintaining or changing the status value of that characteristic.[1]

The theory starts with Weber's (1968) structural condition: A correlation develops between an inequality in material resources and a cognitively recognized, but unordered (i.e., nominal), distinction among the population. Say 60 percent of As are resource-rich while only 40 percent of Bs are. The nominal characteristic (i.e., the A-B distinction) is assumed to be a relatively salient attribute in that people in the culture easily perceive one another to differ on it, but it has not yet acquired consensual status value.[2] Since the

[1] These processes, therefore, may or may not have played a part in the actual historical origin of a given status valued characteristic. But if the conditions described by the theory are currently present in regard to that characteristic, the theorized processes will continually recreate status beliefs about the characteristic and will maintain status value, even if the forces that created it disappear.

[2] Although the social salience of an attribute will increase as it acquires evaluative significance in the culture, at least some individual characteristics can be distinguished before they acquire consensual status value. Research suggests that attributes of appearance that are easily observed and that show clear differences among interactants are the strongest candidates for such salient descriptive characteristics (for a review see Fiske and Taylor 1991:144–45).

more distinctive a characteristic is, the more susceptible it is of acquiring status value, status construction theory assumes that the nominal characteristic at stake is not systematically correlated with nonresource characteristics more salient than itself.

Status construction theory employs Blau's (1977, 1994; Blau and Schwartz 1984) structural theory of association to specify how the condition of a correlation between the nominal distinction and resource differences constrains who encounters whom. That theory, which has empirical support (Blau and Schwartz 1984; McPherson and Smith-Lovin 1987), estimates the likelihood of associations between different categories of people based on the way people's preferences for similar others are constrained by the availability in the population of others who are similar or different in various ways.

Using Skvoretz's (1983) formalization of Blau's principles of association, it is possible to predict the percentage of encounters in the population likely to occur between people who are similar and different in combinations of resources and in the nominal characteristic. The exact percentage of each type of encounter depends on assumptions about the initial structural conditions: the distributions of the population among categories of resources and the nominal characteristic, the strength of the correlation between resources and the nominal characteristic, and the strength of preferences (if any) for others who are similar in resources or the nominal characteristic.

The theory then predicts what happens in these different types of encounters and this is our primary focus here. Drawing on expectation states theory, status construction theory specifies the hierarchies of influence and esteem that are likely to structure the encounters (Berger et al. 1977; Berger and Zelditch 1985; Webster and Foschi 1988). Expectation states theory can predict which actors are likely to be perceived as more worthy and competent when compared with others in goal-oriented encounters of various sorts. Status construction theory argues that these implicit assumptions about the worthiness of given actors in the encounter, as reflected in the interactional hierarchy, can, under certain circumstances, provide the seeds from which more general assumptions develop about the relative worthiness and competence of whole categories of social actors.

Interactional Hierarchies and the Formation of Status Beliefs

To explain how experiences in interactional hierarchies induce beliefs about the worthiness and competence of categories of actors, status construction theory turns to goal-oriented encounters between people who differ on a nominal characteristic, such as the distinction between As and Bs. Since the A-B distinction at first carries no consensual value, it should have no systematic effect on the initial formation of influence hierarchies in these encounters. However, once the interactional hierarchy has developed (on whatever basis), actors may well associate the worthiness and competence with which they are viewed in the setting with their corresponding differences on the nominal characteristic. In other words, they make guesses about what other people think is the social worthiness and competence of As and Bs generally from the influence and esteem that particular As and Bs are accorded in the encounters they experience. Thus, the aspect of interaction that induces status beliefs, according to the theory, is participation in an interactional hierarchy that is associated with participants' differences in a nominal characteristic. By participation we mean a mutual exchange through which an influence hierarchy is enacted. Multiple experiences of this sort are probably necessary to induce clear status beliefs.

If actors do form fledgling status beliefs about As and Bs from such encounters, another body of expectation states research indicates that they will transfer these beliefs to future encounters with other As and Bs (Markovsky 1988; Markovsky, Smith, and Berger 1984; Pugh and Wahrman 1983). With each subsequent encounter, the power of their newly formed status beliefs will decline unless they are "boosted" by periodic encounters that reinforce them (i.e., if subsequent encounters contradict the new beliefs, the beliefs may erode entirely). But in the meantime, while actors hold their new beliefs they will treat others accordingly. This effectively altercasts the others and, by that means, "teaches" the beliefs to some of these

others (Miller and Turnbull 1986; Moore 1985; Weinstein and Deutschberger 1963).

Doubly Dissimilar Encounters and Consensual Beliefs

Whether individual beliefs about the social worthiness of As and Bs formed in local encounters take hold and become widely shared likely depends on whether the preponderance of A-B encounters available to actors in the society support or contradict the beliefs. Over a set of encounters between As and Bs there is no prior reason to predict that there will be more with interactional hierarchies favoring As over Bs than Bs over As, unless As have a systematic advantage in gaining influence and esteem in at least some subset of these encounters. Unless such a subset exists, A-B encounters will produce a random collection of contradictory beliefs favoring As and favoring Bs rather than a social process that leads predictably to consensual status beliefs favoring As over Bs.

The correlation between resources and the A-B distinction becomes important at this juncture because it affects the association of influence hierarchies with As and Bs. Consequently, status construction theory argues that a subset of encounters between As and Bs, called *doubly dissimilar* encounters, is central to the development of widely shared status beliefs favoring As over Bs. Doubly dissimilar encounters are goal-oriented encounters between actors who differ not only in the nominal characteristic, but also in resources.

Several studies demonstrate that when actors differ in resources or rewards, they tend to create expectations for one another's competence and performance on the basis of those rewards (Cook 1975; Harrod 1980; Stewart and Moore 1992). Acting on these expectations, the higher rewarded actors tend to assert and maintain their opinions with greater confidence than lower rewarded actors, who act with greater uncertainty about the value of their own contributions. This, in turn, tends to create an interactional hierarchy of influence and esteem in the setting that favors the reward or resource-advantaged actor.

In doubly dissimilar encounters, then, resource-rich actors in the setting have a systematic advantage over resource-poor actors in gaining influence and esteem. Once an interactional hierarchy has formed, however, actors are again likely to associate the relative worthiness and competence each is accorded (due to resource differences) with their corresponding differences in the A-B distinction. Thus doubly dissimilar encounters systematically induce status beliefs favoring the nominal category of the resource-advantaged actor.

Doubly dissimilar encounters are the least common kind of encounter because of people's general tendencies toward homophily (McPherson and Smith-Lovin 1987). Yet, because of structural constraints on the availability of similar others, at any given time a certain percentage of the population is always engaged in doubly dissimilar encounters. As people are circulated in and out of doubly dissimilar encounters, beliefs formed in those encounters have the potential to diffuse widely through the population.

The correlation in the population between resources and the nominal distinction means that more of these doubly dissimilar encounters will be between rich As and poor Bs than between rich Bs and poor As, giving status beliefs favoring As over Bs a numerical advantage. Analyses of other types of encounters suggest that they either create no beliefs about the A-B distinction or that equal numbers of counteracting beliefs emerge so that the surplus of beliefs favoring As over Bs coming out of doubly dissimilar encounters should not be overwhelmed (Ridgeway 1991). As a consequence, status beliefs favoring As over Bs are likely to diffuse widely throughout the population and gradually take hold (Ridgeway and Balkwell 1997). In effect, doubly dissimilar encounters become beacons that continually broadcast support for status beliefs about the nominal distinction, encouraging and underpinning their diffusion and eventually their consensuality as well.

EMPIRICAL TESTS

That is the essence of status construction theory. Note that it involves two distinct sets of arguments. One set of arguments focuses on the probability of different types of encounters and their logical consequences for

the likely diffusion and consensuality of status value beliefs among the population, given various initial structural conditions. The second set focuses on belief formation in encounters—most critically in doubly dissimilar encounters. Computer simulations of the encounter and diffusion processes specified by the theory support the logical sturdiness of the first set of arguments (Ridgeway and Balkwell 1997); but the simulations presume the second set of arguments. In particular, they presume the theory's central claim that doubly dissimilar encounters encourage participants to develop status beliefs about the A-B distinction that favor the resource-advantaged category. The emergence of consensual status beliefs favoring the resource-advantaged category turns on this claim; our purpose here is to test it.

Both cognitive and behavioral processes operate in doubly dissimilar encounters that encourage beliefs about the social worthiness of As and Bs (Ridgeway 1997). Actors recognize that they differ in resources as well as the nominal characteristic, and their resource differences occur in the context of referential information about the general association of Bs with poverty rather than riches. This creates a cognitive context for their behavioral experience in interaction.

According to the theory, however, a more important effect of resource differences is to bias the development of the interactional hierarchy, while participation in the hierarchy, in turn, induces status beliefs. Indeed, we suspect that the behavioral experience of the hierarchy in doubly dissimilar encounters is key to the acceptance of status beliefs by those the beliefs disadvantage. The influence hierarchy altercasts the resource-poor B as less worthy and competent than the resource-rich A and, by behaviorally enacting that state, forces the poor B to participate in a local social reality in which As are more valued than Bs. We suspect this experience is a potent force overcoming poor Bs' natural tendency to favor their own group and forcing Bs to concede that "most people" believe As are "better."

To test the theory's claim that doubly dissimilar encounters create status beliefs in this way, we designed a laboratory experiment to incorporate all the elements of these encounters theorized to affect the formation of status beliefs: a salient nominal distinction, a resource difference with associated information about its distribution in the population, the experience of an influence hierarchy corresponding to the resource difference, and multiple encounters. If the theory is correct, the combined effect should be sufficient to create status value beliefs about the nominal distinction.

After this principal test of the theory, we carried out a second experiment to clarify whether the formation of status beliefs in doubly dissimilar encounters can be attributed to the cognitive context of those encounters alone, or whether, as the theory argues, the experience of the interactional hierarchy is a powerful or necessary factor in the acceptance of status beliefs by those they disadvantage. Evidence from a third experiment further clarifies the power of interactional hierarchies to induce status beliefs.

Experiment 1

For the primary experiment, our hypotheses are that after goal-oriented doubly dissimilar encounters:

Hypothesis 1a: Resource-advantaged subjects will form beliefs that greater social worthiness and competence are attributed to members of their own nominal category compared to the other.

Hypothesis 1b: Resource-disadvantaged subjects will form beliefs that greater social worthiness and competence are attributed to members of the other's nominal category compared to their own.

Confirmation of Hypothesis 1b is especially critical to the theory's claim that doubly dissimilar encounters create generalized status beliefs, not just in-group favoritism.

Design and procedural overview. To test these hypotheses, we designed a $2 \times 2 \times 2$ experiment that crossed a nominal distinction with resource level (high-pay–low-pay) and sex composition (all male or all female) in dyadic teams. In all conditions, dyads were doubly dissimilar in that self and partner differed on both the nominal distinction and resource level. Seventy-six paid undergraduate volunteers (38 males and 38 females) were randomly assigned to condition

within sex; they participated in two rounds of a decision-making task, each time with a different partner (actually confederates), supposedly as part of a study of diverse decision-making teams. There were between 8 and 11 subjects in each of the eight conditions. To minimize the impact of confounding status characteristics (e.g., ethnicity or attractiveness) without eliminating the experience of interaction, subjects and partners sat in separate rooms and interacted via audio hook-up to accomplish a task presented on a computer display. By the "experience of interaction" we mean the mutual, contingent exchange of responses in terms of substance, tone, and verbal nuance. Afterwards subjects completed a questionnaire about their beliefs about people in both nominal categories.

Because the nominal distinction is crossed with resource level, the hypotheses predict that one nominal category will be evaluatively favored in half of the conditions while the other category will be favored in the remaining conditions. Thus, this design protects against the possibility that subjects already have established evaluative associations with the nominal distinction that could produce the predicted results independently of the experimental treatments.

Nominal distinctions and resource levels. Upon arrival, subjects completed a "background information sheet" that asked brief questions about their GPA, birthplace, siblings, and employment history. Then, to create the nominal distinction, they completed a task adapted from social identity studies of "mere difference" asking them to chose between reproductions of art by Klee and Kandinsky (Tajfel et al. 1971). They were told that this "Personal Response Style" test differentiated between two types of people, S_2s and Q_2s, whose very different response styles were stable aspects of their selves. Supposedly, there were about equal numbers of S_2s and Q_2s in the world.

After they completed the response style test, but before they received the results, subjects' pay levels were manipulated to create a resource difference. Adapting Stewart and Moore's (1992) procedures, subjects were told that, based on the information the laboratory had about them, they had been assigned to pay categories according to a predetermined fee schedule. They were shown a sheet with pay categories ranging from \$6 to \$13. In low-pay conditions, \$8 was circled for the subject and \$11 for the partner. In high-pay conditions, the subject received \$11 and the partner \$8. In the context of the background information sheet filled out earlier, these procedures were designed to make pay differences plausible to the subjects while retaining ambiguity about the precise basis for them. (At the end of the session, all subjects were actually paid \$11.)

On a separate part of the pay assignment sheet, personal response style results were listed for self and partner. When self was S_2, partner was Q_2; when self was Q_2, partner was S_2. This created a nominal distinction in all dyads.

To create referential information about resources and the nominal distinction, subjects signed a pay record with one column labeled S_2 and another labeled Q_2. Under each were four signatures and pay levels, apparently of previous participants. In low-pay conditions, subjects saw that people in their own response style category were paid \$7 to \$9 while those in the other category received \$9 to \$12. In high-pay conditions, their own response category received the higher pay levels. To reinforce the manipulations, subjects copied their own and their partner's response styles and pay levels on an "information cover sheet," supposedly for laboratory records.

Interaction and influence hierarchies. Subjects were then put in microphone contact with their partners and began a 10-trial "meaning insight" task requiring them to associate English words with words supposedly from an early language. For each trial, first the subject and then the partner announced an initial choice. A discussion followed, and then they typed a final choice on their computer keyboards. They were told that their performance would be scored as a team, receiving credit only if both members agreed on the correct choice. The highest scoring team in the study would receive a bonus of \$100.

In all conditions, partners were undergraduate confederates who followed a constant script dictating the choices and arguments they presented. On all but trials 3 and 8, confederates announced an initial choice that differed from the subjects'. *Confederate*

influence is the proportion of these disagreement trials on which the subject switched choices to agree with the confederate on the final choice.

Status construction theory presumes that the behavioral experience of the influence hierarchy is central to the formation of status beliefs. Studies have repeatedly shown that resource differences tend to create differential assumptions about competence that are expressed in more or less assertive and confident behavior in interaction. This, in turn, leads to influence differences (Cook 1975; Harrod 1980; Stewart and Moore 1992). To create this situation behaviorally, confederates varied the certainty and confidence with which they presented their choices and arguments to correspond with their pay level relative to the subject. In low-pay subject conditions the confederate interacted in a confident, assertive, but nondomineering manner, a style shown to characterize those who hold higher performance expectations for themselves than the other and who are more influential (Carli, LaFleur, and Loeber 1995; Ellyson, Dovidio, and Corson 1981; Ridgeway 1987; Ridgeway, Berger, and Smith 1985). In subject high-pay conditions, the confederate presented the same arguments, but in a hesitant, uncertain, and deferential manner.[3] Multiple confederates were randomly assigned across conditions within sex.

After completing round 1 and a brief questionnaire, subjects began a second 10-trial round of the same task with a different partner. The subject again was shown a pay assignment sheet repeating the subject's own pay level and personal style. It indicated that the new partner's personal style was the same as the first partner's and his or her pay level was similar to the first partner's. The new partner was assigned \$11.50 in subject low-pay conditions and \$7.50 in subject high-pay conditions. During the task the new partner, a second confederate, again followed an established script, presenting the arguments in a deferential manner in subject high-pay conditions and a nondeferential manner in subject low-pay conditions. Thus, round 2 replicated round 1 with a different partner and minor differences in partner pay to maintain plausibility.

As expected, influence hierarchies developed in round 1 and round 2 dyads that reflected pay levels and the confederates' associated behavioral styles. In conditions where subject pay was low, confederate influence was high. On round 1, subjects changed their word associations to match the confederate's on 74 percent of disagreement trials in male groups and on 65 percent of disagreement trials in female groups; on round 2, subjects changed to agree with the confederate on 80 percent of trials in male groups and on 71 percent of trials in female groups. In subject high-pay conditions, confederate influence was dramatically lower (round 1, 43 percent for male dyads, 44 percent for female dyads; round 2, 52 percent for males and 51 percent for females). These differences by pay level were highly significant for both round 1 ($F = 42.66$, $p < .001$) and round 2 ($F = 34.94$, $p < .001$) and did not differ by sex composition of the dyad or subject-partner response style (i.e., S_2/Q_2 or Q_2/S_2).

Status beliefs and other measures. Seven-point semantic differential items on the post-round-2 questionnaire measured status beliefs about S_2s and Q_2s. Subjects indicated how they thought *most people* would rate S_2s, and separately, how *most people* would rate Q_2s on status and power (respected vs. not respected, powerful vs. powerless, low status vs. high status, leader vs. follower) and on competence (competent vs. incompetent, knowledgeable vs. unknowledgeable, incapable vs. capable). Scores on these items were summed and averaged to create scales of the perceived status/power and competence of S_2s and Q_2s; scores were recoded to

[3] Slightly more than half of the confederate performances, randomly distributed across conditions, were tape recorded. Coders blind to the condition they were coding rated the confederates' performances on each task trial as deferential (0) or nondeferential (1); scores were summed over 10 trials. Confirming the manipulation of confederate behavior, nondeferential scores were much higher on round 1 ($F = 322.17$, $p < .001$) and round 2 ($F = 351.16$, $p < .001$) in conditions where subject pay was low (for males, means = 9.50 on round 1 and 9.73 on round 2; for females, rounds 1 and 2 means = 8.33 and 8.69) than when subject pay was high (for males, rounds 1 and 2 means = .30 and .20; for females, rounds 1 and 2 means = .27 and .81). Confederate behavior did not differ significantly by sex or by self-versus-partner response style.

represent perceived assessments of subjects' own category and the partner's category.[4] These scales provided the primary measure of the subjects' status beliefs about the nominal distinction.

Two other measures tapped perceptions related to status beliefs. Subjects used the same semantic differential items to indicate how they *personally* would rate the status/power and competence of S_2s and Q_2s. Also, after round 1 and round 2, subjects indicated, for a set of choice categories including an S_2 or Q_2, who would be more likely to (1) be in a position of greater responsibility in the university, (2) give the keynote address at a professional conference, (3) receive early promotion by a major corporation, and (4) be chosen foreman of a jury. Results were coded to indicate the percentage of questions for which subjects chose someone from their own response style group as more likely to be in the high status position. This provided a measure of evaluative bias for the subject's own nominal category compared with the other category. Additional semantic differential items (inconsiderate vs. considerate, unlikable vs. likable, pleasant vs. unpleasant, cooperative vs. uncooperative), also summed and averaged in a scale, tapped how subjects thought most people and they themselves would rate both S_2s and Q_2s on social considerateness.

Finally, after round 1 and round 2, subjects placed both self and their partner on nine-point scales asking (1) how influential each was, (2) how useful each's ideas were, (3) how much each contributed to a high quality decision, and (4) how skilled each was at the task. The first question evaluated the perceived influence of self and partner for each round. For the remaining three questions, scores for partner were subtracted from those for self and the differences were summed and averaged to provide a measure of the perceived task skill of self relative to partner.

Results. Status beliefs are distinguished from group identity effects by the fact that those in the disadvantaged group overcome in-group bias and concede that the *other* group is more socially worthy. As Table 1 shows, the experience of doubly dissimilar encounters was, as predicted, sufficient to overcome low-pay subjects' preference for their own nominal group. In low-pay conditions, after each round subjects' choices of their own personal response style group as the more likely to be in high-status positions were generally below 50 percent, indicating that they were as likely or more likely to choose the other group for high-status positions as their own. Given the documented power of in-group bias effects and the rarity of out-group preferences (Fiske and Taylor 1991:133–35), this is striking support for status construction theory's predictions that doubly dissimilar interactions will constrain the beliefs of the disadvantaged as well as the advantaged.[5] Also as expected, those in high-pay conditions showed strong preferences for their own group in their choices, producing highly significant effects of pay level in analyses of variance (Table 1).[6] These effects did not vary by sex composition of the dyad or by whether the subject was assigned the Q_2 or S_2 personal response style.

[4] Factor analysis of these semantic differential items supports theoretical views of status beliefs as constituted by attributions of social worthiness but carrying corresponding assumptions about competence (Berger, Conner, and Fisek 1974; Ridgeway and Walker 1995). Results suggest that a one-factor solution combining status/power and competence items is most parsimonious, but a two-factor solution separating status and competence items offers a slightly better fit. For substantive clarity, we present the data as two separate scales.

[5] The few studies of social identity theory that find out-group favoritism (e.g., Sachdev and Bourhis 1985, 1987; also see Hinkle and Brown 1990:50–52) deal with situations where an established status evaluation of the categories already exists (e.g., between actual high- and low-status occupations) or where structural power differences are imposed (e.g., between a group assigned the power to decide for all and one without decision-making power). Here we find out-group favoritism where the categories are not initially status valued, and self and partner do not begin with differences in structural power.

[6] Although the encounters in both rounds were structurally identical, the partners themselves differed, raising questions about whether it is appropriate to use a repeated-measures analysis of variance here. If one is performed, however, there is a powerful effect of pay ($F = 26.47$, $p < .001$) and a borderline tendency for all scores to be higher on round 2 ($F = 2.82$, $p = .10$).

Table 1. Percentages of Subjects Preferring Their Own Personal Response Style (PRS) Group: Experiment 1 and 2

	Means (Percentages)			
	Males		Females	
Experiment	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2
Experiment 1				
Round 1				
High-pay subjects	83.3	78.1	58.3	82.5
Low-pay subjects	44.4	45.8	40.0	38.5
Round 2				
High-pay subjects	92.5	75.0	67.5	85.0
Low-pay subjects	41.7	36.9	47.5	53.1
Experiment 2				
High-pay subjects	85.4	75.0	50.0	69.4
Low-pay subjects	50.0	52.5	62.5	60.4

ANOVA Results (*F*-Values)	Effect Tested						
Experiment	Sex	Pay	S_2/Q_2[a]	S × P[b]	S × S_2/Q_2[c]	P × S_2/Q_2[d]	3-Way[e]
Experiment 1							
Round 1	n.s.	21.56***	n.s.	n.s.	n.s.	n.s.	n.s.
Round 2	n.s.	24.69***	n.s.	n.s.	n.s.	n.s.	n.s.
Experiment 2	n.s.	5.05*	n.s.	6.77*	n.s.	n.s.	n.s.

[a] S_2/Q_2 = subject assigned a Personal Response Style of S_2 or Q_2.

[b] S × P = Sex × Pay.

[c] S × S_2/Q_2 = Sex × S_2/Q_2.

[d] P × S_2/Q_2 = Pay × S_2/Q_2.

[e] 3-Way = Sex × Pay × S_2/Q_2.

* $p < .05$ ** $p < .01$ *** $p < .001$

The doubly dissimilar encounters created in Experiment 1 not only were sufficient to overcome in-group bias, they also induced status beliefs favoring the high-pay nominal category (see Table 2). Compared to high-pay subjects, low-pay subjects thought "most people" would perceive the subjects' own response style group to be significantly lower in status and less competent. Low-pay subjects also thought most people perceive the other response group to be significantly higher in status and more competent than did high-pay subjects. These results are clearest when examined in terms of the difference between subjects' estimates of the way "most people" perceive their own response style group and the other group (again, see Table 2). The difference favors the subjects' own category for both males and females in high-pay conditions. But low-pay subjects of both sexes consistently reported that most people perceive the *other* response style group as higher in status and more competent than their own group, as the negative mean difference scores indicate. These results produced highly significant effects of pay level in analyses of variance that strongly confirm Hypotheses 1a and 1b for males and females alike (see Table 2). After two doubly dissimilar encounters, both resource-advantaged and resource-disadvantaged subjects formed beliefs attributing greater social worthiness and competence to members of the advantaged nominal category.

Another way to look at these findings is to consider how subjects' assessments of the way their own and the other group is perceived relates to the influence hierarchies

Table 2. Subjects' Assessment of "Most People's" Evaluations of Their Own and Others' Personal Response Style (PRS) Group: Experiment 1

	Means							
	High-Pay Males		Low-Pay Males		High-Pay Females		Low-Pay Females	
Scale	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2
Status/Power								
Own Group	5.31	5.38	4.56	3.57	5.55	6.03	4.33	4.84
Other Group	3.60	3.41	4.98	5.82	4.35	3.93	5.83	5.59
Difference	1.69	1.97	–.31	–2.25	1.20	2.10	–1.50	–.75
Competence								
Own Group	5.44	5.58	5.19	4.67	5.63	6.03	5.17	5.29
Other Group	4.10	4.04	5.20	5.48	4.73	4.47	5.57	5.79
Difference	1.37	1.54	.15	–.81	.90	1.57	–.40	–.50
Considerateness								
Own Group	4.25	4.16	4.58	5.04	5.18	4.70	5.85	6.38
Other Group	5.38	5.41	4.68	3.50	5.83	6.18	4.03	3.38
Difference	–1.09	–1.25	–.10	1.54	–.65	–1.48	1.83	3.00

ANOVA Results (*F*-Values)	Effect Tested						
Scale	Sex	Pay	S_2/Q_2	S × P	S × S_2/Q_2	P × S_2/Q_2	3-Way
Status/Power							
Own Group	n.s.	24.12***	n.s.	n.s.	3.61	n.s.	n.s.
Other Group	5.21*	55.82***	n.s.	n.s.	n.s.	n.s.	n.s.
Difference	n.s.	50.69***	n.s.	n.s.	4.02*	n.s.	n.s.
Competence							
Own Group	n.s.	9.22**	n.s.	n.s.	n.s.	n.s.	n.s.
Other Group	n.s.	17.72***	n.s.	n.s.	n.s.	n.s.	n.s.
Difference	n.s.	20.78***	n.s.	n.s.	n.s.	n.s.	n.s.
Considerateness							
Own Group	20.76***	12.68***	n.s.	n.s.	n.s.	3.61	n.s.
Other Group	n.s.	52.41***	n.s.	4.25*	n.s.	5.00*	n.s.
Difference	5.92*	41.68***	n.s.	4.62*	n.s.	6.40*	n.s.

Note: See Table 1 for definitions of ANOVA table column heads.

* $p < .05$ ** $p < .01$ *** $p < .001$

subjects experienced in their encounters. Status construction theory argues that the experience of the hierarchy itself is especially important for the formation of status beliefs. The degree of influence subjects' accepted from their partners, averaged over both rounds, is a more sensitive measure of standing in the hierarchies they participated in. As predicted, the greater their partners' influence, the lower in status ($r = -.53$, $p < .001$) and less competent ($r = -.49$, $p < .001$) was their own group in "most peoples'" eyes, and the higher in status ($r = .43$, $p < .001$) and more competent ($r = .30$, $p < .01$) was the other group. It is interesting that the hierarchy subjects actually experienced was associated especially strongly with their perceptions of the way their *own* group was viewed. This is consistent with the argument that the interactional experience of the hierarchy itself is particularly important in constraining people to accept a lower status evaluation of their own nominal group.

Table 3. Subjects' Assessments of Their Own and Others' Personal Response Style (PRS) Group: Experiment 1

	Means							
	High-Pay Males		Low-Pay Males		High-Pay Females		Low-Pay Females	
Scale	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2
Status/Power								
Own Group	5.22	5.41	4.85	3.96	5.45	5.85	4.35	5.19
Other Group	3.30	3.41	4.95	4.57	4.03	4.13	5.50	5.34
Difference	1.94	2.00	–.10	–.61	1.43	1.73	–1.15	–.16
Competence								
Own Group	5.00	5.00	5.10	5.48	5.60	5.97	4.83	6.17
Other Group	4.13	4.58	5.17	4.33	5.27	4.87	5.33	5.46
Difference	.89	.42	–.07	1.14	.33	1.10	–.50	.71
Considerateness								
Own Group	5.08	5.03	4.78	5.32	5.60	5.78	6.30	6.53
Other Group	5.30	5.81	4.95	2.86	6.18	6.50	3.85	4.00
Difference	–.19	–.78	–.18	2.46	–.58	–.73	2.45	2.53

ANOVA Results (*F*-Values)	Effect Tested						
Scale	Sex	Pay	S_2/Q_2	S × P	S × S_2/Q_2	P × S_2/Q_2	3-Way
Status/Power							
Own Group	n.s.	9.11^{**}	n.s.	n.s.	n.s.	n.s.	n.s.
Other Group	10.84^{**}	44.75^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Difference	n.s.	30.64^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Competence							
Own Group	4.73^{*}	n.s.	5.85^{*}	n.s.	n.s.	n.s.	n.s.
Other Group	6.48^{*}	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Difference	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Considerateness							
Own Group	18.29^{***}	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Other Group	n.s.	51.53^{***}	n.s.	n.s.	n.s.	5.88^{*}	4.88^{*}
Difference	n.s.	39.97^{***}	n.s.	4.94^{*}	n.s.	4.89^{*}	4.07^{*}

Note: See Table 1 for definitions of ANOVA table column heads.

$^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$

Because status beliefs are beliefs about social reality—about "what most people think is true"—subjects' estimates of what most people think constitutes our primary measure of status beliefs. However, it is interesting to compare this measure to how subjects *personally* rate S_2s and Q_2s (see Table 3). Low-pay subjects personally evaluate their own group as lower in status than do high-pay subjects and high-pay subjects rate their own group as higher in status. This produces highly significant pay effects in analyses of variance (Table 3). Similarly, the greater the hierarchy subjects experienced (measured by partners' average influence), the lower their personal evaluations of their own group's status ($r = -.52$, $p < .001$) and the higher their ratings of the other group's status ($r = .46$, $p < .001$). These results add to evidence that status beliefs developed about the nominal distinction.

On the other hand, subjects' personal evaluations of the competence of S_2 and Q_2s differed a bit from their assessments of what

"most people" think. In analyses of variance, there were no significant differences in the competence subjects personally attributed to S_2s and Q_2s based on pay differences (Table 3). The precise degree of influence subjects experienced in the hierarchy, however, did relate to their personal evaluations of the competence of their own group ($r = -.45$, $p < .001$) and the other group ($r = .27$, $p < .05$), albeit more weakly than to their evaluations of most people's views of each group's competence. Again, this suggests that the experience of the influence hierarchy associated with pay levels had the most direct and powerful impact on subjects' status beliefs. In general, however, subjects conceded that most people attribute clear competence differences to their own and the other group, but they were more resistant in their personal evaluations of these differences. In addition, as the effect of sex composition in the analyses of variance show (Table 3), subjects in female dyads evaluated both their own response style group and the other group as significantly more competent than did those in male dyads.

Interestingly, subjects at both pay levels seemed to view the status and competence of S_2s and Q_2s as inversely related to their social cooperativeness/considerateness. Both in terms of what most people think (Table 2) and their own personal evaluations (Table 3), subjects in high-pay conditions rated the other response group as lower in status but significantly more considerate than their own response group. Low-pay subjects generally agreed that the other group was less considerate, even if higher in status than their own group. Social "niceness" here seemed to be viewed as compensatory for low status/power, a relationship that also has been demonstrated for established status beliefs such as those associated with occupations and gender (Conway, Pizzamiglio, and Mount 1996). As the main effects for sex indicate, subjects in female dyads also were more likely than those in male dyads to assume that their own personal response style group was perceived as considerate.

All the above results reflect subjects' beliefs about people in nominal categories to which self and partner belong. But how did subjects actually perceive their two partners as individuals, relative to themselves? First, subjects in low-pay conditions clearly ranked their partners as more influential than themselves in both rounds 1 and 2, while high-pay subjects saw themselves as more influential than their partners (Table 4). Thus subjects perceived and acknowledged the actual influence hierarchy.

As expectation states theory predicts, low-pay subjects also saw their better-paid partners in both rounds of interaction as relatively more skilled at the task than they were, while high-pay subjects thought their partners less skilled. This resulted in significant pay effects for both rounds (Table 4). These results are consistent with other studies of the impact of resources and of behavioral style on perceived competence (Carli et al. 1995; Stewart and Moore 1992).

Discussion. The results of Experiment 1 are unusually clear. They demonstrate that repeated doubly dissimilar interactions can and do create status beliefs about a distinguishing characteristic. As predicted, after two doubly dissimilar encounters, both resource-advantaged (i.e., high-pay) and resource-disadvantaged (low-pay) participants developed beliefs attributing greater status and competence to the advantaged nominal category. The findings were clearest for subjects' assessments of way the "most people" view those in the two nominal categories. This suggests that the experience of doubly dissimilar encounters did affect participants' sense of what they took to be a "social reality" regarding the nominal distinction, as status construction theory argues is important for the formation of status beliefs.

The most striking aspect of these findings is the painful transformation they reveal in the beliefs that resource-disadvantaged subjects formed about their own nominal category. "Mere difference" usually induces evaluative preferences for one's own group. But, as predicted, doubly dissimilar interactions induced low-pay subjects to overcome their in-group biases and concede that the *other* group is more respected and higher in status.

What is it about structurally constrained interaction that gives it this power to transform beliefs? Status construction theory argues that the distribution of rewards biases the development of influence hierarchies in favor of the resource-advantaged and pro-

Table 4. Subjects' Perceptions of Self Compared to Partner: Experiment 1

	Means							
	High-Pay Males		Low-Pay Males		High-Pay Females		Low-Pay Females	
Scale	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2
Perceived Influence								
Round 1								
Self	5.30	7.00	3.73	3.11	6.60	5.91	4.20	5.00
Partner	3.50	3.88	6.46	6.00	5.10	4.27	6.20	5.88
Difference	1.80	3.13	−2.73	−2.89	1.50	1.64	−2.00	−.89
Round 2								
Self	5.92	7.25	4.18	4.22	6.90	6.27	4.50	6.13
Partner	4.28	5.00	6.55	6.00	4.90	5.64	6.60	7.00
Difference	1.64	2.25	−2.36	−1.78	2.00	0.64	−2.10	−.88
Relative Skill (Self vs. Partner)								
Round 1 Difference	.22	.67	−1.73	−1.05	−.05	.17	−1.70	−.71
Round 2 Difference	.45	.30	−.72	−.33	.45	.90	−1.57	−.33

ANOVA Results (*F*-Values)	Effect Tested						
Scale	Sex	Pay	S_2/Q_2	S × P	S × S_2/Q_2	P × S_2/Q_2	3-Way
Perceived Influence							
Round 1							
Self	n.s.	23.49^{***}	n.s.	n.s.	n.s.	n.s.	3.97
Partner	n.s.	31.39^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Difference	n.s.	59.95^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Round 2							
Self	n.s.	18.96^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Partner	n.s.	16.89^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Difference	n.s.	37.45^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Relative Skill (Self vs. Partner)							
Round 1 Difference	n.s.	16.59^{***}	n.s.	n.s.	n.s.	n.s.	n.s.
Round 2 Difference	n.s.	10.06^{**}	n.s.	n.s.	n.s.	n.s.	n.s.

Note: See Table 1 for definitions of ANOVA table column heads.

$^{*}p < .05$ $^{**}p < .01$ $^{***}p < .001$

vides a framing context in which interaction occurs. We expect, therefore, that the mere knowledge of reward differences and of referential information associating reward differences with nominal categories has some impact on beliefs; but we suspect that the interactional experience of the hierarchy itself is a powerful, and perhaps even a *necessary*, intervening factor in the formation of status beliefs in doubly dissimilar encounters because such interaction plays a critical role in inducing the resource-disadvantaged to accede to them.

Experiment 2

Experiment 1 has demonstrated that the combined elements (cognitive knowledge *and* interactional experience) of doubly dissimilar encounters are sufficient to create status beliefs. But we cannot be sure that these results could not be produced by the cognitive context of doubly dissimilar encounters alone (i.e., by the mere knowledge of resource differences and associated referential information). The correlations we found between the precise degree of hierarchy experienced by

subjects and their acceptance of status beliefs argue against this. Since degree of hierarchy was closely linked with pay level, however, such correlations are not conclusive. Therefore, we cannot tell whether participation in an influence hierarchy resulting from mutual exchange with a confident or deferential partner (i.e., the experience of an interactional hierarchy) was a powerful or a necessary factor in the results we obtained. If interaction were removed, would status beliefs fail to emerge fully among the resource-disadvantaged? We designed a second experiment to examine this possibility.

Hypothesis 2: The cognitive context of a doubly dissimilar encounter (knowledge of resource differences and associated referential information) will be insufficient by itself to cause resource-disadvantaged subjects to form beliefs that their own nominal category has less social worthiness and competence than the other category.

Methods. Experiment 2 replicated the first experiment in defining the cognitive context of a doubly dissimilar encounter, but the experiment stopped before actual interaction began. Eighty-six undergraduates (43 men and 43 women) were randomly assigned to condition within sex of a 2 × 2 × 2 experiment that crossed a nominal distinction (S_2/Q_2) with pay level ($8/$11) and the sex composition of the dyad they were to work in (all male or all female). As before, subjects were told they would work as a team on a decision task. They completed the background information sheet and personal response style test, were informed that they had been assigned a pay level of either $8 or $11, that their partner was assigned the opposite pay level, that they were either a S_2 or a Q_2, and that their partner the opposite. They signed a pay record indicating the corresponding pay levels of previous S_2s and Q_2s. Then, prior to working with their partners, they were asked to complete a questionnaire giving their first impressions of their partners. This questionnaire contained measures of status beliefs from Experiment 1. The session ended when the questionnaire was completed.

Results. Refer back to Table 1; it shows that the simple cognitive association between the nominal distinction and pay, backed by referential information, was enough to affect males' evaluative preferences for their own response style group, but not those of females, as the interaction of sex and pay indicates in the ANOVA. For females, pay differences alone neither strengthened the in-group bias of high-pay subjects (mean = 58.8%) nor reduced that bias for low-pay subjects (mean = 61.4%). Notably, low-pay subjects, whether male or female, did not actually show a preference for the other nominal category (i.e., an in-group bias below 50 percent), unlike in Experiment 1.[7]

Table 5 shows that, by itself, the cognitive context of a doubly dissimilar encounter only weakly induced status beliefs. In striking contrast to Experiment 1, low-pay subjects in Experiment 2 did not think that "most people" see the subjects' *own* response group as significantly lower in status ($F = 1.03$, $p = .32$) or competence ($F = .06$, $p = .81$) than high-pay subjects did. Since we hypothesized no differences here, it is worth noting that these effects not only failed to reach conventional levels of significance, but also they did not even approach those levels.[8] On the other hand, pay did affect how subjects thought "most people" perceive the *other* group's status ($F = 4.13$, $p < .05$) and competence ($F = 4.01$, $p < .05$).

Compared to high-pay subjects, low-pay subjects did think that the difference between

[7] If the status belief results from both experiments are analyzed together in 4-way ANOVAs (experiment × pay × S_2/Q_2 × sex), we obtain significant ($p < .01$) main effects for pay and experiment × pay interactions for all of the "most people's" evaluations variables (own group, other group, and difference for status, competence and considerateness) as well as for personal evaluations of status and two of the considerateness variables (other group and difference). We do not present the results this way, partly for clarity. In a 4-way analysis, none of the main or interaction effects directly tests our hypotheses while in separate 3-way analyses they do. Secondly, because the hypotheses must be tested by additional means contrasts for each experiment and because of the large number of interaction tests generated, the 4-way ANOVA approach actually entails more tests of significance than the separate 3-way approach, increasing the probability of chance results.

[8] Cohen's (1988) power analysis procedures show that the F-tests for pay in these analyses have the power to reliably detect moderate ($d = .40$) or larger pay effects if they indeed exist.

Table 5. Subjects' Mean Assessments of Their Own and Others' Personal Response Style (PRS) Group: Experiment 2

	High-Pay Males		Low-Pay Males		High-Pay Females		Low-Pay Females	
Scale	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2	PRS S_2	PRS Q_2
"Most Peoples'" Evaluations								
Status/Power								
Own Group	5.18	5.05	4.56	5.25	4.87	5.16	4.69	4.86
Other Group*	4.75	3.63	4.86	4.85	4.84	4.75	4.65	5.44
Difference*	.46	1.43	–.30	.40	.02	.38	.04	–.60
Competence								
Own Group	5.68	5.17	5.25	5.43	5.36	5.74	5.48	5.44
Other Group*	4.81	4.37	4.90	5.40	4.88	5.30	5.20	5.61
Difference	.87	.80	.35	.03	.49	.44	.28	–.17
Considerateness								
Own Group	5.09	4.09	4.80	5.40	5.21	5.22	5.18	5.29
Other Group	5.04	5.35	4.72	4.70	4.77	5.39	4.68	5.29
Difference	–.04	–1.26	.08	.70	.43	–.17	.50	.06
Personal Evaluations								
Status/Power								
Own Group	5.16	5.28	4.47	5.35	4.74	4.92	5.05	5.15
Other Group+	4.54	4.35	4.72	4.73	4.91	5.00	5.38	5.35
Difference+	.65	.93	–.25	0.63	–.17	–.08	–.33	–.19
Competence								
Own Group	5.70	5.55	5.46	5.50	5.61	5.59	5.57	5.82
Other Group+	4.86	4.88	4.29	5.30	5.00	5.37	5.38	5.61
Difference	.85	.67	1.17	.20	.61	.22	.18	.21
Considerateness								
Own Group	5.37	5.18	5.13	5.53	5.58	5.83	5.45	5.87
Other Group	5.02	5.14	3.84	4.75	4.84	5.28	4.98	5.19
Difference	.28	.04	1.28	.78	.74	.56	.48	.77

* Pay effect $p < .05$ in ANOVA.

\+ Sex effect $p < .05$ in ANOVA.

most people's perceptions of their own group and the other group was significantly less positive for status ($F = 4.36$, $p < .05$) and tended toward being less positive for competence ($F = 3.81$, $p = .055$). However, these evaluative differences rarely actually favored the other group (i.e., produced negative difference scores). For low-pay subjects' estimates of the status and power attributed to the two personal response style groups, the average difference score (mean = –.13), although slightly negative, is not significantly different from zero ($t = –.55$, $p > .50$).[9] Compare this to Experiment 1, in which the equivalent mean difference score was –1.16 which is substantially less than zero ($t = –4.48$, $p < .001$). For the other component of status beliefs (most people's attributions of competence to each category), low-pay subjects continued to presume that their own personal response style group was seen to be as competent or more competent than the other group (mean difference score = .10). None of these results were affected by subjects' sex or response style group.

Given these results, it is not surprising that pay also did not significantly affect subjects'

[9] The 95-percent confidence interval for this mean status difference is –.13 ± .47. The zero-point of no difference is located nearer to the midpoint (the observed mean value) than to either limit of this confidence interval.

personal evaluations of either their own group (for status, $F = .003$, $p = .95$; for competence, $F = .01$, $p = .91$) or the other personal response style group (for status, $F = 1.97$, $p = .17$; for competence, $F = .33$, $p = .57$) (Table 5). In their personal evaluations, however, women, regardless of pay, rated the other response group more favorably for status ($F = 5.81$, $p < .05$) and competence ($F = 4.84$, $p < .05$) than did men. Not surprisingly, without interaction, pay had no effect or only weak effects on the considerateness attributed to response groups.

Discussion. Experiment 2 shows that the cognitive knowledge of resource differences and supportive referential information alone cannot fully account for our results in Experiment 1. It offers moderate support for our hypothesis that the cognitive context of doubly dissimilar encounters, by itself, is insufficient to induce the resource-disadvantaged to form clear status beliefs favoring another nominal category over their own. Knowledge of resources alone did not affect subjects' estimates of how most people see their own category in terms of status and competence or the subjects' personal evaluations of the two nominal categories. Most important for our hypothesis, low-pay subjects estimated that their own group is seen by most people as about the same as, rather than significantly lower than the other group in status and competence. Taken together, these results suggest that the resource context of doubly dissimilar encounters begins the process of creating status beliefs by reducing or eliminating own-group favoritism on the part of the resource-disadvantaged. But, without interaction and participation in the hierarchy, doubly dissimilar contexts do not exert enough pressure on the disadvantaged to produce the belief that the other category is perceived as superior to their own in status and competence.

SOME FURTHER EVIDENCE

Results from Experiments 1 and 2 demonstrate that the interactional experience of a hierarchy is an important and possibly a necessary factor in the production of status beliefs in doubly dissimilar encounters. The findings do not, however, indicate whether the interactional hierarchy experience alone is sufficient to create status beliefs. For status construction theory, the critical point is that the combined elements of doubly dissimilar encounters are sufficient to produce status beliefs favoring the resource-advantaged nominal category. Yet the theory's view on how these encounters create status beliefs does suggest that participation in an interactional hierarchy where there is a corresponding nominal difference among the actors should be sufficient, by itself, to create status beliefs favoring the interactionally advantaged nominal category.

There is some evidence to suggest that this is indeed the case. Ridgeway and Glasgow (1996) report on an experiment testing other aspects of status construction theory—those dealing with the diffusion of status beliefs. Some of the conditions of their study, however, offer evidence relevant to our question here. In these conditions, male and female subjects differed from their same-sex partners in personal response style, but did not differ from them in pay. Partners were confederates who treated the subjects either in an uncertain, deferential manner (similar to confederate behavior in the high-pay conditions of Experiment 1) or confidently and assertively (similar to the low-pay conditions of Experiment 1). As in our Experiment 1, in each of the two rounds of decision-making interaction, influence hierarchies developed that favored the subject in conditions where the partners were uncertain and deferential and favored the partners where partners were confident in manner.

After two rounds of participation in an interactional hierarchy with a nominally different partner, subjects formed clear status beliefs favoring the interactionally advantaged nominal category. When subjects were in the advantaged position in the interactional hierarchies, they believed that most people attribute greater status to their own response style group than to the other group (mean difference score = 1.57) and greater competence as well (mean difference score = 1.19). Most important for the formation of status beliefs, subjects in the disadvantaged position in the hierarchies thought most people attributed less status (mean difference score = −1.84) and less competence (mean difference score = −.88) to their own group than the other group, resulting in a signifi-

cant effect of position in the interactional hierarchy on both variables (for status difference, $F = 112.57$, $p < .001$; for competence difference, $F = 36.24$, $p < .001$).[10]

We note that it is well established that a confident versus deferential behavioral style will create differences in the influence and perceived competence of specific actors in the situation (Carli et al. 1995; Ridgeway 1987; Ridgeway et al. 1985). But Ridgeway and Glasgow's (1996) results indicate that such behavior and the influence hierarchies it creates also can affect actors' perceptions of the distinguishing social categories to which they belong and the status and competence "most people" attribute to them.

Considered with the results of Experiment 2, Ridgeway and Glasgow's (1996) findings suggest that while the cognitive context of doubly dissimilar interaction by itself is not sufficient to fully induce status beliefs in those disadvantaged in the situation, the interactional experience of hierarchy in these encounters *is* sufficient. This suggests substantial support for status construction theory's account. According to the theory, the most important effect of resources differences in doubly dissimilar encounters is to bias the formation of the interactional hierarchy by shaping actors' confidence and susceptibility to influence. Prior research shows resource differences have this effect on susceptibility to influence (Cook 1975; Harrod 1980; Stewart and Moore 1992). Because resources bias interactional hierarchies in doubly dissimilar encounters and the experience of the hierarchy induces status beliefs as the theory suggests, encounters in the population will create a surplus of beliefs favoring the resource-advantaged nominal category, rather than a cacophony of contradictory beliefs. As a result of this effect of doubly dissimilar encounters, the development of consensual status beliefs favoring the resource-advantaged nominal category is a predictable result.

CONCLUSION

The results of our experiments confirm a central claim of status construction theory: In doubly dissimilar encounters, where participants differ on both resource level and a distinguishing characteristic, the interactional context fosters status beliefs about that characteristic. Because a certain percentage of the population is always engaged in doubly dissimilar encounters and because the beliefs formed there have the potential to diffuse widely, the theory argues that these encounters continually pump support for status beliefs about the characteristic into the populace. Experiment 1 confirmed an essential piece of this argument. After two doubly dissimilar encounters, both the resource-advantaged and, importantly, the resource-disadvantaged formed beliefs that people in the advantaged nominal category were higher in status, more respected, leaderlike, and powerful as well as more competent than those in the disadvantaged category. Thus, repeated doubly dissimilar interactions clearly did create status beliefs in the experiment's participants.

Perhaps the most dramatic aspect of Experiment 1 was its demonstration of the power of doubly dissimilar encounters to induce resource-disadvantaged subjects to concede that their own nominal category is less

[10] It is interesting that not only the direction but the size of these effects are comparable to those in Experiment 1. This is what we would expect if, as status construction theory suggests, the effects of resources in doubly dissimilar interactions are mediated by their impact on interactional behavior and the emergent hierarchy. The added cognitive context (i.e., the mere knowledge of resource differences and associated referential information) seems not to independently and substantially strengthen or weaken the status beliefs actors form in doubly dissimilar interaction. While this cognitive context might be presumed to facilitate status beliefs for the resource-advantaged, it is not clear that it will do so for the resource-disadvantaged. Knowledge of the resource difference offers the disadvantaged an alternative explanation for their interactional experiences in doubly dissimilar encounters which could help them resist attributing lesser worthiness and competence to own their nominal category. Indeed, what slight differences occurred between the results in Experiment 1 and Ridgeway and Glasgow's (1996) findings support this view: Those in the advantaged category showed stronger favoritism for their own group in Experiment 1 than in the Ridgeway and Glasgow study; those in the disadvantaged category showed stronger favoritism for the other group over their own in the Ridgeway and Glasgow study compared with Experiment 1.

status worthy than the other category. Consensual status beliefs are only possible because of this transformation in the disadvantaged group's beliefs about what most people think about them and others. Those advantaged by a status valued characteristic may fully accept its social meaning as a matter of personal belief. Some of those disadvantaged by it may believe so personally, but this is not necessary for the status characteristic to have force in social relations: The disadvantaged must only believe that *others* believe that the characteristic reflects differences in worthiness and competence. When this occurs, the status characteristic has the power to shape people's behavior and organize social relations between categories of people.

What gives doubly dissimilar interaction its power to shape the beliefs of the disadvantaged about what "most people think is true?" Drawing on several studies, status construction theory argues that the resource difference encourages a corresponding influence hierarchy (Cook 1975; Harrod 1980; Stewart and Moore 1992). But the experience of the hierarchy itself, of being devalued relative to a person of the other nominal category in a social interaction, is the key factor in forcing people to concede status beliefs that disadvantage them. The results of Experiment 2 and evidence from another study support this contention. Experiment 2 shows that the resource and referential context of doubly dissimilar interaction, on its own, can only start the process of creating status beliefs by mitigating out-group devaluation by the disadvantaged. For the full transformation into actually conceding that another group is more highly evaluated, such as in Experiment 1, it appears that the experience of the interactional hierarchy is necessary. Indeed, findings from the study by Ridgeway and Glasgow (1996) confirm that participation in an interactional hierarchy corresponding to a nominal distinction is sufficient by itself to induce status beliefs, even in those they disadvantage.

Taken together, these results suggest that status construction theory is justified in attaching importance to events at the interactional level in the creation, spread, and change of status beliefs about distinguishing attributes. This in turn supports the macro-micro-macro form of the theory. The distribution of resources affects who encounters whom and the influence hierarchies that are likely in those encounters. The interactional hierarchies, themselves, however, produce the local realities that make both the advantaged and the disadvantaged believe that the advantaged nominal category is more status worthy and competent in the eyes of most other people.

This study and the general perspective of status construction theory has some wider implications as well. Current "dualist" theories of social structure argue that a given structure is both the cultural schema by which the structure is enacted and the material distribution of resources and behaviors that result from its enactment (Giddens 1984; Sewell 1992). In that context, it is possible to view status beliefs about a distinguishing characteristic as such a cultural schema. Our results here indicate the surprising power of certain interactional experiences to transform social structural conditions into cultural schemas by which inequality is enacted and maintained. If structurally constrained interaction has the power to create and continually reinforce such cultural schemas of inequality, then it must be taken into account in efforts to change those schemas as well.

Cecilia L. Ridgeway *is Professor of Sociology at Stanford University. Her research focuses on interactional status processes and the role these play in multilevel processes of stratification, particularly gender stratification. Current projects include experimental tests of status construction theory's arguments about the power of interactional contexts to create and spread status beliefs. Other work addresses the role of interactional processes in conserving gender inequality over transformations in the socioeconomic organization of society.*

Elizabeth Heger Boyle *is Assistant Professor of Sociology and Law at the University of Minnesota. Her research interests include international and comparative law. Current projects include using ethnic status hierarchies within nations to explain the acceptance or rejection of international human rights doctrine.*

Kathy J. Kuipers *is a Ph.D. candidate in Sociology at Stanford University. Her dissertation examines the relationship between formal and informal networks in the workplace and how they influence organizational identification and internalization. Her areas of interest include social*

psychology, social networks, and gender and organizations. Current research projects involve examining the emergence of trust in the workplace, the relationship between social network characteristics and organizational effectiveness, and women's use of social networks in organizations.

***Dawn T. Robinson** is Assistant Professor of Sociology at Louisiana State University. Her research interests include the relationship between social identities, social emotions, and social relationships. In particular, she is concerned with the processes through which groups construct joint social meanings through face-to-face interaction.*

REFERENCES

Abrams, Dominic and Michael A. Hogg. 1990. *Social Identity Theory: Constructive and Critical Advances.* New York: Springer-Verlag.

Berger, Joseph, Thomas L. Conner, and M. Hamit Fisek. 1974. *Expectation States Theory: A Theoretical Research Program.* Cambridge, MA: Winthrop.

Berger, Joseph, M. Hamit Fisek, Robert Z. Norman, and Morris Zelditch, Jr. 1977. *Status Characteristics and Social Interaction.* New York: Elsevier.

Berger, Joseph and Morris Zelditch, Jr. 1985. *Status, Rewards, and Influence.* San Francisco, CA: Jossey-Bass.

Berger, Peter L. and Thomas Luckmann. 1967. *The Social Construction of Reality.* New York: Doubleday.

Blau, Peter M. 1977. *Inequality and Heterogeneity: A Primitive Theory of Social Structure.* New York: Free Press.

———. 1994. *Structural Context of Opportunities.* Chicago, IL: University of Chicago Press.

Blau, Peter M. and Joseph E. Schwartz. 1984. *Crosscutting Social Circles: Testing a Macrostructural Theory of Intergroup Relations.* New York: Academic Press.

Brewer, Marilyn and Roderick Kramer. 1985. "The Psychology of Intergroup Attitudes." *Annual Review of Psychology* 36:219–43.

Carli, Linda L. 1991. "Gender, Status, and Influence." Pp. 89–113 in *Advances in Group Processes*, vol. 8, edited by E. Lawler, B. Markovsky, C. Ridgeway, and H. Walker. Greenwich, CT: JAI Press.

Carli, Linda L., Suzanne J. LaFleur, and Christopher C. Loeber. 1995. "Nonverbal Behavior, Gender, and Influence." *Journal of Personality and Social Psychology* 68:1030–41.

Cohen, Jacob. 1988. *Statistical Power for the Behavioral Sciences.* 2d ed. Hillsdale, NJ: Earlbaum.

Conway, Michael, M. Teresa Pizzamiglio, and Lauren Mount. 1996. "Status, Communality, and Agency: Implications for Stereotypes of Gender and Other Groups." *Journal of Personality and Social Psychology* 71:25–38.

Cook, Karen S. 1975. "Expectations, Evaluations, and Equity." *American Sociological Review* 40:372–88.

Dovidio, John F. and Samuel L. Gaertner. 1993. "Stereotypes and Evaluative Intergroup Bias." Pp. 167–94 in *Affect, Cognition, and Stereotyping*, edited by D. M. Mackie and D. L. Hamilton. New York: Academic Press.

Ellyson, Steve, John Dovidio, and Randi L. Corson. 1981. "Visual Behavior Differences as a Function of Self-perceived Expertise." *Journal of Nonverbal Behavior* 5:164–71.

Feagin, Joe. 1991. "The Continuing Significance of Race: Antiblack Discrimination in Public Places." *American Sociological Review* 56: 101–16.

Fiske, Susan T. and Shelley E. Taylor. 1991. *Social Cognition.* 2d ed. New York: McGraw-Hill.

Giddens, Anthony. 1984. *The Constitution of Society: Outline of the Theory of Structuration.* Berkeley, CA: University of California Press.

Harrod, Wendy J. 1980. "Expectations from Unequal Rewards." *Social Psychology Quarterly* 43:126–30.

Hinkle, Steve and Rupert J. Brown. 1990. "Intergroup Comparisons and Social Identity." Pp. 48–70 in *Social Identity Theory: Constructive and Critical Advances*, edited by D. Abrams and M. Hogg. New York: Springer-Verlag.

Markovsky, Barry. 1988. "From Expectation States to Macro Processes." Pp. 351–65 in *Status Generalization: New Theory and Research*, edited by M. Webster and M. Foschi. Stanford, CA: Stanford University.

Markovsky, Barry, LeRoy F. Smith, and Joseph Berger. 1984. "Do Status Interventions Persist?" *American Sociological Review* 49:373–82.

McPherson, J. Miller and Lynn Smith-Lovin. 1987. "Homophily in Voluntary Organizations: Status Distance and the Consequences of Face-to-Face Groups." *American Sociological Review* 52:370–79.

Messick, David M. and Diane M. Mackie. 1989. Intergroup Relations." *Annual Review of Psychology* 40:45–81.

Miller, Dale T. and William Turnbull. 1986. "Expectancies and Interpersonal Processes." *Annual Review of Psychology* 37:233–56.

Moore, James C., Jr. 1985. "Role Enactment and Self-Identity." Pp. 262–316 in *Status, Rewards, and Influence*, edited by J. Berger and M. Zelditch. San Francisco, CA: Jossey-Bass.

Pugh, Meredith D. and Ralph Wahrman. 1983. "Neutralizing Sexism in Mixed-Sex Groups:

Do Women Have to Be Better Than Men?" *American Journal of Sociology* 88:746–62.

Ridgeway, Cecilia L. 1991. "The Social Construction of Status Value: Gender and Other Nominal Characteristics." *Social Forces* 70: 367–86.

———. 1987. "Nonverbal Behavior, Dominance, and the Basis of Status in Task Groups." *American Sociological Review*, 52:683–94.

———. 1997. "Where Do Status-Value Beliefs Come From? New Developments." Pp. 137–58 in *Status, Network, and Structure: Theory Development in Group Processes*, edited by J. Szmatka, J. Skvoretz, and J. Berger. Stanford, CA: Stanford University Press.

Ridgeway, Cecilia L. and James W. Balkwell. 1997. "Group Processes and the Diffusion of Status-Value Beliefs." *Social Psychology Quarterly* 60:14–31.

Ridgeway, Cecilia L., Joseph Berger, and LeRoy Smith. 1985. "Nonverbal Cues and Status: An Expectation States Approach." *American Journal of Sociology* 90:955–78.

Ridgeway, Cecilia and Kristan Glasgow. 1996. "Acquiring Status Beliefs from Behavior in Interaction." Paper presented at the annual meeting of the American Sociological Association, August 1996, New York.

Ridgeway, Cecilia and Henry Walker. 1995. "Status Structures." Pp. 281–310 in *Sociological Perspectives on Social Psychology*, edited by K. Cook, G. Fine, and J. House. Boston, MA: Allyn and Bacon.

Sachdev, Itesh and Richard Bourhis. 1985. "Social Categorization and Power Differentials in Group Relations." *European Journal of Social Psychology* 15:415–34.

———. 1987. "Status Differentials and Intergroup Behaviour." *European Journal of Social Psychology* 17:277–93.

Sewell, William H. 1992. "A Theory of Structure: Duality, Agency, and Transformation." *American Journal of Sociology* 98:1–29.

Skvoretz, John. 1983. "Salience, Heterogeneity and Consolidation of Parameters: Civilizing Blau's Primitive Theory." *American Sociological Review* 48:360–75.

Stewart, Penni A. and James C. Moore, Jr. 1992. "Wage Disparities and Performance Expectations." *Social Psychology Quarterly* 55:70–85.

Tajfel, Henri. 1978. *Differentiation between Social Groups: Studies in the Social Psychology of Intergroup Relations*. New York: Academic Press

Tajfel, Henri, M. G. Billig, R. P. Bundy, and Claude Flament. 1971. "Social Categorization and Intergroup Behavior." *European Journal of Social Psychology* 1:149–77.

Turner, John C. 1987. *Rediscovering the Social Group: A Self-Categorization Theory*. New York: Basil Blackwell.

Weber, Max. 1968. *Economy and Society*. Edited by G. Roth and C. Wittich; translated by E. Frischoff, et al. New York: Bedminster.

Webster, Murray and Martha Foschi. 1988. *Status Generalization: New Theory and Research*. Stanford, CA: Stanford University Press.

Weinstein, Eugene and P. Deutschberger. 1963. "Some Dimensions of Altercasting." *Sociometry* 26:454–66.