# The Effects of Status Differentiation on Nonverbal Behavior

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An experiment was conducted to investigate relationships between status and nonverbal behavior. Subjects were randomly assigned to a high status position (teacher) or a low status position (student). Status was crossed with gender to produce four treatment conditions: males teaching males, males teaching females, females teaching males, and females teaching females. Statuses were then reversed on a second trial: former students became teachers and former teachers became students with the same partners. Nonverbal behavior from both interactions was recorded and coded from videotape.

Findings indicate that status structures nonverbal behavior. In general, high specific status subjects (teachers) claimed more direct space with their bodies, talked more, and attempted more interruptions than their low status counterparts. And, by means of touching and pointing (both to their partner and to the partner's possessions), they symbolically intruded upon their partners noticeably more than their partner sintruded upon them. Similarly, gender affected nonverbal behavior: males took more horizontal space, pointed to possessions more often, touched more frequently, and laughed less than females. The set of behaviors organized by specific status differed somewhat from the set of behaviors that showed diffuse status effects.

The problem of how macrostructural statuses are translated into microstructural statuses has received a great deal of attention in social psychological research. There is consistent evidence that previously established diffuse status characteristics such as gender, race, age, occupation, and education act as important determinants of emergent power and prestige orderings in small groups, "whether or not the external status characteristic is related to the group task" (Berger et al., 1973:198, emphasis added). The reproduction of macrorank in microsettings would seem to imply that ascription, as opposed to achievement, plays a role in small groups as well as in the macrostratification system; the question for small group research then becomes how this

occurs. One approach, the situational resource model, argues that behavioral cues associated with differentiated access to social and economic resources may organize power, influence, and prestige orders in microsettings. It further argues that relative rank shapes behavior, and that individual nonverbal behavior is situationally flexible.

However, the nonverbal literature itself tends to conceptualize behavior somewhat differently than this situational resource approach in the small groups literature. Thus, while it has long been posited in the nonverbal literature that demeanor patterns depend upon status rankings (e.g., Hall, 1959; Sommer, 1969), research designs using nonverbal dependent variables have tended to favor some independent variables over others. The possible dependence of nonverbal behaviors on status has been neglected in most of these studies. This lack of emphasis on the stratification aspects of nonverbal behavior patterns is partly the result of conceptualizing nonverbal behavior between men and women, blacks and whites, etc., as the result of genetic differentiation or socialization into particular subcultural behavioral norms rather than as an aspect of situationally differentiated groups with varying amounts of power, prestige, and influence in the macrostructural order. Emphasis on affect states and personality characteristics of subjects likewise has encouraged an

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underemphasis on hierarchical aspects of nonverbal behavior (Gillespie and Leffler, 1982).

The early work of Henley (1973, 1977) and other researchers (e.g., Lamb, 1981; Ellyson et al., 1980; Frieze and Ramsey, 1976; Dean et al., 1975; Knowles, 1973) suggests that nonverbal behavior does exhibit hierarchical components. Much of this work has argued that nonverbal patterns and relative status are associated, but has not empirically disentangled the nature of the association. A situational resource paradigm would suggest that relative status rank causes nonverbal behavior patterns; that humans learn a variety of behavioral modes appropriate to superordinate, subordinate, and equivalent rankings; and that conscious or unconscious decisions concerning the appropriate behavioral display will take into account the status characteristics of the other participants as well as of the self. In contrast to a stable individual behavioral model, this model predicts behavioral flexibility, modes of behavioral display being linked to relative status rankings rather than to persons. Unacquainted individuals, then, are expected to interact as representatives of their relative status rankings in the macrostratificational order and to display behavioral cues appropriate to their relative ranks. Thus, differential access to social and economic resources in the macroorder will produce asymmetrical patterns of nonverbal activity among participants in the microorder, while relatively equal access to such resources will produce symmetrical patterns (Goffman, 1967; Henley, 1977).

# Predicting the Relation between Status and Nonverbal Behavior

At least three types of nonverbal behaviors have been discussed in the literature as dependent variables associated with differentiated status ranking: proxemic behaviors, vocalic behaviors, and symbolically intrusive behaviors. The present study concerns dependent variables from each area.

*Proxemic behaviors*. The use of space surrounding the body, called "personal space" by Sommer (1969) or "personal distance" by Little (1965), is a variable upon which a great deal of attention has been focused. The "status organizing behavior" theory reasons that persons of higher status have more and better space for their use than do persons of lower status, and consequently that persons of high status are "invaded" less frequently when interacting with persons of low status. In testing this "status causes behavior" proposition, Dean et al. (1975) found that previously established status and power differences do affect approach distance. However, little experimental

work has been done on the distribution of personal space during a face to face encounter once approach has been accomplished. Basing our hypotheses on the argument from the status differentiation literature and associated findings in the "approach distance" (proxemics) studies, we expect individuals with high relative status to take more space with their bodies during a postapproach encounter than individuals with low relative status. Following Altman (1970), we also expect individuals with high relative status to mark off a larger proportion of mutually shared space with their personal possessions than individuals with low relative status.

Vocalic behaviors. The three vocalic behaviors we investigate are participation rates, interruptions, and laughter. The literature suggests a status component to each one. Participation rates or vocalization rates are traditionally included in the nonverbal behavior literature along with all other behavior but the actual content of speech. Participation rates have long been established as indicators of dominance and influence in a group: those ranking highest talk the largest proportion of the time and those talking longest are also considered most influential and powerful regardless of the content of their vocalic contributions (Berger et al., 1973). Henley (1977) has suggested that *interruptions* are also indicators of relative status, i.e., status superiors are expected to interrupt more frequently and more successfully than are status inferiors. Eakins and Eakins (unpubl.) reported an analysis of faculty department meetings that compared individuals' rates of interruptions. Not only were women interrupted proportionately more frequently than men, but "interruption patterns within the sex group followed a hierarchy of status within the department" (Henley, 1977:69). A third vocalic behavior to be considered is laughter. Coser's study of laugh rates among colleagues at mental hospital staff meetings over several months indicated that individuals of low status laughed proportionately more frequently than did individuals of high status (Coser, 1960). Rates of laughter have been consistently associated with gender differences (Duncan and Fiske, 1977), females exhibiting a greater rate when interacting with males than with females. If we consider gender a diffuse status characteristic as do Berger et al. (1977) and Lamb (1981), rather than a subcultural or differentiated personality grouping, we can then hypothesize that individuals of relatively low status (females) evidence a higher rate of laughter than individuals of relatively high status (males).

Symbolically intrusive behavior. It has also been argued that authority or power is demon-

strated by controlling others from a distance: "A dominant person may summon others by a beckon, direct them by a gesture, and point at them in a way that will shut them up, stop other action, or evoke attention and submissiveness" (Henley, 1977:128). We term these kinds of nonverbal behavior "symbolic intrusions," because they do not actually involve physical contact with the other person nor do they involve changes in what is traditionally called "approach distance" (e.g., distance toe-to-toe, shoulder-to-shoulder, etc.); rather, they are indicators of the possibility of intrusion into personal space or are symbolic of such intrusion. The hypothesis governing this set of nonverbal behaviors (points at others, points at other person's possessions, touches to other person's possessions) follows the same reasoning as previous hypotheses: persons of relatively high rank in the encounter exhibit a higher rate of symbolic intrusion than do persons of relatively low rank in the encounter.

In summary, it is hypothesized that behavior is situationally flexible, attaching to relative statuses rather than to persons. It is also hypothesized that there are dominant and subordinate modes of nonverbal behavior appropriate to stratified situations, that individuals have multiple sets of behavior in their personal interactive repertoires, and that these modes are activated by individuals' relative status positions in any given situation.

#### METHOD

For this research we chose two status differentiating factors: the task-specific status of role (teacher vs. student), and the diffuse status of gender. Fifty-six unacquainted subjects, all white college students recruited through the Placement Center of a large urban university, were run in dvads. Half were randomly assigned to be teachers (high specific status) and the other half students (low specific status) at the simple but unfamiliar task of recognizing environmental adaptations among birds and fish. Twenty-eight males (high diffuse status) and twenty-eight females (low diffuse status) were run. Role was crossed with gender to produce four treatment conditions: males teaching males (seven pairs), males teaching females (eight pairs), females teaching males (six pairs), and females teaching females (seven pairs). Subjects were told the experiment concerned how to improve teaching and learning; all were paid for participation.

The subject assigned to teach was trained via videotape in the environmental adaptation task, while in a separate room the subject assigned to be a student received videotape training in a similar but spurious task. One of the subjects was then brought to the room where the other waited, both subjects were given identical sets of bird or fish flash cards to aid the discussion, and both were seated facing each other at a  $31'' \times 31''$  table covered with a tablecloth checkered in one-inch squares. The teacher was given 15 minutes to instruct the student, and was told to rely upon a discussion mode of teaching in which the student would do at least half the talking. Both subjects were reminded that each was new to the task.

Following this initial interaction (trial 1), subjects were briefly separated and taught new tasks via videotape. The exstudent was now instructed in a new environmental adaptation task, while the exteacher learned the spurious task. The subjects were then reintroduced (trial 2), but with reverse task-specific status assignments. Thus, the exstudent was now a teacher, whose pupil was the same subject who had been the teacher during trial 1. Both trials were videotaped and the nonverbal dependent variables coded from the tapes.

Both diffuse and specific status characteristics were used as independent variables. No predictions were made about their relative impacts, since the present experiment differs in certain ways from research on which previous discussions of this issue have been based. The literature on multiple status characteristics suggests that task-specific status tends to outweigh diffuse status under conditions of status incongruence in predicting their relative impacts on decision-making processes (Berger et al., 1977). In the present experiment, however, the relative impacts of diffuse and specific statuses might vary from behavior to behavior, since three types of nonverbal behavior (proxemic, paralinguistic, and intrusive) were examined. Consequently, although we expected that diffuse and specific status effects would share some general features (for instance, that both kinds of high ranks would increase space use), no predictions were made concerning the relative impact of each on single behaviors.

# Measuring Nonverbal Behavior: The Dependent Variables

*Proxemic behaviors.* The proxemic behaviors measured were the amount of body space used on and over the table surface in two dimensions—direct (towards partner along the table length) and horizontal (along the table width). To be certain that space-taking was not controlled by subjects' body sizes, correlations were run between height and direct and horizontal space. This was done separately for each gender to separate height effects from gender effects. None of the obtained r's differed significantly from zero. Because the table was covered with a tablecloth checkered in one-inch squares, the amount of space each subject took could be measured accurately by extrapolating from the known dimensions of table and cloth. Space taken with the flash card possessions could similarly be measured. Because these behaviors were subject to rapid change, they were time-sampled from the videotape at 30-second intervals.

Vocalic behaviors. Vocalic behaviors measured were (a) amount of vocalization, (b) number of attempted interruptions, and (c) number of laughs. All were counted in their totality rather than time-sampled. All were defined so as to preclude, as much as possible, the necessity of coders having to evaluate subjects' intentions in order to determine whether the behavior had occurred. Thus, for vocalization itself, sheer amount was measured; any audible sound, regardless of its function in the conversation, was counted and timed. Attempted interruptions included all vocalizations where, while one subject was speaking, the other subject uttered at least two consecutive identifiable words or at least three syllables of a single word, e.g., "but why . . .," "so you mean. . . ." However, words that merely echoed what the first speaker was saying at the time did not count, for it was clear that verbal mimicking was not an interruption attempt but a way to indicate listener attentiveness. Further, because we were interested in whether or not subjects attempted to interrupt their partners (whether or not they succeeded), both successful and unsuccessful attempts to gain the floor were counted as attempted interruptions. They were standardized by the amount of time the interruptee spoke. The final vocalization variable, laughter, consisted of all vocal acts with stressed aspirations; these included not only full-belly "ha ha ha's," but also "hmh's" forcibly expelled from the diaphragm. On both attempted interruptions and laughter, to score more than once the subject had to pause five seconds between episodes.

Symbolically intrusive behaviors. Pointing at a partner, pointing at his or her flash cards, and touching his or her possessions were counted as symbolically intrusive behaviors. All were coded in their totality. Pointing consisted of a single finger held straight in a line that, if extended, would have touched the partner's body or possessions. To score twice, between pointing episodes a subject had to change the whole hand to a nonpointing configuration. Touches were coded whenever a subject tapped, wiggled, held, or otherwise made tactual contact with a partner's possessions. To score twice, the intruder had to withdraw at least six inches between touches. All dependent variables were coded from the videotapes, which could be stopped, run in slow motion, or played back when measurement questions arose. Three coders were used and interrater reliability ranged from 85% to 95% for all the dependent variables.

#### RESULTS

Since each subject was paired with the same partner on both trials, the dependent variables are measured on each individual within a pair. The fact that a particular pair of individuals may interact in such a way as to give atypical behavioral scores poses a threat of extraneous variation, which may confound the results. Because the individuals were randomly assigned to pairs, we would not expect these effects from nesting within pairs to be significant. However, this source of variation cannot be ignored a priori. In order to test the significance of pairing, Duncan's multiple range test was performed between pairs on the factorial means (within pairs) of each of the dependent variables. The results of these tests show that for three of the dependent variables (horizontal possession space, vocalizations, and interruptions) the effects of pairing were not significant (i.e., all within-pair means could be considered to belong to one confidence interval). For the remaining seven dependent variables, the multiple range test was significant, and in each case two groups of pairs, constructed from the confidence intervals on the factorial means, were sufficient to account for the effects of pairing.<sup>1</sup> This procedure for constructing a pairs effect has two advantages over the inclusion of a variable that identifies each and every pair uniquely. First, a unique pairs effect may artificially remove variance in the dependent variables. Second, since each pair consists of only four observations, grouping pairs bolsters the degrees of freedom used in subsequent analyses.

A number of alternative analysis of variance models that included higher order interaction terms were fitted. The final model includes those effects of significant substantive interest: a between-pairs effect and *nested*<sup>2</sup> within-pairs effects for specific status, diffuse status (gen-

<sup>&</sup>lt;sup>1</sup> Based on these results, two pairs of observations were excluded from the analysis for the direct body space, laughter, and horizontal possession space measures. For the direct possession space and horizontal body space measures, one pair of observations was excluded from the analysis.

<sup>&</sup>lt;sup>2</sup> For effects nested within two groups of pairs, the degrees of freedom for dichotomous factors are thus doubled. See Tables 2, 3, and 4.

der), trial, and a trial  $\times$  status interaction. The mean scores on all measures for all groups are included in Table 1. The ANOVA model results are presented in Tables 2, 3, and 4. The proxemic indicator results are in Table 2, the vocalic behaviors in Table 3, and the symbolic intrusions are in Table 4.

The discussion of these results focuses on three issues: (1) differences between task-specific statuses (teachers vs. students), (2) differences between diffuse statuses (males vs. females), and (3) trial  $\times$  status interactions.

## Teacher/Student Differences

It was expected that subjects assigned to the high specific status condition (teacher) would behave differently than those assigned to the low specific status condition (student). Specifically, teachers were expected to score higher proxemically, to talk and attempt to interrupt more, to laugh less, and to touch and point more than students. The ANOVA results provide strong support for these expectations. For seven of the ten dependent variables, the effects of status are significant. Teachers took more direct space with both their bodies and their possessions than did students. Teachers talked and interrupted more. As predicted, teachers symbolically intruded on their partners by touching and pointing more. Only the laughter (Table 3) and horizontal space measures (Table 2) did not yield significant specific status differences. The data clearly

show that the task-specific status dimension differentiates high and low status with respect to proxemic, vocalic, and symbolic intrusion indicators. Specific status plays a significant role in the organization of nonverbal behavior patterns.

### Differences between Males and Females

Given the literature and the present findings concerning specific status, diffuse status was expected to differentiate nonverbal behavior in ways similar to specific status. The results in Tables 2, 3, and 4 do include nonverbal gender effects, but also indicate that diffuse status is generally not as important a predictor of the dependent variables as is specific status. Diffuse status differences appeared for five indicators: body and possession space on the horizontal axis (Table 2), laughter (Table 3), and touching and pointing to partner's possessions (Table 4). The high diffuse status subjects (males) took more horizontal space with their bodies and possessions and touched and pointed to partner's possessions more, while the lower diffuse status subjects (females) laughed more often. Thus, it appears from these data that diffuse status does have a nonverbal impact.

Interestingly, the data suggest that the net impact of diffuse status and specific statuses may be consistent yet interdependent for some nonverbal categories. Both types of behavior, for instance, organized an association of high

Table 1. Group Means for Ten Measures of Nonverbal Behavior: Trials 1 and 2

	Direct Body Space	Direct Poss. Space	Hori- zontal Body Space	Hori- zontal Poss. Space	Vocali- zation	Inter- rupt	Laugh	Touch	Points to Partner	Points to Poss.
Trial 1										
Teacher Male	26.63	44.08	51.62	56.98	51.87	0.21	1.08	2.03	0.15	0.29
Student Male	24.00	43.81	47.51	46.63	20.99	0.09	0.96	0.02	0.09	0.35
Teacher Male	31.88	44.67	50.95	51.71	56.34	0.14	0.62	1.57	0.29	0.30
Student Female	21.07	43.03	41.94	50.93	29.94	0.07	1.52	0.00	0.05	0.03
Teacher Female	34.38	46.23	41.25	39.55	59.91	0.27	2.12	1.20	0.38	0.36
Student Male	24.81	44.85	52.79	57.88	30.74	0.10	0.91	0.03	0.14	0.04
Teacher Female	23.03	45.94	41.24	45.05	54.95	0.16	1.22	0.10	0.09	0.05
Student Female	15.98	39.73	32.01	45.99	27.21	0.07	0.97	0.32	0.12	0.00
Trial 2			L.							
Student Male	16.32	42.09	50.84	64.21	25.92	0.08	1.15	0.12	0.01	0.01
Teacher Male	23.82	46.60	43.94	66.79	56.66	0.10	1.12	0.56	0.15	0.15
Student Male	27.27	43.50	54.43	49.49	31.75	0.07	0.57	0.68	0.05	0.01
Teacher Female	29.48	45.23	43.53	61.06	54.97	0.10	1.04	0.12	0.06	0.01
Student Female	26.76	41.80	43.07	63.14	28.19	0.10	2.02	0.00	0.09	0.00
Teacher Male	23.68	40.72	53.74	58.24	55.22	0.16	0.86	1.25	0.09	0.13
Student Female	19.12	43.48	45.11	<u>6</u> 3.40	34.55	0.08	1.17	0.00	0.02	0.02
Teacher Female	22.54	45.52	37.95	51.60	48.95	0.11	0.95	0.35	0.15	0.04

Source	Sums of Squares	df	Mean Square	F
Dependent Variable: D	Firect Body Space, $R^2 = .37$			
Total	10774.7143	103		
Between Pairs	2783.6429	1	2783.6429	35.18***
Error	7991.0714	101	79.1195	
Within Pairs	1223.4290	8	152.9286	2.12
Gender	87.4048	2	43.7024	.61
Status	992.0368	2	496.0184	6.89***
Trial	11.6736	2	5.8368	.08
Trial $\times$ Status	132.3139	2	66.1570	.92
Error	6767.6424	94	71.9962	
Dependent Variable: D	irect Possession Space, R <sup>2</sup> =	.25		
Total	4693.3197	107		
Between Pairs	841.5766	1	841.5766	22.94***
Error	3851.7431	105	36.6833	
Within Pairs	315.9321	8	39.4915	1.09
Gender	34.9641	2	17.4821	.48
Status	265.2227	2	132.6114	3.68**
Trial	5.1349	2	2.5674	.07
Trial $\times$ Status	10.6104	2	5.3052	.15
Error	3535.8110	98	36.0797	
Dependent Variable: He	orizontal Body Space, $R^2 =$	.43		
Total	9720.9615	67		
Between Pairs	1886.1054	1	1886.1054	15.65***
Error	7834.8561	65	120.5362	
Within Pairs	2253.7850	8	281.7231	2.93*
Gender	717.1147	2	358.5574	3.73**
Status	16.9313	2	8.4657	.09
Trial	29.3755	2	14.6878	.15
Trial $\times$ Status	1490.3635	2	745.1818	7.74***
Error	5581.0711	58	96.2254	
Dependent Variable: <sup>a</sup> H	Iorizontal Possession Space,	$R^2 = .27$		
Total	9666.1223	59		
Within Pairs	2575.0044	4	643.7511	4.99***
Gender	375.5819	1	375.5819	2.91*
Status	23.9402	1	23.9402	.19
Trial	2174.8339	1	2174.8339	16.87***
Trial × Status	.6484	1	.6484	.01
Error	7091.1179	55	128.9294	

Table 2. ANOVA Results for Four Measures of Proxemic Nonverbal Behavior

<sup>a</sup> Multiple range test shows no pairs effect.

\*\*  $.01 \le p \le .05$ .

\*\*\* p < .01.

rank with increased space use; but while specific status organized direct space, diffuse status organized horizontal space. Touching and pointing, on the other hand, displayed both specific and diffuse effects. More research about joint status impacts on nonverbal behavior paralleling similar research about verbal behavior would be helpful.

### Trial by Status Interactions

An alternative explanation of all the teacher/student differences is that intrinsic and inflexible pedagogical role requirements rather than task-specific status differentiation accounts for the significant differences. In other words, the alternative explanation would be that the type of task-specific status we chose to manipulate (i.e., teacher vs. student) would necessarily demand the specific types of behavior differences we claim to predict. Teachers must teach by talking, pointing, touching, etc., and students learn by remaining silent and not pointing or interrupting. According to this possibility, if we had manipulated other task-specific roles (e.g., doctor vs. nurse, employer vs. employee, interviewer vs. interviewee), the differences in behavior we found would not have existed.

This alternative role explanation can be compared with our own status explanation by examining the trial  $\times$  status interaction results presented in Tables 2, 3, and 4. Because role and status are confounded the results are only

<sup>\*</sup>  $.05 \le p \le .10$ .

Source	Sums of Squares	df	Mean Square	F	
Dependent Variable: <sup>a</sup>	Vocalization, $R^2 = .46$		and and a second s		
Total	29018.1995	111			
Within Pairs	13286.9027	4	3321.7257	22.59***	
Gender	30.8700	1	30.8700	.21	
Status	12153.8889	1	12153.8889	82.67***	
Trial	774.2284	1	774.2284	5.27***	
Trial $\times$ Status	327.9154	1	327.9154	2.23	
Error	15731.2968	107	147.0215		
Dependent Variable: <sup>a</sup>	Interruptions, $R^2 = .09$				
Total	1.9244	111			
Within Pairs	.1710	4	.0428	2.61*	
Gender	.0000	1	.0000	.00	
Status	.0920	1	.0920	5.61***	
Trial	.0193	1	.0193	1.18	
Trial $\times$ Status	.0597	1	.0597	3.64**	
Error	1.7534	107	.0164		
Dependent Variable: L	augh, $R^2 = .48$				
Total	87.2637	103			
Between Pairs	33.4258	1	33.4258	62.71***	
Error	53.8379	101	.5330		
Within Pairs	8.7137	8	1.0892	2.27	
Gender	8.3645	2	4.1823	8.71***	
Status	.0257	2	.0129	.03	
Trial	.1745	2	.0873	.18	
Trial $\times$ Status	.1490	2	.0745	.16	
Error	45.1242	94	.4800		

Table 3. ANOVA Results for Three Measures of Vocalic Nonverbal Behavior

<sup>a</sup> Multiple range test shows no pairs effect.

\*\*  $.01 \le p \le .05$ .

\*\*\*  $p \leq .01$ .

suggestive, but they do provide some evidence that status and not role is the causative factor. Since pedagogical role requirements remain constant across trials, the role explanation predicts no trial  $\times$  status effects. On the other hand, status distance does not necessarily remain the same across trials: on trial 2 upwardly mobile subjects are attempting to dominate their exsuperiors, who may not succumb as thoroughly as trial 1 status inferiors did in the absence of an interaction history. Because the two positions are subject to the same pedagogical role demands across trials, but need not necessarily exhibit the same status difference, the appearance of trial × status interactions offers some support for the status explanation. While two of the measures (vocalization and horizontal possession space) appear to be reactive and show trial effects, the ANOVA results show that for three of the nonverbal behaviors, trial  $\times$  status interactions are significant: downwardly mobile subjects occupied more horizontal space; upwardly mobile subjects interrupted more, and touched more. This evidence suggests that the teacher/ student differences that appear in the data cannot be attributed to intrinsic requirements of pedagogical roles per se, but are the results of

differing ranks and are unconnected to the particular roles manipulated in the experiment.

#### DISCUSSION

The experimental findings lend strong support to the argument that differential rank affects nonverbal behavior patterns. Both specific and diffuse statuses play a significant role in the organization of proxemic, vocalic, and symbolically intrusive behaviors; in addition, this status rather than role interpretation is supported by significant trial  $\times$  status interactions. In general, high specific status subjects (teachers) claimed more direct space with their bodies, talked more, and attempted more interruptions than their low status counterparts. And, by means of touching and pointing (both to their partner and to the partner's possessions), they symbolically intruded upon their partners noticeably more than their partners intruded upon them. Similarly, gender affected nonverbal behavior: males took more horizontal space, pointed to possessions more often, touched more frequently, and laughed less than females. Behaviors organized by specific status were not precisely the same behaviors that showed diffuse status effects.

<sup>\*</sup>  $.05 \le p \le .10.$ 

Source	Sums of Squares		Mean Square	F
Dependent Variable: T	Fouch, $R^2 = .46$			
Total	235.0667	111		
Between Pairs	52.8305	1	52.8305	31.60**
Error	182.2362	109	1.6719	
Within Pairs	56.0822	8	7.0103	5.67***
Gender	30.1311	2	15.0656	12.18***
Status	13.9594	2	6.9797	5.64***
Trial	4.6477	2	2.3239	1.88
Trial $\times$ Status	7.3440	2	3.6720	2.97*
Error	126.1540	102	1.2368	
Dependent Variable: P	oints to Partner, $R^2 = .33$			
Total	5.1823	111		
Between Pairs	1.0561	1	1.0561	27.87***
Error	4.1262	109	.0379	
Within Pairs	.6350	8	.0794	2.32
Gender	.0012	2	.0006	.02
Status	.4541	2	.2271	6.64***
Trial	.1139	2	.0570	1.67
Trial $\times$ Status	.0658	2	.0329	.96
Error	3.4912	102	.0342	
Dependent Variable: Po	oints to Partner's Possessions	$R^2 = .52$		
Total	7.2021	111		
Between Pairs	1.8354	1	1.8354	37.30***
Error	5.3667	109	.0492	
Within Pairs	1.9087	8	.2386	7.04***
Gender	.1817	2	.0909	2.68*
Status	1.5545	2	.7773	22.93***
Trial	.0532	2	.0266	.78
Trial $\times$ Status	.1193	2	.0597	1.76
Error	3.4580	102	.0339	

Table 4. ANOVA Results for Three Measures of Symbolically Intrusive Nonverbal Behavior

\*  $.05 \le p \le .10$ .

\*\*  $.01 \le p \le .05$ .

\*\*\*  $p \le .01$ .

More research is needed to determine the reliability and theoretical import of this finding.

What is clear, however, is that status indeed organizes nonverbal behavior. Moreover, status components appeared even though the behavioral dependent variables were chosen as much for precise measurability as for their theoretical links to status. The nonverbal importance of relative status is further underlined by the fact that both the specific and the diffuse status manipulations were deliberately weak here so as to maximize the generalizability of the results. With respect to specific status, the distinction between teachers and students was minimized throughout the experiment: it was made clear that each was new to the task, teachers enjoyed none of the prerogatives usually associated with the task, and there was no salary spread or educational or age difference between the two groups. With respect to gender, only 25% of the subjects were in the gender condition male-teaching-female, where the sexes were expected to behave most differently; another 25% were in the femaleteaching-male incongruent status condition,

where diffuse rank conflicted with specific rank. Yet both specific status and gender did affect nonverbal behavior. It is likely that in less contrived interactions, where status normally carries greater weight because it has access to larger resources, larger nonverbal differentiations by rank appear.

The findings have certain implications for both the nonverbal and the small groups literatures. With respect to the nonverbal literature, the data suggest that despite the relative inattention there to hierarchical factors such as situational status, these factors have a great deal of explanatory merit for nonverbal behavior. Differences between groups are not necessarily attributable to subjects' internal states or to cultural or subcultural interactive styles. Rather, individuals seem to have multiple sets of status-cueing behaviors in their personal repertoires, and they exhibit a particular set when it becomes appropriate to their relative status.

With respect to the small groups literature, a controversy exists regarding the causal ordering of small group tasks on the one hand, and

competence in or expectations about performance on the other. While this experiment does not disprove the meritocratic or expectation states theories that competence or expectations shape rank, it does lend substantiation to the situational resource position that rank shapes performance. A random assignment to specific high or low status produced performance variations. Vis-à-vis the expectation states model, these findings suggest that behavioral cues associated with differentiated statuses, rather than stereotyped beliefs about competence, may organize power, influence, and prestige orders, Vis-à-vis the behavioral meritocracy model of hierarchy formation, the data underline the possibility that nonverbal differences reflect group ranks rather than contribute to their formation. High ranks in small groups cannot be assumed necessarily to be occupied by those who deserve superordinance by virtue of stable individual behavioral competence. Rather, performance differences may reflect discrepant statuses. As in macroorderings, so in microorderings: high rank need not rest on achieved behavioral competence, or on others' expectations concerning leadership competence.

#### REFERENCES

- Altman, I.
  - 1970 "Territorial behavior in humans: An analysis of the concept." Pp. 1–24 in L. Pustalan and D. H. Caron (eds.), Spatial Behavior of Older People. Ann Arbor: University of Michigan Press.

Berger, J., B. P. Cohen, and M. Zelditch, Jr.

- 1973 "Status characteristics and social interaction." Pp. 194–216 in R. Ofshe (ed.), Interpersonal Behavior in Small Groups. Englewood Cliffs, NJ: Prentice-Hall.
- Berger, J., M. H. Fisek, R. Z. Norman, and M. Zelditch, Jr.
  - 1977 Status Characteristics and Social Interaction. New York: Elsevier.
- Coser, R. L.
  - 1960 "Laughter among colleagues." Psychiatry 23:81–95.
- Dean, L. M., F. M. Willis, and J. Hewitt
- 1975 "Initial interaction distance among individuals equal and unequal in military rank." Journal of Personality and Social Psychology 32:294–299.

Duncan, S., Jr., and D. W. Fiske

- 1977 Face-to-Face Interaction: Research, Methods, and Theory. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Eakins, B., and G. Eakins
- unpubl."Verbal turn-taking and exchanges in faculty dialogue." Paper presented to the Conference on the Sociology of the Languages of American Women, 1976.
- Ellyson, S. L., J. F. Dovidio, R. L. Carson, and D. L. Vinicur
  - 1980 "Visual dominance behavior in female dyads: Situational and personality factors." Social Psychology Quarterly 43:328–336.
- Frieze, I. H., and S. J. Ramsey
  - 1976 "Nonverbal maintenance of traditional sex roles." Journal of Social Issues 32:133-141.
- Gillespie, D. L., and A. Leffler
  - 1982 "Theoretical paradigms in the study of human nonverbal behavior: A review and appraisal of proxemics research." Sociological Theory 1.

Goffman, E.

- 1967 "The nature of deference and demeanor." Pp. 47–95 in E. Goffman (ed.), Interaction Ritual: Essays on Face-to-Face Behavior. Garden City, NY: Anchor Books.
- Hall, E.T.
- 1959 The Silent Language. Greenwich, CT: Fawcett.
- Henley, N.M.
  - 1973 "Status and sex: Some touching observations." Bulletin of the Psychonometric Society 2:91-93.
  - 1977 Body Politics: Power, Sex, and Nonverbal Communication. Englewood Cliffs, NJ: Prentice-Hall.
- Knowles, E. S.
  - 1973 "Boundaries around group interaction: The effect of size and member status on boundary permeability." Journal of Personality and Social Psychology 26:327–331.
- Lamb, T. A.
  - 1981 "Nonverbal and paraverbal controls in dyads and triads: Sex or power differences?" Social Psychology Quarterly 44:49-53.
- Little, K. B.
  - 1965 "Personal space." Journal of Experimental Psychology 1:237–247.
- Sommer, R.
  - 1969 Personal Space: The Behavioral Basis of Design. Englewood Cliffs, NJ: Prentice-Hall.