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# SOME EFFECTS OF DEMEANOR ON THE MEANING OF BEHAVIORS IN CONTEXT

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# ABSTRACT

I examine the role of demeanors in modifying the meanings of behaviors in event contexts using the measurement techniques developed in Affect Control Theory. Previous research shows that demeanors do hold consistent affective meanings for individuals and that those meanings modify the interpretation of other behaviors that they accompany. The current study develops a fuller picture of this modification by placing the demeanor and behaviors into complete interactional situations. Measurement of the meanings of the behaviors in context indicates that (1) the meanings of the demeanor and the out-of-context behaviors do affect the meaning of the incontext behaviors and (2) the predictive power is greater when the demeanor is included than when it is not.

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#### **INTRODUCTION**

The expression, "It's not what you say, it's how you say it," indicates that many people believe that demeanor has an effect on the impressions we create in others' minds during interaction. However, at present there exists no consensus on how to conceptualize demeanor, how interactants interpret it, or specifically how it affects subsequent behavior. Demeanor consists primarily of nonverbal behaviors, physical and paralinguistic behaviors that often accompany actions. It influences how people form impressions, react to events and define situations.

Recently, researchers studying group processes have reported a variety of effects of different types of demeanor. In many cases, this research documents the significance of *how* someone enacts particular behaviors. Demeanor evidently affects a number of variables of interest to social scientists, including influence, leadership, performance expectations, status, and situational meanings. After briefly mentioning some of the significant findings of demeanor, I

will describe the tradition in which work presented here fits, and how that work relates to other studies of demeanor's effects.

Some general processes regarding demeanor have been identified in task groups. For instance, Balkwell and Berger (1996) related gender to a number of demeanor variables, including time speaking, looking while speaking, gesturing, chin thrusts, smiling and laughing. They concluded that some, but not all, of those differences in demeanor are controlled by status position in the group. Ridgeway (1997, 2000) has analyzed how different behavior of women and men in task groups and work settings can create and perpetuate status inequalities and beliefs about unequal abilities. Robinson and Smith-Lovin (2001) found that women and men in task groups used humor differently, with men using it to increase power and prestige differentiation in the group and women using it to build cohesion. Johnson (1994) found that women were more likely to smile and laugh in same-sex groups. Foels, Driskell, Mullen and Salas (2000) reviewed 19 studies of natural and laboratory groups and found an overall tendency for individuals to prefer democratic leadership. However, that finding is conditioned by several other factors including "leadership potency" or demeanor. Autocratic, over-controlling leader demeanor reduces members' satisfaction, while simply behaving as the boss generally increases satisfaction.

Other research focuses on particular outcomes of specific demeanors for the individuals who perform them. Walker, Ilardi, McMahon and Fennell (1996) found very similar patterns of differentiation in all-male and all-female groups. In both types, they found a positive correlation between time spent talking and members' subjective attribution of leadership traits and influence. However, women who were opinion leaders were less likely than men to receive favorable ratings on leadership traits, perhaps because of a feeling that the women had less legitimate right to the leader position than the men did. Rashotte

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and Smith-Lovin (1997) determined that demeanor behaviors including low verbal latency, long eye contact behavior, and greater time spent talking positively affected the influence an individual would exert in a group. Shelly and Webster (1997) and Shelly (2000) found that sentiment (liking) could produce power and prestige inequalities in groups. Shelly, Troyer, Munroe and Burger (1999) extended that finding by showing that one mechanism might be duration of acts. Actors having an advantage in sentiment (those well liked) tend to contribute speech of longer duration than others do, though other group members see them as less influential than actors are where sentiment is not a factor. By contrast, actors advantaged in status also display long speech acts, but others perceive them as *more* influential.

Other work has tested the ability of actors to decode the emotions communicated by demeanor (e.g., Butler 1990; Custrini and Feldman 1989; Ekman et al. 1987; Matsumoto 1989; Sogon 1989). In that research, demeanor modifies identity for the individuals displaying the emotions.

Some work has examined demeanor and impression formation. Klienke (1991) looked at the evaluations of actors by observers based on their demeanor. Most of this research, however, deals with impressions of credibility (e.g., Vrij 1993) or of dominance (e.g., Harrigan, et al.

1989; Ridgeway 1987) attributed to an actor, rather than impressions of situational elements or situational definitions.

None of this previous work has specifically examined the meanings that various demeanors have for individuals in interaction. The demeanor of those involved in the situation affects the definitions that people create for situations. This paper will describe the role of demeanor in the creation of situation definitions, using precise mathematical models, which in turn should provide a better understanding of the role of demeanor in interaction.

# AFFECT CONTROL THEORY

One micro-level model that explains situational definition is Affect Control Theory (ACT) (Heise 1979, 1985, 1988), which has proven highly predictive of the definitions, cognitions, emotions and responses evoked by an event. ACT uses ideas from symbolic interactionism to explain how definitions of situations lead to specific behaviors and particular emotions. The theory posits that people hold meanings for identities and actions that are maintained in interaction and that are shared in a culture. ACT is especially well suited to the study of demeanor because it has a strong framework of event components that not only allows for, but seems to demand, inclusion of demeanor.

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## Situation Definition and Event Recognition

In any situation, individuals see themselves and the others around them as fulfilling roles or identities. The process of defining situations always involves locating appropriate identities for self and others (Heise 1988). The appropriate identities are often determined by institutional structures (Smith-Lovin and Douglass 1990), e.g., student. The labeling of identities for all actors in a situation, while not fixed and unchanging, yields a definition of the situation that is fairly stable and, when institutionally anchored, often consistent across actors and observers.

Once an actor can define the situation, that definition serves to identify "events" as behaviors that relate two or more identities. Event recognition basically entails a process in which a person looks over possible actor-object combinations and assesses the potential of each as a valid frame for a given event (Heise 1979). Cultural rules tell actors what realm of behaviors might be appropriate for specific actors (subjects) in each given situation. These rules allow actors to eliminate the vast majority of possible behaviors and identify the actual event that is taking place (Heise 1988).

# **Mathematical Modeling of Affect Control Theory**

Affect Control Theory quantifies the definitions of actors and behaviors on three dimensions: Evaluation, Potency and Activity (EPA) that have been shown to be human universals for responding to stimuli (Osgood, May and Miron 1975). Evaluation measures sentiments of goodness versus badness. Potency indicates powerfulness versus powerlessness. Activity corresponds to liveliness versus passiveness. ACT measures each dimension (E, P and A) on a scale from -4 to +4. For example (Heise 1979), in the United States, the actor "mother" is seen as quite good (2.4), fairly powerful (1.4) and fairly active (1.3). The behavior "provoke" has the fundamental ratings of -1.2, 0.3 and 0.7. Thus, this action is seen as fairly bad, neither powerful nor weak and slightly active.

Identities and behaviors have highly consensual fundamental EPA ratings for a culture. Fundamental EPA ratings are established affective associations or attitudes (Heise 1979). Events may produce transient impressions for actors and observers that temporarily alter the EPA ratings for any part of the scenario: actor, behavior or other. For instance, a mother might act in a way that temporarily deflects her positive Evaluation rating downward.

Impression formation researchers (Gollob 1968) have developed equations that can be used to predict the level on one dimension (E, P or A) of an identity or behavior based on knowledge of the levels of other dimensions. For example, the transient rating of evaluation for an actor can be computed from the ratings of other parts of the event:

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 $A_e' = \alpha + \beta_1 A_e + \beta_2 B_e + \beta_3 B_e O_{e.}$ 

Here  $\alpha$  is the baseline rating, A<sub>e</sub>' represents the transient evaluation impression of the actor, A<sub>e</sub> is the fundamental evaluation sentiment attached to the actor's identity, B<sub>e</sub> is the fundamental evaluation sentiment attached to the behavior, O<sub>e</sub> is the fundamental evaluation sentiment attached to the behavior and the  $\beta$ s represent the temporary alterations to those fundamental sentiments in a particular setting.

#### **Extensions to Affect Control Theory - Modifiers**

Affect Control Theory's original conceptualization incorporated only actors (subjects), behaviors and objects. Extensions of the theory have taken place over the years; I am performing another with this project. The major previous extension to the theory that I will be discussing here is the inclusion of identity modifiers. Identity modifiers are applied to either subjects or objects. The extension I will be performing is the addition of modifiers to behaviors in the form of demeanor.

Averrett and Heise (1988) undertook a major study to add modifiers to identities within ACT. These identity modifiers include such things as statuses, personality traits and mood descriptors. They can be long-term individual characteristics or temporary states. Statuses include things like rich, young or black. Dispositions (e.g., introverted) and styles make up personality traits. Angry, proud and shaken are examples of moods.

Averrett and Heise (1988) collected EPA ratings for 64 combinations of modifiers and behaviors. They then modeled how the impressions that these combinations, or amalgamations, formed could be predicted from the original meanings associated with the identity and the modifier. For example, the rating on the evaluation dimension of an amalgamation was:

 $C_e = .17 + .62P_e - .14P_p - .18P_a + .50R_e$ 

where  $P_e$  is the fundamental evaluation sentiment for the modifier,  $P_p$  is the fundamental potency sentiment for the modifier,  $P_a$  is the fundamental activity sentiment for the modifier and  $R_e$  is the fundamental evaluation sentiment for the identity. They also examined how such combined identities affected impressions for identities in the contexts of events. The combinations acted just like unmodified identities in the context of events. In other words, the EPA rating of the amalgamation could be substituted for the EPA rating of the actor in any equation.



#### **Affect Control Theory and Demeanor**

No research has systematically examined the role that demeanor plays in the production of impressions. Particularly with regard to the more general understanding that *how* one performs a behavior is important (e.g., with a smile or rolling one's eyes), the role of demeanor in the formation of impressions about behaviors can be significant. Integrating demeanor into ACT is a promising way to understand this process. ACT has proven useful in the prediction of impression ratings using the three dimensions of evaluation, potency and activity. These three dimensions can also be well applied to demeanor.

I examine how demeanor affects impression formation as it applies to behaviors. In other words, I want to study how behaviors modified by demeanor form impressions differently than nonmodified behaviors when placed into an event context. ACT is ideally suited to address and answer this question. ACT promises to be particularly useful in illuminating the relationship between demeanor and impressions, due to its strong event framework that allows for the relatively easy inclusion of simple modifiers. Making the model more sensitive to demeanor of situations can improve ACT's precision in predicting impressions.

#### Earlier Studies in this Project

Earlier research in this larger project (Rashotte 2001) has shown that (1) demeanor has meanings on the Evaluation, Potency and Activity dimensions, and (2) that the impressions of demeanorbehavior combinations are an additive function, an amalgamation, of their meaning elements. I determined this through two earlier studies that I summarize below. The first entailed the collection of information from volunteer undergraduate students on the meanings of demeanor alone. This was done in order to determine if demeanor does have meanings on the Evaluation, Potency and Activity dimensions. The second study required the collection of EPA ratings for demeanor profile-behavior profile combinations.

In the first study, meanings on the dimensions of evaluation, potency and activity were collected for a list of 98 demeanors that was developed after a thorough review of studies on nonverbal behavior. Of particular use in this task was *The Handbook of Methods in Nonverbal Behavior Research* (Scherer and Ekman, 1982). I attempted to obtain a full range of demeanors on all dimensions. The instrument contained standard EPA rating scales (-4 to +4) for a variety of demeanors. Each demeanor behavior (e.g., smiling) was rated in isolation from other demeanors. The subjects were 402 undergraduate students (230 females and 172 males) at a large public university.

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The EPA ratings were calculated for each demeanor. The -4 to +4 rating scale is often collapsed to just positive versus negative in ACT, giving each dimension only two levels. The EPA ratings thus yield eight configurations: E+,P+,A+; E+,P+,A-; E+,P-,A+; E+,P-,A-; E-,P+,A+; E-,P+,A-; E-,P-,A+; and E-,P-,A-. Average Evaluation, Potency and Activity ratings were computed for each demeanor. Then, those average numbers were then mapped onto these profiles. For example, a demeanor with Evaluation of 2.5, Potency of -1.6 and Activity 1.3 would fit the E+, P-,A+ profile. Some examples of the meaning profiles of various demeanors are presented in Table 1.

| EPA<br>Profiles/Configurations | Examples of Demeanors  |
|--------------------------------|--|
| E+,P+,A+                       | Laughing, smiling, jumping, tickling, grinning and clapping  |
| E+,P+,A-                       | Caressing, snuggling, kissing, hugging and stretching  |
| E+,P-,A+                       | Blinking   |
| E+,P-,A-                       | Leaning back, lying down, speaking softly, tilting the head and sitting  |
| E-,P+,A+                       | Punching, making a fist, baring one's teeth, pushing, kicking, shaking one's head, snatching, speaking in a harsh voice, pulling, speaking quickly |
| E-,P+,A-                       | Staring, grinding one's teeth, sticking out one's chin, weeping, crouching, putting hands on hips  |
| E-,P-,A+                       | Wrinkling one's nose, pointing, flinching, puckering, rolling one's eyes   |
| E-,P-,A-                       | Speaking in a quavering voice, speaking in a monotone, sucking on one's fingers  |

| <b>Table 1. EPA Profiles</b> | and Examples |
|------------------------------|--------------|
|------------------------------|--------------|

The second study paired the demeanors rated in the first study with previously rated behaviors to see how the two combined. Particularly, I was interested in seeing how the different elements of the two sets of meanings combine to create new meanings for the amalgamation. I examine meaning combination on all three dimensions - evaluation, potency and activity. This study showed how demeanor and behaviors work together to form amalgamated behavior sets that have meanings of their own. In addition, these combined meanings are used to make predictions about how these demeanors will act in meaning formation for behaviors in complete events, which I am testing in the current study.

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This study required the collection of EPA ratings for the sixty-four demeanor profile-behavior profile amalgamations. This yields complete variation on the six independent variables (behavior evaluation, behavior potency, behavior activity, demeanor evaluation, demeanor potency and

demeanor activity), each of which has two levels (2x2x2x2x2=64). The collection was done with a different set of 394 undergraduate student volunteers (222 women and 172 men). No student who participated in the first study also participated in the second study.

For most profile amalgamations, two word-set amalgamations were used, yielding 120 total word pairs to be rated. (Blinking was the only demeanor to fit the E+, P-, A+ profile well and thus there was no second set of words for this profile.) The 120 pairs were broken into four subsets of thirty pairs each and about 100 subjects rated each subset. The instruments presented subjects with the list of demeanor - behavior amalgamations and asked them to rate each on the EPA nine-point scales. For example, "smiling" and "comforting" might be presented together, and subjects would be asked to rate "smiling and comforting" on evaluation, potency and activity.

Ordinary least-squares regressions were performed to see if the meanings associated with combinations of demeanors and behaviors were determined by the ratings of the two elements' dimensions out of context. In addition, all possible interactions of the element meanings on the three dimensions were included to test for any interaction effects. I found that individual dimensions generally have an impact on the meaning of the amalgamation on that dimension. This is particularly true for evaluation, where other dimensions (potency and activity) are not predictive. For example, the evaluation of smiling and the evaluation of delaying will both significantly affect the evaluation of "smiling and delaying." The other dimensions, however, show effects but not as simple of a pattern on affecting the combined meaning. The potency and activity ratings of the amalgamation seem to be more multi-dimensional, drawing on the out-of-context evaluation, potency and activity ratings of the demeanor and the behavior. The evaluation-by-evaluation interaction is key for two of the three dimensional ratings of the pair. In other words, performing a positively evaluated behavior with a positive demeanor greatly increases the evaluation and potency ratings of the amalgamation.

# PREDICTIONS

The prior studies (Rashotte 2001) suggest a way to investigate how demeanor affects situational definitions using theoretical ideas and measurement techniques of ACT. Respondents were able to assess demeanor along the dimensions crucial to ACT and they did incorporate those assessments in their ratings of events. This work isolated behaviors and demeanor from the

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actors who portray the behavior and other actors who receive its effects. Here I build on that work by placing it in a social context. I investigate in detail how various combinations of the meanings individuals attach to demeanor function in respondents' affective interpretation of complete event situations. In other words, I extend the investigation to determine whether demeanor's effects operate predictably in social settings of actors and others who witness behavior accompanied by demeanor. Research surveyed suggests two general predictions of how demeanor interacts with behavior to affect ACT ratings. After stating the general predictions, I describe a set of models that specify the relationships more precisely, and then assess the models with some new data.

First, I expect that combining demeanor with behavior in a social setting will permit better predictions than will behavior alone. This would be consistent with findings of Averett and Heise (1988), who combined modifiers with identities. Those researchers found that the combination of identity with modifiers permitted better predictions than identity alone, concluding that "incorporating modifiers into affect control theory enriches the model" (p 128). Thus:

1. Including demeanor will increase the predictive power of models over events where demeanor is not considered.

Second, I expect that the portions of ratings that are affected will vary for the different dimensions of meaning when the behaviors occur in the full event context (actor, behavior, demeanor and object). Thus:

- 2. The ratings of the behavior/demeanor amalgamations established in the earlier studies will affect overall ratings as follows:
  - a. Only the Evaluation dimension rating of the amalgamation will predict the Evaluation dimension rating of the behavior in context; and
  - b. The Evaluation, Potency and Activity dimension ratings of the amalgamation will all predict the Potency and Activity dimension ratings of the behavior in context.

To assess these predictions, I develop a set of eighteen models incorporating different elements that may influence ratings of the social events. The models used in analysis are presented in Table 2. The first six models examine events in which demeanor is not included. The final twelve models (4 each predicting the in-context rating of evaluation, potency and activity of the behavior) assess the effect of the "modified" behavior (the amalgamation of demeanor and behavior ratings from the previous studies) versus the effect when the effects of the demeanor and the behavior are included as separate elements.

Models 7—10 take Evaluation as the dependent variable; 11—14 take Potency as the dependent variable; and 15—18 take Activity as the dependent variable. All these models include demeanor. Models 1—6 omit demeanor. Models 1—2 predict Evaluation of the social event. Model 1 predicts Evaluation using only the Evaluation rating of Actor, Object, and Behavior; model 2 predicts Evaluation using ratings of E, P and A for Actor, Object, and Behavior. Models 3—4 predict Potency rating of the social event. Model 3 predicts Potency using only the Potency rating of Actor, Object and Behavior; model 4 uses ratings of E, P and A for Actor, Object and Behavior. Models 5—6 predict Activity rating of the social event. Model 5 predicts Activity using only Activity rating of Actor, Object, and Behavior; model 6 predicts Potency using E, P, and A ratings of Actor, Object and Behavior.

#### **Table 2. Models and Properties**

| Model<br>Number | Independent Variables                              | Event Includes<br>Demeanor? | Dependent<br>Variable | <b>R</b> <sup>2</sup> |
|-----------------|--|-----------------------------|-----------------------|-----------------------|
| 1               | Actor, Object and Behavior E                       | No                          | Evaluation            | .4835                 |
| 2               | Actor, Object and Behavior E, P and A              | No                          | Evaluation            | .5747                 |
| 3               | Actor, Object and Behavior P                       | No                          | Potency               | .2370                 |
| 4               | Actor, Object and Behavior E, P and A              | No                          | Potency               | .2758                 |
| 5               | Actor, Object and Behavior A                       | No                          | Activity              | .4700                 |
| 6               | Actor, Object and Behavior E, P and A              | No                          | Activity              | .5417                 |
| 7               | Actor, Object and Amalgamation E                   | Yes                         | Evaluation            | .3010                 |
| 8               | Actor, Object and Amalgamation E, P and A          | Yes                         | Evaluation            | .3526                 |
| 9               | Actor, Object, Demeanor and Behavior<br>E          | Yes                         | Evaluation            | .5055                 |
| 10              | Actor, Object, Demeanor and Behavior<br>E, P and A | Yes                         | Evaluation            | .6309                 |
| 11              | Actor, Object and Amalgamation P                   | Yes                         | Potency               | .1642                 |
| 12              | Actor, Object and Amalgamation E, P and A          | Yes                         | Potency               | .2081                 |
| 13              | Actor, Object, Demeanor and Behavior<br>P          | Yes                         | Potency               | .2528                 |
| 14              | Actor, Object, Demeanor and Behavior<br>E, P and A | Yes                         | Potency               | .3523                 |
| 15              | Actor, Object and Amalgamation A                   | Yes                         | Activity              | .0844                 |
| 16              | Actor, Object and Amalgamation E, P and A          | Yes                         | Activity              | .1654                 |
| 17              | Actor, Object, Demeanor and Behavior<br>A          | Yes                         | Activity              | .4738                 |
| 18              | Actor, Object, Demeanor and Behavior<br>E, P and A | Yes                         | Activity              | .5578                 |

# DESIGN

This is a study with a written stimulus. I asked respondents to rate one of two sets of events. Each event was a complete sentence including a subject identity, a behavior and an object identity. The first event set consists of actors performing behaviors toward objects using demeanor. The second set contains only actors, objects and behaviors without demeanor.

Respondents were paid volunteers recruited from undergraduate courses. After scheduling by telephone, they came to the Sociology Department and sat around a worktable to fill out the stimuli. Instructions appeared both in writing and orally, and included a request not to communicate or to look at others' ratings until after all respondents had finished with their work. The researcher was present to ensure that subjects did not discuss responses. I excluded students who had participated in previous studies, and approximately 20 respondents rated each event.

Completely crossing all of the variables would be impossible (8 actor profiles x 8 object profiles x 8 demeanor profiles x 8 behavior profiles = 4096 possible events). Instead, I use designs that provide maximum variation on these variables while limiting the actual number of events to a feasible number. Thus, I do not need to create and study all possible combinations in order to test effectively the hypotheses. The first event set has an 8x8 Graeco-Latin square design. This design requires four independent variables. The second event set has an 8x8 Latin square design that requires three independent variables. All variables in both designs must have the same number of levels for the maximization of variation to occur.

For this study I have eight levels of the independent variables--the eight combinations of three two-level factors--which is one normal permutation of the design (Fisher and Yates 1963). Evaluation, potency and activity are the three factors; a rating as positive or negative created the two levels. As stated above, taken together the EPA ratings yield eight configurations.

Standard ratings on fundamental meanings are available for actors, behaviors and objects. The appendix to Heise (1979) lists ratings for hundreds of identities and behaviors. That set provided the actor and object-person identities and the behaviors in the stimuli here. The ratings obtained in the earlier study (Rashotte 2001) identify the demeanor fitting each profile. As in the earlier studies, I employ identities, demeanors and behaviors that fit the eight EPA configurations most strongly and that are useful in describing a large number of events.

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Response sheets contained the standard scales for Evaluation, Potency and Activity. Each behavior from each event was rated on these dimensions. Thus, if the event were "Mother smiles and plays with baby," then "plays with" (behavior) would get rated on evaluation, potency and activity within the context of this event.

To test my predictions, the transient behavior ratings from this written test (for each of E, P and A) were regressed on the fundamental sentiments (as previously measured) for EPA for all of the event elements. Next,  $R^2$  for each pair of models (with modified ratings or including separate

demeanor and behavior element ratings) is compared to assess which was more predictive. If the inclusion of the demeanor increases the predictive power of the models, prediction 1 receives support. The contributions of each out of context event element are examined to see if they follow the patterns of prediction 2.

# RESULTS

#### **Inclusion of Demeanor**

As mentioned above, Models 1-6 show the analyses for the models that did not include demeanor. These, in comparison to Models 7-18 will provide the basis for examination of prediction 2, that the inclusion of demeanor allows prediction of in-context ratings better than when those behaviors are not included, however the parameters are less likely to be significant.

In predicting evaluation ratings, the best fitting model is that including demeanor and behaviors separately. This is true for both the simpler model (F=2.62, p < .05) and the more complex one (F=2.59, p < .05). Thus, for evaluation, prediction 1 is supported; it is important to include demeanor in the picture.

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 Table 3. Behaviors in Event Context: Regression Coefficients for Predicting In-Context Evaluation (Without Demeanor) (N=64)

|                  | Model 1 | Model 2 |
|------------------|---------|---------|
| Intercept        | 0.021   | 0.276   |
| Actor E          | 0.075   | 0.090   |
| Object E         | -0.015  | -0.028  |
| Behavior E       | 0.786*  | 0.584*  |
| Actor P          |         | 0.133   |
| Object P         |         | -0.135  |
| Behavior P       |         | 0.328   |
| Actor A          |         | -0.156  |
| Object A         |         | -0.058  |
| Behavior A       |         | -0.549* |
| <b>R-squared</b> | .4835   | .5747   |

For potency, the best fitting model includes the demeanor and behaviors as separate elements. The difference is not significant for the simpler model (F=1.25), but it is for the more complex one (F=2.01, p < .05). Thus, there is again support for prediction 1, that including the demeanor provides a better analysis of the in-context ratings than not including that information.



 Table 4. Behaviors in Event Context: Regression Coefficients for Predicting In-Context Potency (Without Demeanor) (N=64)

|                  | Model 3 | Model 4 |
|------------------|---------|---------|
| Intercept        | 0.604*  | 0.611*  |
| Actor E          |         | 0.060   |
| Object E         |         | 0.007   |
| Behavior E       |         | -0.056  |
| Actor P          | 0.056   | 0.051   |
| Object P         | -0.077  | -0.068  |
| Behavior P       | 0.401*  | 0.427*  |
| Actor A          |         | -0.010  |
| Object A         |         | -0.042  |
| Behavior A       |         | 0.078   |
| <b>R-squared</b> | .2370   | .2758   |

#### \* p < .05

Finally, for activity, again the most variance is explained in models where the ratings of demeanor and behaviors are included in the model - separately. Here, however, the difference is not so great as for evaluation and activity. For both models, the difference is not significant (F=0.43 and F=0.62 respectively). Again, there is some support for prediction 1, that demeanor improves the models.

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 Table 5. Behaviors in Event Context: Regression Coefficients for Predicting In-Context Activity (Without Demeanor) (N=64)

|  | Model 5 | Model 6 |
|--|---------|---------|
|--|---------|---------|

| Intercept  | 0.384  | 0.456* |  |
|------------|--------|--------|--|
| Actor E    |        | 0.050  |  |
| Object E   |        | 0.004  |  |
| Behavior E |        | -0.083 |  |
| Actor P    |        | -0.008 |  |
| Object P   |        | -0.033 |  |
| Behavior P |        | -0.114 |  |
| Actor A    | 0.030  | 0.004  |  |
| Object A   | -0.109 | -0.109 |  |
| Behavior A | 0.622* | 0.624* |  |
| R-squared  | .4700  | .5417  |  |

\* p < .05

# **Examining Each Dimension**

#### Evaluation

Model 7 shows that the prediction that the ratings of the amalgamations provide significant information about the ratings of the behaviors in context is supported. The evaluation rating of the amalgamation is the only significant evaluation rating that has significant effect on the evaluation rating of the behavior in context. Thus, prediction (2A), that evaluation ratings for the amalgamation will predict in-context ratings, is supported.

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This effect remains in Model 8, which includes the ratings on other dimensions. The evaluation of the amalgamation is still the only significant variable affecting the rating of the behavior in event context.

Models 9 and 10 follow the same logic as Models 7 and 8 above except that here the separate effects of the demeanor and the behavior are examined. Model 9 includes the evaluation ratings for all event elements. Here, the only significant contribution comes from the evaluation rating of the behavior out of context. There is no significant effect of demeanor in this model.

Model 10 adds the other event element ratings of the other dimensions. A significant contribution of the behavior evaluation rating is still present. In addition, the potency rating of the behavior has a positive effect and the activity rating of the behavior has a negative effect on the evaluation of the behavior in context. Doing behaviors that are strong makes them seem better in context; doing behaviors that are passive makes them seem worse in context. Also, there now are significant effects for two aspects of the demeanor rating: a positive effect of evaluation

and a negative effect of potency. Good demeanors make behaviors seem better. Strong demeanors make behaviors seem worse.

Additional models adding two-way interactions between demeanor and behavior ratings not significantly increase the R-squared and none of these interactions proved to be significant. Thus, I do not further consider those models here.



Table 6. Behaviors in Event Context: Regression Coefficients for Predicting In-Context Evaluation (With Demeanor) (N=64)

|                  | Model 7 | Model 8 | Model 9 | Model 10 |
|------------------|---------|---------|---------|----------|
| Intercept        | 0.314   | 0.451   | -0.036  | 0.394    |
| Actor E          | 0.116   | 0.127   | 0.088   | 0.117    |
| Object E         | -0.026  | -0.063  | -0.002  | -0.054   |
| Modified E       | 0.628*  | 0.568*  |         |          |
| Demeanor E       |         |         | 0.119   | 0.169*   |
| Behavior E       |         |         | 0.681*  | 0.554*   |
| Actor P          |         | 0.075   |         | 0.094    |
| Object P         |         | -0.032  |         | -0.115   |
| Modified P       |         | 0.180   |         |          |
| Demeanor P       |         |         |         | -0.314*  |
| Behavior P       |         |         |         | 0.402*   |
| Actor A          |         | -0.129  |         | -0.192   |
| Object A         |         | 0.005   |         | -0.056   |
| Modified A       |         | -0.496  |         |          |
| Demeanor A       |         |         |         | 0.066    |
| Behavior A       |         |         |         | -0.558*  |
| <b>R-squared</b> | .3010   | .3526   | .5055   | .6309    |

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# **Potency**

Model 11 is the basic model regressing behavior potency in the context of an event on the potency of the actor, object and amalgamation. The potency of the amalgamation predicts the incontext potency rating significantly, giving some evidence for prediction (2B) - that potency, activity and evaluation would all predict potency and activity of the behavior in context. Model 12 adds in the other affective dimensions for all event elements. There is still a significant effect of the amalgamation's potency but not any other event elements. This provides mixed evidence regarding prediction 2B since that prediction said that out of context evaluation, potency and activity ratings would all affect potency ratings in-context.

Models 13 and 14 examine the various event elements' effects on the rating of the behavior's potency in context. Demeanor and behaviors are examined independently rather than in amalgamation. Model 13 shows a significant effect only of behavior's potency.

In Model 14, the addition of other dimensions provides another significant finding. There is still a significant effect of behavior's potency; and the demeanor's evaluation rating contributes significantly. This is some evidence of the multi-dimensionality of potency as well as of the importance of demeanor.

Again, as with evaluation, a model was run with complete two-way interactions between the dimensions of the demeanor and the behaviors. The model did not significantly improve the predictive capability.

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Table 7. Behaviors in Event Context: Regression Coefficients for Predicting In-Context Potency (With Demeanor) (N=64)

|            | Model 11 | Model 12 | Model 13 | Model 14 |
|------------|----------|----------|----------|----------|
| Intercept  | 0.774*   | 0.855*   | 0.572*   | 0.631*   |
| Actor E    |          | 0.105    |          | 0.081    |
| Object E   |          | 0.018    |          | 0.024    |
| Modified E |          | -0.015   |          |          |
| Demeanor E |          |          |          | 0.099*   |
| Behavior E |          |          |          | -0.054   |
| Actor P    | 0.073    | 0.054    | 0.062    | 0.040    |
| Object P   | -0.071   | -0.060   | -0.084   | -0.073   |

| Modified P       | 0.350* | 0.480# |        |        |
|------------------|--------|--------|--------|--------|
| Demeanor P       |        |        | 0.091  | 0.007  |
| Behavior P       |        |        | 0.382* | 0.414* |
| Actor A          |        | -0.036 |        | -0.038 |
| Object A         |        | -0.055 |        | -0.055 |
| Modified A       |        | -0.122 |        |        |
| Demeanor A       |        |        |        | 0.061  |
| Behavior A       |        |        |        | 0.071  |
| <b>R-squared</b> | .1642  | .2081  | .2528  | .3523  |

\* p < .05; # p < .10

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#### Activity

The models predicting activity follow the same pattern as for evaluation above. Model 15 shows a significant positive effect of the amalgamation's activity rating. This is partial support for prediction 2B, which predicted that evaluation, potency and activity ratings out of context would all affect activity ratings in context.

Model 16 adds the ratings for other dimensions. Again, there is a significant contribution for the amalgamation's activity rating. However, there are no effects on its evaluation or potency ratings, mitigating the support for prediction 2B.

When examining the behavior's rating on in- context activity by demeanor and behavior separately, the picture is consistent. Model 17 shows just the effect of the element activity ratings. Behavior activity out of context strongly predicts behavior activity in context.

This holds true when adding the ratings for other dimensions for all of the event elements (Model 18). The only effect is still that of the behavior's out of context activity rating. No demeanor ratings make significant contributions. Again, as for when predicting the other dimensions, a model with all the behavior-demeanor two-way interaction terms was run but the interaction effects were not significant.

# Table 8. Behaviors in Event Context: Regression Coefficients for Predicting In-Context Activity (With Demeanor) (N=64)

|  | Model 15 | Model 16 | Model 17 | Model 18 |
|--|----------|----------|----------|----------|
|--|----------|----------|----------|----------|

| Intercept        | 0.733* | 0.748* | 0.379* | 0.468* |
|------------------|--------|--------|--------|--------|
| Actor E          |        | 0.068  |        | 0.060  |
| Object E         |        | 0.001  |        | 0.010  |
| Modified E       |        | -0.030 |        |        |
| Demeanor E       |        |        |        | 0.047  |
| Behavior E       |        |        |        | -0.083 |
| Actor P          |        | 0.021  |        | -0.014 |
| Object P         |        | -0.076 |        | -0.035 |
| Modified P       |        | -0.228 |        |        |
| Demeanor P       |        |        |        | -0.014 |
| Behavior P       |        |        |        | -0.115 |
| Actor A          | -0.050 | -0.105 | 0.030  | -0.008 |
| Object A         | -0.139 | -0.143 | -0.110 | -1.115 |
| Modified A       | 0.214# | 0.345# |        |        |
| Demeanor A       |        |        | 0.037  | 0.044  |
| Behavior A       |        |        | 0.622* | 0.621* |
| <b>R-squared</b> | .0844  | .1654  | .4738  | .5578  |

\* p < .05; # p < .10

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## DISCUSSION AND CONCLUSIONS

Predictions generated from the earlier studies in this project were tested in this current research. Specifically, it was predicted that evaluation meanings for behaviors and demeanor would positively affect the in-context rating of the behavior's evaluation; that the meanings of all three dimensions (evaluation, potency and activity) would affect the behavior's potency and activity ratings; and that the inclusion of demeanor would make predicting in-context behavior ratings more accurate.

Support was found for prediction (2A), that out of context evaluation ratings affect the in-context evaluation rating of the behavior. Support was also found for prediction (2B), that multiple dimensions of meaning (evaluation, potency and activity) determined in-context potency and

activity ratings of the behavior. In addition, preliminary support was found for prediction (1), that demeanor increases the predictive power of the models. The conclusion reached by Averett and Heise (1988), that "incorporating modifiers into affect control theory enriches the model" (p 128), was supported. These findings address the question of how demeanor meanings work within situational contexts.

The meanings we hold for things do combine systematically in complete situational context. In other words, ratings of the demeanor-behavior amalgamations and their separate elements provide significant information about the ratings of the behaviors in context. For example, doing powerful acts in nice, non-dominant ways makes those acts seem nicer. Therefore, it might be possible to plan a demeanor for a power struggle that, while still using powerful acts, maintain one's reputation as a nice person. Perhaps when negotiating a new contract with an employer, one should speak softly, lean back and tilt one's head.

These results provide us with insight both into general group processes and into the outcomes for individuals in groups. Clearly, as found by Balkwell and Berger (1996), Ridgeway (2000), Robinson and Smith-Lovin (2001) and others, certain aspects of demeanor arise out of group characteristics (e.g., status or gender composition). The results of this current study provide further evidence that demeanor is connected to our meaning structures and that therefore certain demeanors are likely to arise in the context of particular group structures.

Additionally, the results of this study have implications for individuals acting in groups. In addition to the connections between demeanor and personal outcomes identified in earlier research (e.g., Walker et al. 1996; Rashotte and Smith-Lovin 1997; and Shelly 2000), there is now specific evidence that demeanor affects, in a systematic way, the impressions that others get of an individual's behavior. Additional exploration could be done on outcomes of interest to sociologists (e.g., influence, attributions of leadership, and expectations) and how particular demeanors work to produce them.

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Further research might place demeanor and behaviors into more complete situational events and group contexts. These complete situational events will include settings, identity modifiers and subsequent behaviors. Also, additional research is needed on ways in which the inclusion of demeanor affects the meanings of other situational elements, especially impressions formed of actors. This research can be placed into the larger theoretical contexts of Affect Control Theory.

Demeanor ratings are important in understanding the meaning of behaviors in event contexts. There are many social contexts – business, personal relationships, and sales – in which this understanding could prove useful. Further research will explicate how meanings of demeanors operate in those various contexts.

# REFERENCES

Averett, Christine and David R. Heise (1988). "Modified Social Identities: Amalgamations, Attributions and Emotions," in *Analyzing Social Interaction: Advances in Affect Control Theory*, edited by Lynn Smith-Lovin and David R. Heise. Gordon and Breach Science Publishers.

Balkwell, James W. and Joseph Berger (1996). "Gender, Status and Behavior in Task Situations." *Social Psychology Quarterly*. 59:273-283.

Butler, Dore (1990). "Nonverbal Affect Responses to Male and Female Leaders: Implications for Leadership Evaluations." *Journal of Personality and Social Psychology*. 1:48-59.

Custrini, Robert J. and Robert S. Feldman (1989). "Children's Social Competence and Nonverbal Encoding and Decoding of Emotions." *Journal of Clinical Child Psychology*. 4:336-342.

Ekman, Paul, Wallace V. Friesen, Maureen O'Sullivan, Anthony Chan, Irene Diacoyanni-Tarlatzis, Karl Heider, Rainer Krause, William Ayhan LeCompte, Tom Pitcairn, Pio E. Ricci-Bitti, Klaus Scherer, Masatoshi Tomita and Athanase Tzavaras (1987). "Universals and Cultural Differences in the Judgments of Facial Expressions of Emotion." *Journal of Personality and Social Psychology*. 4:712-717.

Fisher, Ronald A. and Frank Yates (1963). *Statistical Tables for Biological, Agricultural and Medical Research*. Oliver and Boyd.

#### [273] [274]

Foels, Rob, James E. Driskell, Brian Mullen and Eduardo Salas (2000). "The Effects of Democratic Leadership on Group Member Satisfaction: An Integration." *Small Group Research*. 31:676-701.

Gollob, H. F (1968). "Impression Formation and Word Combination in Sentences." *Journal of Personality and Social Psychology*. 10:341-353.

Harrigan, Jinni A., James F. Gramata, Karen S. Lucic and Charles Margolis (1989). "It's How You Say It: Physicians' Vocal Behavior." *Social Science of Medicine*. 1:87-92.

Heise, David R (1979). *Understanding Events: Affect and the Construction of Social Action*. Cambridge University Press.

Heise, David R (1985). "Affect Control Theory: Respecification, Estimation and Tests of the Formal Model." *Journal of Mathematical Sociology*. 11:191-222.

Heise, David R (1988). "Affect Control Theory: Concepts and Model," in *Analyzing Social Interaction: Advances in Affect Control Theory*, edited by Lynn Smith-Lovin and David R. Heise. Gordon and Breach Science Publishers.

Johnson, Cathryn (1994). "Gender, Legitimate Authority, and Leader-Subordinate Conversations." *American Sociological Review*. 59:122-135.

Klienke, Chris L (1991). "Evaluation of Opposite-sex Person as a Function of Gazing, Smiling and Forward Lean." *The Journal of Social Psychology*. 3:451-3.

MacKinnon, Neil J (1994. *Symbolic Interactionism as Affect Control*. State University of New York Press.

Matsumoto, David (1989). "Face, Culture and Judgments of Anger and Fear: Do the Eyes Have It?" *Journal of Nonverbal Behavior*. 3:171-188.

Osgood, Charles E., W. H. May and M. S. Miron (1975). *Cross- Cultural Universals of Affective Meaning*. University of Illinois Press.

[274] [275]

Rashotte, Lisa Slattery (2001). "What does that smile mean? The Meaning of Nonverbal Behaviors in Social Interaction." *Social Psychology Quarterly*. Forthcoming.

Rashotte, Lisa Slattery and Lynn Smith-Lovin (1997). "Who Benefits from Being Bold: The Interactive Effects of Task Cues and Status Characteristics on Influence in Mock Jury Groups." *Advances in Group Processes.* 14:235-255.

Ridgeway, Cecelia L (1987). "Nonverbal Behaviors, Dominance and the Basis of Status in Task Groups." *American Sociological Review*. 52:683-694.

Ridgeway, Cecelia L (1997). "Interaction and the Conservation of Gender Inequality." *American Sociological Review*. 62:218-235.

Ridgeway, Cecelia L. (2000). "Social Difference Codes and Social Connections." *Sociological Perspectives*. 43:1-11.

Robinson, Dawn T. and Lynn Smith-Lovin. (2001). "Gender, Status and Humor." *Social Forces*. 80:123-158.

Scherer, Klaus R. and Paul Ekman (1982). *Handbook of Methods in Nonverbal Behavior Research*. Cambridge University Press.

Smith-Lovin, Lynn and William Douglass (1990). "Modeling Emotions in Religious Ritual: An Affect Control Analysis of Two Religious Groups," in *Social Perspectives on Emotion*, edited by David Franks and Viktor Gecas. JAI Press.

Shelly, Robert K. (2000). "How Performance Expectations Arise from Sentiments." *Social Psychology Quarterly*. 64:72-87.

Shelly, Robert K., Lisa Troyer, Paul T. Munroe and Tina Burger (1999). "Social Structure and the Duration of Social Acts." *Social Psychology Quarterly*. 62:83-95.

Shelly, Robert K. and Murray Webster, Jr (1997). "How Formal Status, Liking, and Ability Status Structure Interaction: Three Theoretical Principles and a Test." *Sociological Perspectives*. 40:81-107.

[275] [276]

Sogon, Shunya (1989). "Identification of Emotion from Body Movements: A Cross-cultural Study of Americans and Japanese." *Psychological Reports*. 1:35-46.

Walker, Henry A., Barbara C. Ilardi, Anne M. McMahon and Mary L. Fennell (1996). "Gender, Interaction and Leadership." *Social Psychology Quarterly*. 59:255-272.

Vrij, Aldert (1993). "Credibility Judgments of Detectives: The Impact of Nonverbal Behavior, Social Skills and Physical Characteristics on Impression Formation." *The Journal of Social Psychology*. 5:601-10.

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