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SOCIAL FACTORS IN FACIAL DISPLAY AND COMMUNICATION: A REPLY TO CHOVIL AND OTHERS

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ABSTRACT: This paper discusses the Chovil (1991) study, questioning the assumption that the notion of facial display as communication is incompatible with that facial display as "readout" of motivational/emotional response. It is argued that (a) the Chovil paper oversimplifies the view of the competition; (b) social factors can facilitate or inhibit expression depending upon the nature of the emotion being expressed and the expressor's personal relationship with the other; and (c) social factors produce strong social emotions, so that any manipulation of "sociality" must also manipulate "emotion."

This paper discusses the Chovil (1991) study as a way of addressing more general issues of analysing facial displays as readouts of "underlying states" (i.e. motivational/emotional states) and as responses to social cues.

The Chovil Study

Chovil created four increasingly social situations: (a) listening to a tap recording, (b) interacting over the telephone, (c) interacting separated by partition, and (d) interacting face-to-face. It was predicted that the frequency of facial mimicry would increase across these conditions as subjects were told of a "close-call" experience. The relative sociality of the conditions was determined by ranking them from most to least social. As expected, mimicry displays increased with rated sociality. The ranking of the telephone and partition situations in sociality differed from the expected. Chovil should discuss this, as it is relevant to the reliability of the manipulation of sociality.

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Chovil argues that this evidence of social facilitation is contrary to what she describes as a "social management" (p. 143) and "social inhibition model" (p. 143) attributed to Ekman and Friesen (1969) and Izard (1971). Chovil states that this model predicts the presence of others to produce an inhibition of expression, quoting Izard: "into later childhood, peers and parents generally discourage the ready display of strong emotions" (p. 192). It is unclear whether the inhibition model is assumed to be common to all "readout" theories of the display, but Chovil argues that her result supports "an emerging second view in which facial displays are assumed to be communicative acts that serve social motives." Since facial displays are "primarily social acts," they should be facilitated by others' presence.

In this paper I discuss this "emerging second view" and in particular the apparent assumption that the notion of facial display as communicative act is contrary to the view of facial display as "readout" of underlying motivational/emotional state. It is organized into sections corresponding to major comments.

The Social Inhibition Model Is Oversimplified

The social inhibition model arguably represents an oversimplification of the views of Ekman, Friesen and Izard. Ekman and Friesen (1975) for example describe a variety of facial management techniques in which one follows display rules by increasing as well as decreasing the intensity of the display, qualifying strong negative displays with smiles, showing "unfelt" displays, etc. Also, it seems doubtful that Izard would consider facial mimicry to be the sort of "display of strong emotion" that is discouraged by parents and peers.

Both Facilitation and Inhibition Effects Occur

Studies Demonstrating Social Facilitation

Chovil cites other evidence of the social facilitation of expression, including studies by Fridlund (1991; Fridlund et al., 1990); Kraut and Johnston (1979); and Brightman, Segal, Werther, and Steiner (1975). Also, Dale, Hudak, and Wasikowski (1990), found more expressiveness to humorous and informational videotapes in women informed that they were being videotaped or in dyads than in women who viewed the videotapes alone.

Studies Demonstrating Social Inhibition

However, as Chovil acknowledges there is also evidence of the social inhibition of expression. Yarczower and Daruns (1982) found children were more expressive when they viewed affective slides alone than with an experimenter; Kraut (1982) found that persons presented with pleasant vs unpleasant smells were less expressive when with another than alone; Blumberg, Solomon, and Perloe (1981) found the presence of a male experimenter to inhibit expressions of "tenderness" in male but not female subjects; Kleck et al. (1976) showed that subjects who knew they were being observed showed reduced expression to painful stimuli.

Resolution

How can these two sets of findings be reconciled? Examination reveals that most studies showing social facilitation involved pleasant emotional stimuli, and that the "others" involved often had a relationship with the subject: friends, peers, etc. In contrast, studies showing social inhibition involved negative emotion, and/or the other was of a different role and status in the situation, did not have a personal relationship, and did not share the emotional stimulus. Variables such as these have been found to be important in determining preferences for affiliation under stress (Schachter, 1959). Affiliation is more likely with friend than stranger, and with person exposed to the same stress. Also, the type of stress involved—i.e. fear versus embarrassment—influences affiliation and the other's stressful or stress-relieving effects (Buck & Parke, 1972).

Buck, Losow, Murphey, and Costanzo (1991) examined the effects of personal relationship and type of emotional stimulus on the facilitative vs inhibitory effects of the presence of another person on spontaneous expressive behavior. Senders viewed emotionally-loaded slides either alone or with another sender, while facial/gestural responses were secretly video taped. Forty-two receivers viewed 10 senders with friends, 10 with strangers, and 10 alone. One dyad member was covered so that only one person was visible. Results revealed the stranger to have an overall inhibitory effect on communication accuracy relative to being alone, while the friend had a facilitative effect on sexual slides and an inhibitory effect on unpleasant and unusual slides. Thus both social facilitation and inhibition of expression occurred based upon the particular emotion and personal relationship involved.

The pattern of results indicates that under some conditions of personal relationship and type of emotion, the presence of others has a facilitating

effect upon display and under other conditions the effect is inhibitory. This is consistent with both those studies showing social facilitation and those showing inhibition.

Social and Emotional Factors Cannot Be Easily Distinguished

Chovil states that "spoken messages are assumed to be deliberate, intentional communication, whereas nonverbal messages are often seen as spontaneous readouts of underlying states that can have a secondary communicative role" (p. 142). I agree that there is an important difference between "deliberate, intentional communication" and "spontaneous readouts of underlying states," but argue that this difference does not parallel that between verbal proposition and nonverbal display. Rather, the nonverbal display is both symbolic and organized in synchrony with propositional linguistic expression and a spontaneous non-propositional readout of motivational/emotional states. There are, in effect, two simultaneous streams of nonverbal display; a learned, culturally-patterned "symbolic" stream and an innate, biologically-structured "spontaneous" stream (Buck, 1984; 1988b; 1991). I suggest that the spontaneous-symbolic distinction is more basic, and less confusing, than the distinction between "verbal" and "non-verbal" behavior.

It is at this point that we come to the issue of the distinction between "social" and "emotional" factors in the control of the display. There are two issues here: one is Chovil's statement that the "readout" view assumes the communicative role of nonverbal displays to be secondary to their being readouts of underlying states; the second is the implication endemic to this literature that "social" factors can be manipulated independently of "emotion."

The Communicative Role Is not Secondary

The display of motivational/emotional states is not accidental, and their communicative role is not epiphenomenal. Rather, the primary role of the display is communication, which functions to maintain social organization; to "inform other members of the species about the sender's emotional state" (Kraut & Johnston, 1979, p. 1551). The display is innate—a phylogenetic adaptation—and it must have evolved in concert with preattunements so that the display constitutes a "social affordance" in the terms of

Gibson's (1977; 1979) perceptual theory. The receiver "knows the meaning" of the display directly as a kind of inherited knowledge.

The result is a spontaneous communication process that is, in effect, a conversation between limbic systems. It answers the problem of "other minds" posed by philosophers: we know certain feelings and desires in others directly because they are constructed to display those states and we are constructed, given attention, to know the meaning of those display just as directly as we know the pain when we stub our toe. In spontaneous communication the sender and receiver constitute literally a biological unit (Buck, 1988b, 1991; Buck & Ginsburg, 1991).

Social Factors Are Inherently Emotional

I submit that it is impossible for social factors to be nonemotional, for social emotions are basic to all social behavior and are activated in every social encounter. The definition of "emotion" is critical here. In their study of social and emotional factors in smiling, Kraut and Johnston (1979) specifically defined emotion in terms of the primary affects, and this particular definition of emotion does allow one to speak meaningfully of "social factors" in contrast to "emotion." However, other analyses of emotion explicitly recognize the existence of social emotions, such as pride, shame, embarrassment, etc. Social emotions are based upon attachment, which establishes fundamental needs to do what is expected and to be loved. Success and failure at fulfilling these social needs are the basis for specific social emotions such as pride, shame, and guilt (Buck, 1988a).

In effect, my argument is that social emotion itself constitutes an "underlying state" that like the primary affects has experiential and expressive "readouts." In its purest form the experiential readout involves attachment, affection, and love. Panksepp (1982) has suggested that such social emotions may be associated particularly with brain opiate systems. The expressive readout includes smiling, direct eye gaze, touching, close spacing and other immediacy behaviors (Argyle & Dean, 1965). As noted by Kraut and Johnston (1979) in their discussion of "friendship displays," similar behaviors are characteristic of other animals, such as chimpanzees.

From this point of view, manipulations of sociality, as accomplished by Chovil and other investigators in this area, are in reality manipulation of the strength, complexity and dynamism of the stimulus to the experience and expression of social emotion. As with other motivational/emotional states, manipulations of the strength of the stimulus will alter the resulting experience and expression.

One of the implications of this point of view is that manipulations of

sociality will naturally be judged by subjects to be manipulations of emotion (although the opposite would not, of course, be the case). As a test of this hypothesis, one might ask subjects to rate the emotional impact of hearing the "close-call" experiences in the different situations created by Chovil, just as she asked them to rate the sociality of these situations. In general, I suggest that any situation that is judged to be "social" will also be judged to be "emotional."

In conclusion, I suggest that the value of Chovil's study and others in this area is not to demonstrate the control of displays by "social factors" independently of "emotion," but rather to demonstrate the importance of social motivational/emotional systems in addition to the primary affects in the control of human expressive displays.

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