

Human Feelings, Human Faces

The study of mankind has always been concerned with understanding human emotions. An important element in the study of human emotions is the role played by facial expression. Studies indicate that the perception of facial affect plays a critical role in interpersonal communication.¹ In an influential book, *Affect, Imagery, Consciousness*, Tomkins argued that not only is the human face the source of maximal transmission of information about emotion, but also that there is an inextricable link between the experience of emotion and the action of the facial muscles.²

In recent years increased attention has been directed to investigation of the relationship between culture and facial expression of emotion.³ The major concern of such studies has been the extent to which the facial behaviour concomitant with the experience of emotion is the same in all cultures or differs from culture to culture. A large body of literature on this issue has accumulated including many studies of facial expression of emotion in many different cultures.⁴

The purpose of this paper is to review the major arguments regarding facial expression of emotion across cultures and to suggest future directions on the basis of an examination of the literature.

Culture-specific View of Emotions

In *The Expression of Emotion in Man and Animals*, Darwin provided the first distinct theory of the universality of facial expressions associated with specific emotions.⁵ Darwin made careful observations of facial affective behavior of people in different cultures, and postulated on the basis of his theory of evolution that human facial expressions are innate and universal.

However, Darwin's descriptive and observational methodology did not allow replication and production of controlled and accurate facial stimulus material. Darwin himself commented that "the study of

1. J. S. Bruner, and R. Tagiuri, "The Perception of People," in *Handbook of Social Psychology*, Y. B. Lindzey (ed.), Cambridge, Mass.: Addison-Wesley, 1954.
2. S. S. Tomkins, *Affect, Imagery, Consciousness*, Vol. I: *The Positive Affects*, New York: Springer, 1962; *Affect, Imagery Consciousness*, Vol. II, *The Negative Affects* New York: Springer, 1963.
3. J. D. Boucher, "Culture and the Expression of Emotion," *International and Intercultural Communication Annual*, 1973; J. D. Boucher, "Display Rules and Facial Affective Behaviour: A Theoretical Discussion and Suggestions for Research," *Topics in Culture Learning*, Honolulu, East - West Culture Learning Institute, 1974; P. Ekman (ed.), *Darwin and Facial Expression: A Century of Research in Review*, New York: Academic Press, 1973; C. E. Izard, *The Face of Emotion*, New York: Appleton - Century - Crofts, 1971.
4. P. Ekman, W. V. Friesen and P. Ellsworth, *Emotion in the Human Face: Guidelines for Research and an Integration of Findings*, New York: Pergamon Press, 1972.
5. C. Darwin *The Expression of Emotions in Man and Animals*, London: Murray, 1872.

expression is difficult, owing to the movements being often extremely slight, and of fleeting nature." Because of methodological problems of the anecdotal and impressionistic accounts by Darwin, the innate-learned controversy of facial expression of emotions long lacked a definitive solution.

Klineberg studied descriptions of facial expressions of emotion in Chinese literature and suggested that they were different from facial expressions of emotions in the Western cultures.⁶

The two anthropologists Labarre and Birdwhistell have also challenged the notion that there are universals of facial expression.⁷ Like Darwin, they have relied upon their observations of nonverbal behaviors in other cultures but, unlike Darwin, they have concluded that facial expressions are learned and culture-specific. Birdwhistell has written extensively on his view that facial expression is a form of nonverbal behaviour.⁸ His position, while accepted by many, has been challenged on the grounds that there just does not seem to be the basic communication unit in nonverbal behavior that there is in language.⁹ Further, there is the serious concern that, in his attempt to structure nonverbal behavior into a communications model, Birdwhistell has made assumptions about the communicative nature of facial expression of emotion that may not be supportable.

Ekman and Friesen have suggested that there are five categories of nonverbal behavior: emblems, illustrators, regulators, adaptors, and affect displays.¹⁰ Emblems are those behaviors which are codified within a culture, are most like language, and thus are probably most amenable to Birdwhistell-type language analogy. For example, pointing at an object with the forefinger extended would be understood by virtually every American as meaning "that object is the subject of the discussion." In other cultures the extended thumb would convey the same meaning. But most critical, the two emblems might not be interchangeable across cultures. Regulators—those nonverbal behaviors used to control the interaction between people

6. O. Klineberg, "Emotional Expression in Chinese Literature," *Journal of Abnormal and Social Psychology*, Vol. XXXIII, 1938, pp: 517-520.

7. W. Labarre, "The Cultural Basis of Emotions and Gestures," *Journal of Personality*, 1947, Vol. XVI, pp. 49-68; R. L. Birdwhistell, "The Kinesic Level in the Investigation of the Emotions," in P. H. Knapp (ed), *Expression of the Emotions in Man*, New York: International University Press, 1963.

8. See citation above; R. L. Birdwhistell, "Some Relationships Between American Kinesics and Spoken American English," in A. G. Smith (ed), *Communication and Culture*, New York: Rinehart and Winston, 1966, pp. 182-189; R. L. Birdwhistell, *Kinesics and Context; Essays in Body Motion Communication*, Philadelphia, University of Pennsylvania Press, 1970.

S. Duncan, "Nonverbal Communication," *Psychological Bulletin*, LXXII, 1969, pp 118-137.; M. Wiener, S. Devoe, S. Rubinow and J. Geller, "Nonverbal Behaviour

9. and Nonverbal Communication," *Psychological Bulletin*, LXXIX, 1972, pp. 185-214.

10. P. Ekman and W. V. Friesen "The Repertoire Nonverbal Behaviour; Categories, Origins, Usage and Coding," *Semiotica*, I, pp. 1969, 49-97.

and control the flow of a conversation—share with emblems the attribute of often being culture-specific. For example, in Sri Lanka and parts of India the slow roll of the head by the listener indicates to the speaker that the listener is in attention to the conversation. This regulator is confusing to the uninitiated American because it appears more like the American emblem of shaking your head to signify that you do not agree with the speaker. Illustrators—the drawing of a nonverbal picture—are distinguished from emblems primarily by the degree of codification: illustrators are more spontaneous to the individual and the situation. The more the people who use the same illustrator the more it becomes emblematic. Because it is a behaviour that is used to communicate something specific it is still like language. Adaptors—those nonverbal behaviours that people use to make themselves comfortable in a situation, such as scratching, crossing the legs, etc., are basically ideosyncratic. While we might use the frequency of occurrence of regulators to indicate the arousal level of the other person, it is seldom that we know any specific meaning of any specific adaptor—if indeed there is any specific meaning. The final category of nonverbal behavior—*affect displays*—include facial expressions of emotion, and, are quite different from emblems, illustrators and regulators in that they are an external manifestation of the emotional state of the individual rather than a communicative sign. Thus, with this category, the linguistic analogy breaks down.

Evidence for a Universalist Position

At this writing there is already a sufficiently large number of empirical, data-based studies which demonstrate cross-cultural similarities of facial expression that a culture-specific position is extremely difficult to defend. For example, results in favour of cross-cultural similarities were demonstrated by:

Dickey and Knower comparing Mexicans and Americans

Triandis and Lambert comparing Greeks and Americans

Izard (1971) comparing English, German, Swedish, French, Swiss, Greek, Japanese, African, and Americans

Ekman, Sorenson and Friesen who made comparisons in Borneo, New Guinea and the United States

Ekman, & Friesen (in Ekman, Friesen and Ellsworth, 1972) who made comparisons in Japan, Brazil, Chile, Argentina, and the United States

Boucher who made comparisons among two cultures in Malaysia and in the United States.

Hariu (Owaki) who compared Japanese and Americans

Cuceloglu who compared Turks, Japanese and Americans.¹¹

The numerous studies by Ekman and his co-workers stand out as solutions to several important concerns in resolving the question of cross-cultural similarities of facial expression. First, many of the earlier studies were subject to the criticism that the cultures under comparison had considerable cross-contact, and thus, conceivably, one culture could have learned to decode the expressions of another culture. Ekman resolved this question in his New Guinea studies by showing that a preliterate culture which had virtually no contact with another culture could not only decode facial expressions of Americans, but also produce faces which Americans could accurately decode. A second possible criticism of the cross-cultural studies was that most of them utilized photographs of posed expressions, and that, conceivably all that the studies were showing was that a researcher could teach people to pose emotions. Ekman's study of Japanese resolved this by showing that Japanese who were unknowingly photographed while they were alone in a stress situation produced the same facial behavior as Americans in the same situation. This latter study is of additional importance because, rather than rely on the judgements of untrained observers as the criterion for cross-cultural agreement, Ekman and his group actually measured the facial behavior of the experimental subjects by means of his Facial Affect Scoring Technique—a very elaborate and sensitive technique for measuring the configuration of the facial muscles.

The data then clearly support the proposition that facial expressions of emotion produced in one culture are recognizable with accuracy by members of another culture, and further that these facial behaviours are to a large extent the same behaviours. This proposition has been reconfirmed in a large number of different cultures. While strictly speaking we can not say that universality has been demonstrated until every possible culture has been measured, the evidence so far is overwhelmingly in favor of a universalist position.

11. E. C. Dickey and F. H. Knower, "A Note on Some Ethnological Differences in Recognition of Simulated Expressions of the Emotions," *American Journal of Sociology*, Vol. XLVII, 1941, pp. 190-3; H. C. Triandis and W. W. Lambert, "A Restatement and Test of Schlosberg's Theory of Emotion with Two Kinds of Subjects from Greece," *Journal of Abnormal and Social Psychology*, Vol. LVI, 1958, pp. 321-8; P. Ekman, E. R. Sorenson and W. V. Friesen, "Pan-cultural Elements in Facial Displays of Emotion," *Science*, Vol. CLXIV, 1969, pp. 86-8; J. D. Boucher, "Facial Behaviour and the Perception of Emotion: Studies of Malays and Temung Orange Asli," paper presented to the Conference on Psychology and Related Disciplines in Malaysia, University of Kebangsaan Malaysia, Kuala Lumpur, 1973; Y. Owaki, *Psychology of Emotion* (in Japanese), Tokyo; Baifukan, 1971 (2nd ed.); D. Cuceloglu, "Perception of Facial Expressions in Three Different Cultures," *Ergonomics*, Vol: XIII, 1970, pp. 93-100. For other references see notes to this paper.

The Neurocultural Position: a Resolution of Universal and Culture specific Positions

Why is it that two groups of researchers can look at the same phenomena and reach two contradictory conclusions? The answer to that question involves a complex of disciplinary, methodological and definitional issues. But the most basic answer is the tendency to assume that facial expression of emotion is *either* a culture-specific *or* a universal phenomena. A more profitable course might be to allow for the possibility that *both* culture-specific and universal aspects of facial expression exist. One explanation of facial expression is basically a human characteristic, but that cultures develop methods for the *control* of that expression, which then result in apparent cultural differences in expression. The neuro-cultural account of Ekman, based upon Tomkin's theory takes such an approach.¹²

The neuro cultural account of facial expression of emotion proposes that facial expressions of emotion are a result of neurological activity which includes excitation of the muscles of the face during an experience of emotion. However, cultures develop "display rules" which instruct the individual in how to modify the facial expression, dependent upon the social context in which the emotion occurs.¹³ Thus, for example, the facial expression for anger would be the same in all humans, but different cultures may have different rules for whether or not the individual should display anger in a given setting, resulting in apparent differences in facial expression between the two cultures. This example is probably one key as to why there is discrepancy between what the universalists report as data and what the cultural relativists report as data. Again, for example, if the observer notes that an angry Chinese looks different from an angry American, it does not mean that the facial expression for anger is not universal: it could mean that the Chinese has a display rule which instructs him to not show the anger in that setting. If the display rule were not in force, the angry Chinese should have a facial expression quite like that of the angry American, in this example.

A second explanation of the discrepancies between what the two groups report from their studies is, (referring back to the discussion of five categories of nonverbal behavior) that cultures can adopt the facial expressions for emotions as emblems. Thus Birdwhistell's observation that the smile conveys many different meanings in many cultures is quite accurate.¹⁴ That observation does not, however, demonstrate that there is not a universal facial expression for happiness that is quite like the smile. More likely it means that many cultures have adopted the smile as an

12. P. Ekman, "Biological and Cultural Contributions to Body and Facial Movement," in John Blacking (ed.), A. S. A. Monographs 15, *The Anthropology of the Body*, London, Academic Press, 1977; For Tomkins' work, see note 2 above.

13. For work done by Boucher on 'Display Rules', see under note 3, above.

14. See note 8 above.

emblem, a paralinguistic sign, which is intentionally used to convey pleasure (or some other message) regardless of the emotion that the person is feeling. We also can pose facial expressions for emotions we do not feel, in order to intentionally communicate that emotion. For example, the parent can pose anger in disciplining a child when that anger is not felt; we can pose sadness to convey sympathy to a distressed friend even though we do not feel the friend's distress; and we can pose surprise so as not to disappoint the person giving us a supposedly unexpected gift, even though we knew the gift was coming. And, just as the individual can engage in posing of facial expressions, cultures could determine instances where that posing is most appropriate, and in turn this posing might differ from culture to culture. This is yet another use of the display-rule concept.

The neuro-cultural account of emotion thus offers an explanation of why some observers report culture-specific aspects of facial expression, while the majority of empirical studies report cross-cultural similarities: there are *both* culture-specific and multi-cultural (if not universal) aspects of facial expression of emotion.

Implications for the Future

It is perhaps ironic that what is most needed in the field of emotion and facial expression is a better understanding of the culture-specific aspects. Up to now, with a very few exceptions, the literature that addresses the cultural variability of facial expression has been subjective, impressionistic and anecdotal. Friesen's study of Japanese and Americans is apparently the only published study which attempts to measure display rules.¹⁵ At the East-West Center we have a series of collaborative, multi-cultural studies in progress on both the language of emotion and the antecedents to emotional experience. We hope to use these studies to furnish tools for the continued study of cultural aspects of emotion, including display rules for facial expression. Our work is only a tiny portion of what needs doing: there is room in the field for many more researchers.

This paper has primarily focused upon the theoretical issues of emotion and facial expression. This stems from the writer's belief that any attempts at practical application must be firmly grounded in a solid theoretical base. At this time it appears that with the neuro-cultural account of Ekman and Tomkins there is a sufficient explanation of both the similarities and dissimilarities of emotion expression across cultural boundaries that those with the inclination could begin valuable work on applications. On one hand, for example, studies of both the similarities and dissimilarities between any two cultures could be performed with a view toward increasing the potential for valid communication on an interpersonal level between

15. W. V. Friesen *Cultural Differences in Facial Expressions in a Social Situation: An Experimental Test of the Concept of the Display Rules*, Unpublished Doctoral Dissertation, University of California, San Francisco, 1972.

members of the cultures. On the other hand, for example, much psychiatric practice depends upon an accurate assessment of the emotional state of the individuals. Thus there is enormous potential for studies of cultural aspects of emotion expression within the field of trans-cultural psychiatry.

Human faces display human feelings. Culture teaches us how to modify these displays for communicative purposes. Thus we have another example of the interplay of biology and culture-learning on human behavior.

JERRY D. BOUCHER