

What Do Facial Expressions Express?

Alan J. Fridlund
University of California, Santa Barbara
fridlund@psych.ucsb.edu

Most efforts at understanding human facial expressions have taken for granted several suppositions (see Fridlund, Ekman and Oster, 1987):

1. they constitute a finite, small set of alternative expressions that must be discriminated.
2. they can be discriminated using specific features.
3. refer to the internal states (usually, the emotions) of the expressors.
4. are largely universal in both configuration and meaning.

I began my own research in facial expressions under these assumptions, and using facial electromyography (Fridlund & Cacioppo, 1986; Fridlund & Izard, 1983) within a standard multivariate pattern-analysis framework (feature extraction ⇒ discriminant analysis ⇒ cross-classification), found replicable facial patterns that corresponded to different kinds of affective imagery (Fridlund, Fowler, and Pritchard, 1984). At the time, I interpreted these data in terms of the foregoing assumptions.

Subsequent findings led me and others in the field to question each of these assumptions, and to arrive at a different view about what facial expressions express. In this talk I will describe some of the research, the conclusions I draw, and the implications I foresee for emerging electronic communications techniques and whether and how the information in facial expressions can be incorporated.

Historically, facial expressions have been interpreted in manifold ways, and research suggests that “emotion” is merely one way to understand faces. Moreover, believing that our facial expressions express emotion requires that we make them discontinuous from signals emitted by other animals, which are widely understood to be strategic acts that serve to control social interactions.

This conception follows on evolutionary grounds. First, displays could evolve only if others paid attention to them. In other words, expressions cannot evolve outside of social interaction. Second, no one would pay attention to our signals unless they provided information about our actions. Third, no displays would evolve unless they consistently provided information advantageous to the displayer; indeed, displays of any surplus information might be detrimental and would be suppressed or eliminated.

The view that emerges these days among students of the evolution of communication is to see displays of all kinds as social tools that help us creatures navigate our social terrain by giving lead signs to our intentions within the context of our social interactions. These lead signs allow us to negotiate our relations with each other with maximal efficiency and minimal turmoil. The power of this conception in animal communications research is such that most ethologists have forsaken their old views of fixed action patterns and released displays for a vocabulary that includes signaling motives, contexts, strategies, semantics and syntax. They speak of an “ecology” of signaling and vigilance, countersignaling and countervigilance, that is analogous to the balance of resources and consumers that characterizes all natural ecosystems.

If our facial expressions are understood in similar terms then our so-called “facial expressions of emotion” would more accurately be seen as social messages than involuntary eruptions of emotional state. Our facial expressions should be no less strategic, and no less dependent upon motive and context, than are the displays of other animals.

Indeed, research now suggests that the kinds of faces we emit, the circumstances under which we emit them, and the ways that we interpret them, are profoundly influenced by the nature and trajectory of ongoing social interactions. This is true even for facial expressions made “in private,” many of which are actually instances of imaginary or implicit social interaction (Fridlund, 1991; Fridlund & Duchaine, 1996; Fridlund et al., 1990, 1992).

Such a functionalist view of facial expression mates well with recent efforts to incorporate nonverbal information in E-messaging, VR and telepresence. How can we capture what is essential about facial expressions and transmit it efficiently? I suggest that it may be better to consider facial expressions to be declarations whose referents are external than as eruptions whose referents are internal.

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