

Fridlund (pg 109) says that "Signals do not evolve to provide information detrimental to the signaler. Displayers must not signal automatically but only when it is beneficial to do so." Do you agree? How does this fit with the definition of signaling we have been using thus far? How does this fit with involuntary expressions of inner state (such as blushing or crying)?

Fridlund subscribes to the Behavioral Ecology view of faces, which posits that facial displays are signals, or messages, intended to influence the behavior of others. Fridlund believes others' awareness and comprehension of these facial signals actually evolved along with the signals themselves. According to Fridlund's view, facial signals would be conventional signals, rather than assessment signals. For example, if someone smiles, this is not an inherently honest expression of happiness, but rather, an evolved motive-driven response. For example, the motive behind a genuine smile might be to show someone that you are a friendly and approachable person. The motive behind a false smile may be to show someone that you are willing to appease him or her. Signalers learn through convention that the different acts of smiling, looking sad, looking angry, etc, all produce different responses in receivers of these signals. Thus, people will choose which signal to give off based on which response they want to receive. Fridlund believes that these signals and responses have evolved and are interpreted according to convention, and are thus conventional signals.

I agree with Fridlund's notion to an extent. For example, small children may learn that they are more likely to get what they want by crying and pouting. Thus they may be likely to cry and pout even when they do not actually feel sad, but just as a motive for achieving their goals (i.e. getting their parents to buy them an ice cream cone). In this sense, crying is indeed a conventional signal and an evolved response. But in some cases, such as when someone steps on a tack and feels a sharp pain in his foot, crying is an involuntary expression of pain. A man who steps on a tack may very likely not wish to be seen crying in public, but the great and sudden pain may cause tears to spring to his eyes. In this case, the tears are an assessment signal, and their presence is indicative of genuine pain. Convention may have taught the man that he will be regarded as a sissy if he cries in public, and he is most likely to want to signal that he is able to withstand pain and act like a "tough guy". His evolved response would be to not show that he is vulnerable in this situation. Yet, he cannot control the involuntary response of tears in his eyes. This example is not consistent with Fridlund's view of displayers who neither signal automatically, nor detrimentally.

Ekman proposes that "all facial expressions of emotion are involuntary". Is there any way of reconciling this view with Fridlund's? Do they each use the words "emotion" and "expression" in the same way? In Ekman's view, are facial expressions signals? Are they in Fridlund's? Are they reliable signals?

Fridlund does not really offer a definition of emotion; he states that emotions are “ineffable entities about which there is no consensual definition”. He believes the facial expressions are derived from social motives, rather than from emotions. Ekman, on the other hand, believes each emotion word is actually an abbreviation for the whole set of events and processes that go into making someone feel a certain way. He posits that facial expressions of emotions are almost never seen totally out of social context, except for viewing a picture of someone in a magazine. Thus, because Ekman’s view of emotional expression is so intertwined with the accompanying social context, his view could be reconciled with Fridlund’s view that expressions are motivated by social contexts.

In Ekman’s view, facial expressions function as signals only when they are voluntary, and in this case, he argues that they are not actually expressions of emotion; instead, the facial expressions fabricate something that resembles emotion. Thus, they are not reliable signals, because deception is possible. Facial expressions of emotion, according to Ekman, are involuntarily created when impulses are sent to the facial muscles when an emotion occurs. The person who displays them does not intentionally cause them, and thus, they are not signals. In contrast, Fridlund believes that all facial expressions are driven by intentional social motives, and thus, they function as conventional signals. They are not inherently reliable; rather, they have evolved according to how the receivers of these signals respond to the different displays of facial expression.

What does Zebrowitz mean by "overgeneralization effects"? What is an example of a physically based overgeneralization, a culturally based one and a personal one? Can you re-frame her discussion about different cues (signals) of traits (qualities) that are seen in faces in terms of signaling - are these signals assessment signals? What are their costs? Go to a public place and observe 4 different people you do not know. Write down what your impression is of each of them. How much is your impression drawn from their face, their clothing, their actions, etc? Concentrating on the face, what sense of the person do you derive from it? Can you articulate why? Do you think any of the "overgeneralization" processes that Zebrowitz describes played a role in your interpretation? What about other categorization processes?

Overgeneralization effects are when people respond to facial qualities in others that suggest a certain age, race, emotion, or other quality, regardless of whether that quality is accurate for that individual. For example, a physically based overgeneralization might be when someone naturally has a pale complexion, and is assumed by others to be physically weak, since sickly people, particularly those suffering from anemia, are often pale. Zebrowitz presents the reaction of the Mexican Indians to the Spanish explorers in the 16th century as an example of a culturally based overgeneralization. The Mexican Indians have a white-skinned god called Quetzalcoatl, and since the Spanish explorers were also white-skinned, the Mexicans attributed god-like characteristics to the Spaniards. A personal overgeneralization might be assuming that someone who looks like she would be a good mother is similar to one’s own mother.

Zebrowitz has a discussion of visible facial cues, and how these cues might be indicative of certain personality traits. For example, short hair and a refined appearance

might be a cue of conscientiousness. As other examples, being wide-eyed suggests innocence, and having large eyes and a symmetrical face suggests honesty. In terms of signaling, the large eyes would be the signal of the quality of being honest. This is not an assessment signal because it is not inherently reliable – it is certainly possible to have large eyes, and to be dishonest. In fact, people with honest-looking faces may tend to lie more because they can get away with it. The costs of assessing a facial cue as a signal can be high; to determine if someone is truly conscientious or innocent or honest, one may have to exert a great deal of time and effort in getting to know more about this person and his or her habits.

My observations:

I observed a guy on a skateboard skating down Mass Ave. He had large brown eyes, a goatee, and sideburns. His sleeves were rolled up, and in one hand, he was carrying a DVD from Blockbuster. Right before reaching the Blockbuster store, he hopped off his skateboard, scooped it up in one arm, and walked into the store, presumably to return the DVD. Judging from his face, I would say that he was a fairly laidback, friendly, and easygoing guy. I think perhaps the goatee and sideburns contributed to my impression of him as a laidback individual since they gave him a casual appearance. He did not look scruffy, but at the same time, he did not seem as though he was concerned about perfecting his appearance. The rolled up sleeves and the fact that he was riding a skateboard also certainly contributed to this impression, so it did not all stem from his face.

I observed a guy crossing a street on MIT's campus, carrying a black briefcase that may have been holding a laptop. He resembled someone I used to work with; like my former co-worker, this man was presumably Indian in ethnicity, and he also walked with a similar gait to my former co-worker. Because my former co-worker was fairly serious and was also a very able computer programmer, I made similar assumptions about the man crossing the street at MIT. The fact that I observed him near the Stata Center, MIT's computer science building, and the fact that he may have been carrying a laptop probably also contributed to my assumption that he was a computer programmer. So the combination of his location and his resemblance to my former co-worker led me to make a great deal of assumptions about him, with no verifiable information. I used Zebrowitz's mistaken identity overgeneralization when making this interpretation.

I observed a guy riding a bicycle wearing a helmet, with a gym bag slung over his shoulder. He was Asian, and was wearing basketball shorts and a zip-up jacket. He looked like he was either going to or from the gym, especially based on his clothing. The fact that he was wearing a bicycle helmet led me to believe that he was safety-conscious and conscientious. The fact that he was exercising and wearing athletic clothing also led me to believe that he was health-conscious. His face looked serious and goal-driven, perhaps because he was concentrating on avoiding cars while riding his bike across a busy street. Most of my impression of this guy was derived from his clothing and his actions, rather than from his face.

Faces are used to recognize people, to assess their character and gauge their emotional state. In a mediated environment, we may be able to design interfaces so that none, some or all of these functions are possible. What are the costs and benefits of each of these functions, to both the signaler (the face) and the receiver

(the viewer)? How might you design a face that that purported to show character and emotion, but not identity? Can you show identity without the markers of character? When do you think seeing someone's face is important in a mediated environment? Why? In what form? What about video phones - do you think they will eventually replace or supplement the audio-only phone or is there a deeper reason why they have never been successful?

There are several costs and benefits to a signaler who shows his face in a mediated environment, and thereby allows others to see his identity, assess his character and gauge his emotional state. The benefits of revealing his identity include allowing others to recognize him, and possibly being reunited with someone from the past as a result of being recognized. However, certain costs may also accompany being recognized, such as the potential cost of being pursued by a stalker, or the cost of embarrassment, if one wishes to hide one's presence on an online dating website, for instance.

The benefits of allowing one's character to be assessed include giving others an opportunity to contact him based on his character. If one's friendly and honest character can be gauged from one's face, it might benefit that person to reveal his character and honest nature, because it might inspire others to place trust in him. However, if one's face suggests a mean or dishonest character, revealing this character to others in whom one wants to gain trust might not be a good idea.

One can benefit by allowing others to see his emotional state because he might receive much-needed empathy as a result. Then again, if one wishes to hide what he is really feeling in a particular situation, it may cost him to make his emotions known to others. In a videoconference, an employee may not wish to allow his remote boss to see how upset he is at the outcome of a certain decision, for instance, and he would be better off if his face were hidden, so as not to reveal his unhappy emotion.

In all of these situations, the receiver (viewer) of the face, can also either benefit or pay by either not receiving enough or receiving too much information about a person, based on what is shown by his or her face. In some cases, the receiver may wish to construct his own fantasy of what a signaler is like, and this fantasy will be shattered if the signaler reveals his identity. The receiver may not care about a person's character or about his emotional state, and this information may hinder the receiver in acquiring the information in which he is most interested; one's character or emotional state can be a distraction from retrieving basic quantitative facts from this person.

Faces can be drawn such that they do not reveal someone's identity (i.e. the drawing is unrecognizable as a real person) but that do give insight into one's character and emotional state. For example, an artist may be able to render an honest-looking face (one with large eyes and a great deal of symmetry). This face can be recreated showing several different emotions (anger, happiness, fear, etc). Thus, the face can simultaneously attempt to reveal both character and emotion, while keeping identity safely hidden.

Seeing one's face is important in a mediated environment if you are trying to read emotional cues from his/her expressions. This may be important to two people who are emotionally close to each other, but who cannot be in the same place at the same time for some reason. In this case, one's real face (revealing identity, character and emotion all at

once) is the most appropriate form to display. This allows subtle facial gestures to augment the conversation in ways that could not be conveyed in an audio-only environment. In this sense, videophone is appropriate and viable as a substitute for audio phone. However, it is unlikely that videophone will ever replace audio phone entirely, as there are many situations in which a person may not wish to reveal his face over the phone. For example, telemarketers who make hundreds of calls daily may not wish to be recognized by their irritated call recipients. Also, one of the advantages of audio phone is that it does not involve the eyes; thus, people can talk on the phone while their eyes are otherwise engaged – watching the road while driving, for instance. Adding a video component to the phone would be a dangerous distraction in this case, and would reduce one's ability to multi-task while talking on the phone.