Perspectives on Fluency

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Chapter 6

Nonverbal Aspects of Fluency

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Spontaneous face-to-face dialogue is the language of our everyday life—the language in which we chat, discuss, tell, request, explain, teach, learn, argue, joke, and work together. One of the key differences between face-to-face dialogue and other forms of language use (e.g., writing) is that it has nonverbal as well as verbal components, especially spontaneous facial and hand gestures. One has only to imagine conversing with a person who is completely immobile to appreciate the importance of these animations. I propose that some nonverbal acts are a significant aspect of conversational fluency.

The notion that nonverbal acts are fluent (and even eloquent) is far from conventional. For example, there is a widespread belief that hand gestures are the last resort of the inarticulate or that they are evidence of the "excitability" of certain cultures. (No self-possessed Englishman would be seen waving his hands about!) It is even more common to equate facial expressions with emotional expression, as if the only function of the face were to reveal (often unwittingly) how we feel. Indeed, most of the research literature on the face consists of efforts to match specific facial configurations with a list of emotions (usually happiness, sadness, fear, anger, disgust, and surprise). In brief, facial and hand gestures have traditionally been of interest to psychologists because of what they might *inadvertently* reveal about emotion; for the same reason, they have not been of interest to language scholars.

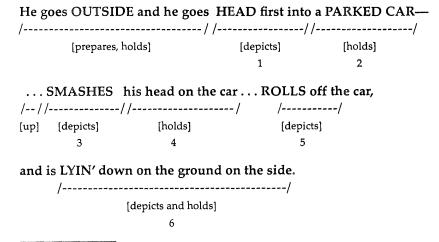
We (Bavelas 1994; Bavelas and Chovil 1997, in press) have been developing a new approach to certain nonverbal acts, one that treats them more as linguistic units than as separate or incidental features. It is important to stress that we include not all nonverbal acts but only those visible acts that convey meaning and are tightly synchronized with speech. Thus, we do not include (a) hand or facial actions made in nonspeaking contexts, such as the hitchhiking signal or the facial actions of a mime artist; (b) nonverbal actions that serve functions other than communication, such as brushing

words and phrases of speech. As will be seen, our focus is on the hand gestures and facial displays1 that accompany speech in dialogue and have a semantic or syntactic role in the dialogue. This chapter will focus on three groups of nonverbal actions with

significance for fluency: the speaker's hand gestures, the speaker's facial displays, and the listener's nonverbal responses. To illustrate these actions, I will describe excerpts from videotaped conversations between acquaintances.

Conversational Hand Gestures

Several researchers have described the close semantic and temporal linking of words and hand gestures (Kendon 1980, 1983, 1985; McNeill 1985, 1992). A gesture depicting an aspect of the speaker's narrative occurs precisely with the relevant words. In the following example, the precise time of the gesture is indicated by /----/ below the boldfaced words; the gestures are described in more detail in the subsequent text. Mike was telling Erik about a person he saw leaving a bar.



^{1.} The term facial expression traditionally implies expression of emotion; scholars who are interested in a more social view of the face have adopted the ethological term facial display (cf. Kraut and Johnson 1979).

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In this eight-second excerpt, Mike's gestures flow from one to another in perfect synchrony with his phrases. First, he prepares to gesture by bringing his hand and lower arm to a vertical position; we will soon see that his arm becomes the man he is describing, with his hand as the man's head. However, he holds this position until he says "HEADfirst into," which is his main dramatic point. Precisely with those words, he brings his upper arm and hand down with some force, onto an imaginary car. Then he freezes the action by holding the gestural head down, palm flat, on the "PARKED CAR." Then he raises his arm and hand again, so that when he repeats what happened with a more vivid verb, he can again depict the headfirst movement, precisely with the new verb, "SMASHES." Again, he holds the gestural head facedown on the imaginary car, so the two different phrases each contain (verbally and gesturally) an action and the consequence of that action.

Then Mike moves on with his narrative and tells how the man "ROLLS off the car." In the slight pause before this phrase, he brings his other hand up from his lap so he can depict the rolling by circling his index fingers around each other. Again, the depiction occurs only during the relevant words, and then his hands are already moving into position for the next phrase: he opens his arms fully to his sides and, throwing himself back in his chair, he becomes the man "LYIN' down on the ground on the side," that is, on his back with arms flung out to either side.

Thus, Mike's six gestures occurred with the exactly relevant words. We saw evidence that he sometimes adjusted either his words or his actions to accomplish this synchrony—for example, waiting in position at the beginning of his sentence and later pausing slightly before he rolled his hands. Such synchrony suggests that he is encoding his narrative simultaneously into words and gestures; they are an integrated whole, just as his phrases and sentences are.

Another important feature of hand gestures is that they often convey information that is not in the accompanying words. In the preceding example, we know from Mike's gesture that the man fell facedown onto the car—information that appears nowhere in his words. Indeed, the phrase "he goes HEADfirst into a PARKED CAR" would more readily suggest that he ran and butted his head into the car. Also, the words "LYIN' down on the ground on the side [of the car]" tell us nothing about how the man was lying on the ground (facedown, on his side, on his back, curled up, etc.). In these cases, the gestures are not redundant with the simultaneous words. Rather, while the words provide a linear narrative, the gestures provide the simultaneous equivalent of adverbial phrases—a highly efficient division of labor. The reader may wish to imagine a purely verbal de-

scription of the same details. Mike's verbal-plus-nonverbal depiction is shorter, clearer, and probably more engaging.

So far, I have been describing gestures that have a direct relationship to the topic of the accompanying words. My colleagues and I have called these topic gestures (Bavelas 1994; Bavelas et al. 1992; Bavelas et al. 1995), and they comprise the vast majority of gestures in ordinary conversations. However, we have discovered another function of gestures in face-to-face dialogue, which is to help maintain the dialogue itself. These interactive gestures do not depict any aspect of the topic of conversation; rather, they refer directly to the listener and to some aspect of their relationship as interlocutors. For example, in a documentary on writer Margaret Atwood by the National Film Board of Canada, the interviewer says:

Well, you didn't come — your FAMILY is not . . . WIMPS. There aren't WIMPS in YOUR family. /-----/ [points hands at Atwood]

Clearly, the interviewer's gesture does not depict "wimps" in any way, nor is she indicating that Atwood (to whom she is pointing) is a wimp; quite the contrary. We interpret this gesture, combined with a slight intonation rise, as indicating that she is seeking confirmation of her statement from Atwood. And Atwood immediately responds with a paraphrase.

They aren't noted for self-DOUBT, let's put it that way:

Another common function of an interactive gesture is a brief acknowledgment or citation of the other person's previous contribution with a flick of the finger toward him or her. Also, speakers often hold out an open palm to indicate that the listener should help provide a word or phrase the speaker is having difficulty finding. There are two key features of all gestures serving interactive functions. First, as noted, they refer directly to the interlocutor rather than to the topic of conversation. Second, they always point some part of the hand(s) at the interlocutor, even if very briefly. We have established that interactive gestures are tied directly to face-to-face dialogue; that is, they occur at the highest rate when two people are talking in dialogue rather than in sequential monologues (Bavelas et al. 1995).

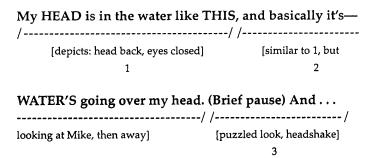
Another interesting feature of interactive gestures is that they are usually completely nonredundant with words. For example, the Atwood interviewer could have put her sentence into question form, or she could have added "You know what I mean?" to make her request explicit. Instead, she used only the gesture and a slight intonation rise. We (Bavelas et al. 1992) found that about 80 percent of interactive gestures were completely nonredundant with the accompanying phonemic clause (vs. less than 10 percent of topic gestures). We propose that interactive gestures (which constitute about one-sixth of conversational gestures) are a particularly efficient way to include the listener in the dialogue without interrupting the topical flow. In one study (Bavelas et al. 1999), our microanalyses showed that the listeners definitely responded to the meaning of the interactive gesture. For example, they nodded or said "Mhm" or provided a missing word at the appropriate moment, even though the speaker's request was made only gesturally.

In brief, the speaker's hand gestures contribute in several significant ways to the speaker's fluency. They illustrate, specify, and animate what the speaker is saying, and they help ensure that the listener is following and is included in the dialogue. As we shall see, many of these same functions can be served by the speaker's facial displays as well.

Conversational Facial Displays

Representations of the face in photographs and paintings are highly misleading: Mona Lisa's smile lasts forever, as does the anguished expression of a defeated athlete on the sports page. However, the muscles of the human face are fast and mobile, and facial displays in conversation are fleeting because they are precisely synchronized with the equally fleeting words.

Let us return to Mike and Erik's conversation, at a point when Erik is telling about a harrowing close call. He had slipped off a log bridge into a fast-flowing river. He was able to hang onto a rope but could not pull himself out, because two canvas buckets tied to his pack were filling with water. The rapids threatened to carry him into a high-walled canyon from which rescue would not be possible. At this point in the story, he is still hanging onto the rope. The /-----/ indicates the location of facial displays. Some hand gestures will be described in the text.



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Erik's first facial depiction re-creates his plight, showing that his body (including the back of his head) was being dragged underwater and that only his face remained above the water, which ran around his face at the level of his ears. His facial expression is tensely stoic, with eyes closed. His hands depict the flow of water around his face. He then modifies this depiction slightly to combine it with looking directly at Mike. After breaking eye contact, and during a pause, he looks off to the side, shaking his head with a brief puzzled look, as if to underline the strangeness of what he is about to describe. The difference between the first two facial displays and this one is sharp and dramatically quite effective; notice that he has frozen the action and is now filling in his subjective experience. His fourth facial display is an extension of the same interior perspective. He looks directly at Mike as he begins to slow his speech, and his face depicts being "REALLY REALLY calm." His next phrase is accompanied by a hand gesture that depicts calmly and slowly letting go of the rope. His facial display in combination with a rise in intonation might be translated as "Can you believe that?" He then picks up the action again, using hand gestures to depict how he "BOUNCED." He now has little facial expression until he matches his ironic humor ("got nice and cut up") with an asymmetrical smile.

As can be seen in this fifteen-second episode, Erik's facial displays depict a wide range of events and reactions, including (1 and 2) how he looked with only his face out of the water; (3) a dramatic comment on his decision to let go; (4) a vivid re-creation of that decision; (5) including Mike by a rhetorical inquiry; and (6) ironic humor. Erik spontaneously integrated each of these displays not only with the synchronous words but also

with his hand gestures, head position or movement, eye contact, and intonation. All of these elements worked together to create particular narrative moments.

In the first study of facial displays in dialogue, Chovil (1991/92) found that facial displays often depict personal reactions or the reactions of another person being described in the narrative. For example, the speaker may portray how angry he or she (or someone else) was, reenact fear or surprise, or indicate how he or she would react to a hypothetical event. The face (vs. words or hand gestures) seems particularly suited to portraying personal reactions. It is important to emphasize that these facial displays are symbolic depictions of reactions, not relived experiences. For example, the rapidity of Erik's succession of displays and their precise synchrony with his verbal phrasing make it implausible that his facial displays reflect reexperienced emotions. Rather, they are stylized elements of a narrative whole. We (Bavelas and Chovil 1997) have argued that conversational facial displays are symbolic acts, depictions rather than reactions.

In Chovil's (1991/92) data, another large group of facial actions were syntactic, especially brow movements that emphasized or "underlined" a particular word or phrase (see also Ekman 1979). Chovil also found that, like hand gestures, many facial displays were not redundant with the accompanying words. We can see this in our recent example: Erik's third display contained all of the information being conveyed at that moment; the only word he uttered was "And." His fifth display was nonredundant in a different way, because the facial display addressed Mike as interlocutor whereas the words described the action. His first and second displays were partially redundant; the facial, head, and gestural depictions added information that was closely tied to but not explicitly conveyed in his words. His fourth and sixth displays were almost completely redundant with the words, although they did add a vivid illustration of the words. As with gestures, the division-of-labor metaphor is apt here: words, faces, hands, intonation, and so forth, each do something that the others cannot do-or cannot do as well. Moreover, they can be combined at a given point in the narrative so that their different functions come together into a seamlessly integrated performance.

What Listeners Do

Most of the time, only one person in the conversation is speaking at any given moment; that is, one person has the (verbal) floor, or speaking turn, and uses it to convey information to the listener. However, listeners make

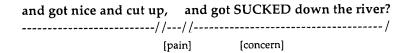
a wide variety of noninterruptive (indeed, essential) contributions. Because the other person has the speaking turn, listener responses are largely nonverbal. Recent research (Bavelas et al. 1999) has uncovered a variety of ways in which listeners are active without taking up the speaking turn.

First, there are the familiar nods and "Mhms." My colleagues and I have called these *generic* listener responses because they are appropriate to any narrative, whether humourous, tragic, exciting, or technical. In our experimental data, which consist of one person telling a stranger about a close call, the vast majority of listener responses are generic. However, there is an important smaller group, which tend to occur near the climax of the story. These *specific* responses include gasps, horrified looks, rolling the eyes, even ducking an imaginary object that the narrator is describing. Specific listener responses are tightly connected to a precise moment in a particular narrative and would not be appropriate in many other contexts. Indeed, at that moment, the listener becomes a conarrator and illustrates what the speaker is saying at the time.

Because we have just examined a section of Erik's narrative in detail, let us go back and insert Mike's responses as listener to that same section:

My HEAD is in the water like THIS, and basically it's—/	
[knitted brows, tense expression]	
WATER'S going over my head. (Brief pause) And	
[recoil, laugh] [intense look,	
it's really stra—I grew REALLY REALLY calm,	
grimace, which fades to rounded mouth;	
and then I just let GO of the rope? And I got sucked	
expression becomes concerned] [wince] [returns to	
like I sort of BOUNCED off the bottom of the log,	
intense, concerned expression]	

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As we can see, Mike is reacting virtually constantly to each piece of Erik's narrative. Because this is the climax of Erik's story, Mike is making entirely specific responses (i.e., not just nodding comprehension). His base expression is one of intense concern, periodically punctuated with a more specific response. For example, when Erik says, "WATER'S going over my head," Mike pulls his own head back slightly, with a brief empathetic laugh. His laugh definitely does not indicate humor; on the contrary, it is an intake of breath that sounds almost like "Oh no!" Later, when Erik says he "let GO of the rope," Mike winces and ducks his head back. Finally, at the words "cut up," Mike displays a fleeting pain expression. In brief, the listener's face is a constant feedback display for the narrator, indicating comprehension and empathy.

What I am calling specific listener responses are mainly instances of a nonverbal phenomenon historically called motor mimicry (Allport 1968), in which one person displays a reaction that is appropriate to another person's situation and not appropriate to his or her own (e.g., a spectator wincing at an athlete's injury). My colleagues and I (Bavelas et al. 1986, 1988) have shown experimentally that motor mimicry is an encoded communicative act, designed to be seen and understood by the other person. Chovil's (1991) experiment revealed that listeners' facial motor mimicry in conversation virtually disappears when the conversants cannot see each other (e.g., talking on the phone or through a partition). It is therefore noteworthy that all of the changes in Mike's expression (the three specific responses previously described) were elicited by Erik's direct eye contact with Mike. This pattern suggests strongly that speakers expect and even need the listener's responses. In our most recent experiments (Bavelas et al. 1999), we have made it impossible for some listeners to respond (by preoccupying them with an experimental task), and the speaker's narrative falls apart, particularly at the climax of the story.

Summary

Fluency implicitly means verbal fluency; indeed, nonverbal acts are often seen as evidence of disfluency. However, microanalysis of face-to-face dialogue reveals meaningful and often eloquent nonverbal acts. This brief introduction to a new view of selected nonverbal acts has described how they

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are part of conversational fluency. Of particular importance are hand or facial gestures that are integrated but not redundant with the words they accompany. Nonredundant nonverbal acts supplement words so that, taken alone, the words would seem inadequate or even disfluent. It is obvious that the interlocutors treat verbal and nonverbal acts as part of an integral whole; language scholars might fruitfully begin to do so as well.

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