

# Nonverbal Communication<sup>☆</sup>

ML Patterson, University of Missouri, St. Louis, MO, United States

© 2017 Elsevier Inc. All rights reserved.

---

<b>Introduction</b>	1
<b>Characteristics of Nonverbal Communication</b>	2
<b>Components and Patterns</b>	2
Static Features	2
Dynamic Behaviors	3
Patterns of Behavior	4
<b>Determinants</b>	4
Biology	5
Culture	5
Gender	5
Personality	6
Environment	6
Overview of Determinants	7
<b>Functions</b>	7
Providing Information	7
Regulating Interaction	7
Expressing Intimacy	8
Exercising Influence	8
Managing Impressions	9
<b>Summary</b>	9
<b>Further Reading</b>	9
<b>Relevant Websites</b>	10

---

## Glossary

**Nonverbal communication** It refers to the sending and/or receiving of information and influence through the physical environment, appearance, and nonverbal behavior.

Nonverbal communication is a pervasive influence in our interactions and relationships with others. It is important to appreciate that nonverbal communication is not limited to face-to-face encounters. Any communication medium that carries visual and vocal information is a vehicle for nonverbal communication. Thus, the images on television, films, the Internet, and even in photographs are examples of nonverbal communication. In addition, the audio channels of mediated communication provide vocal cues, including pitch, volume, intonation, and pauses that are elements of the nonverbal system of communication. Although linguistic, or verbal, communication is a powerful means of transmitting a wide range of information, nonverbal communication usually has a greater impact on our social contacts with others.

## Introduction

As social animals, our survival and general welfare are dependent on communicating with others. Nonverbal communication is a powerful and efficient means of managing these necessary interactions. The popular referent for nonverbal communication is “body language,” but this is an unfortunate and misleading term. There are two simple reasons for this. Nonverbal communication involves more than the body and it is not a language. The first point will be covered in more detail later in the section on the components of nonverbal communication. Let us look briefly at the second point. Body language is commonly used in describing the mood and motivation of individuals. When a team is losing badly and its prospects look bleak, sportscasters proclaim that “you can see it in their body language.” The body language of politicians and other public figures is often scrutinized closely. Although appearance and nonverbal behavior can reflect feelings and attitudes, this is not “body language.”

---

<sup>☆</sup>*Change History:* September 2015. M Patterson made some changes to the text and revised the biography.

To clarify, let us take a brief look at language. There is a consistent vocabulary with language. In contrast, what does a particular smile mean? It might indicate that someone is pleased to see you. The same smile could simply mean that someone wants to be friendly or, perhaps it is a sign of appeasement. The meaning of a particular nonverbal behavior, unlike language, is conditional. That is, it is dependent on the social and behavioral context in which it is issued.

There is, however, more to language than just semantics. With language, there is also a syntax determining how words and phrases are combined in usage. There is no syntax for nonverbal communication. American Sign Language (ASL) is an example of a language that is not spoken. ASL does have a vocabulary, with signs carrying specific meaning, as well as a syntax. Even though ASL engages signing, it functions like a verbal language, and shares the identical neural basis in the brain. ASL and verbal language are primarily controlled by areas in the left hemisphere of the brain. In contrast, most of the sending and receiving of nonverbal signals is controlled by areas in the right hemisphere of the brain. Speech and sign language are similar in function, but different from nonverbal signals such as gaze, facial expression, interpersonal distance, and touch. Thus, nonverbal communication is not body language.

## **Characteristics of Nonverbal Communication**

The distinctiveness of nonverbal communication is particularly clear when compared to verbal communication. A first and basic characteristic of nonverbal communication is that the nonverbal channel is always “on” in social settings. That is, as long as there is some visual, auditory, tactile, or olfactory information, the nonverbal channel is open. Even when there is no movement, the physical appearance of the interactants still registers and affects the judgments of others. In contrast, verbal communication is intermittent and typically involves partners taking turns. Even amidst animated conversation, the verbal channel is sometimes closed as people pause or reflect about others’ comments. Of course, just because the nonverbal channel is always open does not mean that we process everything from our social environments. Attention is selective, and we preferentially notice events that affect us and our welfare.

A second characteristic of nonverbal communication is that the sending and receiving of nonverbal signals may occur simultaneously. In fact, this is critical in coordinating our behavior with those around us. This happens both in conversational exchanges and in situations where individuals are simply sharing a common presence, with no intention of mutual interaction. For example, in choosing a seat in a waiting room or standing in line at the grocery store, we make subtle adjustments to others in the setting.

A third characteristic of nonverbal communication is that most nonverbal messages are sent and received automatically and outside of awareness. In contrast, verbal communication usually requires some attention in both speaking and listening. Of course, we can apply effort in thinking about how to manage our own behavior (sending side) and how to make sense of a partner’s behavior (receiving side), but this is usually unnecessary. That this kind of concentration is optional reveals a fourth characteristic of nonverbal communication—it is cognitively efficient. As a result, the routine give-and-take of nonverbal communication drains little from our cognitive batteries, even when the verbal side of communication becomes demanding or difficult.

## **Components and Patterns**

The nonverbal system of communication includes components that are both static and dynamic. That is, some elements are relatively unchanging over the course of an interaction, although others are highly variable. To speak of the “elements” of nonverbal communication may be misleading, however, because how each element functions is tied fundamentally to the other elements in play. In other words, nonverbal communication typically occurs as a coordinated pattern of elements, not simply an additive package. For example, eye contact may mean one thing if the person is smiling and relaxed and another thing if he is frowning and tense. Thus, this section focuses first on the primary component elements of nonverbal communication, and then turns to the patterns that bear the intent and the impact.

### **Static Features**

Every face-to-face interaction occurs in a particular context. The *design and arrangement* of settings are basic factors affecting our communication with others. Something as simple as placing chairs farther from, rather than closer to, one another means that people will probably make eye contact more and speak louder when they interact. In the Western business world, powerful individuals in an organizational hierarchy typically have large, well-furnished offices with scenic views. In contrast, lower level employees may simply share a large bullpen area or be pigeonholed in partitioned cubicles. The particular furnishings and arrangement of executive offices also reinforce the power and status of the people in the top echelon of an organization. Large desks with visitor chairs directly opposite the executive’s chair keep subordinates at a greater distance than is common in casual interactions outside of the business setting.

The design and arrangement of furniture are also important in our homes. For example, important visitors might be directed to a well-furnished living room rather than to the den or the kitchen. The latter choices may be more common for good friends or

family members. In addition, the physical contents of personal territories generate expectancies that facilitate interactions between occupants and visitors. The allocation of time may also be important in setting the context of interaction. In some countries, showing up on time for a meeting implies interest and reliability; in other countries, it implies desperation. Time as a resource is also manipulated by the physical setting. Furniture in fast-food restaurants is engineered to be uncomfortable enough that patrons will finish their meals promptly and interact minimally. In contrast, cushier furniture in fancier restaurants sets the stage for slower meals and extended interactions. As a result, even before an interaction begins, the setting imposes physical constraints and social norms on communication.

Next, *appearance characteristics* provide important information affecting impressions and communication. Although we often hear “don’t judge a book by its cover,” automatic judgments of others are inevitable and often useful. For example, physical appearance provides information about sex, race, and age. Clothing style can also tell us something about a person’s social class, ethnicity, religion, and even occupation. We are also sensitive to appearance because it indicates whether others are similar to or different from us. Although appearance characteristics are imperfect indicators of what others are really like, the automatic judgments they precipitate are useful and relatively accurate. Nevertheless, appearance can also be strategically modified to create desired impressions. Some modifications may be as simple as changing clothing or grooming to increase attractiveness or perceived dominance. Politicians and actors often pay considerable sums of money for “makeovers” to improve their appearance and increase their likeability. Other interventions, such as exercise, weight loss regimens, and plastic surgery require a greater investment of time and/or money, but they also reflect how important appearance can be.

### Dynamic Behaviors

Although the fixed features of the setting and interactants establish the context for interaction, the dynamic behaviors are the fluid components in the give-and-take of nonverbal communication. Perhaps the most basic elements are *distance and orientation*. Even though the fixed features of design and arrangement of settings affect how individuals space themselves, distance and orientation are still flexible, especially in standing interactions. Distance and orientation are important because they contribute to the overall involvement level in interactions and affect the other dynamic behaviors. For example, as partners are farther apart in interactions, they tend to take a more directly facing orientation, increase gaze, and speak more loudly. In contrast, at closer distances, for example at 0.5 m, partners are typically less directly oriented toward one another, gaze less, and speak more softly. In addition, at closer distances, touch is possible. Thus, various component behaviors operate as a system, with some behaviors compensating for changes in other behaviors.

Next, *gaze* is fundamentally important because most of our information about others comes through the visual channel. Gaze also facilitates turn-taking in conversations and provides feedback in face-to-face interactions. Furthermore, gaze changes can modify the meaning and impact of a message. In general, holding gaze increases arousal in the recipient and increases the impact of a verbal message. The meaning of a particular look, however, depends on more than just the amount of gaze. That is, the impact of gaze is also a product of the facial expressions that frame the gaze and other behaviors, including posture and body orientation. Thus, separate behaviors combine in shaping the meaning of nonverbal messages.

*Facial expressions* are particularly rich sources of information. In interactions, most of our visual attention is directed at others’ faces. We also manage our own facial expressions more than we do our other behaviors. The research of Paul Ekman and his colleagues suggests that universal patterns in the sending and receiving of facial expression are the hardwired product of natural selection. Much of this research contends that facial expressions are primarily signals of emotions, including happiness, sadness, anger, fear, disgust, and surprise. A different approach, Fridlund’s behavioral ecology theory, proposes that facial expressions are signs of intentions or social motives, not emotions. Thus, facial expressions signal what people are likely to do, not how they feel. For example, an “angry” face is not actually a reflection of underlying anger, but a threat. A smile is not a sign of happiness, but an indication of wanting to cooperate and be friendly. Facial expressions also complement and qualify verbal comments. When there is inconsistency between the words and the expression, listeners might doubt the intent or candor of the speaker.

Next, *posture and movement* also provide information about a person’s feelings and intentions. An individual’s posture can signal interest, respect, and openness toward a partner, or the opposite. For example, a closed and rigid posture is less inviting than a more open and relaxed one. Posture differences can also reflect contrasts in power and status. Usually, more powerful individuals are more relaxed and less vigilant about their social environment than are less powerful individuals. People also differ in how quickly they move and whether they are graceful or awkward, coordinated or clumsy.

*Gestures* are specific movements of the hands, arms, and even the head that merit distinction from the broader movements just described. Although gestures are usually closely linked to speech, they can also be initiated independent of speech. Nevertheless, the close relationship between gestures and speech suggests that many gestures are really part of the verbal system of communication. Different types of gestures may be distinguished on the basis of their functions. First, *emblems* are gestures that have a specific verbal translation and, like language, their meanings can vary across culture. For example, the “OK” sign in the United States is an obscene gesture in some countries. Next, *illustrators* depict their linguistic referents. For example, a person might make a downward movement with her hand in referring to a book on the lowest shelf of a bookcase. Finally, *regulators* are pacing gestures that are timed to identify particular referents in a verbal list. Thus, a speaker may quickly raise and then lower a hand as he says “the first point ...” A similar gesture may be repeated as he continues talking about subsequent points. Regulators help speakers in presenting their messages fluently, and they benefit listeners’ ability to store and recall the verbal messages later.

Next, *touch* is a basic component of nonverbal communication in all kinds of relationships. Contrary to the teaching of early behaviorists, like John B. Watson, tactile stimulation is critical to the physical and psychological health and welfare of infants and young children. The routine touch involved in feeding, changing, bathing, comforting, and playing with infants is an important source of stimulation, and it facilitates bonding between parents and children. Touch is important in other relationships in signaling affection, support, and comfort, but touch is also a component in intense hostile and aggressive encounters. The type and frequency of touch between individuals are also signals of the closeness of relationships. The norms regarding touch vary across culture, and sometimes inappropriate touch leads to very negative impressions. For example, butt-slapping in some cultures is harmless flirtation, while in others it is sexual harassment. A punch to the shoulder can be a sign of solidarity in one culture, but an assault in another culture.

*Vocal behaviors* are characteristics of speech that are distinct from its content or meaning. Changes in tone of voice and emphasis can modify the meaning of comments, as in the case of sarcasm. More generally, pitch, loudness, emphasis, tempo, and pausing are all vocal (not verbal) characteristics that can indicate something about speakers and their feelings and motivations. The voice also affects first impressions, including judgments of attractiveness and dominance.

Finally, the importance of *olfactory cues* is evident in varying cultural rules about cleansing and grooming, and in the marketing of soaps, shampoos, deodorants, colognes, perfumes, and air fresheners. People spend billions of dollars every year on products to remove unpleasant odors and replace them with more desirable ones. Some natural scents, called pheromones, may not even register consciously, but still affect sexual attraction and even fear. This is another instance where nonverbal communication operates automatically and outside of awareness in affecting judgments and behavior.

### Patterns of Behavior

Identifying the component cues and behaviors is only the first step in appreciating the complexity of the nonverbal system of communication. Because nonverbal communication operates in a holistic fashion, it is important to move beyond elemental components to overall patterns. We cannot possibly consider the countless permutations of subtle changes in the various components, and there is no formula for the weighted combinations of elements that determine particular meanings. Nevertheless, we can find some common themes across the various components that shape the meaning of integrated patterns of nonverbal communication. Two pattern dimensions are particularly important.

The first dimension is *involvement* or immediacy. In general, increased involvement is indicated by a closer distance, touch, gaze, greater facial expressiveness, a more direct-facing orientation, forward lean, gesturing, and vocal expressiveness. Higher levels of involvement reflect greater interest in our partners. For example, friends are usually more comfortable with high levels of nonverbal involvement than are strangers. Nevertheless, high involvement may also occur in negative situations, such as escalating physical conflict between individuals who may be yelling at each other while only inches apart. In both situations, involvement is high, but there is no difficulty in distinguishing the positive from the negative encounters.

Involvement also provides a kind of metric for identifying the intimacy of relationships. Two people walking hand-in-hand and sharing a high level of gaze are more likely to be seen as a couple than are two others who happen to be walking next to one another. Maintaining a comfortable level of involvement is usually achieved automatically and outside of awareness. Nevertheless, a stranger's stare or looming approach can be very uncomfortable, and might result in compensation in the form of increasing distance, decreasing gaze, or even leaving the setting. At the other extreme, avoidance by a good friend who keeps a distance and makes minimal eye contact is also noticeable and uncomfortable. In such a case, one might try to restore involvement by moving closer and even initiating touch as a way to determine the reason for the avoidance.

Of course, involvement can be deliberately managed in order to influence a partner or even to create a particular impression for others in the setting. We understand that the salesperson's solicitous behavior does not indicate how much he likes us, but rather how much he wants the sale. In contrast, two people who are trying to hide a romantic relationship at work might minimize their mutual involvement around others.

A second pattern dimension is *disposition*. Because we are social animals and interact with a wide variety of people, we have to make sense of their behavior quickly and they have to make sense of ours. In social settings, we have to signal our intentions and motivations to others and, at the same time, anticipate what those around us are likely to do. Particularly important in these processes are the expressive reactions of our faces and bodies. Although facial expressions provide the most detailed information, they are complemented by other behaviors, including distance, gaze, posture, muscle tension, and speed of movement. For example, a friendly greeting is easily distinguished from a hostile threat. We are the descendants of those hominid ancestors who made such judgments quickly and accurately.

### Determinants

Although specific instances of nonverbal communication may vary widely, substantial consistencies abound as well, as a function of biology, culture, gender, personality, and the environment. Much of social interaction is ritualized. For example, greetings, departures, flirtations, solicitations, and a variety of ceremonies transpire with little or no conscious control. In fact, they typically proceed more smoothly if people do not think about them or vary from the prescriptions. This section examines how the basic determinants constrain stable patterns of nonverbal communication.

## Biology

From the time of our hominid ancestors, a few million years ago, our species has been shaped by natural selection. Our biological evolution has modified not only on our physical characteristics and physiologies, but also our nonverbal communication. Even the development of language could not replace the efficiency of nonverbal communication in managing the immediacy of our face-to-face interactions. To suggest that biology plays a role in nonverbal communication does not mean that we all react in an invariant, programmed fashion. To the contrary, natural selection breeds diversity as well as communality, and part of the human evolutionary heritage is our plasticity— including our ability to adapt quickly via cultural transmission.

First, because we are social beings, close attention to others is highly adaptive. The nonverbal reactions of others alert us not only to their intentions, but also to changes in the immediate environment. For example, we are wired to attend to appearance cues and behavior that can signal threat on one hand or cooperation on the other. This information, in turn, facilitates an appropriate response to changing circumstances.

Next, appearance characteristics and nonverbal behavior are also critical in mate selection. Because both males and females have no direct information about a potential mate's reproductive value, they have to rely on appearance and behavioral cues that signal information about a partner's characteristics. For example, males' typical preferences for younger, shapely females with symmetrical features, clear skin, and lively behavior correlate with both better health and greater fecundity. In turn, females' typical preference for somewhat taller, older, dominant-looking males with resources reflects her interest in securing a mate who can provide for the welfare and security of both her and her offspring.

Survival of our species also requires long-term, special care of young children. Beyond food and shelter, children need love, stimulation, and security for successful development. One critical signal prompting the appropriate, nurturing care is the baby-face appearance of infants and young children. That is, the large forehead, small rounded chin, and big eyes of infants are powerful stimuli that promote adult concern and care. This effect even generalizes to baby-faced adults who are judged as more innocent, helpless, and less responsible than are more mature-looking adults.

## Culture

Our shared biology provides the foundation for basic communalities in nonverbal communication, but different physical and social environments increase variability in nonverbal communication across culture. Many of these differences in nonverbal communication reflect basic cultural dimensions. For example, the *individualism–collectivism* dimension is relevant for cultural differences in expressive behavior. Individualistic cultures, including the United States and most of Western Europe, tend to emphasize the distinctiveness of an individual and promote a focus on the self, personal achievement, and fulfilment. In contrast, collectivistic cultures, including many East Asian countries, tend to emphasize one's identity within a larger social group, and interdependence with that group. Thus, in a situation in which one person is walking ahead of a group, the individual is likely to be seen as a trailblazer by the Westerner, and a glory-hound by the East Asian. Because most people from individualistic cultures are predisposed to value assertiveness and independence, they are more likely to show negative expressions in social situations and are better at identifying them in others than are people from collectivistic cultures. A second dimension, *power distance*, reflects the degree to which power, prestige, and wealth are unequally distributed within a culture. Thus, high power-distance cultures, including Mexico, Colombia, Venezuela, and India, have a clearer hierarchy of power and influence, whereas low power-distance cultures, including Great Britain and Germany, are more egalitarian. In general, a lower power person is likely to show greater respect and control in interacting with a higher power partner in a high power-distance culture than in a low power-distance one. In terms of nonverbal communication, this might be evident in efforts to keep greater distances from high-power others and to minimize negative facial expressions.

The anthropologist Edward Hall proposed that cultures also differ in the degree to which communication is relatively explicit or implicit. Specifically, in *low-context* cultures, most information is transmitted in a relatively direct and explicit fashion through language. As a result, ambiguity in the meaning of messages is minimized. People mean what they say. In contrast, in *high-context* cultures, there is greater ambiguity in messages because there is an increased emphasis on both the situational cues and the nonverbal behavior of individuals. Thus, in high-context cultures, nonverbal communication plays a larger role in understanding the meaning of interactions. In general, East Asian countries are typically on the high-context end of the continuum, whereas the United States and northern European countries are on the low-context end.

Although the broad contrasts on these dimensions provide some insight into cultural differences, some caution is warranted. Most cultures are not at the extremes of these dimensions, and within a particular society, people vary considerably. Not everyone possesses a given cultural characteristic, and members of any culture differ in the degree to which they identify with the culture. Differences also occur between younger and older generations, and between urban and rural dwellers. Finally, cultural norms are not immutable, especially in this age of global communication and the increased ease of international travel.

## Gender

In general, women are more sensitive on the receiving side of nonverbal communication than are men. This may be the result of women simply noticing more or being better at actually forming judgments, or some combination of both. This female advantage in reading others may be the product of both natural selection and social norms found in most cultures that

emphasize women's sensitivity to and caring for others. On the sending side, women's nonverbal behavior is usually more easily read than that of men. Nevertheless, in many cultures it is less appropriate for women than for men to threaten or show anger explicitly.

Next, compared to men, women are usually more comfortable with higher levels of nonverbal involvement in interactions, especially in same-sex interactions. This might be seen in women's closer distances, greater gaze, and occasional touch with same-sex partners. Women also smile more frequently and receive more smiles than men, a sex difference that is probably facilitated by females' higher level of gaze. Smiles are primary signals for getting along with others, and women are generally more invested in their social contacts than men are. In addition, because these sex differences in smiling align with the expectation that women are more sociable than men, smiling may also reflect impression management. Of course, these patterns may be reversed if women are interacting with male strangers and greater reserve is appropriate.

### Personality

This section discusses a few of the personality traits that predict distinctive patterns of nonverbal communication. One set of related traits—introversion, social anxiety, and affiliation—all reflect a broader *social approach-avoidance* dimension. That is, introverted, socially anxious, and low-affiliation individuals constitute the "social avoidance" end of the continuum, whereas extroverted, non-anxious, high affiliation individuals constitute the "social approach" end. On the sending side of nonverbal communication, social-avoidant individuals typically keep greater distances from others, make less eye contact in interactions, are less expressive, and talk less than social-approach individuals. On the receiving side of nonverbal communication, social-avoidant individuals are less sensitive to others' nonverbal signals and less accurate in social judgments than are social-approach individuals. The decreased judgment accuracy of social-avoidant individuals may follow directly from their decreased gaze, which restricts the amount of information they have available.

A second dimension, *field dependence-independence*, identifies contrasting perceptual, cognitive, and interpersonal styles. Field-dependent individuals are more influenced by broader visual and social contexts than are field-independent individuals. For example, on a perceptual task such as identifying an embedded hidden figure, field-dependent types do not perform well in identifying the figure. That is, they are more dependent on and affected by the surrounding visual context than are field-independent individuals. The same holds for social behavior, with field-dependent individuals being more dependent on, or connected to, other people. Thus, field-dependent individuals prefer closer distances and greater gaze in interactions than do those who are field-independent. The social connectedness of field-dependent individuals is also reflected in higher levels of behavioral mimicry in interactions.

The next dimension, *self-monitoring*, is characterized by the tendency for motivated self-presentation, sensitivity to changing situational norms, and the ability to modify one's behavior for different kinds of goals. That is, high self-monitors are more skillful at reading social situations and more flexible in managing their own behavior than are low self-monitors. High self-monitors are social chameleons who can adapt their behavior to fit the situation and influence others. In contrast, low self-monitors are less sensitive to the changing situational demands and less flexible in their behavioral styles. In general, successful politicians, actors, and salespeople are likely to be high self-monitors.

Sometimes, the extremes of personality veer toward frank psychopathology, with consequences for nonverbal communication. In the syndrome of paranoia (seen in disorders such as schizophrenia, mania, stimulant abuse, posttraumatic stress disorder, and in paranoid personality disorder), sufferers may be overly attuned to the nonverbal behavior of others. They may interpret any nonverbal behavior as signifying malicious intent. They may further interpret the behavior as intended toward them even when it is not, such as interpreting the smirk of a TV news commentator as a personal comment (this is known as a *delusion of reference*). At the other extreme lie the autistic spectrum disorders (ASD). Individuals with these disorders are often insufficiently attuned to the nonverbal behavior of others. In one variant of ASD, known as Asperger's syndrome, individuals can be verbally quite articulate but nonverbally clueless. Such ASD examples point to some degree of "encapsulation" of nonverbal perceptual skills from general verbal fluency.

### Environment

In the earlier discussion of the component cues of nonverbal communication, the design and arrangement of furniture were specific features of the immediate environment that can be manipulated to influence nonverbal communication. There is, however, a much broader role for the environment in shaping patterns of nonverbal communication. Particularly useful in understanding this role is the concept of *behavior settings* from ecological psychology. A behavior setting is a limited geographical location where human and nonhuman elements operate interdependently to facilitate events over a period of time. Examples of a behavior setting include an advanced college history class, a church service, a baseball game, and an office meeting. In each of these settings, there is a physical environment constraining behavioral options, a relatively predictable sequence of events, and social norms for appropriate behavior.

In addition, people select settings and, in turn, settings (ie, the people managing settings) select who may participate in the settings. For example, only a relatively small percentage of college students are interested in the advanced history class, and not all students meet the requirements to enroll in the class. As a result, people in a given setting are likely to have more in common than people sampled across a variety of settings. The combination of the constraints of the physical environment, the pressure of

social norms, and both self- and setting-selection processes increases the likelihood of predictable patterns of nonverbal communication. In contrast to an individual differences explanation for behavior where the cause for people's behavior lies in different personality traits, motives, or attitudes, ecological psychology assumes that behavior is constrained by processes related to the physical and social features of settings.

A variety of other specific environmental features affecting nonverbal communication merit some brief mention here. For example, dimmer lighting can foster increased nonverbal intimacy among romantic partners, but decreased nonverbal intimacy among strangers. Comfortably warm, but not hot, ambient temperatures facilitate more positive impressions of others. In contrast, extreme heat is a stressor that increases the probability of more negative and aggressive encounters. Pleasant odors, such as the smell of pastries, increase the likelihood of helping of others, whereas unpleasant odors decrease helping and lead to more negative impressions of strangers. Finally, the soundscape affects people's moods and their behavior toward others. Much of the research on sound focuses on the aversive effects of noise, reflected in more negative judgments of others and more avoidant behavior. But the opposite can happen also, with the excessive crowd noise and happy celebrations of sports fans of victorious teams, or with excited audiences at major concerts.

### Overview of Determinants

Biology, culture, gender, and personality are the primary determinants of stable patterns of nonverbal communication. The combination of these factors constitute the "baggage" that we all bring to social settings, constraining variability in the sending and receiving sides of nonverbal communication. But the physical and social characteristics of the immediate environment also shape patterns of nonverbal communication. Although these determinants predispose a person toward relatively predictable, and even stereotyped, patterns of nonverbal communication, changing circumstances modify the patterns. Thus, the sending and receiving sides of nonverbal communication change across settings and circumstances, as nonverbal communication operates in the service of different functions.

## Functions

### Providing Information

In social settings, we continuously send and receive information. Appearance characteristics signal basic information regarding gender, race, age, and fitness. Clothing, hair style, grooming, tattoos, and jewelry are frequently indicators of socioeconomic status, group membership, and even personal interests. Behavior provides additional information about personality, attitudes, feelings, and even motives in the situation. It is useful to signal this information to others and to receive it from them. We are the products of those distant ancestors who were effective in their expressive behavior and in gauging the reactions of others.

Automatic judgments are inevitable and relatively accurate. We are not wired to assimilate information and simply suspend judgments until a careful, reasoned assessment occurs. Of course, sometimes rapid judgments are inaccurate and the appropriate corrections require additional reflection. If we are not sufficiently motivated to apply the effort to make the correction, or we are distracted and do not have the necessary cognitive resources, corrections are less likely.

The earlier biology discussion highlighted the importance of appearance characteristics in mate selection and care of offspring. More generally, appearance also informs us whether others are relatively similar to or different from us. Typically, we are more comfortable with others who are more similar to us, and we like them better than those who are different. Although appearance cues are imperfect indicators of what people are really like, they facilitate expectations and adaptive reactions to others.

Even the briefest encounters provide behavioral information about others. Thin slices of behavior, lasting only a few seconds, are sufficient for relatively accurate judgments. In as little as 5–10 s, perceivers make accurate judgments of relationships, status, and competition. In everyday settings, facial expressions, body tension, and speed of movement are critical behaviors that signal how others are likely to act. Finally, behavior can even be self-informing. That is, sometimes we "discover" how we think or feel only after behaving. For example, when we meet someone new, we might realize that we are more engaged and expressive with this person than with others and conclude that we like her. Thus, in some situations, behavior happens first, and it affects how we think and feel later.

### Regulating Interaction

Nonverbal communication plays a central role in the routine give-and-take between people in social settings. But interactions involve more than simply having conversations. The sociologist Erving Goffman used the term "focused interactions" to identify instances where people were having conversations, but he also recognized that interaction often occurs without conversation. People can be interacting when they simply share a close presence with others and accommodate their behavior to them. For Goffman, these were "unfocused interactions," that is, they occurred without words. Examples of unfocused interactions include standing in line at the grocery store, picking a seat in a half-filled waiting room, or passing by strangers in the mall.

In unfocused interactions, we negotiate our position and relationship with others entirely through our nonverbal behavior. For example, we might quickly glance at a stranger as we enter an elevator, but then avoid gaze for the rest of the ride. In this way, we recognize his presence but then grant him privacy. There are, of course, cultural differences in how unfocused interactions are

managed. For example, in Japan, pedestrians approaching one another on the sidewalk are likely to show complete avoidance. In contrast, in the United States, pedestrians frequently glance at the approaching stranger and, occasionally, smile and nod.

In focused interactions, nonverbal communication facilitates the efficient give-and-take of verbal exchanges. Because the momentary goals of speakers and listeners are different, their patterns of nonverbal communication are also different. One of the basic contrasts is that speakers gesture, but listeners do not. Speakers usually gaze less at listeners than do listeners at speakers. This is probably due to the greater cognitive demand involved in speaking than in listening. Thus, gaze avoidance may facilitate speakers' retrieval of verbal content. In fact, speakers occasionally break gazing at the partner as they are searching for the appropriate word. Protracted gaze toward the listener by the speaker is used for emphasis, and prolonged gaze aversion by speakers can signal anxiety, subordination, or indifference. Nevertheless, speaker gaze is important in reading the reactions of the listener and is more likely at the end of a speaker's turn. Listeners gaze relatively more at speakers because part of the verbal meaning lies in speakers' expressive behavior. Listeners often respond to speakers' comments with head nods that signal understanding or agreement. Sometimes, listener vocalizations, such as "yeh," "uh-huh," or "OK" substitute for a head nod. These brief listener vocalizations are not attempts to initiate a speaking turn, but simply reinforce speakers' comments. The absence of listener feedback can be unsettling to a speaker and result in hesitations or rephrasings by the speaker in order to produce the listener's feedback.

Finally, nonverbal communication is critical in the process of taking turns in conversations. As speakers end a turn, the verbal cue of finishing a grammatical clause is complemented by several nonverbal and vocal behaviors. Among these changes are the following: (1) the cessation of gestures; (2) a change in vocal intonation, particularly a pitch drop on the last few words; (3) decreased loudness on the last few syllables; (4) a longer pause, that is, longer than the brief pauses in the middle of a turn; and (5) an increased probability of listener-directed gaze. Listeners who are about to take a turn typically show the following changes: (1) an audible inhalation; (2) a postural readjustment and start of a gesture; and (3) a louder vocalization, that is, compared to the reinforcing listener vocalizations, such as "yeh" or "OK." Thus, our face-to-face contacts, in both unfocused and focused interactions, are primarily regulated by nonverbal communication.

### Expressing Intimacy

Intimacy is an important element in most relationships. In general, as relationship intimacy increases, so does the typical level of nonverbal involvement between partners. For example, good friends are more comfortable with high levels of nonverbal involvement than are mere acquaintances. This might take the form of a close approach, touch, gaze, and expressiveness, but not always. Situational constraints and norms may well limit the appropriate levels of involvement. Lovers behave differently in a business meeting than at a party. In addition, intimate relationships are sometimes characterized by the opposite of high involvement, specifically, ignoring one's partner. Thus, long-term partners may be quite comfortable, on occasion, to ignore one another; entire dinners can occur without a word between them.

It is common to assume that one person's feelings for, or commitment to, a partner determines behavior. This might be described as an inside-out link. That is, greater underlying attachment (feelings and attitudes) precipitates increased nonverbal involvement (external behavior) with a partner. The rapport that is characteristic of people in intimate relationships is also reflected in increased behavioral coordination. This is evident in behavioral mimicry and synchrony in the timing of partners' movements, and, for example, in the ability to finish each other's sentences. Typically this happens automatically and outside of awareness.

The intimacy-behavior link is, however, a reciprocal one; either one can determine the other. In the case of first meetings, appearance affects impressions and initial liking, but the give-and-take of behavior can modify first impressions. For example, a person might notice that she's gazing at her acquaintance and smiling more than usual. She might also lean forward and gesture expressively as she is talking. In turn, her acquaintance might respond with increased behavioral mimicry as a result. Thus, this pattern of reciprocated high nonverbal involvement and mimicry evolves over the course of an interaction, and the interactants "discover" that they like each other.

### Exercising Influence

Influence is present in all kinds of situations, including face-to-face interactions and various types of mediated communication. In general, exercising influence might be described as goal-oriented behavior initiated to change the behavior, attitudes, and feelings of others. Like many of our everyday activities, influence can operate automatically. Sometimes the goal-oriented behavior, and even the goals themselves, operate outside of awareness. There are several different categories of nonverbal influence. First, nonverbal communication is present in instances of *power and dominance*. In the business world, powerful people typically control larger territories, have greater privacy, and more expensive furnishings. These setting features are not only perquisites of powerful people, but also status cues that help regulate contact with others. In addition, powerful people usually have the prerogative of initiating either high involvement in the form of close approaches, high levels of gaze, and touch—or the opposite, in ignoring those with less power. In contrast, when low-status individuals interact with high-status partners, they have to be more careful in attending to the high-status partner and minimizing negative expressions. Finally, high-status individuals are typically more relaxed in interacting with low-status partners than are low-status individuals with high-status partners.

Second, nonverbal communication is important in providing *feedback and reinforcement*. A smile, pat-on-the-back, or a simple head nod can signal approval to a partner, even without a verbal comment. These may act as reinforcers that strengthen the preceding behavior and increase its frequency in the future. This may be particularly important in influencing the behavior of young

children, because for them nonverbal signals may have greater impact than mere words. Third, nonverbal communication is important in *compliance and persuasion*. Extensive research shows that high involvement in the form of a close approach, increased gaze, and touch increases compliance on simple, low-level requests. This might happen with securing small donations or getting people to sign a petition. In such cases, the high involvement may increase stress on the target, and compliance is the easiest way to end an uncomfortable interaction. Changing attitudes, the essence of persuasion, is more complicated and requires an opportunity to reflect on the message and evaluate its merits. Because high involvement is stressful and distracting, it interferes with cognitive processing and is less effective than moderate involvement. Thus, different tactics are effective in gaining simple behavioral compliance versus longer term persuasion.

Finally, nonverbal communication is critical in *deception*. Effective deception requires that liars manage their nonverbal behavior to be consistent with the verbal lie. Sometimes successful detection of deception is the result of targets noticing the inconsistency between the verbal statement and the accompanying nonverbal behavior. In some cases, these discrepancies are present in the facial expressions and gestures of liars, especially when the liars are themselves conflicted about lying and betray signs of conflict. Even when these discrepancies are evident, most people are only slightly better than chance at detecting lies. Furthermore, our perceived confidence in detecting lies is unrelated to actual accuracy in detection. This is another example of our having relatively little insight into our own judgments.

### Managing Impressions

Nonverbal communication is also critical in impression management. People can change their appearance, clothing, and grooming, and most importantly, their behavior, in order to create particular images or identities. In some cases, people invest considerable time, energy, and resources to modify their appearance. This might include plastic surgery, weight loss programs, exercise, hair replacement, and other interventions, all designed to fashion a more desirable appearance. Behavioral changes are more common as people routinely enter settings with conscious or unconscious goals of creating particular impressions in others. For example, in a job interview, applicants are likely to be more expressive, attentive, and responsive to the interviewer on the sending side of nonverbal communication, than they would be in casual conversation. In addition, on the receiving side of nonverbal communication, applicants will attend closely to any nonverbal signs of approval or disapproval from the interviewer, and they will adjust their behavior accordingly. Similar self-presentation efforts might be initiated on first dates, interacting with one's supervisor, and meeting important people.

Managing impressions is particularly important in politics, and election outcomes are often affected by the appearance and behavioral style of candidates. Actors and politicians are well known for hiring expensive media consultants to help them tailor and refashion their images. Defense attorneys in high-profile cases hire such consultants to "make over" their clients to increase the odds of acquittal. Sometimes impression management requires an accomplice in creating a pair or couple identity. For example, at a family gathering, a feuding couple might try to sustain the image of a happy marriage by being attentive and affectionate, even though they can barely stand one another.

### Summary

Nonverbal communication is pervasive in both face-to-face and mediated communication. Because much of nonverbal communication operates automatically and often outside of awareness, it provides an efficient means of regulating our social contacts with others. The determinants of biology, culture, gender, personality, and the environment shape stable patterns of nonverbal communication. Nevertheless, the flexibility and utility of nonverbal communication are evident in several distinct functions, including providing information, regulating interaction, expressing intimacy, exercising influence, and managing impressions. Thus, the complementary behavioral and social judgment tracks of nonverbal communication constitute an indispensable system for navigating our social worlds.

### Further Reading

- Ambady, N., Bernieri, F.J., Richeson, J.A., 2000. Toward a histology of social behavior: judgmental accuracy from thin slices of the behavioral stream. In: Zanna, M.P. (Ed.), *Advances in Experimental Social Psychology*, vol. 32. Academic Press, San Diego, CA, pp. 201–271.
- Burgoon, J.K., Dunbar, N.E., 2006. Nonverbal expressions of power and dominance in human relationships. In: Manusov, V., Patterson, M.L. (Eds.), *The Sage Handbook of Nonverbal Communication*. Sage Publications, Thousand Oaks, CA, pp. 279–297.
- Dijksterhuis, A., Bargh, J.A., 2001. The perception-behavior expressway: automatic effects of social perception on social behavior. In: Zanna, M.P. (Ed.), *Advances in Experimental Social Psychology*, vol. 33. Academic Press, San Diego, CA, pp. 1–40.
- Ekman, P., 1993. Facial expression and emotion. *Am. Psychol.* 48, 384–392.
- Fridlund, A.J., 1994. *Human Facial Expression: An Evolutionary View*. Academic Press, San Diego, CA.
- Goffman, E., 1971. *Relations in Public*. Harper Colophon, New York.
- Hall, E.T., 1966. *The Hidden Dimension*. Doubleday, Garden City, NY.
- Hall, J.A., 2006. Women's and men's nonverbal communication. In: Manusov, V., Patterson, M.L. (Eds.), *The Sage Handbook of Nonverbal Communication*. Sage Publications, Thousand Oaks, CA, pp. 201–218.
- Krauss, R.M., 1998. Why do we gesture when we speak? *Curr. Dir. Psychol. Sci.* 7, 54–60.

- Manusov, V., Patterson, M.L. (Eds.), 2006. *The Sage Handbook of Nonverbal Communication*. Sage Publications, Thousand Oaks, CA.
- Matsumoto, D., 2006. Culture and nonverbal behavior. In: Manusov, V., Patterson, M.L. (Eds.), *The Sage Handbook of Nonverbal Communication*. Sage Publications, Thousand Oaks, CA, pp. 219–235.
- Matsumoto, D., Hwang, H.C., Frank, M.G. (Eds.), 2016. *APA Handbook of Nonverbal Communication*. APA Books, Washington, DC.
- Parkinson, B., 2005. Do facial movements express emotions or communicate motives? *Pers. Soc. Psychol. Rev.* 9, 278–311.
- Patterson, M.L., 1983. *Nonverbal Behavior: A Functional Perspective*. Springer-Verlag, New York.
- Patterson, M.L., 2008. Back to social behavior: mining the mundane. *Basic Appl. Soc. Psychol.* 30, 93–101.
- Patterson, M.L., 2011. *More than Words: The Power of Nonverbal Communication*. Editorial Aresta, Barcelona, Spain.
- Patterson, M.L., 2014. Reflections on historical trends and prospects in contemporary nonverbal research. *J. Nonverbal Behav.* 38, 171–180.
- Patterson, M.L., Iizuka, Y., Tubbs, M., Ansel, J., Tsutsumi, M., Anson, J., 2007. Passing encounters East and west: comparing Japanese and American pedestrian interactions. *J. Nonverbal Behav.* 31, 155–166.
- Patterson, M.L., Quadflieg, S., 2016. The physical environment and nonverbal communication. In: Matsumoto, D., Hwang, H.C., Frank, M.G. (Eds.), *APA Handbook of Nonverbal Communication*. APA Books, Washington, DC.
- Wilson, T.D., 2002. *Strangers to Ourselves: Discovering the Adaptive Unconscious*. Harvard University Press, Cambridge, MA.
- Zebrowitz, L.A., 1997. *Reading Faces: Window to the Soul?* Westview Press, Boulder, CO.

## Relevant Websites

- [http://www.uni-regensburg.de/Fakultaeten/phil\\_Fak\\_II/Psychologie/Psy\\_II/beautycheck/english/kontakt/kontakt.htm](http://www.uni-regensburg.de/Fakultaeten/phil_Fak_II/Psychologie/Psy_II/beautycheck/english/kontakt/kontakt.htm) – Beauty Check (last accessed on 02.06.16).
- <http://nonverbal.ucsc.edu/> – Exploring Nonverbal Communication (last accessed on 02.06.16.).
- <http://www.springer.com/psychology/personality+%26+social+psychology/journal/> – Journal of Nonverbal Behavior (last accessed on 02.06.16.).
- <http://umresearchboard.org/resources/52> – Miles Patterson's Research (last accessed on 02.06.16.).
- <http://www.media.mit.edu/events/movies/video.php?id=ambady-2005-04-01> – Nalini Ambady and Thin Slices of Behavior (last accessed on 02.06.16.).
- <http://www.sagepub.com/booksProdDesc.nav?prodId=Book226551> – Sage Handbook of Nonverbal Communication (last accessed on 02.06.16.).