A widely recognized problem with the term 'language' is the great range of its application. This word has prompted innumerable definitions. Some focus on the general concept of 'language', some on the more specific notion of 'a language'. Some draw attention to the formal features of phonology (or graphology), grammar, and semantics (Parts III–V). Some emphasize the range of functions that language performs (Parts i, ii). Some stress the differences between language and other forms of human, animal, or machine communication (see below). Some point to the similarities. At one extreme, there are definitions that are highly technical in character; at the other, there are extremely general statements, reflecting the way in which the notion has been applied figuratively to all forms of human behaviour, such as the 'language' of music, cookery, or the cinema.

Most textbooks in the subject avoid the problem, preferring to characterize the notion of language rather than define it. They recognize that the question of identifying an individual language has no single, simple answer, because formal and social criteria are often in conflict (§47). Similarly, they note the correspondingly complex problems that arise when attempting to construct a definition of language in general that makes a precise and comprehensive statement about formal and functional universal properties. The set of definitions given below exemplifies the way different writers have attempted to tackle the problem, and illustrates some of the difficulties involved. There seems little to be gained by trying to summarize the content of the present volume in a single sentence – unless it is the banal observation that 'language' is what this encyclopedia is about!

A more useful approach to language, and one used by most modern linguists, is to identify the various properties that are thought to be its essential defining characteristics. The aim is to determine what 'counts' as a human language, as opposed to some other system of communication. Two main kinds of enquiry have been used. One focusses upon identifying the universal structural properties of language, and this is discussed in Part III (§§13–15). The other is to contrast language with non-human forms of communication and with other forms of human communication.

**DESIGN FEATURES OF COMMUNICATION**

The most widely acknowledged comparative approach has been that proposed by the American linguist Charles Hockett (1916–, who used a zoological mode of enquiry to identify the main points of connection between language and other systems of communication, especially those found in animals. His set of 13 design features of communication using spoken language were as follows:

- **Auditory–vocal channel** Sound is used between mouth and ear, as opposed to a visual, tactile, or other means (pp. 401–3).
- **Broadcast transmission and directional reception** A signal can be heard by any auditory system within earshot, and the source can be located using the ears' direction-finding ability (p. 142).
- **Rapid fading** Auditory signals are transitory, and do not await the hearer's convenience (unlike animal tracks, or writing, §31).
- **Interchangeability** Speakers of a language can reproduce any linguistic message they can understand (unlike the differing courtship behaviour of males and females in several species).

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**Language definitions**

Language is a purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols. (E. Sapir, 1921.)

A language is a system of arbitrary vocal symbols by means of which the members of a society interact in terms of their total culture. (G. Trager, 1949.)

A language is a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements. (A. N. Chomsky, 1957.)

Language is 'the institution whereby humans communicate and interact with each other by means of habitually used oral–auditory arbitrary symbols'. (R. A. Hall, 1964.)

**A dictionary definition**

1. The words, their pronunciation, and the methods of combining them used and understood by a considerable community and established by long usage.
2a. Audible, articulate, meaningful sound as produced by the action of the vocal organs.
2b. A systematic means of communicating ideas or feelings by the use of conventionalized signs, sounds, gestures, or marks having understood meanings.
2c. An artificially constructed primarily formal system of signs and symbols (as symbolic logic) including rules for the formation of admissible expressions and for their transformation.
3d. The means by which animals communicate or are thought to communicate with each other.
3. The faculty of verbal expression and the use of words in human intercourse... significant communication.
4. A special manner or use of expression. (Webster's Third New International Dictionary, 1961.)

**And a comment**

The question 'What is language?' is comparable with — and, some would say, hardly less profound than — 'What is life?'; the presuppositions of which circumscribe and unify the biological sciences... It is not so much the question itself... as the particular interpretation that the biologist puts upon it and the unravelling of its more detailed implications within some currently accepted theoretical framework that nourish the biologist's day-to-day speculations and research. So it is for the linguist in relation to the question 'What is language?' (J. Lyons, 1981, p. 1.)
**Total feedback** Speakers hear and can reflect upon everything that they say (unlike the visual displays often used in animal courtship, which are not visible to the display)

- **Specialization** The sound waves of speech have no function other than to signal meaning (unlike the audible panting of dogs, which has a biological purpose).
- **Semanticity** The elements of the signal convey meaning through their stable association with real-world situations (unlike dog panting, which does not ‘mean’ a dog is hot; it is ‘part of’ being hot).
- **Arbitrariness** There is no dependence of the element of the signal on the nature of the reality to which it refers (unlike the speed of bee ‘dancing’, which directly reflects the distance of the nectar from the hive).
- **Discreteness** Speech uses a small set of sound elements that clearly contrast with each other (unlike growling, and other emotional noises, where there are continuous scales of variation in strength).
- **Displacement** It is possible to talk about events remote in space or time from the situation of the speaker (unlike most animal cries, which reflect immediate environmental stimuli).
- **Productivity** There is an infinite capacity to express and understand meaning, by using old sentence elements to produce new sentences (unlike the limited, fixed set of calls used by animals).
- **Traditional transmission** Language is transmitted from one generation to the next primarily by a process of teaching and learning (unlike the bee’s ability to communicate the source of nectar, which is passed on genetically).
- **Duality of patterning** The sounds of language have no intrinsic meaning, but combine in different ways to form elements (such as words) that do convey meaning (unlike animal calls, which cannot be analysed into two such levels of structure).

---

The applicability of the 13 design features to six systems of communication (after C. F. Hockett, 1960, pp. 10–11). The music column refers only to western music since the time of Bach. A question mark indicates that it is unclear or unknown whether a system has a particular feature. A blank space indicates that a feature cannot be determined because other information is lacking.

<table>
<thead>
<tr>
<th>Bee dancing</th>
<th>Stickleback courtship</th>
<th>Western meadowlark song</th>
<th>Gibbon calls</th>
<th>Language</th>
<th>Instrumental music</th>
</tr>
</thead>
<tbody>
<tr>
<td>The vocal-auditory channel</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Broadcast transmission and directional reception</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Rapid fading</td>
<td>?</td>
<td>?</td>
<td>yes</td>
<td>yes, repeated</td>
<td>yes</td>
</tr>
<tr>
<td>Interchangeability</td>
<td>limited</td>
<td>no</td>
<td>?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Total feedback</td>
<td>?</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Specialization</td>
<td>?</td>
<td>in part</td>
<td>yes?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Semanticity</td>
<td>yes</td>
<td>no</td>
<td>in part?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Arbitrariness</td>
<td>no</td>
<td></td>
<td>if semantic, yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
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<td>no</td>
<td>?</td>
<td>?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Displacement</td>
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<td></td>
<td>?</td>
<td>no</td>
<td>yes, often</td>
</tr>
<tr>
<td>Productivity</td>
<td>yes</td>
<td>no</td>
<td>?</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Traditional transmission</td>
<td>probably not</td>
<td>no?</td>
<td>?</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Duality of patterning</td>
<td>no</td>
<td></td>
<td>?</td>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

The ‘language’ of bees One of the most closely investigated forms of animal communication is the ‘dance’ performed by a honey bee when it returns to the hive, which conveys precise information about the source and amount of food it has discovered. Several kinds of movement pattern have been observed. In the ‘round dance’ (above, left) when the food source is close to the hive, the bee moves in circles alternately to left and right. In the ‘tall-wagging dance’ (above, right), used when the food source is further away, the bee moves in a straight line while wagging her abdomen from side to side, then returns to her starting point. The straight line points in the direction of the food, the liveliness of the dance indicates how rich a source it is, and the tempo of the dance provides information about its distance. For example, in one study, an experimental feeding dish 330 metres from the hive was indicated by 15 complete runs through the pattern in 30 seconds, whereas when the dish was moved to 700 metres distance, only 11 runs were carried out in that time. No other animal communication system seems able to provide such a quantity of precise information – except human language. (After K. von Frisch, 1962.)
CHIMP COMMUNICATION

The formal and functional complexity of language is such a distinctive human trait that many scholars think the designation homo loquens ('speaking man') to be a better way of identifying the species than any other single criterion that has been suggested (such as tool using) (p. 291). This is not to disregard the complex patterns that have been observed in the natural communicative systems of birds, insects, apes, and other animals (the subject matter of the field of zoosemiotics). But no animal system remotely compares with the level of sophistication found in human language. The evolutionary gap is very wide. Only the recent experiments in teaching language to chimpanzees have suggested that this gap may be somewhat narrower than has traditionally been assumed.

Early experiments to teach chimpanzees to communicate with their voices failed because of the insufficiencies of the animals' vocal organs (p. 290). However, when attempts were made to communicate with them using the hands, by teaching a selection of signs from American Sign Language (ASL), see Part vi), dramatic progress was claimed. The first subject was a female chimpanzee named Washoe, whose training began in 1966 when she was less than a year old. It took her just over four years to acquire 132 ASL signs, many of which bore striking similarities to the general word meanings observed in child language acquisition (Part vii). She also began to put signs together to express a small set of meaning relations, which resembled some of the early sentences of young children, such as want berry, time drink, there shoe (B. T. & R. A. Gardner, 1975).

Since then, several other chimpanzees (and also gorillas) have acquired a vocabulary of signs, and alternative teaching procedures have been tried. For example, in the case of the chimps Moja and Pili, sign language teaching began soon after birth, and training was carried out by native signers. Both chimps began to sign when they were about 3 months old, and had over a dozen signs by the age of 6 months—a marked contrast with Washoe, who had only 2 signs after 6 months of training.

A quite different way of proceeding was introduced in the case of a 5-year-old chimpanzee called Sarah, in a research programme that began in 1954 (D. & A. J. Premack, 1983). She (and, later, several others) was taught a form of written language—to arrange and respond to vertical sequences of plastic tokens on a magnetic board. Each token represented a word, e.g. small blue triangle = apple, small pink square = banana. In due course, the trainer was able to teach Sarah to respond correctly to several basic semantic sequences (e.g. 'give Mary apple'), including a number of more abstract notions, such as ‘same/different’ and ‘if/then’ (e.g. apple different banana).

Chimp language research attracted considerable media publicity in its early years, with reporters focussing on the implications of the work. What would chimps say if they could use language? What would they think of the human race? Would they claim civil rights? Such speculations were wholly premature, given the limited findings of the research to date. These findings are in any case controversial, receiving a range of reactions extending from total support to total antipathy. A variety of interpretations seems possible. It is evident that chimps can learn to imitate signs, combine them into sequences, and use them in different contexts, but the explanation of this behaviour is less clear. Many scholars believe that the chimps’ behaviour can be explained as a simplified imitation rather than as evidence for some form of linguistic processing, and they argue the need for fuller accounts to be provided ofchimp behaviour, and of the training methods used, in order to evaluate the claims being made about learning. More systematic data have begun to be collected, but it will be some time before these questions can be resolved.

Washoe’s words

Washoe’s typical vocabulary can be seen from the signs she used in a study of her responses to 500 question pairs. The signs were grouped in 13 general types:

Proper names (her companions)
Don, Dr G, Greg, Roger, Lynn, Mrs G, Susan, Wash

Pronouns
me, we, you

Common nouns
baby, dirty, nut
bath, drink, pants
bed, flower, pencil
berry, food, purse
bird, fruit, ride
blanket, gun, shoe
book, hammer, smoke
brush, hat, spoon
bug, ice, swall
lemon, key, sweet
cereal, leaf, tree
chair, listen, water
clock, look, wind
cheese, lollipop, wiper
clothes, man, woman

Possessives
mine, yours

Traits
funny, good, hungry, stumpy

Colours
black, white, green, red

Temporal
time

Negative
can’t, enough, no

Impersonal
gimme, help

Appetitive
please, want

Quantitative
hurry, more

Verbs
bite, catch, cry, go, hug, open, peekaboo, smile, talk

Locatives
in, out, up, there

Typical sequences
Me Washoe Food fruit
You me out Time drink
Susan bite Good me there
Sarah’s symbols (left)
Symbols used in communicating with Sarah and the other chimps (colour is not shown). (From D. Premack & A. J. Premack, 1983, p. 21.)
Semiotics

Language can also be studied as part of a much wider domain of enquiry: semiology, or semiotics. This field investigates the structure of all possible sign systems, and the role these play in the way we create and perceive patterns (or 'meanings') in sociocultural behaviour. The subject is all-inclusive, therefore, dealing with patterned human communication in all its modes (sound, sight, touch, smell, and taste) and in all contexts (e.g., dance, film, politics, eating, clothing). The subject matter of the present book would form but a small section of any proposed encyclopedia of semiotics.

AUDITORY–VOCAL

The diagram below shows the relationship between language, as identified in Parts III–VI, and other aspects of human communication. The structured use of the auditory–vocal mode, or channel (p. 400), results in the primary manifestation of language: speech. But non-linguistic uses of the vocal tract are also possible: physiological reflexes, such as coughing and snoring; musical effects, such as whistling; and the communication of identity, in the form of voice quality (§6). The suprasegmental aspects of vocal expression (§29) are usually included within the study of language, though it is difficult to draw a clear-cut boundary line between some of these effects (those placed under the heading of 'paralanguage', such as giggling and whispering) and those that clearly fall outside language.

VISUAL

The visual mode is used for a variety of purposes, some linguistic, some not. The primary way in which visual effects have a linguistic use is in the various deaf sign languages (Part VI). In addition, there is the historically derivative use of the visual mode that resulted in the development of written language. Further writing-based codes, such as semaphore and morse, would also be included here. Non-linguistic forms of visual communication include the systems of facial expression and bodily gesture, which are the subject matter of kinesics (p. 402).

TACTILE

Tactile communication has very limited linguistic function, apart from its use in deaf–blind communication and in various secret codes based on spoken or written language (p. 58). Its main uses are non-linguistic, in the form of the various ways in which bodily contact and physical distance between people can signal contrasts of meaning—the subject matter of proxemics (p. 401).

The communicative use of the visual and tactile modes is often referred to as 'nonverbal communication', especially in academic discussion. In everyday terms, it is the area of 'body language'.

OLFACTORY AND GUSTATORY

There seems to be little active role for the olfactory and gustatory modes in human communication (a marked contrast with the important use of these senses for communicative purposes in the animal kingdom). However, they do play an important part in our perception of information about the outside world (e.g., in smelling and tasting food). The communicative use of body odour seems to have a mainly sexual role in human society; but there are several anecdotes of its use in other domains. One linguist even claimed to be able to tell when his informants (p. 410) were under strain (and perhaps therefore were being less reliable) by the different body odour they exuded!

Other modes? This is the pictographic message transmitted into space by the Arecibo radio telescope in Puerto Rico in 1974. The signal was aimed at the cluster of 300,000 stars, known as M13, in the Hercules constellation.

The message consists of a series of radio pulses which can be arranged into a pictogram. It includes data on the chemical basis of life on earth, the human form, and the solar system. It assumes, of course, that the communicative system of the receiving species is capable of responding to the same semiotic contrasts as are displayed in the pictogram (shape, length, etc.). If the entity receiving the signal happens to have a communicative system based on, say, heat, the astronomers will have wasted their time!

The Hercules constellation is 24,000 light years away—which means that, if any one thing is there to receive it, and choses to reply, the response should arrive in about 50,000 years' time.
AUDITORY–VOCAL EFFECTS

The main systems of communication using the auditory–vocal channel have been described elsewhere in this volume (Part IV). However, from time to time linguists have reported types of auditory communication that fall outside the normal use of the vocal apparatus — notably, the whistled speech of several rural populations. This is found in some Central and South American tribes, as well as in the occasional European community (e.g. in Turkey and the Canary Islands, based on Turkish and Spanish respectively).

Whistled speech

Eusebio Martínez was observed one day standing in front of his hut, whistling to a man a considerable distance away. The man was passing on the trail below, going to market to sell a load of corn leaves which he was carrying. The man answered Eusebio’s whistle with a whistle. This interchange was repeated several times with different whistles. Finally the man turned around, retraced his steps a short way and came up the footpath to Eusebio’s hut. Without saying a word he dumped his load on the ground. Eusebio looked over, went into his hut, returned with some money, and paid the man his price. The man turned left. Not a word had been spoken. They had talked, bargained over the price, and come to an agreement satisfactory to both parties — using only whistles as a medium of communication. (G. M. Cowan, 1948, p. 280.)

This conversation took place between Mazateco speakers, members of a tribe that lives in and around the State of Oaxaca, Mexico. The whistled conversations closely correspond to patterns of spoken language, as has been shown by having the whistlers translate their tunes into speech. It is thus quite unlike the unstructured whistling patterns used as attention signals (e.g. ‘wolf-whistling’) in Euro-American culture. For example, in the following sequence of whistled utterances (where the tones are classified from 1 (high) to 4 (low), and glides between tones are marked by a dash), quite specific meanings are signalled, as the following transcription of Mazateco shows:

1,1,3,3,2,2 hme1 'pa1 si1 ki1-2 'i1-te1 ve4
‘What did you bring there?’

1,4,1,1 'pa1 na1 hme1 ni1
‘It is a load of corn.’

1,3,3,3,4 hra1 ti1-3 mi1 koa1 ni1
‘Well where are you going with it?’

3,2,4,2,4,2 te1 na1 nka1 ti3-2 nhta1 koa1
‘I am going to Tenango.’

3,3,3,3,2,2-2,4,3,2,4,2,4 te1 te1 na1 ni1-3 ni1
‘Are you going to sell it then?’

2,3,3,2,2,3 ti1-3 uht1 ka1 te1 na1-3
‘I am going to sell it.’

1,1,3,3,2,4,2,3-3,1,4 ho1 thi1 pa1 ni2
‘How much will you take then? Sell it to me here.’

4,3,4,3,3,3,2,4 kaa1-3 tao1 ko1-3 nka1 hmk1 ka1-3 sa1
‘I will take $2.30 a box.’

(G. M. Cowan, 1948, pp. 284–5.)

The whistled tunes are based on the patterns of tone and rhythm used in the spoken language, and can convey precise distinctions. With very few exceptions, each ‘syllable’ of whistle corresponds to a syllable of speech. Ambiguity is uncommon, because the topic of the conversation is usually something evident in the situation of the speakers. However, it is important for both speakers to use the same musical key, otherwise confusion may arise.

Whistled dialogues tend to contain a small number of exchanges, and the utterances are short. They are most commonly heard when people are at a distance from each other (e.g. when working the land), but they can also be found in a variety of informal settings. Although women are able to understand whistled speech, it is normally used only by and between males.

Drum signalling

In several parts of the world — notably Africa, the Americas, and the Pacific — drums, gongs, horns, and other musical instruments have been used to simulate selected features of speech (primarily, tones and rhythms). In Africa, drums are the usual instruments involved, and quite elaborate systems of communication have developed.

One system, used among the Jabo tribe of Eastern Liberia, makes use of a wooden signal ‘drum’ (actually, more like a bell, as it has no skin covering) — a hollowed tree trunk, often over 2 metres in length. This has a longitudinal slit with lips varying in thickness, thus allowing several different tones to be produced. Two straight sticks are used for beating, and further tonal variations can be made by altering the way these sticks hit the drum. Other types of drum are also used for different purposes (such as dancing).

The drummer, an official of the town’s law-enforcing authority, controls the way meetings take place, using special signals to do such things as call for order, summon people, and end the meeting. These signals consist mainly of fixed formulae, with a few variations and additions. The Jabo rarely use these drums for communicating with other villages (unlike the drum signalling found in other parts of Africa).

The words and syllables of Jabo are tonal (§29): there are four basic tones, which are often linked by glides, and these glides interact with aspects of the vowel and consonant system. There is also considerable variation in the length of these tonal contrasts, which accounts for several of the drum patterns used. Some examples of these signals, with a transcription in Jabo, are given below.

(From G. Herzog, 1945.)
TACTILE EFFECTS

The communicative use of touching behaviour, proxemics, has in recent years attracted a great deal of research by psychologists, sociologists, and anthropologists. A very wide range of activities is involved, as is suggested by this small selection of terms expressing bodily contact:

embrace  lay on (hands)  punch
guide  link (arms)  shake (hands)
hold  nudge  slap
kick  pat  spank
kiss  pinch  tickle

The communicative value of tactile activities is usually fairly clear within a culture, as they comprise some of the most primitive kinds of social interaction (several of the activities are found between animals). They express such 'meanings' as affection, aggression (both real and pretend), sexual attraction, greeting and leave taking, congratulation, gratitude, and the signalling of attention. They operate within a complex system of social constraints: some of the acts tend to be found only in private (notably, sexual touching); some are specialized in function (e.g. the tactile activities carried on by doctors, dentists, hairdressers, or tailors); and some are restricted to certain ceremonies (e.g. weddings, graduation, healing). Everyone has a subjective impression about how these activities take place, and what they mean. But there are many differences in behaviour between individuals and groups, and it is not easy to make accurate generalizations about society as a whole.

It is difficult to study tactile activity in an objective way: a basic problem is how to obtain clear recordings in which the participants are unaware of the observer (especially if the behaviour is being filmed). There are thus few detailed accounts of the range of communicative tactile acts in a society, and of the factors governing their use. It is evident, however, that some societies are much more tolerant of touching than others, so much so that a distinction has been proposed between 'contact' and 'non-contact' societies — those that favour touching (such as Arabs and Latin Americans), and those that avoid it (such as North Europeans and Indians). In one study of couples sitting together in cafés, it was found that in Puerto Rico the people touched each other on average 180 times an hour; in Paris it was 110 times an hour; whereas in London there was no touching at all (S. M. Jourard, 1963).

The distance people stand from each other, and the way they hold their bodies when interacting, are other important facets of proxemic behaviour. There are norms of proximity and orientation within a culture that communicate information about the social relationship between the participants. A common research procedure is to observe the point at which people are made to feel uncomfortable when others invade their 'body space', by moving too close to them (e.g. in a queue, outside a cinema, on a beach). Any cultural variations can easily lead to conflict and misinterpretations. Latin Americans, for example, prefer to stand much closer to each other than North Europeans, so that when the former and the latter converse, there may be a problem. The present author recalls one such conflict during a conversation with a student from Brazil, who came and stood before him at some 45 cm distance — a normal interaction distance for her, but much too close for him. He instinctively moved back to the distance he found most comfortable — nearer 1 metre. However, as he did so, the student moved forward, unconsciously maintaining her own norm. He retreated further, not wishing to be so close to the student. After both had circled the desk several times, he capitulated, and asked her to sit down!

Distance zones

An American study suggests that there may be four proximity zones when people interact:
- Intimate Less than 45 cm, used for intimate relationships.
- Personal Between 45 cm and 1.3 metres, for reasonably close relationships.
- Social Consultative Between 3 and 4 metres, for more impersonal relationships.
- Public Above 4 metres, for public figures and public occasions.

(T. E. Hall, 1959.)

The rules of Indian caste (p. 38) illustrate the point even more precisely. According to tradition in one part of India, members of each caste may not approach each other within the following distances:
- Brahmins — Nayars: 2 metres
- Nayars — Iravans: 8 metres
- Iravans — Cherumans: 10 metres
- Cherumans — Nayadis: 20 metres

The rules, which are still followed in some areas, work in an additive way: thus, a Nayadi may not come closer to a Brahmin than 40 metres (M. Argyle, 1975).
VISUAL EFFECTS

The field of non-verbal visual communication, kinesics, can be broken down into several components: facial expression, eye contact, gesture, and body posture. Each component performs a variety of functions. Movements of the face and body can give clues to a person's personality and emotional state. The face, in particular, signals a wide range of emotions, such as fear, happiness, sadness, anger, surprise, interest, and disgust, many of the expressions varying in meaning from culture to culture. In addition, the face and body send signals about the way a social interaction is proceeding: patterns of eye contact show who is talking to whom; facial expression provides feedback to the speaker, expressing such meanings as puzzlement or disbelief; and body posture conveys a person’s attitude towards the interaction (e.g. relaxation, interest, boredom). Several kinds of social context are associated with specific facial or body behaviours (e.g. waving while taking leave). Ritual or official occasions are often primarily marked by such factors as kneeling, standing, bowing, or blessing.

Visual effects interact very specifically with speech. Gestures and head movements tend to coincide with points of emphasis. Hand movements in particular can be used to add visual meaning to what has been said (‘drawing pictures in the air’). Patterns of gaze distinguish the participants in a conversation: a listener looks at a speaker nearly twice as often as the speaker looks at the listener. They also assist in marking the structure of a conversation (§20): for example, speakers tend to look up towards the ends of their utterances, thus giving their listeners a cue that an opportunity to speak is approaching.

Several visual effects may well be universal, but the focus of interest in recent years has been on the cultural differences that can be observed in face and body movements. Some societies use many gestures and facial expressions (e.g. Italian); others use very few (e.g. Japanese). Moreover, a visual effect may seem to be shared between societies, but in fact convey very different meaning. Thus, in France, using a finger to pull down the eyelid means that the speaker is aware of something going on, whereas in Italy the same gesture means that the listener must become aware. Cultural variations in visual effects are among the first things a foreigner notices, but it can be very difficult working out what they mean, and even more difficult deciding whether one is permitted to use them.

Eyebrow flashing

When people greet each other at a distance, wishing to show that they are ready to make social contact, they raise their eyebrows with a rapid movement, keeping them raised for about one-sixth of a second. The behaviour has been noted in many parts of the world, and is considered universal (though some cultures suppress it, e.g. the Japanese, who consider it indecent). We are not usually aware that we use this signal, but it evokes a strong response in a greeting situation, and is often reciprocated. To receive an eyebrow flash from someone we do not know is uncomfortable, embarrassing, or even threatening. (After I. Elb-Eibesfeldt, 1972.) Below: an eyebrow flash made by a Samoan (left) and a Waika Indian (right).

Come here?

Beckoning can be carried out with the palm of the hand facing up or down. People used to the former could interpret the latter to mean 'Go away!' The chart shows the preferred pattern in countries between Britain and North Africa. (After D. Morris et al., 1978.)

Body transcription

Some of the symbols, or kinographs, which have been used in order to transcribe the various movements of face and body. Different sets of symbols have been devised for different areas of the body: head, face, trunk, shoulder/arm/wrist, hand/fingers, hip/leg/ankle, foot activity, and neck. The symbols below are from the set for facial activities. (From R. L. Birdwhistell, 1952.)

- Blank-faced
  - Single raised brow (indicates brow raised)
  - Lowered brow
  - Medial brow contraction
  - Raised brows
  - Wide eyed
  - Wink
  - Sidewise look (slow lick—lips)
  - Focus on auditor (quick lick—lips)
  - Stare
  - Rolled eyes

Slitted eyes
  - Eyes upward
  - Shifty eyes
  - Glare
  - Tongue in cheek
  - Pout
  - Clenched teeth
  - Toothy smile
  - Square smile
  - Open mouth
  - Slow lick—lips
  - Quick lick—lips
  - Moistening lips
  - Lip biting

Being humble

Points of similarity as well as difference can be seen in the expression of an attitude among various cultures. In one early study, the communication of humility was found to make use of such body postures as the following:

- Join hands over head and bow (China).
- Extend or lower arms (Europe).
- Stretch arms towards person and strike them together (Congolese).
- Crouch (Fiji, Tahiti).
- Crawl and shuffle forward; walk on all fours (Dahomey).
- Bend body downward (Samoa).
- Permit someone to place a foot on one’s head (Funaksho, Tonga).
- Prostrate oneself, face down (Polynesia).
- Bow, extend right arm, then move it down; head down (Turkey, Persia).
- Throw oneself on the back, roll from side to side, and slap outside of the thighs (Batonkas). (After M. H. Krout, 1942.)