

## **Communication**

Nicholas Allott

*draft for Den Store Norske Leksikon*

When we communicate we share thoughts by making an action, deliberately and openly. This may involve the use of language, but need not: we can communicate using words but also with gestures. In human communication someone has something in mind that she wants to convey and she produces words or gestures (or both together) with the aim that her intended audience works out what she means.

This description of communication reflects a view held by many linguists and philosophers, but not all: that it makes sense to think of deliberate, open human communication as a distinct category of human action.

There is also a broader view of communication as any behaviour or feature of a organism whose evolutionary function is to transmit information: this would include animal communication systems such as bee dances and the calls of vervet monkeys but also some human behaviour such as smiling.

Both of these ways of looking at communication are explained below, after a brief discussion of the connections between language and communication.

Language and communication are not as closely linked as some people have thought, for two reasons. First, as already mentioned, we can communicate without language. We sometimes communicate with non-linguistic sounds, such as sighing to convey disappointment or happiness. We also use non-linguistic gestures, some conventional or stereotyped, like pointing, nodding and thumbs-up, and others that are improvised on a particular occasion, like miming an action. Note that the point here is not just that we can communicate without speaking or writing (although that is true). Not all languages are spoken or written: the sign-languages of the deaf use gesture, but they are real languages with words arranged into sentences according to a grammar. The point is that we can communicate without words or sentences (spoken, written or signed) and without the use of signals that depend on a pre-arranged code.

The second reason to think that language and communication are not so closely linked comes from modern linguistics. While most philosophers and some linguists assume that the purpose of language is communication, that view has been seriously challenged. In particular, Noam Chomsky has argued that human languages contain many grammatical and meaningful sentences that are not useable. For example 'Cats dogs chase meow' is a perfectly grammatical sentence with the interpretation *Cats that are chased by dogs meow*. It only seems strange and meaningless because it is difficult to process. According to Chomsky, in communication we use the parts of language that we can cope with.

The details are complex, but the argument is straightforward: if human languages were designed (e.g. by evolution) for communication then one would not expect them to include many sentences that are unusable for that purpose. Chomsky also argues that we use language much more in 'inner speech' – the kind of thinking that seems to involve 'hearing' sentences in one's head – than in communication.

Whether or not the purpose of language is communication, the fact that we can communicate without language (e.g. by pointing, or sighing, or miming) shows that communication is not just a matter of saying a sentence that encodes the message that you want to convey.

There is a second reason to think that there is more to communication than this. Even when we speak we often communicate more than is meant by the words that we say. For example, in answer to an invitation to dinner, you might say, "I've already eaten", in order to turn down the invitation. The main point of your utterance here would be what you imply, not what you say directly.

In many other cases, the words that are said fall short of determining any complete meaning. For example, if someone says to you, "He will be ready" you know that she is talking about a male individual and saying that he will be ready for something or other, but you have to work out which individual she meant and what she was saying that he would be ready for.

So we can, and often do, communicate something different from what the words we say literally mean, and we can communicate without using language at all. Both of these

facts demonstrate that there is more to communication than the use of a code. For this reason, many linguists and philosophers, following the philosopher Paul Grice, think that human communication requires inference: the speaker produces an utterance, intending it as a clue to the thought that she wants to convey. This clue may be more or less direct and what she wants to convey may be simple or complex. The task of the hearer of an utterance is to work out from the words or gesture that has been produced what the speaker intended to convey. This is a type of inference that is sometimes called (in philosophy and logic) *inference to the best explanation*.

We often try to work out what caused an event or an action. If you see water coming down through the ceiling you may infer that a pipe is leaking. If you see someone reaching in his pocket as he walks up to a door, you may infer that he intends to unlock the door and is reaching for a key. These are examples of inference to the best explanation.

According to the Gricean view of communication, working out what a speaker meant is the same kind of process. The hearer uses the words and gestures that the speaker has produced as a clue to what she has in mind, given the circumstances. For example, the best explanation for why she has said 'He is ready', pointing at John, in a certain situation, might be that she wants to convey that John is ready to take his driving test.

Communicative actions differ from other actions and other events in that they are produced with the aim of getting across a certain thought. Since the speaker wants to be understood, it is rational for her to make her action a good clue. Hearers are aware of this and so they expect the action to be a good clue and this makes the task of working out what was meant easier than it would otherwise be. Returning to the example above, if someone says 'He is ready' during a discussion of who might take a driving test soon, the speaker knows that the hearer will expect her utterance to be relevant to the situation, so she does not need to say 'ready to take a driving test'. On the other hand, in those circumstances, if she wanted to mean that John is ready for his ascent of Mount Everest she *would not* be able to say just 'He is ready'.

Not all communication is the intentional sharing of information. Many animals communicate in some sense, but it would be strange to say that they intend to share information. For example, honey bees have a complex signalling system for indicating

the direction of flowers containing pollen. A bee that has found some pollen returns to the hive and performs a repeated 'waggle dance' that conveys information about the direction, distance and amount of pollen that she has found. (The direction that she moves in while wagging indicates the direction of the food source, and the number of times that she waggles in each repetition of the dance is proportional to the amount of pollen and inversely proportional to the distance to the food source.) Another well-known animal communication system is the alarm calls of vervet monkeys. Vervets have four distinct alarm calls that they produce in response to four different dangers: leopards, eagles, snakes and baboons.

This sort of animal communication is quite different from human communication. It is non-intentional: a bee dance or a vervet call is a kind of reflex produced by external circumstances (e.g. pollen or a leopard). Also bees and vervet monkeys are apparently restricted to communicating what their signalling systems encode. Their subject matter is restricted (e.g. to the amounts and direction of pollen) and they cannot go beyond the code: there is certainly no metaphor or irony in animal communication, nor do animals improvise mimed actions. Unlike a human utterance, a bee dance or a vervet bark is not a freely-chosen clue to a meaning that has to be inferred.

In fact the fundamental distinction here is not between human and animal communication, but between open, deliberate communication (which seems to be restricted to humans) and non-intentional behaviour whose evolutionary purpose is to convey information. This can be found in humans as well as animals. For example, when someone smiles, that makes available to the people around her the information that she is happy, in much the same way as a dancing bee makes available information about the location of pollen. The person smiling does not have to (and generally does not) have any intention to communicate that she is happy. She may not even know that she is smiling. She smiles because she is happy – and those observing will come to think that she is, because smiling is a reliable indicator of happiness, which we pick up on (mostly) unconsciously. It seems likely that both smiling and bee dancing are bits of behaviour that have been selected for by evolution because they transmit information among members of a species.

Not all behaviour that transmits information is communicative in this sense, though. For example, shivering is a reliable indicator of cold (or shock), but its evolutionary function is presumably to increase temperature, not to signal.

Note also that humans are capable of more complex behaviour. As discussed, a genuine smile is a natural indicator of happiness, but we can also produce fake smiles. What is still more interesting is that if you realise that you are smiling (genuinely) you may choose to let people see your smile, intending to let them know that you are happy. Here the distinctively human capacity to communicate deliberately and openly makes use of an communicative signal provided by evolution.

## References

- Cheney, D. L., & Seyfarth, R. M. *How Monkeys See the World: Inside the Mind of Another Species*, 1990.
- von Frisch, Karl. *The Dance Language and Orientation of Bees*, 1967.
- Grice, Paul. 'Meaning'. *The Philosophical Review*, 66, 377–388, 1957.
- Grice, Paul. 'Logic and conversation'. In *Studies in the Way of Words*, 22–40, 1989.
- Scott-Phillips, Tom C. 'Defining biological communication'. *Journal of Evolutionary Biology*, 21 (2), 387–395.
- Sperber, Daniel. 'How do we communicate?'. I J. Brockman & K. Matson (ed.s), *How Things Are: A Science Toolkit to the Mind*, 1995.
- Wharton, Tim. *Pragmatics and Non-verbal Communication*, 2009.