

Cognitive Pragmatics

The Mental Processes of Communication

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Translated by John Douthwaite

A Bradford Book
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Preface

The basic idea behind this work is that communication is essentially a cooperative activity between two or more people in which the meanings of each transaction are constructed by all those actors together engaged in the shared task of reciprocally attending to the other communicants' words. The aims of the actors engaged in an interaction may differ, but to be able to say that communication has taken place successfully, all the participants must share a set of mental states. The responsibility for communication falls on the shoulders of each and every participant, for they act together in order to realize communication. Focusing on stereotypical roles such as speaker and hearer, or emitter and receiver, confounds the issue by fragmenting into isolated blocks an activity which acquires meaning precisely from being global and collective. Moreover, I shall claim that human beings, unique among animals, possess a basic communicative competence that sustains both the linguistic and the extralinguistic way of expressing it.

Furthermore, if we are to speak of communication and not simply of information transmission, then agents must devote themselves *intentionally* to such common activity. The intention to communicate must be a conscious one: no unconscious intentions exist in communication, even though, as we shall see, one can easily broadcast information unconsciously, about the world and about oneself.

The cognitive emphasis which can be seen in the title of the book itself is justified by the fact that communication will not be examined here from the viewpoint of an external observer, as happens in linguistics and the philosophy of language, where attention is focused on the finished product, whether this be an utterance or a discourse. Instead, I will take a standpoint within the mind of the individual participants, trying to explain how each communicative act is generated mentally—before being realized physically—and then comprehended mentally by the other interlocutors.

My intention is to describe the mental states of the participants in a communicative interaction. In addition to an analytical description, I will also furnish a formal definition of the various mental states, such as belief and intention, offering a number of innovations compared to traditional treatments, thereby offering solutions to problems which have hitherto not found satisfactory explanations. The mental states introduced will then come to constitute a logical model that accounts for both the production and the comprehension of communication acts in the ongoing process of their construction.

From a methodological standpoint, I take my stance within a cognitive science that has been revised from a constructionist standpoint. This corresponds to furnishing first and foremost a formal validation of the theory presented, something I have realized here essentially by deploying logic. From an analytical viewpoint, my standard procedure is to describe the stable state of communication as it is found in normal adults communicating among themselves.

The second important step is connected both to the evolution of the species and to individual development. It consists in defining how both the cerebral substratum, which renders communication possible, and the cognitive architecture, which realizes pragmatics properly speaking, come to be constituted. With regard to evolution, I have traced a possible developmental line, starting from primates and premodern humans.

With regard to individual development, the central point is to define the stages in the acquisition of pragmatic competence, from the first few seconds of birth to adulthood. Hence sets of experimental data taken from the literature and from my own work will be presented to support cognitive pragmatics. Finally, a valid theory should be able to correlate with the neurosciences, predicting how communicative capacities may decline with age, or suffer damage as a consequence of given pathologies that may be general—as in Alzheimer's disease—or focal—as is the case with brain injury. I will offer data supporting cognitive pragmatics in this area too.

In sum, I have attempted to corroborate the theory advanced in these pages with various scientific methodologies: with formal logic, with anthropology, with developmental psychology, and with the neurosciences. I take linguistics and psychology for granted. The book contains a number of formulas, which have helped me to clarify concepts that would have been difficult to express only through the medium of words. However, the number of formulas is relatively small and they are not too difficult to understand.

All the intellectual work presented in this book was carried out at the Center for Cognitive Science at the University and Polytechnic of Turin, a center I founded in 1994 together with Gabriella Airenti, Monica Bucciarelli, and Maurizio Tirassa. Over the years, we have been joined by a number of colleagues, the closest of whom are: Mauro Adenzato, Cristina Becchio, Francesca Bosco, Livia Colle, Ilaria Cutica, and Giuliano Geminiani. This limited group of collaborators has been supported by other researchers, the most assiduous of whom have been Romina Angeleri, Rita Ardito, Angela Ciaramidaro, Marco Del Giudice, Ivan Enzici, Katiuscia Sacco, Valeria Manera, and our general manager, Cesare Bertone.

The objective of expressing thanks is to recognize debts, not to pay them off in full. In addition to the friends I have just mentioned, I owe a special debt to Philip Johnson-Laird, a model who cannot be equaled and who is an extremely severe judge when it comes to carrying out research; to John Searle, an affectionate and critical master of intellectual analysis; and to Steven Small, an ever-encouraging friend. I name the first last: John Douthwaite, who, in translating the book competently and generously, helped to creatively strengthen any weaker points in my analysis.

Marc Lowenthal and Judith Feldmann of the MIT Press gently and competently drove me through the unexpected, smoothing any asperity.

The first draft of the book was actually written during two consecutive stays as Visiting Scientist at the International Computer Science Institute (ICSI) in Berkeley, California. The research facilities at the ICSI and the people who work and study at University of California at Berkeley helped to make the writing of the book an easier and more enlivening task. The final version has been edited in front of a different sea: the Mediterranean, on the Ligurian riviera.

My daughters Simona and Elena provided me with a sense of proportion and detachment; all seasoned with their continual happiness, especially when they accompanied me on my trips to the United States, enriching weeks of paperwork with art, fashion, tennis and sailing.

All these good friends have shared with me their intelligence and their emotions, enabling me to pretend that what I was doing was called work when in actual fact, deep down, I was enjoying myself beyond belief.