## NON-VERBAL COMMUNICATION

## CAMBRIDGE

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Andaman Islander (from A. R. Radcliffe-Brown, *The Andaman Islanders*, C.U.P.)



Mme. Proust with her sons (from G. D. Painter, *Marcel Proust*, Chatto & Windus).

(frontispiece)

# NON-VERBAL COMMUNICATION

edited by

**R. A. HINDE** Royal Society Research Professor in the University of Cambridge Honorary Director of the MRC Unit on the Development and Integration of Behaviour

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## PREFACE

In 1965 Sir Julian Huxley organized, and the Royal Society sponsored, a three-day meeting on the 'Ritualization of behaviour in man and animals'. The proceedings were lively and fertile, and the papers submitted were subsequently published in the Philosophical Transactions of the Royal Society (1966, **251**, 247-526).

It was apparent to those who attended the meeting that, although many of the individual contributions were of great interest, the terms 'ritual' and 'ritualization' were being used in quite different senses by students of animal behaviour, by psychologists, and by anthropologists. Although relatively little contact was achieved between these groups, many felt that contact could perhaps be achieved at a finer level of analysis – or, if it could not, the reasons why should be made explicit. Spurred on by Sir Julian Huxley's enthusiasm, the Royal Society set up a study group to explore further under the chairmanship of W. H. Thorpe.

This study group set itself more limited aims – the nature of 'nonverbal communication' in animals and man. It met thirteen times between 1965 and 1970, discussing contributions by its own members and invited guests. Its composition changed somewhat with time. In 1969 it was decided that some of the members should produce papers, based primarily on their own interests and taking into account the products of the discussions. A final two day meeting was held in the Ciba Foundation in September, 1970, at which pre-circulated drafts of most of the chapters in this book were discussed. In the light of these discussions, and numerous letters which followed them, chapters were revised and sent to section editors, and then to me.

In performing my task as editor, I had the advantage of copies of the correspondence which had passed between the contributors. I was able to see how far the final chapters had been influenced by the points raised, and what matters were still outstanding. From that point, I have attempted to synthesize and to link the contributions, bringing up issues not resolved in the discussions or in the correspondence, as well as other points which appeared when the material was collected together. No one editorial method was uniformly suitable. I have used notes, included amongst the author's own, for minor matters of fact; comments following the individual contributions for discussion of outstanding issues and for highlighting areas of disagreement; and these comments, prefaces and postscripts for linking the contributions. Where a particular individual was responsible for a point or opinion I have named him, but many of the issues arose from

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general interchange among the group. These editorial contributions were circulated amongst the authors, and were improved in the light of their comments, but at that point a halt was called to the interchange and the authors were not permitted further reply – though even here I have made some exceptions. Many of the individual contributions changed markedly between drafts as a result of our meetings and discussions, and the book as a whole was a collective enterprise. For defects in the comments and linking sections I alone am responsible.

The pleasantest of my editorial duties is to express the gratitude of all who took part to Sir Julian Huxley for setting us going and for his enthusiasm throughout; to the Royal Society for their generous support and for accommodating some of our meetings; to the trustees of the Ciba Foundation and to Ruth Porter, its medical director, for their hospitality and kindness, especially over the final meeting; to W. H. Thorpe for his patient and wise chairmanship; to M. Cullen and E. Leach for putting in much hard work as secretaries; and to D. M. MacKay, W. H. Thorpe and M. Argyle for acting as section editors.

R. A. H.

# MEMBERSHIP OF ROYAL SOCIETY STUDY GROUP ON NON-VERBAL COMMUNICATION

\* Attended final meeting.

- \*Professor W. H. Thorpe, Sub-Department of Animal Behaviour, Cambridge.
- Dr E. R. Leach, King's College, Cambridge.
- \*Dr J. M. Cullen, Department of Experimental Psychology, Oxford.
- \*Mr M. Argyle, Department of Experimental Psychology, Oxford.
- \*Professor R. J. Andrew, School of Biological Sciences, University of Sussex.
- Dr N. G. Blurton Jones, Institute Child Health, University of London. Dr J. Bowlby, Tavistock Clinic, London.
- Miss M. Brearley, Froebel Institute College of Education, London.
- Professor R. Firth, Department of Social Anthropology, London School of Economics and Political Science.
- \*Mr J. A. W. Forge, Department of Social Anthropology, London School of Economics and Political Science.
- Dr R. Fox, Department of Social Anthropology, London School of Economics and Political Science.
- \*Professor E. H. Gombrich, Warburg Institute, London.

\*Dr G. A. Harrison, Anthropology Laboratory, Department of Human Anatomy, Oxford.

\*Professor R. A. Hinde, M.R.C. Unit on the Development and Integration of Behaviour, Madingley, Cambridge.

- \*Mr F. J. H. Huxley, St Catherine's College, Oxford.
- \*Sir Julian Huxley, London.
- \*Professor D. M. MacKay, Department of Communication, Keele University.
  - Dr Jonathan Miller, London.
  - Dr D. Morris, Zoological Society of London.
  - Professor R. C. Oldfield, Speech and Communications Research Unit, Oxford.
  - Professor R. H. Robins, Department of General Linguistics, University of London.
  - Professor J. M. Tanner, Institute Child Health, University of London.
  - Professor N. Tinbergen, Department of Zoology, Oxford.
  - Professor J. Tizard, Institute of Education, University of London.

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#### X MEMBERSHIP OF ROYAL SOCIETY STUDY GROUP

In addition the following attended meetings of the group to read papers or as discussants:

Dr A. Ambrose, Tavistock Clinic, London.

Professor R. Exline, Department of Psychology, University of Delaware, Newark, USA.

- Dr E. Grant, Department of Psychiatry, Queen Elizabeth Hospital, Birmingham. (Now at Chelsea College, London.)
- \*Professor I. Eibl-Eibesfeldt, Max Planck Institüt, Seewiesen, Germany.
- \*Dr J. A. R. A. M. van Hooff, Laboratory for Comparative Physiology, Utrecht, Holland.

\*Professor J. Lyons, Department of Linguistics, Edinburgh.

Professor D. Ploog, Max Planck Institute, Munich, Germany.

Professor D. Vowles, Department of Psychology, Edinburgh.

## **GENERAL INTRODUCTION**

When we meet a stranger, we form an immediate impression of the sort of man he is. Without thinking we take in small details of how he stands, the way he uses his hands, his eye movements and facial expressions. The conclusions we draw may or may not be correct, but they certainly affect our actions. If we start to talk with him, our words are accompanied by other gestures which may elucidate, emphasize, enhance or even contradict what we say. At the beginning and end of our conversation we may use culturally determined signals, such as hand-shaking or hand-waving, which symbolize our readiness to enter into friendly acquaintanceship or our impending departure. Throughout this episode, much information passes between us which is never put in the form of words. Indeed a third party watching from a distance but unable to hear our conversation would be able to tell a great deal about us and about our relationship. It is signals such as these which form the subject matter of this book.

As discussed in later chapters, the importance of these signals has long been appreciated in the arts. The playwright can provide only the words to be spoken – the meaning which these convey to the audience must depend in no small way on the interpretation placed on them by the director and the actors, and this is carried by the particular emphases, facial expressions, gestures, postures and movements which accompany them. Novelists are able to supply their readers with more information about the non-verbal signals emitted by the characters they create, but still can cover only a small fraction of those which would be present in real life. The painter, in depicting human face or form, depends in part for his success on representing these non-verbal signals – and on their recognition by the beholder.

The painter's skill depends on long and patient objective observation of how people behave, but sometimes one must wonder just how far even the great masters consciously analysed all the signals which contribute to the impressions they convey. Indeed we use these signals ourselves nearly all the time without consciously recognizing that we are doing so. This was dramatically brought home to the participants at a recent conference at which Eibl-Eibesfeldt described the eyebrow flash – a rapid raising and lowering of the eyebrows which, though it appears in many and perhaps all human cultures, had not previously been described in the scientific literature. Suddenly the members of the conference were made conscious of a gesture which they were using many times a day without realizing it. From that moment on it became impossible to greet a colleague without a

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momentary mutual embarrassment as each realized that he had used this commonplace gesture without meaning to.

Outside the arts, many of these signals were documented by biologists and anthropologists in the nineteenth century (e.g. Charles Darwin, *The Expression of the Emotions in Man and Animals*, 1872) but, with a few exceptions, their detailed study was neglected for over fifty years. Recently, however, their importance has been more fully recognized and knowledge about them greatly increased. The reasons for this are multiple. In part, the descriptions by ethologists of signals in animals called attention to the functionally comparable, but more complex, signals in man. Independently psychologists realized their importance in human inter-personal relations, and anthropologists became increasingly conscious and objective about the role of non-verbal communication in the integration of societies. Also the practical importance of these signals became apparent – for instance by their absence in long-distance telephone and radio communication, and during interchanges between individuals from different cultures with dissimilar conventions about their use.

The problems which arise are numerous, and it may be helpful at this stage to illustrate them by a particular example which was used by Dr Leach in one of the earlier discussions of the group. The frontispiece shows members of two different cultures – an Andaman islander and Mme Proust – coming from opposite extremes of our normal scale of sophistication, but holding their hands in a similar way. The hand position is a striking one, but has no intended or explicit meaning. Is the resemblance accidental? If not, how is it to be explained? Does it represent a deep-rooted response which has some independence of culture? In any case, how is its appearance in the individual to be explained? In Western Europe, at least, girls are not often taught to stand in that way. Does it arise through imitation, or through some subtle social pressure common to both cultures, or is it independent of social experience?

We may also ask about the emotion or motivation associated with the posture, and its communicatory significance. In Mme Proust we might well call it a modest pose, but with the Andaman islander this seems more doubtful. Is it that our interpretation changes with the context in the picture, and depends on our own background? Or does the posture really mean different things in different cultures? If so, is the underlying motivation different in kind? Or different only in degree, with both women being ambivalent, but to differing extents? After all, we are familiar enough with the extent to which dress itself, ostensibly worn in the interests of decency, may in fact emphasize what it is supposed to obscure.

These are only a few of the many problems arising from the study of

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non-verbal communication between individuals. It has been the purpose of the contributors to this book to explore some of them. We have not attempted a complete review, but selected some issues for detailed discussion and merely sketched others, while attempting to highlight some of the threads which tie the whole field together and to underline some areas of controversy.

The chapters are grouped into three parts. Part A is concerned with establishing some basic distinctions, and with the relations between verbal and non-verbal communication. These are of necessity largely theoretical, and although they are fundamental to the serious student, the reader more interested in the empirical material may prefer to pass straight to the brief discussion at the end of the Section and thence to Part B. This is concerned with the problems raised by, and the diversity of, signalling systems in animals. Finally, Part C is concerned with our own species, except for one chapter which describes the way in which certain human expressive movements are related to those in sub-human primates.