



A SYMPOSIUM OF
THE FYSSSEN FOUNDATION

Social Relationships and Cognitive Development

EDITED BY

Robert A. Hinde
Anne-Nelly Perret-Clermont
Joan Stevenson-Hinde



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and Joan Stevenson-Hinde

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Social Relationships and Cognitive Development

This volume is dedicated to the memory of

H. Fyssen

Preface

This volume consists of a report on the first symposium sponsored by the Fyssen Foundation. In opening the symposium, Madame Fyssen said:

About 5 years ago, my husband and myself decided to create a Foundation, whose aim is to *encourage all forms of scientific enquiry into cognitive mechanisms, including thought and reasoning, underlying animal and human behaviour, and their ontogenetic and phylogenetic development*. Until now, the Foundation's activities have been directed primarily towards the awarding of fellowships to young researchers. Since the creation of the Foundation, 90 fellowships have been granted, both to French and to foreign researchers.

In addition, each year the Foundation awards an international prize. This has been presented, successively, to Professors André Leroi-Gourhan (1980), William H. Thorpe (1981), Vernon B. Mountcastle (1982), Harold C. Conklin (1983), and Roger W. Brown (1984).

Finally, the bye-laws of the Foundation provides for the organization of specialized symposia on topics related to the scientific objectives of the Foundation about once per year.

The first symposium was held at the Trianon Palace Hotel, Versailles, from the 16 to the 20 November 1984. Draft manuscripts had been pre-circulated, in order to allow ample time for discussion. Final papers were submitted after the meeting so that authors could, if they wished, take up points made in the discussions. Many of these points were submitted also in writing, either at the meeting or soon afterwards. Many of the issues raised in discussion and not included in the authors' revisions appear, with the contributors' approval, in an edited form after each chapter in this volume.

In the initial planning of the conference we were helped by the scientific committee of the Fyssen Foundation, and especially by Dr Perriault. The immediate organization of the meeting was undertaken by Madame Colette Leconte, whose foresight and indefatigable devotion was largely responsible for its success. Madame Colette Kouchner also helped in the pre-conference planning and in the arrangements for publication. The successive drafts of the editorials and discussions, the sorting out of the references, and the correspondence with authors necessary for the production of the final manuscript were in the capable and imperturbable hands of Mrs Ann Glover. To all of these we are duly grateful.

Finally we would especially like to express our gratitude to Madame Fyssen who played an active part throughout the planning, chose the location, attended all the meetings, and gave us much encouragement.

Cambridge
March 1985

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Introduction: The dialectics between levels of social complexity

Most children grow up in a nuclear or extended family, interacting first with one or two parents, and then with siblings, with relations, and with friends. Later, through schools and peer groups, the number and variety of their interactants increase (e.g. Foot *et al.* 1980; Rubin and Ross 1982). Whilst the details differ, such a pattern of an expanding network of relationships is virtually ubiquitous in human societies (e.g. Whiting and Whiting 1975) and also in most non-human primates (Berman 1983), and was almost certainly present in our environment of evolutionary adaptedness (Alexander 1974; Hinde 1984).

This network of relationships constitutes the most important part of the child's environment. In any social group, individuals must adjust their behaviour according to whom they are with. Abilities to assess the capacities and predict the behaviour of others are invaluable, and it has been argued that the need for managing interpersonal relationships provided the selective forces that moulded the evolution of the cognitive capacities of higher mammals and of man (Chance and Mead 1953; Jolly 1966; Humphrey 1976).

Yet the study of the properties of interpersonal relationships has until recently been neglected by psychologists. Until the seventies, most students of personality focused primarily on the individual, with little attention to variations in behaviour between different social contexts. Developmental psychologists have been concerned with the effect of others (usually the mother, but more recently also the father and siblings) on the development of personality, but only in the last few years have they directed much attention to children's friendships (e.g. Foot *et al.* 1980; Asher and Gottman 1981; Duck 1983). Most social psychology texts treat individuals' perceptions of social phenomena, and the bases of their attraction to others, but then leap to group phenomena, neglecting the dyad. Although the way was paved by earlier work (e.g. Blau 1964; Homans 1961; Thibaut and Kelley 1959), only in the last few years has the necessity for a science (in the sense of an ordered body of knowledge) about long-term dyadic and triadic relationships been widely recognized (e.g. Duck 1973; Hinde 1979; Kelley *et al.* 1983).

The nature of relationships poses special problems to the psychologist. The nature of the constituent interactions depends upon the natures of the participant individuals, whilst the characteristics that individuals display

depend in part on the nature of the interaction and relationship in which they are involved, and in the longer term the characteristics that they *can* display are influenced by the interactions and relationships they have experienced. The nature of relationships depends on those of the constituent interactions, but the nature of those interactions depends on the participants' perceptions of the nature of the relationship. The nature of any relationship is affected by that of the social group in which it is embedded, whilst the nature of that social group depends in part on its constituent dyadic (and higher order) relationships.

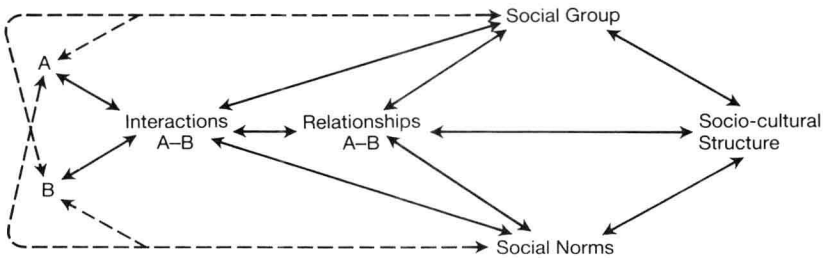


Fig. Int. 1 The dialectics between successive levels of social complexity. (Discontinuous lines represent dialectics perhaps of less importance than the continuous ones.) (Modified from Hinde 1984.)

Interactions and relationships are affected also by the norms and values of the participants—norms and values which are in part created, transmitted, and transmuted through the agency of dyadic relationships. And the sociocultural structure, used here for the system of institutions and beliefs, and the relations between them, shared by the members of the group, in turn both influences, and is influenced by, the relationships between individuals (Fig. Int. 1). And beyond that, each group is juxtaposed with other groups, contact with which affects diverse aspects of the social behaviour of its individuals. And finally each group is set in a physical environment, which affects and is affected by the group members. The social scientist must therefore come to terms with a series of dialectics between successive levels of social phenomena—relationships, social structure, sociocultural structure, and intergroup relationships, each of which has emergent properties not relevant to the level below. And at the same time he must remember that each level represents not an entity but a process in continuous creation through the agency of the dialectics (Mead 1934; Doise 1980, 1982; Hinde 1979, 1984).

Whilst some of the social sciences seem to be concerned with one or other of these levels, in practice the dialectics always obtrude. Thus students of personality, finding that the cross-situational consistency of

supposed 'traits' tended to be low, were forced to recognize that behaviour may be affected (to differing extents according to the nature of the individual and the behaviour) by the context (Bem and Allen 1974; Bem and Funder 1978; Kenrick and Stringfield 1980). And the most important aspect of the context is the interactional and relationship one, including the meaning that the individual attributes to them (the sense he makes out of the situation) according to his sociocultural scheme of reference (systems of understanding and beliefs), and his personal past experience. Developmental psychologists, concerned first with the growing child, have had to come to terms with the interacting influences of parent on child and child on parent (Bell and Harper 1977), and to consider the relative importance of complementary and reciprocal relationships in the development of personality (Sullivan 1953a,b; Youniss 1980). Recent work by Palmonari and his colleagues on institutionalized adolescents has emphasized that the development of personality is closely linked to the set of relationships in which the child grows up. Changing the structure of the educational setting produced changes in the children's social relationships and these in turn led to deep changes in their personalities (Carugati *et al.* 1984). Cognitive psychologists find that how an individual tackles an intellectual problem may change radically with the social context (Carragher *et al.* 1985). Educationists have found that students' school performance is affected by their teachers' expectations and these are affected by the teachers' own career and identity (Marc 1984) and by the organization of the institution (Gilly 1980). Anthropologists, concerned with the sociocultural structure, seek to understand the ways in which beliefs, myths, and legends are created and passed on by individuals and affect the lives of individuals and their mode of establishing relationships and social groups (e.g. Herdt 1981; Verdier 1979; Hainard and Kaehr 1983).

This volume is concerned with one aspect of these dialectics—namely the interplay between an individual's social interactions and relationships on the one hand, and his or her cognitive development on the other. As we proceed we shall see both that relationships cannot be considered independently of the individual or social group, and that individuals cannot be considered independently of the relationships, social group, norms, values, and socio-historical context in which they are embedded. We shall see also that cognitive development is closely related to other aspects of the individual, including the emotions. And we shall be forced to bear in mind that the concepts we use—relationships, cognition, emotion, stage, and so on—are at the same time essential tools for understanding and blinkers that constrain our vision.

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Section A

Methodology and the concept of cognition

EDITORIAL

Our verbal language depends upon, and is critical for, many of our own cognitive abilities, and we use those abilities to form, and in the presence of, the norms, values, beliefs, and institutions of our society. We shall see later that there is a close interdependence between our cognitive abilities and our social situation. It is thus helpful to seek a different perspective by considering first the abilities of monkeys and apes, which lack verbal language and anything comparable to human culture.

Two issues raised by the animal data permeate much of the rest of the volume, and may be introduced here. The first is methodological. Upon what sorts of data can we base conclusions about something as apparently nebulous as cognitive abilities, and even more, how could we obtain hard evidence that relationships affect cognitive abilities or vice versa? The chapters in this volume represent diverse approaches to this problem, none of which is fully adequate on its own but each of which can be seen as a contribution towards a solution:

1 *Description of what individuals do in the real social world.* This can provide evidence about both cognitive capacities and performance, and about factors that may affect them. The absence of experimental control poses difficulties for the interpretation of process and the long-term consequences of a given experience may seem probable but are likely to remain unproven (e.g. in this volume chapters by Dasser; Cheney and Seyfarth; Attali; Tizard; Stambak *et al.*).

2 *Laboratory experiments to assess performance.* These can provide hard evidence about performance and the factors that can affect it, but not necessarily about maximum capacities, since the individual may not show optimum performance in the inevitably artificial test conditions (Dasser, this volume). They may also reveal abilities which may not be apparent in nature.

3 *Correlational studies showing associations between life experiences and cognitive performance.* These provide important evidence for the existence of (direct or indirect) causal links, especially with additional evidence concerning for instance the sequence of events. However, in general correlational data cannot prove the direction of causal links,