Book reviews

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Understanding Other Minds. Edited by S. Baron-Cohen, H. Tager-Flusberg and D. J. Cohen. (Pp. 530; £28.95.) Oxford University Press: Oxford. 2000.

The subject of this book, theory of mind, can be defined as the ability to attribute mental states to others, an ability that is essential for the smooth running of our day-to-day social interactions. In laboratory settings the presence or absence of theory of mind in a child or adult is often tested by the use of false belief tasks. A subject can perform the task correctly only if they understand that another person can hold a mistaken belief (e.g. on the location of a hidden object) because they lack information that the subject possesses (that the object has been moved from a previous location). This ability to pass laboratory and real-life social tests pertaining to the mental states of others is often more colloquially referred to as 'mindreading'. The range of competencies involved here is far more wide-ranging than the particular example of understanding others' false beliefs. In children a range of precursors to the full development of theory of mind such as gaze following, joint attention behaviours and pretend play have been identified. In both children and adults mindreading skills are necessary for the interpretation of certain cartoons and jokes, and are required for the understanding of emotional as well as cognitive states in others. *Under*standing Other Minds takes as its subject matter research findings and unresolved questions relating to the entire domain of mindreading.

The first (1993) edition of *Understanding Other Minds* was subtitled 'perspectives from autism', but this has been changed in the current edition to 'perspectives from developmental cognitive neuroscience', reflecting a broadening of the emphasis of current research in this area. Theory of mind deficits relative to the individual's

intelligence level are a core feature of autism in both children and adults and hence the existence and causation of such deficits still receives extensive coverage in the new edition. There is however also material on the normal development of theory of mind, deficits in other clinical groups, and the use of techniques such as functional neuro-imaging and single cell recording to identify the regions of the brain associated with processing information about the mental states of others. This range of topics highlights the key position occupied by theory of mind at the intersection of a diversity of research areas including developmental psychology, cognitive psychology, clinical psychology and psycholinguistics. The book also contains coverage of the extent to which mindreading skills can be found in primates, and of evolutionary and cultural perspectives on theory of mind.

The first and longest section of the book is entitled 'theory of mind in normal development and autism'. An introductory chapter by Baron-Cohen reviews research findings on theory of mind and autism, while the second chapter by Wellman and Lagattuta describes the development of theory of mind in normal children. Subsequent chapters in this section focus on a number of areas in theory of mind research. A key thread running through the section is that of the connections between theory of mind and other aspects of cognitive function and how these links might be used to elucidate the underlying mechanisms of mindreading. One theory, referred to by several authors, proposes the existence of a developmental sequence of mental modules specialized in the detection of the representation of the mental states of others. An alternative viewpoint, put forward in a chapter by Gopnik, Capps and Meltzoff, is that the underlying deficit in autism is in a theorygenerating mechanism rather than in one or more processing modules. A review of the cognitive processes linked to theory of mind is given in chapters covering two other domains where cognitive deficits are found in autism: 1136 Book Review

language use and executive function. The interconnections between these abilities and mindreading skills are emphasized, indicating the need for a detailed understanding of the developmental sequence, which is disrupted in autism. It is currently not clear whether, for example, a critical aspect of language development is causally antecedent to the development of theory of mind or vice versa, or whether both have an underlying common cause. Two chapters in this section describe important findings on cognitive strengths found in autism. Baron-Cohen discusses the finding that autism appears to be characterized by superior 'folk physics' (understanding inanimate objects) coexisting with poorly developed 'folk psychology' (understanding of people, including mindreading skills). These results are consistent with the existence of a dimension of understanding people v. understanding objects as part of the normal range of human psychological variation, with autism possibly corresponding to one extreme of this dimension. This research also indicates a genetic contribution to autism, since relatives of autistic children are often found to have minor folk psychology deficits, and also above-average science and engineering skills. A chapter by Happé discusses the evidence for the existence of a cognitive style of weak central coherence (paying attention to the local rather than the global structure of objects, sentences etc.) in autism. This bias in informationprocessing may explain autistic subjects' superior performance on certain spatial tasks, for example the Embedded Figures Test, but is also implicated in mindreading deficits in situations where the context of social information is important. The section concludes with a chapter by Plaisted reviewing the asocial aspects of autism, providing an important reminder that not all the problems associated with this condition can be accounted for by theory of mind impairments.

In the book's second section, on neurobiological aspects of theory of mind, the current state of knowledge on linking specific brain regions to theory of mind is reviewed. A chapter by Stone discusses the evidence, mainly from studies of patients with brain damage, suggesting that both the amygdala and regions of the frontal lobes are relevant to mindreading and general social skills. A chapter on cerebral

lateralization and theory of mind by Brownell et al. reviews the evidence that the right cerebral hemisphere is of particular importance in theory of mind performance. Related preliminary findings from functional neuroimaging studies are discussed by Frith and Frith. The increasing ability to view the brain directly during the performance of particular tasks is clearly of importance in the development of an understanding of the biological basis of theory of mind, so a growth in imaging studies is to be anticipated. The contribution of animal studies to the understanding of theory of mind and autism in humans is discussed by Emery and Perrett. There is currently little firm evidence for the existence of fully developed theory of mind in non-human primates. These animals do however certainly possess behaviour-reading skills that can reasonably be identified as evolutionary precursors to the development of mindreading in humans, suggesting that studies of regions of the brain linked to non-human primate social behaviour should be informative in the human context.

The third section of the book covers clinical aspects of theory of mind and contains chapters on theory of mind deficits in clinical conditions other than autism, the possible use of problems in behavioural precursors to theory of mind as an aid to the early diagnosis of autism, and the teaching of theory of mind to individuals with autism. The book concludes with a section entitled 'theory of mind: anthropological and evolutionary issues'. This section contains chapters covering research on behaviour reading in chimpanzees, paleoanthropological perspectives on theory of mind, and cultural aspects of theory of mind. While the last two sections of the book are much shorter than the first two, they contain much interesting material, with the final section illustrating the extent to which theory of mind is relevant to disciplines distant from psychology. My sole complaint about topic coverage does however relate to this part of the book. The chimpanzee chapter (by Povinelli and O'Neill) is specialized to one species, to the topic of communication by gesture and to the description of studies on this topic performed by the authors. The book would have been strengthened by the addition of a review chapter on the diversity of laboratory and observational studies relating to mindreading Book Review 1137

and/or behaviour reading in non-human primates.

Despite the minor caveat above, *Understanding Other Minds* is a well thought-out text, with all the chapter authors achieving a very high standard of presentation. The book provides an excellent introduction for readers new to the area while also providing an important research synthesis for the more expert. It contains a wealth of material of obvious relevance and interest to psychiatrists, clinical psychologists and developmental psychologists, but will also be of interest to those working in other branches of psychology.

ELIZABETH AUSTIN

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Wednesday's Child: Research into Women's Experience of Neglect and Abuse in Childhood, and Adult Depression. By A. Bifulco and P. Moran. (£14.99 pb.) Routledge: London. 2000.

This is an important though grim read. The authors summarize findings derived from four large well-known studies carried out over 20 years by Bifulco, Moran and colleagues. They report that as many as one in four women have been subject to severe abuse or neglect in childhood. These experiences are associated with a two to threefold increase in the risk of adult depression, with a further increase in the risk of depression in women who have experienced more than one type of abuse/neglect in childhood. In addition, abuse and neglect appear to be more potentially damaging than parental loss or parental discord, previously thought to be the main childhood experiences associated with later depression.

These conclusions are drawn from studies in which the methodology used was retrospective and may therefore be subject to some recall bias, particularly in women with depression who may search for meaning in their past to explain their psychological difficulties. In addition, some studies used selective samples of working-class

women only. Nevertheless, the findings were consistent across the different types of samples, and one study included corroboration from sisters, so the results appear to be robust. The definitions of child abuse (physical, sexual and psychological) and neglect (which includes rolereversal and antipathy) used here may have their limitations. For example, there is a fine dividing line between normal parenting and mild neglect, which is acknowledged by the authors (though the researchers do not include mild abuse or mild neglect in their final analyses). Inclusion of personal accounts of these experiences allows the reader to judge what is really meant by these terms. Such harrowing examples bring these academic studies of depression alive in a way rarely seen in most psychiatric publications.

This body of work has attempted to integrate traditional psychiatric research into the psychiatric concept of depression (e.g. by using the PSE to identify major depression) with potentially explanatory factors such as abuse measured by instruments developed by social scientists. Since the book was published this research group have included endocrine measures in addition to socially determined vulnerability factors in explanatory models of depression. In a way, this book reads as a first volume – it has set the scene in giving the prevalence of different types of abusive experiences, demonstrated the association between these experiences and adult depression and provided explanatory mechanisms such as low self-esteem and protective factors such as social support.

The book left me with many questions about the complex nature of these inter-related aetiological factors, the role of biological factors such as genetics in these models, the impact of early experiences on other psychiatric disorders and the heterogeneous nature of the outcome 'depression' investigated here. Some of these areas are currently under investigation by this research team and mentioned tantalizingly briefly at the end of *Wednesday's Child*. I hope a companion volume will be published in the near future, which will summarize equally clearly and meaningfully further integration of the social, psychological and biological factors involved in the development of adult psychiatric disorder.

LOUISE HOWARD

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Cure, Comfort and Safe Custody. Public Lunatic Asylums in Early Nineteenth-Century England. By L. D. Smith. (Pp. 310; £55.00.) Leicester University Press: Leicester. 1999.

This book usefully fills a gap in the history of psychiatry. Smith traces the history of the English asylums that came after the 1808 Lunacy Act. He states that it was they that set the tone for the County Asylums which were founded after the 1845 Lunacy Act.

The book's title is an extract from the 1811 amendment to the Act. It antedates the present British Government's recent 'safe, sound and supportive' catch-phrase from modern mental health proposals. Smith argues that the curesafety axis was crucial 200 years ago. At the time of the 1845 Act, non-restraint had just won the day and it was a time of therapeutic optimism with asylums offering cure rates of about 50%. However, he cites the Stafford madhouse proprietor Thomas Bakewell's prophetic warnings against widespread asylum care. Bakewell advised that the curable patients should be treated quickly in small institutions and not be managed alongside chronic patients in large asylums. By the end of the nineteenth century the latter had largely occurred, with the attendant therapeutic pessimism. Smith suggests that the second half of the century therefore was to see an increasing emphasis on 'comfort' compared with 'care and custody'.

Smith works as a principal Social Worker in a Community Mental Health Team in England's West Midlands. He was a beneficiary of the Wellcome Trustees for a one year research fellowship. This work represents a formidable achievement, especially as he consulted primary sources at the Public Record Offices where material for the 15 relevant asylums throughout England is housed.

The topics dealt with in the book include: the battle between lay and medical management of the asylum; the range of treatments; the kinds of patients admitted; who the nurses were; moral management; occupational therapy; the restraint controversy; the causes of insanity; and, aftercare.

Smith paints a sympathetic portrait of the aspirations and achievements of asylum care in the early nineteenth century. He is aware of Andrew Scull's argument regarding the medical profession's desire for professional hegemony. For this period of the early nineteenth century, he says, however, it was not so simple. He cites the example of the superintendent at the Middlesex Hanwell Asylum where the powerful Sir William Ellis was sacrificed because of the power of the local County Magistrates. Smith is aware of the key arguments within the history of psychiatry and has given a good overview of these secondary sources, as well as providing rich material from the archives of the 15 asylums he has studied.

DOMINIC BEER