

More systematised, less empathic?

BARON-Cohen's argument, in a nutshell, is that men on average tend to be systematisers (seeking to analyse, explore and construct systems) while women tend to be empathisers (seeking to identify another person's emotions and thoughts and to respond to them in an appropriate manner). Hence the majority of those suffering from autistic spectrum disorders are male. Two-dimensional proposals about sex difference are not novel (communion–agency, nurturance–dominance, spatial–verbal, Mars–Venus) so the question is: Are Baron-Cohen's dimensions more powerful than their predecessors – perhaps even capable of subsuming them?

The intended audience for this book appears to be a non-

The Essential Difference: Men, Women and the Extreme Male Brain

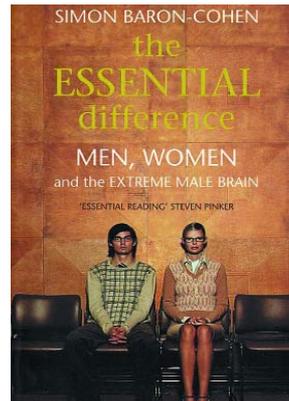
SIMON BARON-COHEN

LONDON: ALLEN LANE; 2003; Hb £16.99 (ISBN 0 71399 671 4)

REVIEWED BY Anne Campbell

specialist one – Baron-Cohen spends a considerable amount of time stressing what might seem fairly obvious to psychologists. For example, his emphasis on overlapping distributions rather than categorical sex differences is illustrated in seven idealised graphs devoid of any calibration on their axes. But the absence of detail, designed to engage a non-specialist reader, makes it hard to evaluate the empirical power of his argument.

Baron-Cohen argues that empathising and systematising can explain sex differences in



a variety of domains. High empathy is proposed to explain, *inter alia*, females' play preferences, friendship styles, self-control, emotional jealousy and absence of dominance hierarchies. But the crucial links between empathy and each of these domains is often assumed rather than documented. For example, Baron-Cohen rightly notes that women rarely rape, murder or use physically aggression. His argument requires that men's predominance in these antisocial acts depends upon poor empathy, and it is here that variable assertions take precedence over evidence. The initial statement that aggression '*can only* occur because of reduced empathizing' later weakens to 'it is *presumably* easier to use aggression towards others if you are poor at empathizing'. When it becomes logically necessary to predict that autistic spectrum individuals should show heightened aggression, he decides that 'reduced empathy does not invariably lead to aggression' and that it may '*not even lead to this in the majority of cases*' [all italics added].

He argues that women's enhanced language skills may derive from their higher empathy but then concludes that 'language and empathy are likely to be independent of one another' (p.62). Despite accepting that language is an abstract 'system', he does not pursue the apparent contradiction that women are on average better at it.

With regard to boys, I was left unpersuaded that systematising was at the heart of their superiority in catching and throwing skills or that systematising logically implied an obsessive desire to collect things. Perhaps this latter derived from a desire to incorporate known symptoms of autism into the typical 'male brain'?

Because Baron-Cohen's specialities are theory of mind and autism, I looked forward most to these sections of the book. Empathy, he argues, involves both a cognitive (theory of mind) and an affective component. He frequently uses the term empathy to refer only to the affective component, leading to occasional confusion. So high empathisers (affective) are attuned to others' thoughts and feelings, but 'not because they want to manipulate the person'. On the other hand, a girl will use mindreading (cognitive) 'to manipulate the other person into giving her what she wants'. For a specialist reader this cognitive–affective distinction is an important one, but there is little detail on their empirical independence and the extent to which they can be operationally separated. (There are several questionnaires, but since there are no details of reliability, validity and standardisation it is hard to know what to make of them.)

The most compelling and often endearing parts of the book are his descriptions of autistic and Asperger's

SPSS for Psychologists: A Guide to Data Analysis Using SPSS for Windows (2nd edition)

NICOLA BRACE, RICHARD KEMP & ROSEMARY SNELGAR

BASINGSTOKE: PALGRAVE MACMILLAN; 2003;

Pb £15.99 (ISBN 0 33398 633 4)

REVIEWED BY Mark Moss

S PSS is (much to my chagrin) the accepted analysis package in psychology, and a large number of texts have been written to divulge the secrets of its use to students and researchers alike. The quality of these works is improving, both in clarity of expression and in directions for weaving your way through the drop-down menus and dialog boxes. The authors of this book approach each topic with easy-to-understand examples, relating them clearly to the analyses carried out. The style is easy to read and follow, and even those completely unfamiliar with SPSS will soon be able to carry out quite complex analyses.

This could, however, present problems – undergraduates might become skilled in performing analyses that they do not fully understand (e.g. multivariate analysis of variance or factor analysis). Certainly, the very short theoretical sections presented in this text would not alleviate any lack of knowledge in the reader. As a support to a well-delivered theoretical course in experimental design and statistics this book could be very valuable. It is important that students are well aware that being able to perform an analysis 'cookbook fashion' is not however, a substitute for understanding the concepts underpinning it.

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individuals. I loved the impeccable, if brutal, logic of mathematician Michael Ventris who stopped talking to his wife after several years because there was nothing left to talk about. Baron-Cohen has plenty left to say. His fundamental position is

provocative and interesting, but psychologists will need a more systematised and less empathic approach to argument and data if they are to be persuaded.

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Feel-good psychology

Looking for Spinoza: Joy, Sorrow, and the Feeling Brain

ANTONIO DAMASIO

ORLANDO, FL: HARCOURT; 2003; Hb £20.00 (ISBN 0 15100 557 5)

REVIEWED BY Janet Sayers

WHERE do good and bad feelings come from? Do they come from others? The currently very influential neurologist Antonio Damasio suggests they do. He notes that 'the monkey's innate fear of snakes requires an exposure not just to a snake but to the mother's expression of fear of the snake'. Without her, its 'innate' fear is not 'engaged'.

Above all, he argues that feelings come from the brain's mapping of the body's reaction to 'emotionally competent' stimuli. They can be joyful or sorrowful, pleasurable or painful, external or internal, present or remembered. Examples include 'sympathy evoked by witnessing someone else's accident, as well as the sadness evoked by one's personal loss'. Evidence of the brain's involvement includes the discovery of mirror neurones in the frontal cortex fired by the same action whether observed in another or done by oneself.

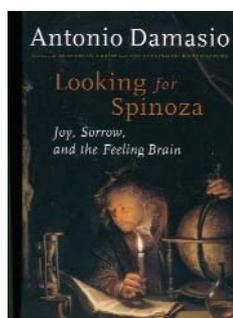
But why *Looking for Spinoza*? Because, says Damasio, Spinoza is often overlooked as a critic, like himself, of Descartes' division of the mind from the body. They are the same stuff, said Spinoza. Or, as Damasio puts it, 'the object of the idea constituting the human Mind is the Body'. Good feelings, he says, again citing Spinoza,

come from our endeavour to preserve ourselves and others.

What then should we do with bad feelings? Spinoza recommended 'cancelling feelings of fear and sorrow that nature inspires', says Damasio, 'with feelings of joy based on the discovery of nature'. Or, Damasio adds, we can cancel bad feelings with the good feelings inspired by nature, science and art.

Another of Damasio's mentors, William James, recommended whistling to keep one's spirits up. It can work. But surely our survival, and that of others, sometimes depends on facing and dealing with the cause of bad feelings, not cancelling them with good? Such quibbles aside, Damasio's book is a good read – much more enjoyable, accessible and cogent than the disembodied, artificial intelligence version of cognitive science that he and others challenge, complement and replace.

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AN INQUIRY INTO THE NATURE AND CAUSES

IQ and the Wealth of Nations

RICHARD LYNN AND TATU VANHANEN

WESTPORT, CT: PRAEGER; Hb £57.50 (ISBN 0 27597 510 X)

REVIEWED BY Tony Ward

IN this highly controversial book, Lynn and Vanhanen advance the argument that current differences in national wealth are based upon differences in IQ. Their case can be summarised as follows:

- IQ is a stable and measurable construct with a high degree of heritability.
- There are large differences in the observed IQ scores of samples of populations from various countries around the world.
- Taking observed IQ scores as estimates of national intelligence, there are sizeable and significant correlations between these IQ scores and various measures of national wealth.
- Current international differences in national wealth are therefore substantially due to genetic differences in IQ, and aid policies should reflect this, for example by promoting greater use of contraception by less intelligent persons in the Third World.

There are numerous problems with Lynn and Vanhanen's thesis. Probably the most major is the fact that all the evidence around which they base their key assumptions comes from Western studies. For example, they suggest that heritability of IQ is very high, whereas the range of environments in Third World countries is such that heritability of IQ is likely to be much lower than in the West. High illiteracy levels are also likely to have had a significant impact on the estimated national IQs (I found a -0.73 correlation between IQ and illiteracy rates for the 85 countries in Lynn and Vanhanen's main analysis). Such factors are now known to impact on brain structure and function (see Castro-Caldas *et al.*, 1998, 1999). None of this is given serious consideration by the authors.

The book is expensive and sometimes technical. Nevertheless, it is probably worthwhile recommending to the library, allowing students to evaluate for themselves Mackintosh's (1998) assertion that comparing the average IQ scores of different nationalities can sometimes be a 'nonsensical and mischievous waste of time'.

References

- Castro-Caldas, A., Petersson, K.M., Reis, A., Stone-Elander, S. & Ingvar, M. (1998). The illiterate brain: Learning to read and write during childhood influences the functional organization of the adult brain. *Brain*, 121, 1053–1063.
- Castro-Caldas, A., Cavaleiro Miranda, P., Carmo, I., Reis, A., Leote, F., Ribeiro, C. *et al.* (1999). Influence of learning to read and write on the morphology of the corpus callosum. *European Journal of Neurology*, 6, 23–28.
- Mackintosh, N.J. (1998). *IQ and human intelligence*. Oxford: Oxford University Press.

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