On the very idea of an extreme female brain

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Abstract. According to Simon Baron-Cohen, having a male brain disposes a person to be more systematic than empathetic, whereas having a female brain disposes a person to be more empathetic than systematic. However, one can be a male human being with a female brain or a female human being with a male brain. Autistics have an extreme version of the male brain, says Baron-Cohen. In this paper, I present an “a priori” argument against the very idea of an extreme female brain.

According to Simon Baron-Cohen, there is such a thing as the male brain, although a human female might have one. There can be a female with the brain of a male! The reverse is also possible: a male with the brain of a female. These claims are strange from one point of view. If a brain came with a female body or developed as part of one, then is it not a female brain? But from another, they are less strange. People sometimes have the impression that a male has psychological qualities that are typical of the female sex, or vice versa; and it is the brain that gives rise to psychological qualities, or so it is commonly thought.

Baron-Cohen defines the female brain as a brain that gives rise to a stronger drive to empathize than to systematize (2003: 8-9). A person with a male brain has a stronger drive to construct or analyze systems. A person with a female brain, in contrast, has a stronger drive to empathize rather than systematize. This means that she is disposed to try to intuitively understand social situations and psychological states, such as emotional states, and

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1 I do not of course mean that the female sex has psychological qualities typical of a male.
2 There is some ambiguity here over whether these qualities are to be understood in terms of drive or skill. I shall, for the most part, work with the drive interpretation below. See Edward 2018.
respond appropriately, where appropriate response covers ethical behaviour – caring for someone in pain, for example (2003: 2). Autistics, says Baron-Cohen, have an extreme version of the male brain. Their brains are highly oriented towards systematizing and they are, apparently, little disposed to intuitively understand social situations and psychological states. But what about the extreme female brain: high empathizing and low systematizing?

A tempting proposal is that literary writers, whether male or female, have such a brain. Take novelists, for example. Here is a statement of what it takes to be a literary novelist, in a prestigious sense of the word “literary”: one’s effort at a literary novel must be well-written; it must contain insight into social situations and psychological states; and there must be some morally positive quality to the writing, such as that it discourages the morally bad and encourages the morally good. This is a very old-fashioned set of criteria, I anticipate someone’s saying, but that just makes it attractive to look for the extreme female brain among earlier novelists and old-fashioned ones today.³

But there is a problem with the proposal that literature is a happy hunting ground for the extreme female brain. If lots of people are male-brained in terms of Baron-Cohen’s theory – more systematic than empathetic – and I am a novelist exploring social situations and human psychology, will I not have to understand such people? And how can I understand their beliefs, emotions, and behavioural dispositions if the “positive” qualities Baron-Cohen associates with the male brain are weak within me? My novel, let us imagine, is about a philosopher wizard in his youth. In my novel, a teacher in another discipline presents an argument in a jumpy way, which omits various premises, and our hero is puzzled.⁴ After

³ I don’t know if it is old-fashioned across societies.
⁴ This is probably normal outside of peculiar contexts: logic, analytic philosophy reconstructions, etc. I have in mind something along the lines of “P1. Therefore C,” and they need P2 for a logically valid argument form, e.g. “Woman are as politically astute as men. So they should get the vote.”
some more experiences of this kind, he concludes that this is probably not the subject for him. How can I explore this situation without having a higher drive to explore systems, in this case logic and the emotions associated with it?

This material casts doubt on the very idea of the extreme female brain. To have an extreme drive to empathize, one must also have some drive to explore systems, as part of understanding the minds and emotions of systematic people as well, which will reduce the gap between the systematizing and the empathizing drive, so we cannot speak of an extreme female brain: high empathizing drive, low systematizing drive.\(^5\) In Baron-Cohen’s book 2003 book *The Essential Difference*, he says that he has yet to find the extreme female brain (2003: 170). Perhaps he claims to have found it now, but there is an objection to the very idea of such a brain that we can detect prior to empirical psychological research – an armchair objection, an “a priori” one if you like.

**References**


\(^5\) If we define the empathizing brain as causing more skill at this, rather than in terms of drive, then the person with an extremely empathetic brain must also have skill in thinking systematically, to understand the thoughts and emotions of systematic people, and that skill will prevent the realization of low systematizing skill but high empathizing skill.