

The definition of systematizing in S. Baron-Cohen's gender and autism research

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Abstract. The professor of psychopathology Simon Baron-Cohen is well-known for his thesis that males are on average better at systematizing than empathizing and females are on average better at empathizing than systematizing. In this paper, I note an ambiguity in how he defines systematizing.

Introduction

Since very early on in this century, Simon Baron-Cohen has advocated a certain theory about what is true on average about males and what is true on average about females (2003: 8-9). Baron-Cohen tests human beings along two dimensions: empathy and drive to systematize (2003: 6). Empathy is understood as the ability to identify the thoughts and feelings of others and the trait of responding appropriately. (An example he gives of responding appropriately is responding with consideration towards someone in pain. See 2003: 2.) The drive to systematize is understood as the drive to construct or understand systems, systems being things that are rule governed or operate according to laws.

According to Baron-Cohen, if one plots people's scores on these two dimensions, one can distinguish between individuals whose empathizing is stronger than their systematizing, individuals whose systematizing is stronger than their empathizing and individuals whose empathizing and systematizing are equal (2003: 6). He refers to those with stronger empathizing as having brain type E, those with stronger systematizing as having brain type S, and those who are balanced in these qualities as having brain type B. He also says that females on average have brain type E and males on average have brain type S, and goes on to refer to type E as the female brain and type S as the male brain (2003: 6). But Baron-Cohen allows that a male may have a female brain and that a female may have a male brain. Autistics, Baron-Cohen proposes, have an extreme version of the male brain (2003: 6).

The statistics Baron-Cohen presents are very much worth looking into. But with only 56% of men qualifying as type S and 44% of women qualifying as type

E (Baron-Cohen 2009: 76), there seems to be quite a lot of diversity that is masked by speaking of the male and female brain as he does. However, I do not pursue this point below. The purpose of this paper is to raise another point of concern: there is an ambiguity regarding his definition of systematizing.

Defining the systematizing quality

On the basis of what he says, I am unsure how best to define the systematizing quality which Baron-Cohen is interested in. Earlier I introduced it as a drive to systematize, because that is how Baron-Cohen introduces it. In his 2003 book for non-specialist audiences, entitled *The Essential Difference: Men, Women and the Extreme Male Brain*, he writes:

Systematizing is the drive to¹ analyse, explore and construct a system.
(2003: 3)

Baron-Cohen sometimes refers to systematizing as systemizing. In a 2009 article summarizing his research on autism for neuroscientists, he writes:

To understand this theory we need to consider... the concept of systemizing. Systemizing is the drive to analyze or construct systems. These might be any kind of system. What defines a system is that it follows rules, and when we systemize we are trying to identify the rules of the system, in order to predict how that system will behave.
(2009: 71)

Baron-Cohen is using much the same definition at present (see Warrier et al. 2016: 2). The definition of systematizing as a drive is also repeated in an article by Daniel Nettle responding to Baron-Cohen (2007: 237).

If Baron-Cohen is interested in a drive to analyse, explore or construct systems, then it makes sense to speak of one person as having a stronger drive to do such things than another person. It also makes sense to compare this drive within a person with another drive within them, saying that this drive is stronger or weaker than the other drive.

However, Baron-Cohen sometimes writes as if what he is interested in is not

¹ I am not sure if it makes sense to say that “Systematizing is the drive to...” because systematizing sounds as if it refers to something one can be doing, whereas a drive is not something one can be doing, rather it is something one has or does not have. I think it would be better to either say, “Systematizing is the activity of...” or else “The drive to systematize is the drive to...”

a drive at all, rather a skill (2003: 6; 2009: 72). For example, in his 2003 book, he poses the following question:

We all have both systematizing and empathizing skills. The question is: how much of each have you got? (2003: 6)

Skill is different from drive. One can have a drive to do something, but repeatedly fail in one's efforts to do this thing, because one lacks adequate skill. One can also have a skill, but little drive to use it.

An emphasis on skill can be found in a writer summarizing Baron-Cohen's thinking, namely Deborah Barnbaum, in her book on the ethics of autism.² On Barnbaum's interpretation, when Baron-Cohen associates the male brain with systematizing, what he is saying is that the male brain is better at certain systematizing tasks than the female brain (2008: 26).

So is the systematizing quality Baron-Cohen is interested in to be defined in terms of the drive to construct, explore or analyse systems, or a skill in at least one of these areas, or some mixture of drive and skill? As far as I can see, his texts are ambiguous regarding how best to characterize the qualities he is focusing on.

References

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Fine, C. 2010. *Delusions of Gender: The Real Science Behind Sex Differences*. London: Icon Books.

² Some of Cordelia Fine's responses to Baron-Cohen also depend on the skill interpretation. For example, she considers girls with congenital adrenal hyperplasia. In relation to their level of systematizing, she writes, "As for systemising, in the absence of an actual test of this ability it's impossible to know." (2010: 120) Systematizing is understood in terms of skill at this point, not drive. But elsewhere she works with a drive interpretation, criticizing a systematizing quotient questionnaire for being insufficiently focused on determining the level of drive to understand systems (2010: 110).

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