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## UPDATED THINKING ON SAVANT SYNDROME AND PRIME NUMBERS

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### *Abstract*

*In the earlier articles, I showed that at least some parts of Oliver Sacks' report on the twins with savant syndrome cannot be trusted, while also suggesting that there is not necessarily a need to doubt the entire report. Here, in view of some newer materials, I state that my thinking has shifted and propose that the whole story may not be trustworthy.*

**Key words:** *savant, autism*

The popular writings of the late doctor Oliver Sacks (1933-2015) are highly influential, sometimes even cited in academic textbooks as well as in popular media. Among them is the famous, mysterious account of the twins with savant syndrome who reportedly counted more than 100 matches instantly and enjoyed generating huge prime numbers (Sacks, 1985). Unfortunately, that account was shown to be implausible (Yamaguchi, 2007, 2009, 2012). Although these earlier articles suggested that other aspects of the story might be true, newer materials made me think otherwise. As I am sometimes contacted by lay people as well as academics on this issue, I feel the need to express my newer thinking here.

First, After Sacks' death, Temple Grandin testified, published in a popular magazine, that some details in his draft were "wrong":

<https://www.wired.com/2015/09/temple-grandin-oliver-sacks-changed-life/>

We may be left wondering why his report on the twins, written more than a decade after their encounters, can be trusted, given that his reporting of her much more recent (in the same year) interview was inaccurate.

Also the twins' video footage shows that one was perhaps mimicking the other, not responding simultaneously as claimed by Sacks:

<https://www.youtube.com/watch?v=YuhTFsiEcMU>

That claim seems to be at least exaggerated. I also note that there is some inconsistency between his report and research articles of the 1960s (see Yamaguchi, 2012, last paragraph).

Moreover, it may be too unnatural to believe that Sacks detailed the incidents more than a decade afterward. If intellectually disabled people spontaneously generated prime numbers, that would be a scientifically important discovery. Why did he not report it much earlier?

Sacks might have seen the CBS documentary aired in 1983, which could have prompted him to recall the twins and to write about them after a long period of time:

<https://www.youtube.com/watch?v=q9eVqoRctkk>

This last one is only speculation, but other more important materials mentioned above that were unavailable when I published the earlier articles suggest the whole story is untrustworthy.

Conclusion. In light of such newer materials, I now doubt that the twins generated any prime numbers and that they had the ability to count more than 100 objects instantly. Here I propose that this whole story not be trusted, although other writings in his long career may include quite many scientifically valuable, as well as emotionally moving, stories.

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