



Algos, men, women and the 'other intelligence' we largely ignore

VIEW FROM THE US |



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The days when the investment world was dominated by the Old Boys are supposed to have gone. These were the men who went to the right schools and the right clubs and who funnelled money and management fees to each other. Banks and portfolio management companies were supposed to have taken the diversity pill and moved to recruit from a wider universe.

It seems, though, that the Old Boys are being replaced by New Boys. They do not herd into the same, or similar, positions based on friends' tips and simplistic asset allocations. Rather, they herd into the same, or similar, positions based on vast data trawls and proprietary algorithms.

The New Boys do not spend their time off playing golf with each other. Rather, they spend it in front of yet more screens, destroying each others' spaceships in online games or trading Bitcoins in their personal accounts.

Why are women such a small part of the ever larger algo investment world? I am not a self-hating guy, but a monoculture is as risky for investors as it is for farmers. How did this gender tilt come about?

Perhaps in part because algo writing and systematic data trawling are unusually well suited for people on the spectrum of autistic disorders. In Silicon Valley this is such a truism that people, mostly men, will freely say they are "on the spectrum". And there are thought to be three times as many men as women on the spectrum.

The imbalance is even greater among the fraction of autistic people who have savant syndrome. Savants,

who are often socially clumsy, have "islands of genius" that let them memorise books or draw freehand entire cities after one helicopter ride.

The most famous savant is the "Rain Man" card genius portrayed in the film by Dustin Hoffman. The character was based on a savant. There are believed to be six times as many male as female savants.



A gambling scene from the 1988 movie Rain Man — AllStar/United Artists

Savants have an extraordinary ability to perceive patterns in structured material, such as texts, calendars or music, and absorb and recall that data. You might say that sounds like a useful trait in a coder or algorithm writer, and indeed companies such as Microsoft and Google make special efforts to recruit savants.

Wall Street is less explicit about encouraging those on the spectrum. Consider Dr Michael Burry, whose obsession with the sheer wrongness of pre-crash mortgage securities markets, and Wall Street dishonesty, was documented in "The Big Short" book and movie. The awkward and brilliant Dr Burry has acknowledged that he has Asperger syndrome, a type of autism. He returned all his (richly rewarded) investors' money, having made his point.

Dr Darold Treffert, a Wisconsin psychiatrist, studies savant syndrome. He says the high number of

men on the spectrum may originate in the womb. "In the male foetus particularly, circulating testosterone . . . can slow growth and impair neuronal functioning in the [later developing] left hemisphere [of the brain], with actual enlargement and shift of dominance favouring skills associated with the right hemisphere."

In other words, as one part of the brain is under-developed, other parts can overdevelop. Many of the special abilities of those on the spectrum reside in the right side of the brain.

Some women have these characteristics. Dr Laurent Mottron, a psychiatrist at the Université de Montréal, works with Michelle Dawson, a high-functioning savant.

Dr Mottron says "her models never over-reach and are almost infallibly accurate, but she does need a very large amount of data to draw conclusions. By contrast, I have a top-down approach: I grasp and manipulate ideas from fewer sources."

"Combining the two types of brains in the same research group is amazingly productive."

You would think, given the billions thrown at artificial intelligence, that someone would try to find how the source of human intelligence could be illuminated by such research.

Not really. Dr Bruce Miller, a San Francisco psychiatrist who studies how dementia or injury can lead people to acquire savant abilities, says: "This research is not well supported financially."

For its part Wall Street would rather spend its time and money on creating algorithms to own the world.

The risk here is that a monoculture of trying to detect patterns in noisy data may not do well if a sudden shift in the economic or financial environment occurs. The special contributions of a male-dominated "spectrum" or "savant"-like subculture can be valuable. Those need to be balanced and complemented, though, by other forms of insight.