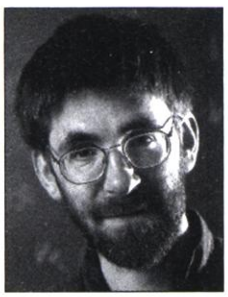
Math and Asociality

Intelligence theorists go round and round on the theme of whether human intelligence is basically a unitary trait or whether different types of braininess can coexist independently of one another. A recent study of three scientists with Asperger syndrome (AS)—a mild version of autism—suggests that deficiencies in "social" intelligence have no effect on math smarts.



Fields medalist Richard Borcherds.

AS can make people socially awkward, withdrawn, and unable to sense the emotions of others. In the December 1999 issue of *Neurocase*, psychologist Simon Baron-Cohen and colleagues at the University of Cambridge report on a study of three men with AS: a 38-year-old mathematician and two students, a physicist and a computer scientist. The mathematician, anonymous in the paper but who acknowledged his identity to *Science*, is Richard Borcherds, a recipient of the Fields Medal, math's equivalent of the Nobel Prize (*Science*, 18 August 1998, p. 1265).

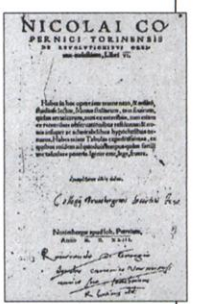
The subjects, and a control group of 14 young men with scientific backgrounds, took tests of "folk psychology"—how well they could read emotions from photographs of people's eyes—and "folk physics"—questions about how things work. The subjects did far better than the controls on the physics test, but they were far worse at reading moods. The results "strongly suggest that social intelligence is independent of other kinds of intelligence, and may therefore have its own unique evolutionary history," the psychologists write. Other recent research has indicated that autism is more common in families of physicists, engineers, and mathematicians, and Baron-Cohen says his team is now "looking to see whether there's a trade-off—as you get better at one you get worse at the other."

Borcherds, now at the University of California, Berkeley, is frank about his condition, although he describes himself as being "at the fuzzy borderline" of Asperger syndrome. He's not sure the research says anything new. Mathematicians' social ineptness has long been part of the profession's self-deprecating folklore, he observes: "I seem to have a hell of a lot of colleagues who are not too much unlike me."

Copernicus Heist In Russia

A number of rare 16th and 17th century books, including a first edition of a Copernicus masterwork, have been stolen in the past 2 years from the Russian Academy of Sciences (RAS) in St. Petersburg, it was revealed last month. Librarians uncovered the theft during a check of the collection made recently when another Copernicus book went up for auction in the United States.

The stolen book is one of just 107 known copies of *De revolutionibus orbium coelestium* (*On the revolutions of the heavenly spheres*), published in Germany in 1543. In it the Polish astronomer presents his revolutionary theory that Earth orbits the sun.



St. Petersburg police said that 23 books were heisted between November 1998 and this January. Irina Belyaeva, deputy director of the library, told *Science* that the Copernicus volume, whose value the library estimated at $200,000, was uninsured—as are all the 300,000 rare books in the 200-million-volume RAS library.

Russian police have recruited Interpol to help track down the books, which, according to library director Valery Leonov, were stored in vaults that only library employees had access to. According to a BBC report, copies of *De Revolutionibus* were stolen from libraries in Poland and Ukraine 2 years ago. Experts suspect that the books were stolen to order for a collector.

Immortality for Sale

Wondering what to get the stargazer who has everything? For just $3000, the University of Arizona Foundation will put your loved one's name on a mirror of the Large Binocular Telescope (LBT), now under construction on Mount Graham, Arizona. The scheme is part of a campaign to raise extra funds for the $90 million telescope.

Typically when a mirror is cast, team members carve their names into the mold. That piqued the interest of telescope board members who saw a fund-raising opportunity, says Peter Strittmatter, director of the Steward Observatory in Tucson. One board member paid for an ad in the 15 February *New York Times*.

Both of the LBT's 8.4-meter-wide mirrors will be perforated in a honeycomb pattern to optimize strength and lightness. The bases of these 1662 honeycomb-shaped molds are available to bear the names of generous citizens. The result, say the builders: "Your name will be imprinted on the reverse side of the telescope mirror forever" (see medusa.as.arizona.edu/lbtwww/cores).

Donors will also get an invitation to the 14 April casting, at which 18,000 kilograms of molten glass will be poured into a spinning mold and engulf the signatures. "This is an environmentally sound way of memorializing yourself—better than sending your ashes into orbit," notes Steve Maran, spokesperson for the American Astronomical Society. Act fast, though; the offer expires 1 March.

Love, NASA Style

NASA, the agency that debunked the famous "face" on Mars, this month started seeing "hearts" everywhere—just in time for Valentine's Day. Images from the martian antarctic and from asteroid ... ahem ... Eros just happen to have heart-shaped features. Cynics might argue that it's a ploy to attract media attention, but *Science* reserves judgment until the space agency finds, say, an Independence Day image of a flag on the moon—or a turkey-shaped comet this November.

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