

Those disagreeable inventors

How can we create an environment conducive to innovation?

Karl D. Stephan

November 11, 2020

Inventors don't play much of a role on the public stage these days compared to the glory days of Marconi and Edison. But they are nonetheless vital to modern civilisation, as technical progress is the main economic engine that drives advanced industrial societies.

Marian L. Tupy, a senior fellow at the Cato Institute think tank, says in a recent issue of *National Review* that we ought to be careful how we treat present and future inventors, even if they prove to be rather disagreeable. And he makes a good case that many of the best ones are just that, and their disagreeability is intrinsic to what makes them good inventors.

Citing several books about psychology, innovation, and DNA, Tupy says successful inventors tend not to care what other people think, and may even take delight in discomfiting their more powerful peers. It's ancient history now, but the legendary 1984 Apple commercial shown during the Superbowl portrayed a young woman, wearing bright colours, running freely as she charges through a grey crowd of drones hypnotised by Big Brother's face on a telescreen, throws a sledgehammer into the screen, and literally busts up everything. It has Steve Jobs' fingerprints all over it. Numerous sources show that Jobs, who is probably the leading candidate for the most famous inventor of the latter 20th century, was not an agreeable person.

So why can't inventors just get along with people like the rest of us do? Tupy contends that those who successfully seek innovative technical solutions to problems also tend to be loners, somewhat socially awkward, and not terribly concerned about fitting in and getting other people to help them with problems. Rather, they prefer to work with things and ideas on their own to solve problems. The umbrella phrase for this type of personality is autism-spectrum disorder, which of course can be crippling in its severer forms, although inventors such as Temple Grandin prove that even clinical-grade autism can be overcome.

Over my career, I have met several, and gotten to know a few, inventors who actually profited from their patents, or at least saw the companies or organisations they were associated with profit from them. Few of them meet the classic description of an autistic personality: intense aversion to social interaction, preference for solitude, etc. I would say that while the autism-spectrum observation is true as far as it goes, and it may be close to necessary to some degree, it is by no means sufficient. And for this I will turn to some history I'm very familiar with: my own.

When I got to college, I was surprised to see that someone had made a poster that showed me as a classic nerd. It wasn't really me, but it might as well have been: plastic-framed glasses, button-down sweater, shirt pocket bulging with pens, slide-rule case hung on belt, etc. I had spent most of my spare time growing up playing with electronics rather than football or socialising. I never dated in high school. And I went to college at what was then probably the West Coast's capital

of nerd-dom: Caltech. If being on the autism spectrum was all it took to be a successful inventor, I should have done fine.

But I think most successful inventors have a drive that I mostly lacked: a desire to show up the established order and make it look foolish, not by words, but by actions, hardware, and (nowadays) software. That part of the successful inventor's personality is missing from my makeup. On the contrary, I tend to revere established institutions and procedures, not delight in their ruination, even if such ruination works to my benefit. This attitude of reverence toward existing structures is exactly what you don't want if your job is to convince others that your idea is better than theirs. It's that simple.

My name is on a couple of patents, one of which (obtained with my Ph. D. supervisor at U. T. Austin in the 1980s) could conceivably have become quite valuable, as it anticipated the future growth of what is known as RFID technology — the little tags that set off alarms if you try to shoplift a pair of sneakers from Walmart. But as it happened, the university that paid for the patent didn't do anything with it, and neither my supervisor nor I had the time or inclination to do the hard work of convincing people that this was the coming thing. It would have involved starting a company, and that was not on my scope screen at the time, nor has it ever been since.

The reason Tupy wrote what he did was to make the point that societies which discourage disagreeableness of the type in question may be shortchanging themselves when it comes to innovation. Nobody knows how to create inventive people. It's like farming: the farmer doesn't really *grow* anything. He or she just creates conditions under which growth of desirable plants can occur.

So cultures that allow people to do things differently, to play around with ideas without having to worry about getting in trouble with their peers or the government, tend to be cultures in which innovation and invention thrive. A good contrast here is between the U. S. in the 1950s and the old USSR (Soviet Union), where everyone had to be constantly on guard lest they be heard to say something even slightly negative about the government, at which point their neighbours might rat on them and they'd end up in the Gulag for twenty years. The USSR was not a hotbed of technical innovation then, although it supported scientists who aided its nuclear-weapons program. But as far as economically profitable inventions go, it was no contest, as the U. S. was far and away the best place to be for that kind of thing, even in the allegedly conformist and repressive 1950s.

By all means, let's preserve what freedoms we have, to allow those cranky inventors among us to be by their lonely selves, cooking up ideas and gizmos that will make them and others millionaires and benefit the rest of us in the bargain. But being a nerd isn't all it takes — you have to want to make fools of the complacent powers that be, and succeed at it, too.