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## FIERCE NERDS

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Most people think of nerds as quiet, diffident people. In ordinary social situations they are — as quiet and diffident as the star quarterback would be if he found himself in the middle of a physics symposium. And for the same reason: they are fish out of water. But the apparent diffidence of nerds is an illusion due to the fact that when non-nerds observe them, it's usually in ordinary social situations. In fact some nerds are quite fierce.

The fierce nerds are a small but interesting group. They are as a rule extremely competitive — more competitive, I'd say, than highly competitive non-nerds. Competition is more personal for them. Partly perhaps because they're not emotionally mature enough to distance themselves from it, but also because there's less randomness in the kinds of competition they engage in, and they are thus more justified in taking the results personally.

Fierce nerds also tend to be somewhat overconfident, especially when young. It might seem like it would be a disadvantage to be mistaken about one's abilities, but empirically it isn't. Up to a point, confidence is a self-fulfilling prophecy.

Another quality you find in most fierce nerds is intelligence. Not all nerds are smart, but the fierce ones are always at least moderately so. If they weren't, they wouldn't have the confidence to be fierce. [\[1\]](#)

There's also a natural connection between nerdiness and independent-mindedness. It's hard to be independent-minded without being somewhat socially awkward, because conventional beliefs are so often mistaken, or at least arbitrary. No one who was both independent-minded and ambitious would want to waste the effort it takes to fit in. And the independent-mindedness of the fierce nerds will obviously be of the aggressive rather than the passive type: they'll be annoyed by rules, rather than dreamily unaware of them.

I'm less sure why fierce nerds are impatient, but most seem to be. You notice it first in conversation, where they tend to interrupt you. This is merely annoying, but in the more promising fierce nerds it's connected to a deeper impatience about solving problems. Perhaps the competitiveness and impatience of fierce nerds are not separate qualities, but two manifestations of a single underlying drivenness.

When you combine all these qualities in sufficient quantities, the result is quite formidable. The most vivid example of fierce nerds in action may be James Watson's *The Double Helix*. The first sentence of the book is "I have never seen Francis Crick in a

modest mood," and the portrait he goes on to paint of Crick is the quintessential fierce nerd: brilliant, socially awkward, competitive, independent-minded, overconfident. But so is the implicit portrait he paints of himself. Indeed, his lack of social awareness makes both portraits that much more realistic, because he baldly states all sorts of opinions and motivations that a smoother person would conceal. And moreover it's clear from the story that Crick and Watson's fierce nerdiness was integral to their success. Their independent-mindedness caused them to consider approaches that most others ignored, their overconfidence allowed them to work on problems they only half understood (they were literally described as "clowns" by one eminent insider), and their impatience and competitiveness got them to the answer ahead of two other groups that would otherwise have found it within the next year, if not the next several months. [2]

The idea that there could be fierce nerds is an unfamiliar one not just to many normal people but even to some young nerds. Especially early on, nerds spend so much of their time in ordinary social situations and so little doing real work that they get a lot more evidence of their awkwardness than their power. So there will be some who read this description of the fierce nerd and realize "Hmm, that's me." And it is to you, young fierce nerd, that I now turn.

I have some good news, and some bad news. The good news is that your fierceness will be a great help in solving difficult problems. And not just the kind of scientific and technical problems that nerds have traditionally solved. As the world progresses, the number of things you can win at by getting the right answer increases. Recently [getting rich](#) became one of them: 7 of the 8 richest people in America are now fierce nerds.

Indeed, being a fierce nerd is probably even more helpful in business than in nerds' original territory of scholarship. Fierceness seems optional there. Darwin for example doesn't seem to have been especially fierce. Whereas it's impossible to be the CEO of a company over a certain size without being fierce, so now that nerds can win at business, fierce nerds will increasingly monopolize the really big successes.

The bad news is that if it's not exercised, your fierceness will turn to bitterness, and you will become an intellectual playground bully: the grumpy sysadmin, the forum troll, the [hater](#), the shooter down of [new ideas](#).

How do you avoid this fate? Work on ambitious projects. If you succeed, it will bring you a kind of satisfaction that neutralizes bitterness. But you don't need to have succeeded to feel this; merely working on hard projects gives most fierce nerds some feeling of satisfaction. And those it doesn't, it at least keeps busy. [3]

Another solution may be to somehow turn off your fierceness, by devoting yourself to meditation or psychotherapy or something like that. Maybe that's the right answer for some people. I have no idea. But it doesn't seem the optimal solution to me. If you're

given a sharp knife, it seems to me better to use it than to blunt its edge to avoid cutting yourself.

If you do choose the ambitious route, you'll have a tailwind behind you. There has never been a better time to be a nerd. In the past century we've seen a continuous transfer of power from dealmakers to technicians — from the charismatic to the competent — and I don't see anything on the horizon that will end it. At least not till the nerds end it themselves by bringing about the singularity.

## Notes

[1] To be a nerd is to be socially awkward, and there are two distinct ways to do that: to be playing the same game as everyone else, but badly, and to be playing a different game. The smart nerds are the latter type.

[2] The same qualities that make fierce nerds so effective can also make them very annoying. Fierce nerds would do well to remember this, and (a) try to keep a lid on it, and (b) seek out organizations and types of work where getting the right answer matters more than preserving social harmony. In practice that means small groups working on hard problems. Which fortunately is the most fun kind of environment anyway.

[3] If success neutralizes bitterness, why are there some people who are at least moderately successful and yet still quite bitter? Because people's potential bitterness varies depending on how naturally bitter their personality is, and how ambitious they are: someone who's naturally very bitter will still have a lot left after success neutralizes some of it, and someone who's very ambitious will need proportionally more success to satisfy that ambition.

So the worst-case scenario is someone who's both naturally bitter and extremely ambitious, and yet only moderately successful.

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■ [Chinese Translation](#)

