

## PLAUSIBILITY

Assessing the quality of anticipatory knowledge about the future is no small problem. The future that actually comes into being is rarely plausible.

William Gibson, for example, is arguably his generation's foremost writer of fiction about the future. He famously invented the word "cyberspace" in his 1984 novel "Neuromancer," which has sold more than 6½ million copies. This was before virtually anyone – including him – knew that something called the Internet was being born. He is also credited with inventing the idea of the "matrix," as well as foreseeing some of the twistiest aspects of globalization.

Gibson is still producing literate and thought-provoking novels featuring the kind of gritty, anonymous warehouses where the future is sometimes fledged. But recently his novels have transcended categories. His new books are set in the recent past.

I asked Gibson whether he could have predicted that in 2007, two leading candidates for the presidency would be a white woman and a black man?

That's the problem with his game, he says. "If I had gone to Ace Books in 1981 and pitched a novel set in a world with a sexually contagious disease that destroys the human immune system and that is raging across most of the world – particularly badly in Africa – they might have said, 'Not bad. A little toasty. That's kind of interesting.'

"But I'd say – *But wait!* Also, the internal combustion engine and everything else we've been doing that forces carbon into the atmosphere has thrown the climate out of whack with possibly terminal and catastrophic results.' And they'd say, 'You've already got this thing you call AIDS. Let's not –'

"And I'd say, *But wait!* Islamic terrorists from the Middle East have hijacked airplanes and flown them into the World Trade Center.' Not only would they not go for it, they probably would have called security."

This is why scenario planners at operations like Global Business Network use the word "credible" instead of "plausible" to describe the essential element of their strategic stories. Is "plausible" not kin to "predictable"? Does it not imply likelihood? And that's a problem. Wild cards and black swans abound. Long practice reveals that even when you're right – especially when you're right – the problem is convincing decision makers to act on your insights.

That's one of the reasons why, in my practice on the future of human nature, I'm trying not to mix up the "plausible" with what's actually in the pipeline. I'm trying to rigorously describe the human enhancement technologies coming at us in the next 20 years in terms of six horizons:

The first horizon is “commercial”: The stuff has been demonstrated to work, the business model is thought to be in place, the crank up process is in full swing. The stuff has cleared stage three clinical trials, for example. We’re just waiting for the factory and the advertising campaign and the company organization to be finished. It’s real and near. Typically 1-3 years to reaching the public.

Second horizon is “engineering.” This is the stage where the venture capitalists usually live. The stuff seems to work, and they’re figuring out if they can ramp it up for major production in a fashion that makes economic sense. Typically 2-5 years to reaching the public unless some deal-killer emerges.

Third horizon is “scientific.” This is the stage where they’re demonstrating that it’s possible. They have proof of concept. But it is not guaranteed yet that it can be safely and economically brought to market, or when. Organ and limb regeneration probably belongs in this category. Typically 4-10 years to reaching the public if everything goes right.

Fourth horizon is “speculation.” This is the situation where, e.g., we know for a fact that plant genes can be spliced into mammals, and we’re thinking about humans who can generate energy from photosynthesis, but who know what that means. Typical time to consumer, 10-20 years, if ever.

Fifth horizon we may call “blue sky.” This is essentially credible science fiction.

And, if we wish, we can add one more, that we might call “questionable.” This gives us the option to throw cold water on stuff that we really have our doubts about within our 20-year timeline.

The significance of attempting such rigor is that we’re living in a world in which Craig Venter, the co-sequencer of the human genome, says that he is within months of creating a life form that eats CO<sub>2</sub> and poops gasoline. If it can be economically mass-produced, it promises to transform climate change and the Middle East at one stroke. ExxonMobil has invested \$600 million in his project.

Is that plausible? You decide. It certainly is credible.