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President's Corner

Most Wished-For New Tech

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We seem to have so much technology in our lives - how could we want more? But, I'm writing this on President's Day, and I wonder, if George Washington could be transported in time to today, would he be able to cope in our world? Beyond the social and economic changes he would face, would he be able to deal with our technology? Cars, trains, airplanes, radio, TV, cell phones, space travel, nuclear bombs - would he be able to understand any of it, or would he want to hide up in a cherry tree? There is a saying: Any sufficiently advanced technology is indistinguishable from magic.

If we were able to bring Abe Lincoln to the present day, would he be any better able to understand our world? He would have at least some familiarity with trains and some industrial technology. Since he used the telegraph, he may be better able to cope with our communications tech today. What if we could bring Albert Einstein (who died in 1955) to the present? Would he be astounded by the capabilities of a smartphone?

What new technology would you most like to see introduced this year? This was a question a web app asked my friend's wife. Because she currently has two retirement homes, one in Idaho and one in Arizona, she said what she wanted most was a transporter.

No matter how much tech we have, we still have science fiction, which can drive our desires for more and direct our innovation. For example, everyone has seen Star Trek and its transporter device, a means to "beam" people and materials from one place to another in almost an instant. My friend and his wife have traveled between their homes many times in the last year, so it was understandable that she would like a way to make that trip more quickly.

The Star Trek transporter is generally portrayed as a circular pad connected to a device or console on the floor. A person on the pad is scanned atomically and then de-materialized, with the data representing their physical manifestation sent to a remote location and re-materialized. Matter, to energy, and back to matter. That seems like it could be in the realm of science and not magic, at least for non-living things. If we can have a 3D printer today using elemental materials, who is to say we couldn't one day print in atomic particles, creating atoms and molecules of any kind?

That is likely the science behind the Star Trek replicator, the cousin of the transporter. It can create inanimate objects of great complexity from a data file, with energy as the only apparent input. From "tea, Earl Grey, hot" to complex parts, the replicator could help feed our world and solve many problems, as long as you could solve the problem of where to plug it in. Of course, Star Trek tech would have to include a powerful green power source like a fusion reactor.

We are starting to take some steps toward the food replicator concept. For example, I've read about a company trying to "grow" animal tissue that can be 3D printed into burgers or steaks. This would provide "cruelty-free" meat that perhaps requires fewer resources than our current agricultural methods.

The Star Trek replicator only made food and parts; it seemed incapable of creating a living object, making it more plausible. Many people, myself included, have concerns about the apparent "destroy, then re-create" operation of the transporter in Star Trek. There were a few episodes in which a character's information was trapped in the device's "pattern buffer" (presumably memory) for years or decades before someone found a way to re-materialize them. In one episode, a transporter malfunction created a second instance of a character. This would have obvious religious implications in the real world, but apparently not in Star Trek.

My preference for quick and distant travel would be by stargate, from the movie "Stargate" and its derivative TV series. In this sci-fi franchise, stargates are devices created by ancient aliens that can connect with a wormhole (a "tunnel" through spacetime). Anything passing into a connected stargate instantly passes through the wormhole and out the stargate at the other end. These seem more supported by science than transporters; now, we need to find those aliens to show us how to build them. Perhaps those aliens in the movie "Contact" could help. If only they'd send us the plans.

My favorite "wish-for" tech device is something I've not specifically seen in any science fiction: the temporal cakebox. My concoction solves one of my most vexing problems: how to fully enjoy my favorite food - chocolate cake. We live in a time of food plenty, with a nice chocolate cake available at Costco for a good price. I'm too thrifty to want to pay for cake by the slice, but I can't (and should not) consume a whole cake in the time before it degrades. So what I need is a temporal cakebox.

I envision the temporal cakebox as a device similar to a large microwave oven. When you buy a cake, you would take a slice, put the remaining cake in the temporal cakebox, close the door and activate it by pressing the Reset button. Later (hopefully at least a day or two), you can return to the temporal cakebox and press the Return button. This would return the inside of the device to the time when you last pressed the Reset button. Then, you could open the cakebox door, remove another slice (just as fresh as when you put the cake in), close the door, and press Reset again. This sequence can be repeated over any timeframe until the cake is gone, with the last slice just as good as the first. Since I'm not violating any laws on the conservation of matter (I'm not creating any cake, just doling it out over spacetime) or making any time travel paradoxes (no cake is going back in time to kill my grandfather), I don't see why the temporal cakebox can't work.

The stereotypically expected technology always involves a flying car. Don't you remember thinking as a child that we would have flying cars by the 21st century? We are almost a quarter of the way through it, and still no flying cars. I can't see that we could have flying cars for the masses unless they were self-flying. Since we can't seem to perfect self-driving in two dimensions, flying cars seem like a long way off.

Another slightly related tech item is the personal jetpack. Those appear to be available (as well as wingsuits), though they are relatively expensive, in the $250k to $500k range. Finally, the personal drone is affordable, though I've yet to see any Amazon delivery drones in my neighborhood.

AI, or artificial intelligence, is being worked on today. It may one day drive our cars, fly our planes, find a solution for global warming or rule us as a benevolent overlord. Right now, all an AI can do is win at Jeopardy and predict what we will buy next. It has been eleven years since the IBM Watson computer beat Ken Jennings on Jeopardy; what has it been doing since then? At least Watson is not trying to invade Ukraine. Or is it? [ see the article "Watson Sold Off for Parts" at" https://slate.com/technology/2022/01/ibm-watson-health-failure-artificial-intelligence.htmeditor]

If AI could be made safe and effective, one good use for it would be as a robot helper. Having a few droids around the house to help out would be great. Oh, wait! My wife has a Roomba robot vacuum, though she hardly uses it. So, I guess it is no R2-D2 or C-3PO.