My Musk list (2022)

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A young Elon Musk, deciding what to do with his life, famously reflected on which upcoming technologies would most impact the future of humanity[1]. His list? "The internet; sustainable energy; space exploration, in particular the permanent extension of life beyond Earth; artificial intelligence; and reprogramming the human genetic code." Do any of those sound familiar?

Ever since reading about this exercise, I've tried to do it for myself, seeing the value in such clarity of vision. My early lists were topped by education: I wanted to start undermining Prussian schools by providing a better solution, so that my future kids will have a better childhood than me. I've been working on this for four years now, and feel that my goal is on track. So the list has regained relevance: how do I want to use my life? What will I be working on in a decade?

Here are my current interests. I'd feel blessed to have a big impact in any of them.

Nanotechnology

The vision of atomically-precise manufacturing explored by Feynman[2], Drexler[3], Stephenson[4], and Storrs Hall[5] fascinates me. Diamond skyscrapers! Sapphire rocket engines! Custom fabrication of anything we can imagine, at an atomic scale and out of vats of lone elements! Moore's Law, but for atoms! The idea of descending the Feynman waldo path[25] and having molecular-scale self-replicating nanofactories that can then do practically anything... it titillates me to no end. As far as I can tell, the challenge remains untackled; how cool would it be to be the one to do this? With enough funds and dedication, I could probably make it a reality.

Abundant [Atomic?] Energy

Fission, fusion, everything: bring on the nukes! Any really "cool" technology, to be abundantly useful, will need energy to be a few orders of magnitude cheaper. So we as a species *really* need to get back on the Henry Adams curve of exponentially-increasing energy production, and nuclear sources seem to be the obvious path forward here[56]. (If you think about it, isn't the fact that the energy we need to light and heat our homes *doesn't* have a negligible cost kind of ridiculous?!) Fortunately and unfortunately, it seems like this problem is being tackled already by a gigantic fleet of fusion startups, at least one of which will probably succeed: bad because it's too late for me to make a big difference, good because that's a key prerequisite to a lot of other cool shit (see above and below) I can work on instead.

Hovercraft

This one is mostly from Clarke[7]. He thinks that hovercraft could economically replace trans-oceanic shipping, with the added benefit of no longer caring about the difference between going over land or water (except to avoid cliffs). The reduced friction between vehicle and ground that hovercraft bring would also eliminate a lot of our infrastructure problems: if all you need is a flat surface that you barely impact, who cares about maintaining expensive highways or the like? I'm still unsure about the affordability math (why aren't shipping lines already doing this?), but am designing and building a small hovercraft myself to learn more. This interest is almost purely for the "haha that would be COOL if it works" factor.

Education

I mentioned it before, but this is really such an all-encompassing category. What should children do? (Run around, hurt themselves, and read.) What should teenagers do? (Follow their curiosity and use their knowledge to make changes in the world.) What should young adults, and older adults, do? (The same thing.) How can libraries and social structures be improved to emphasize eternal exploration and edification? There's so much room for improvement, and it's *such* an obsessively thorny and fractal problem; despite what I said earlier, I probably could spend my whole life in it.

Competent Governance

I don't really know what this looks like, but I'd love to help fix society's decision-making incentive structures. I doubt this means "running for office"; it's more like experiments with sovereign cities, digital nations, and so on. How do we attract the most competent people into the high-leverage roles of politics? How do we speed up government decision-making, and give bureaucracies a sense of upside perspective? How can we persuade officials to optimize for something other than simply reelection? What would it take to make corruption vanish because it's a bad strategy, not just out of fear?

Space Colonization

Pretty self-explanatory. God willing, within my lifetime humanity will have transcended the petty bounds of our home planet and begun to reach to the stars. First Mars[8] and the Moon, then other planets and the void itself[9]... I would be loath to see all this happen without pitching in at all. Perhaps I'll be a colonist, perhaps an industrialist, perhaps just a propagandist. Whatever form it takes, I'd love to be involved.

1. "The Cook and the Chef," Tim Urban (2015). ↩
2. "There's Plenty of Room at the Bottom," Richard P. Feynman (1960). ↩ ↩2
3. "Engines of Creation," K. Eric Drexler (1986). ↩
4. "The Diamond Age," Neal Stephenson (2000). ↩
5. "Where Is My Flying Car?," J. Storrs Hall (2021). ↩ ↩2 ↩3
6. "The Education of Henry Adams," Henry Adams (1904); chapter XXXIV. ↩
7. "Profiles of the Future," Arthur C. Clarke (1968). ↩
8. "The Case for Mars," Robert Zubrin (1996). ↩
9. "The High Frontier," Gerard K. O'Neill (1976). ↩