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Technological development these days seems highly asymmetrical. We have plenty of applications of technology towards terrible things; TikTok using advanced RL to train addictive recommendation algorithms, Palantir uses ML to create a digital panopticon and Anduril – well…

This brings us to an obvious asymmetry in how we perceive the usage and effect of technology on our lives. There are many uses of technology with negative consequences, obviously, but there are also plenty of great uses. There is incredible work in imaging, scientific simulation, and with protein analytics technologies like AlphaFold and IsoDDE. Then, why do we perceive current-day technological development as causing increasing headaches for society?

The most visible facets of technology are primarily perceived through social media, which rewards opinions that are inflammatory and information-sparse. Positive ongoing technological developments do not mesh well with social media due to density of information and because they are increasingly niche. The technological developments that have low information density but are emotionally appealing are often the technologies with negative effects.

The other aspect of this phenomenon is that negative news is much more visceral than positive. Viewing a video of an Anduril drone exploding and releasing a barrage of shrapnel into a car is much more emotionally interesting than a video of somebody talking about a new treatment brought about by computational analysis of novel protein binding sites. However, this comes with the big caveat that the video about the new treatment becomes much more relevant, moreso than the Anduril video, if it concerns the future of somebody that one cares about, or sparks controversy or shock at a rapid upset to their worldview. For example, a cure for cancer may satisfy the first criterion, anti-aging technologies the second.

Social media has been disastrous for coloring our outlook on the world. It has caused us to consider the future to be hopeless. By optimizing for engagement and your emotional response, it brings out the most extreme views, swinging manically between visions of immense luxury and visions of despair and death. It is the very example of a technology that has been gravely injurious for humanity. We hate ourselves for using it and still use it anyways to hate others. Our exposure to new technology becomes restricted to what we see on social media: technology that further degrades our view on the world. We see AI videos, AI slop text. We see misinformation campaigns and botted troll accounts.

So what breaks us out of this cycle?

I believe that technological growth comes in spurts of immense innovation. When the internet began to reach wider audiences, first with AOL and then beyond, it had the same effect of displacing this concern about the negative uses of technology. This is not to say that there were not concerns also voiced about the technology, but the disruption to the "way

things worked" was substantial enough to also invite much hope and optimism. We see the same thing with AI now, with its disruption to the nature of work.

When the paradigm we operate in stalls, something curious happens with applications of new technology. Whereas the highest reward and most laudable goals are tackled first, as technologies mature, these low-hanging fruit dry up. Technologies then find themselves applied to seedier domains, where there is still plenty of profit to be obtained, but may have some taboos or societal disapproval. We see this with autonomy being applied to military hardware and ML for warfare.

New, groundbreaking technologies, shake things up once again. They change reality such that the previous seedy applications are disrupted. Nuclear weaponry, in a similar pattern, upset the pattern of warfare by significantly reducing the rate of armed conflict among major powers. It obviously caused concern for the end of the world, but the point still holds. Paradigm shifts happen rarely, but they ensure that no miserable situation can continue forever, even if they bring about another uniquely miserable situation eventually. In all of this, we must remember that with this pattern, we typically maintain or increase our satisfaction and ease of life. The benefits compound as both existing pain points and collateral effects from disruption are the first to be solved. People typically want to do good. The disruption effect of new technologies typically asymmetrically impacts domains that have societal disapproval or are seen as undesirable.

So how do we adjust to paradigm shifts that occur more and more frequently? Humans are incredibly adaptive; we adjusted to the widespread adoption of the internet within two decades. It has now faded into the background of our lives. It is the canvas on which the controversy, disruptions and worry take place. It is no longer the focus of these things, but the conduit. Much of the promise (and unfortunately also the peril) of the internet's development has come into fruition, but we do not appreciate it; we have moved on to the next thing. In short, we will figure it out.