Technology lecture

Hi everyone, good to be with you.

I was asked to speak to you today about technology – or rather, about why serious philosophers could ever have thought that what is implied by a technological attitude toward ourselves and the world could be seen as a big problem.

To give you straightaway the most noteworthy example, the greatest philosopher of the 20th century, a man named Martin Heidegger, considered the question concerning the essence of technology to be among the worthiest topics of our concentrated attention, in part because he was worried that the technologization of our existence meant a hollowing out, uprooting, and destruction of the human being and of our relationship to being itself.

But let's not get too far ahead of ourselves.

If we don't start with the heights of German philosophy but with our own everyday experiences, then we are less likely to talk about a technological attitude or worldview or about the rootedness or uprootedness of the human being and more likely to talk about the everyday technologies that in general make our lives easier and more enjoyable – cell phones, espresso machines (a personal favorite), and laptops, to name a few.

Consumer technologies, information technologies, communication technologies…you deal with these all the time, in a hundred different ways, obviously. And although there are typical frustrations associated with any technological device, like for instance bad internet connections, or hardware or software that doesn't work quite like you expected it to, still, as a rule, we tend to believe that the solution to these problems is more technology and better technology, and that the improved outcomes will make our lives easier and more pleasant, overall.

Somehow, in other words, it is implied in the idea of technology itself that technology is essentially *progressive*. It gets better. Version 2.0 will solve the problems of version 1.0. Admittedly, it will create its own problems. But nothing that version 3.0 can't fix. And if we extrapolate, we may be tempted to conclude that there is some version, some point in time in the progress of technological development, when, just maybe, there will be no more old problems to solve, only new vistas to explore, uncreated worlds to imagine and create.

At one extreme, this technological utopia seems to fulfill some genuine wants of ours. More comfort, more convenience, more safety, more security, more efficiency, more speed, more control, and more fun – you would almost think that this "more" itself is part of technology's DNA. In a tech utopia, environmental technologies can be managed to preserve a sustainable future for the earth's population, providing clean air, clear water, abundant food, etc.

What's more, through aeronautical technologies, the earth's population, at least some portion of it, could foreseeably populate distant planets and set out to conquer a vast, maybe infinitely

vast, frontier, encouraged by the belief that there is nothing the pioneering or promethean spirit in man cannot conquer.

Speaking of the promethean spirit, a recent book championing the merits of "promotheism" openly embraces a future that overcomes not only the limitations of space and time, but the limitations of human nature and reality itself, ushering in a brave new post-human, post-real world in a moment that those who work on these issues call The Singularity.

Of course, if the fruits of potential technological hyper-development are not shared equally among the human race but are weaponized or hoarded by what might eventually become a sort of super-human tech oligarchy or tyranny, then the picture suddenly looks less rosy for the large, excluded underclass who by assumption benefit from technology.

In other words, for technological development to be good, it must be good for everyone, or for as many people as possible. Technology might imply its own inherent standard of progress, but there are also standards of justice that it must meet to be good. When it falls short of those standards, opposes them or even undermines them, we are justified in wondering whether or not technology *is* simply good, as the argument assumed that it is.

But it's clear that we overexaggerated to begin with the positive vision of a technological utopia, where we get all of the benefits of efficiency, comfort, problem-solving and everything else, with comparatively few downsides.

Chemical and biological weapons, atomic bombs, centralized surveillance apparatuses – these are also technologies, and I would guess that no one among you would dare to call them and other implements of destruction and control *simply* good.

We could of course wonder whether there might come a stage of human progress, a "technology 100 point 0", somewhere in the distant future (let's say 1000 years from now) that will render even weapons of war a thing of a past, since it will have ushered in an era of world peace, overcoming *scarcity* and satisfying men's deepest longings, such that no one will need to kill or be killed for a cause that isn't shared by all other rational beings.

Is that unreasonable? You have heard about medical technologies, like pills, for instance, that are designed to alleviate pain and sadness. Perhaps there will be technologies that alleviate aggression, pride and the other (psychological) causes of war as well as technologies that ensure abundance.

On the basis of more rigorous philosophical analysis, there have been serious thinkers who argued persuasively that the development of technology (i.e. of the spirit of technology) will lead inevitably to a world of universal equality, where no one will need to work or fight again. Since human history is the history of working and fighting, such an outcome would be the end of human history, that is, the end of the human being and the end of history. Some of you may know about the famous book by Francis Fukuyama called The End of History and The Last Man.

It develops the argument made by Alexander Kojeve in his reading of Hegel, a German thinker who argued that history has ended and that he is the one who, in understanding it, has completed it once and for all.

You see how quickly German philosophy tempts us when we begin to think about these things.

Without talking about the end of history and all of that, we are probably on more solid ground for now if we revise the argument that technology is good and assert instead the opinion that technology is neither good (that means: no technological uxtopia follows from the nature of technology itself) nor bad (no dystopia either), but rather neutral.

You've probably heard the phrase: guns don't kill people; people kill people. Well, on this view, the same applies to technology. It doesn't kill. It doesn't heal. People do that - with the help of technology. Technology is a means to ends that are not implicit in technology itself but that are selected by the person. It is only as good or bad as the people who use it.

How do things stand with this thesis of the neutrality of technology? If technology is ultimately neutral in itself, then you'd have to be an old crank or luddite, or maybe just an incompetent fool, to be critical of it, like an angry old man yelling at a cloud.

Let me digress for a moment. I don't know Tolkein well enough to know in detail what his thoughts were on technology: and I've been assured that that's okay, since our conversation today is not about Tolkein; it's about technology. *But* I do have a colleague who writes about him and he told me something that is relevant to this neutrality idea.

"Tolkein," he said, "viewed technology as an exponential power, neither intrinsically good nor evil. An odd integer (say evil) would remain odd but greater. So, technology can make evil worse. The converse is true for even integers and goodness."

He mentioned a few other things, too, which complicate the idea of neutrality. Tolkein (he said) viewed human nature through a Catholic lens: all men are born into original sin and all men are tempted by the power of technology to increase their own power - for the sake of sin, in the service of sin.

But now look: what does the neutrality of technology mean if all men are "odd integers" tainted by original sin? Among other things, it would mean that, for a Catholic, the evaluation of technology would need to fall under not just *any* standard of justice but under the Catholic standard of justice in particular, for instance Aquinas's.

The point is more general, though: It is somehow not enough to say that technology is neutral and that whether it is good or bad depends on man, because it is an open question, at least at first, whether man himself is by nature neutral, or good, or bad, and whether there is a feedback loop between technology and man's nature that makes him better or worse.

Is man a fallen being born into original sin and tempted by power? Does it belong to the essence of man to be "dangerous"? Or was man born (or made?) good and only corrupted through his long history, for instance through the establishment of the arts, which adversely affected his simple virtue? Well, the arts are themselves technological (art is just the standard translation of the Greek term techne). If we were born good/innocent, how could we have been corrupted by something inherently neutral, which should have reflected or embodied our goodness, rather than causing our corruption?

As we dig even just a little below surface of our initial impression that, for the most part, ordinary, everyday technologies make our lives easier and more pleasant, we are confronted, surprisingly, with some big questions and issues: Utopia, dystopia, good and evil, God and the fall, history, reason, freedom, the arts, innocence and corruption… alternatives connected with names like Aquinas and Rousseau, Plato and the Bible.

Should it be so strange if our journey to the heights of contemplation should start from ordinary experience and everyday opinion? In Plato's Republic, the famous allegory of the cave teaches us, among other things, that the ascent which Socrates calls education, the turning around of the soul toward eternity, an ascent so thoroughgoing that it takes us all the way beyond being itself, begins from the shadows on the wall of the cave, from our habitual opinions and impressions.

When we begin to think about what occurs to us in ordinary life, such as how technology occurs to us, the phenomenon of technology, the essence of technology, when we really begin to think, the ordinary gradually transforms itself into something quite strange and unusual, and in the best case we are also transformed.

It does not seem to be possible to think seriously about technology without calling into question what it means to be human. It is in general the provenance above all of those we call philosophers to reflect on what it means to be human in the most comprehensive way. And perhaps it is for that reason that it is among philosophers that you find, as I said at the outset, genuine concerns about what the technological outlook on the world and on ourselves implies about our relationship to the grounds of our existence, and to our deepest and most fundamental needs.

I now want to talk to you about how my teacher in these matters thought about what is implied by modern attitudes towards technology. I'm referring to Leo Strauss, a 20th century scholar of the history of political philosophy. He was my teacher through his books, and he saw something about this issue quite profoundly. There are a few different ways we could work our way into his arguments. I'm going to give you one way.

Strauss observed that modern Western civilization is in a crisis. He characterized this crisis as a crisis of a certain kind of rationalism, modern rationalism. It was once thought that reason was able to provide rational guidance for a good human life. That guidance was presented in the

teaching of the classical political philosophers, who argued that there is stable, knowable standard for the good life, that it is the life lived in the pursuit of and in accordance with our moral and intellectual perfection, a life of justice, moderation, courage, and prudence. They didn't assert these things on the basis of a personal quote unquote commitment to their quote unquote values. They reasoned about the nature of things and showed what is good.

But in the modern era, the idea that the nature of the good life could be rationally understood was replaced by the view that *there is no science or knowledge of the ends of human life* – no knowledge about the best way to live – instead, life is an artistic creation, a product of will rather than reason. The imperative that matches this view is "be authentic" or "be yourself" – be who and what you want to be. Freely create yourself. You are a work of art.

The problem is that there is no standard here for what is good. It is in the eye of the beholder.

The transformations in the understanding of human nature that led to the rejection of a rational standard for the good life led in the political domain to the rejection of rational standards for the good society: the philosophical crisis was thus also a political and moral crisis, for total value relativism implied that even cannibalism is just a matter of taste (as he once put it). Strauss was keenly interested in understanding the nature of this crisis of modern Western civilization and restoring a sober alternative to it, one that he believed was offered by the classical political rationalism of the ancients, Socrates especially.

It's not enough just to prefer the classics, however. Strauss had to show where things went wrong; he had to explain how the first modern thinkers broke from the classical tradition and how that deliberate act culminated in the crisis he was trying to understand and avert. He also had to show that it was *possible* to return to the ancients. He therefore had to raise the question of *progress and return* and show that progress, or a progressive and technological interpretation of being and time, is not the only genuine option, that the old option had not been genuinely refuted because it had not been genuinely understood, that we could return to Plato and the Bible.

For our purposes, I mean, for understanding something about the relationship between how we think about human being and how we think about technology, it may be helpful to consider what Strauss said about the first decisive break with the classical tradition, which he located in the political philosophy of Machiavelli, Hobbes and Locke, in that order.

I'm going to generalize a bit. Prior to Machiavelli, Hobbes and Locke, the classical authors took their bearings by man's perfection, by the perfection of man's nature. Man's nature, his specific difference from other beings, is his rationality or intellect. As a result, the perfection of man's nature consists primarily in the perfection of his intellect.

Politically, that entails the theoretical teaching that the best city is the city ruled by the *wise*, by philosophers, by those who have purified and exercised their intellects in regard to the highest

objects of intellection more than anyone else – the highest of these according to Socrates is the idea of *the good*.

But the classics understood that the actualization of the best life (the life of the philosopher) and the best city (the city ruled by philosophers) was rare, though not impossible. It depended to a great extent on chance. For instance, there is a lot of chance involved with the potential philosopher becoming an actual philosopher without first being corrupted along the way. To give you another example from Plato's Republic, the best city needs a philosopher king, i.e., the highly unlikely coincidence of philosophy and political power. So, you see, for the classics, the best outcomes are very rare and depend in part on chance for their realization. Nevertheless, this rare perfection provides a guideline or standard for judging the more easily realizable or actualizable second and third best alternatives.

I must obviously skip over a lot of details – and I refer you to the good books by Strauss on these topics for those details. But let's briefly continue this rough sketch of the modern break with the classics by turning to Machiavelli, who said that we should not take our bearings by how man *ought* to live (by his perfection) but rather by how he *actually does* live.

Our moral and political teaching should be "realistic." We should be able to guarantee its actualization – something that the classics, to repeat, did not want to do, because they understood the role of chance in human life and the limits of human action. Machiavelli says, no: to ensure the outcome that we want, we must conquer chance, we must conquer fortune. We can't leave it up to chance.

So rather than aiming at what is highest in man, and therefore rarest, we will find instead a lower, more common passion, a selfish passion that can serve as an attainable standard for human life. Machiavelli found that in *glory*: because men want glory (which is a lower and more common passion than intellectual perfection or the love of wisdom), they can be taught to believe that certain actions will gain them glory or everlasting fame and reputation.

Machiavelli could therefore propagate a new moral and political teaching that he thought would stand a far greater chance of actually coming to be. The most important thing for our purposes that Strauss says about Machiavelli's revolution is this: he lowered the standard of the good life to something more common and reliable, and in doing so, he took a radically non-classical stance toward chance or fortune as *something that could be conquered*.

The main way chance or fortune is conquered is through science or technology. Now there are a few things to say here, a couple of different ideas I'd like to ask you to pay special attention to. The first is this. For the classics, the nature of a thing means its essence. Human nature is to be a reasoning being, a rational animal, a soul with intelligence. And that nature or essence is fulfilled when it is perfected. A life according to nature is a life in accordance with reason and intellect. But what happens when the notion of nature shifts…?

…when suddenly nature is the natural world of chance and fortune, of the scarcity, danger and unpredictability that poses an obstacle to man's free development?

If suddenly we are talking about conquering chance and fortune, and *nature* is no longer seen as the *essence* of things but as the realm of chance and fortune, a realm of hostile "necessity" opposed to the human realm of *freedom*, then you see, we are now talking about *conquering nature*. That makes nature something separate from us and something negative in relation to us, to our free *rationality* (i.e. our science and technology, by means of which we will conquer natural limitations). That is absolutely crucial for Strauss. The very notion of nature is transformed in the modern break with the classical tradition.

Now, after Machiavelli – and again, this is in brief, of course – after Machiavelli comes Hobbes. Hobbes argues that there is a more reliable passion in man than his desire for glory on the basis of which to provide a low but solid standard for human life. Hobbes talks about man's *fear of violent death at the hands of others* as the bedrock. In a "state of nature," before the establishment of laws and the political community, everyone is at war with everyone else, everyone is a wolf to everyone else, and man is ultimately afraid of violent death (for Hobbes, this basic fact is the origin of all our rights, since for instance we have a natural right to self-defence and to whatever we judge for ourselves is necessary for self-defence).

The flipside of this fear of violent death is the desire for comfortable self-preservation. Hobbes (and later Locke) transformed the Christian understanding of the state of nature in their teachings. The Christian understanding of the state of nature, Strauss explains, was contrasted with man's pre-fallen state in paradise and his post-natural state of grace – the state of nature is sandwiched between paradise and redemption. These modern thinkers, however, ignore the teaching of the fall, call fallen man "natural," and replace the Christian state of grace with a the establishment of a liberal civil society dedicated, ultimately, to comfortable self-preservation, based on the fear of death and, a life dedicated to the limitless desire for acquisition, which we've learned to call the pursuit of happiness.

That's quite a change from the Christian and classical teaching. And I hope you can see in what I've said that this desire for comfortable self-preservation and limitless desire for acquisition through the scientific control and mastery of nature is pretty much precisely what we earlier said that we mean by technology in the everyday sense. It's the devices and the processes that make our lives easier and more pleasant. And however easy and pleasant they become, they could always be easier and more pleasant.

The philosophical presuppositions that undergird that attitude toward technology, Strauss teaches us, are in part – in large part – a function of the *transformation* or *modification* of the *classical alternative* that the *modern thinkers* inaugurated in a deliberate and highly questionable act.

We are as a rule oblivious of their brazen act and of the older alternatives, which is why I think we should be very grateful when a great teacher like Strauss comes along and helps to make us

aware of them and to understand what is at stake in the things we take for granted (and is there anything we take for granted more now than technology?)

I realize this has been a long talk but please let me try to bring the argument together for you compactly: technology as the limitless conquest of nature for the sake of ever-increasing comfortable self-preservation is a function of the deliberate lowering of the standard of a good human and political life from the life lived in the pursuit of wisdom or intellectual perfection to the life based on fear of violent death and unbounded acquisition.

Technology is indissolubly linked to the shift from an emphasis on man's duties to an emphasis of man's right, on his "natural right" to self-preservation based on his fear of death. There is, then, it seems, a deep metaphysical or ontological undercurrent to technology, one premised on the rejection not only of the Biblical teaching about man but also on the rejection of the classical philosophical teaching. And since it is obvious (given world wars, for instance) that technology is not unqualifiedly a blessing, we are surely justified in wondering whether the classical view (both Biblical and Platonic) was not somehow sounder than is our modern technological perspective.

Very roughly, that is how Strauss discussed technology. I actually want to give you one more taste of Strauss on the topic before stopping.

When Strauss wrote about Thomas Hobbes in Natural Right and History, he said something along the following lines. Hobbes saw the universe as a materialist mechanism. No forms, no essences, no ideas, no God, none of that. "Nothing but bodies and their aimless motions," is how he puts it. But at the same time, he had seen that mathematics, geometry in particular, was somehow able to stand its ground as knowledge or science proper.

Why? Because geometry proceeds on the basis of *constructions*. Here is what Strauss says about the importance of that for Hobbes: "Generally stated, we have absolutely certain or scientific knowledge only of those subjects of which we are the causes, or whose construction is in our own power or depends on our arbitrary will" (173). You see, geometrical proofs are known because they are constructed from beginning to end.

"The construction would not be fully in our power if it made use of any matter, i.e., of anything that is not itself our construct. The world of our constructs is wholly unenigmatic because we are its sole cause and hence, we have perfect knowledge of its cause. The cause of the world of our constructs does not have a further cause, a cause that is not, or not fully, within our power; the world of our constructs has an absolute beginning or is a creation in the strict sense. The world of our constructs is therefore the desired island that is exempt from the flux of blind and aimless causation" – remember, that's what the world is for Hobbes, blind and aimless causation.

So, the upshot of Hobbes's argument is that "We only understand what we *make*." Man becomes the *making* being, the *constructing* being, and his making and constructing are in the service of creating an artificial island of comprehensibility in a sea of "bodies and their aimless motions." I'm mentioning this argument to you to link together in your minds these two ideas: man is sovereign through his making (that is the technological side of the equation), inseparably bound up to the view that the universe at large is unintelligible and, as Strauss puts it, "there is no cosmic support for [man's] humanity."

An artificial island of Technology, making, and sovereignty on one side; and an unintelligible, indifferent, godless, materialistic cosmic whole on the other. Those two go together. It is doubtful, to say the least, whether technology, making, and sovereignty could coexist as they are now understood with the view that the cosmic whole is intelligible, not indifferent, and divine.

A lot is at stake in the question of technology – nothing less than man, the world and God.