

# THE ETHICS OF PROGRESS

A talk by Eli Amdur

Food for Thought

S.I.P.A

Columbia University in the City of New York

April 14, 2021

## Overview

The history and future of ethical decision making. A theoretical and case-study look at “progress” – with and without ethical guidance and oversight. Given the nature, pace, and scope of change, Ethics will be (already is) the single greatest challenge of the 21st century and beyond. Each major civilization-changing progress (invention or discovery) in history comes sooner after the preceding one than that one did after the one before it. This creates the conundrum of having to contemplate larger challenges in less time, with potentially unforgiving consequences of not getting it right. And the lack of – or inattention to – ethics will lead to the greatest disaster(s) of all time. Or we can choose otherwise.

## Setting the Table

What was the world’s first truly global corporation? (To be answered in the talk)

## Five questions

1. How can we build an organization with ethical values, attitudes, and beliefs that foster ethical behavior at its core? How can we do that when the onslaught of pressures to be unethical are mounting, simply to compete?
2. What comes first: invention, assessment, or ethical reins? Do any of these need to be the necessary precedent?
3. Are ethical decision-making and competitive risk incompatible?
4. How prevalent is the weighing of the pros and cons of being the first or second to take ethical measures?
5. How have questions 1-4 grown in weight over time, especially in this century?

In his 1962 book, *The Structure of Scientific Revolutions*, Thomas Kuhn observed, “Intellectual progress is not steady and gradual. It is marked by sudden paradigm shifts.” In April 2016 I interviewed Dr. Michio Kaku of the City University of New York, author of *The Future of the Mind*, in front of an audience of faculty, students, and alumni of Fairleigh Dickinson University. I asked Dr. Kaku where, in Kuhn’s model, he thought we were. Were we surging or stagnating? He said that depended upon what we called progress. It’s a point worthy of examination.

## What is progress, actually?

For the purpose of this discussion, and to give ourselves reference points, we will consider inventions and discoveries of things (like moveable type and dynamite) but not concepts or beliefs (like voting rights and public education), although all are, indubitably, progress. For this discussion, the things we’ll consider must be demonstrable, notable, quantifiable, measurable, equitable, wealth-neutral, and history-worthy. And they must be, to some degree, civilization changers, thus eliminating such popular items as Slinky or remote-control TV.

We humans have a history of invention and discovery, the only species to claim such distinction. Our very first invention was stone tools, about three million years ago (although this might be considered a discovery rather than an invention, depending on one’s interpretation of the opening scene of *2001: A Space Odyssey*).

Stone tools were the first civilization changers. We didn’t do something that dramatic for another couple of million years or so, with the controlled use of fire. Well over a half million years after fire came the idea of clothing. As the millennia unfolded, we started domesticating animals, institutionalizing agriculture, developing alphabets, conducting trade (and accounting for it), telling time, harnessing wind power, and so forth.

Progress. The list of things we call “progress” – when viewed as a linear chronology – takes on interesting characteristics, and those are the underpinning of this talk.

## The choices we make

The ultimate question herewith is not about what we've invented or when we've done it. It is, rather, for us to think about the choices we make in how we use these things. The subsequent considerations ask why we make those choices and why we don't make other choices instead. Example: Cambridge Analytica.

I contend that in the case of absolutely every invention or discovery we humans have ever made – from stone tools three million years ago to the new estimates of magnetic power of the muon just last week at Fermilab we humans have figured out both constructive and destructive ways to use them. Absolutely every single one.

The question, then, is: Why? The answer comes about upon considering not just changes, but the nature of change itself. All physical objects that bring changes – telephones, paved roads, toilets, a Roku stick – can be physically measured in three dimensions: length, width, and height. So can their weight be measured. Change, though, cannot be measured that way, but it can be measured.

## Measuring change

We must measure change in terms of nature, pace, and scope. The nature of change is that it can be caused by anyone with an idea. Unlike ages, centuries, and millennia past – when change was the domain of the crown or the church, then the highly educated, and later, the world's first merchants – one could create change through traditional assets: capital, land, shipping lanes, minerals, timber, etc. The wealthy and powerful created change.

Today, anyone with an idea has the same potential. Tim Berners-Lee had an idea. Jeff Bezos had an idea. Sergei Brin and Larry Page had an idea. They have all changed civilization.

The pace of change is, as we all observe, ever accelerating. The problem with that, as will be discussed during the talk, is that there is less and less time after one civilization changer than there was after the one before it. The result is less time to think – ethically – about their place in society. Genetic engineering is a case in point.

The scope of change refers to the condition that once a change takes hold, it reaches farther faster than any other before it. It took alphabets 6,000 years to reach from Ur, Athens, Alexandria, and Anatolia to the Americas; it took the internet only 30 years to reach four billion people.

## The position we're in

Given the nature, pace, and scope of change – along with our demonstrated unawareness of or disinterest in – weighing the ethical consequences of our decisions – Ethics will be the single greatest challenge of the 21<sup>st</sup> century and beyond. And the lack of attention to Ethics will lead to the greatest disaster(s) of all time.

Or we can choose otherwise.

## Not conclusions. Lessons.

- At any given point in history, we are capable of *doing* more things than we are capable of *understanding*.
- As more technology is developed that can organize humanity, the more potential we have for chaos.
- If something becomes possible, it becomes expected.
- One step taken in advance is longer than 10 steps taken to catch up.
- With a set of deeply held principles, you never have to make a decision in your life.
- Making no decision is worse than making a bad one.

## And ...

If we think about the consequences of our decisions before we make them, we will make better decisions.