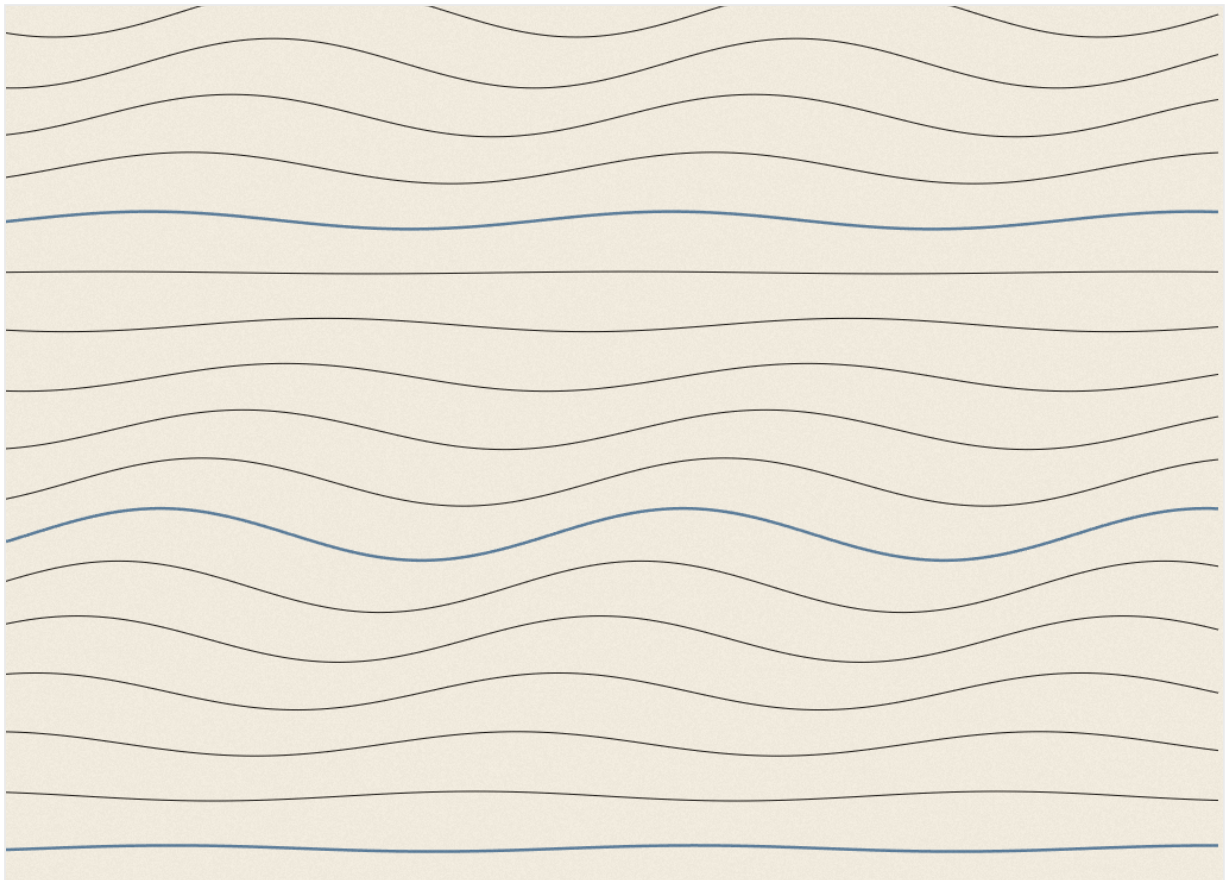


Culture

Technological Progress Is Not Inevitable

We treat progress as the default setting of history. It isn't, and the conditions that produce it are far easier to dismantle than to build.

By Emmanuel Awosika ■ November 13, 2025 ■



We have absorbed a picture of history in which technology climbs a staircase. Each generation stands a step higher than the last, the line on the chart bends upward, and progress is simply what time does. It is a recent picture, and a parochial one, drawn almost entirely from the two centuries of unusual growth that a handful of societies happen to have lived through. Stretch the frame wider and the staircase dissolves into something far less reassuring.

The Romans built concrete that has outlasted the empire, ran aqueducts across provinces, and heated their floors. Then the knowledge scattered, and much of Europe spent the better part of a thousand years unable to match what had already been done. This is not a story of a temporary pause on an upward line. It is a story of capability lost, of a society forgetting how to do things its ancestors had done routinely. Progress ran backward, for a long time, across a wide area, and nobody living through it experienced the reversal as an aberration.

The question that should worry us

The historian Joseph Needham spent his life on a related puzzle. China led the world in technology for centuries, inventing printing, gunpowder, the compass, and advanced metallurgy well ahead of Europe, and then the sustained takeoff happened somewhere else. Whatever the full answer, the mere existence of the question is the point. Being ahead is not the same as staying ahead. The lead evaporated, not because the knowledge was destroyed, but because the conditions that turn knowledge into continued advance stopped obtaining.

Those conditions are the fragile part. Sustained progress seems to require some combination of institutions that reward invention, a culture that grants status to the people who build, capital willing to fund

uncertain bets, and enough freedom for heterodox ideas to survive contact with authority. None of these is natural or permanent. Each can be strangled by a change in politics, a hardening of orthodoxy, or a simple loss of nerve, and history is full of societies where exactly that happened while everyone assumed the good times would continue on their own.

The practical consequence is that progress is a thing to be maintained, not a current to be ridden. Treating it as inevitable is dangerous precisely because it licenses neglect. If the line goes up no matter what, then the institutions and freedoms and appetites that produce the rise are optional decorations, and you can compromise them without cost. The uncomfortable truth is the reverse. The rise is the output of a specific and delicate arrangement, and the arrangement is much easier to break than it was to build.