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## Beyond Modernity's Technology

Contribution to GTI Forum [Technology and the Future](#)

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What could be the role of technology in the unfolding of the Great Transition? The development of technology as it happens today is not contributing to such a shift toward equitable well-being within a healthy biosphere. Some aspects of technological innovation, however, could be repurposed to advance a Great Transition, and the attempts to do so deserve all our attention and support.

Nonetheless, the overall result of the current deployment of new inventions is simply to reinforce the political and economic framework under which technologies are being created. It is difficult to imagine how it could be otherwise, since research and innovation efforts (R&I) are mostly based on two premises: (1) that knowledge is divided into separate disciplines, and (2) that such knowledge is only helpful if it can be harnessed for greater levels of enclosure and control (of people, natural resources, intellectual property, future time, etc.), enabling financial returns on investments.

This leaves our current institutions of R&I unable to ask the questions that would be useful to address our big challenges. At the same time, public and private sectors expect R&I to deliver economic profits and keep alive the illusion of capital. Both premises are so far away from what is needed that it would require a miracle to make R&I contribute significantly to a shift in our trajectory.

Current technological development is not based on what science knows about Life, but on an outdated notion of society, originated at the dawn of Modernity. Its premises are rationalism, reductionism, individualism, objectivity, quantification, productivity, and colonization. This makes

our reconciliation with the biosphere on which our own life depends more difficult. In Modernity, we expect nature and humans to conform to our plans of exploitation and mechanization. We know this expectation is self-deceiving, but current framings of R&I activities do not allow for a greater harmony with Life.

The energy transition from fossil fuels to so-called renewable energies, for instance, is conceived as a techno-economic challenge. But if we assume a growing amount of energy per capita, humanity is doomed whatever the sources of energy since “renewables” also depend on non-renewable resources such as rare earth minerals. Attempts at addressing this issue through “decoupling” consumption from human well-being have failed, but we keep the same strategy in the hope that renewables will buy time until we implement some other source of energy without such limitations.

The obsession of Modernity with materialism and the maximization of production made us ignore that our health and sense of a purpose are not driven by consumerist prosperity, but rather by the quality of our relationships with others, humans and non-humans. This crucial point enables us to imagine other ways of innovating and learning, in which relationships and interdependencies would play the dominant role.

Consider COVID-19. The response to the tragedy involved a mix of separation (isolating people from each other) and technical fixes at the individual level (vaccination). For public health, this was probably the most sensible thing to do. Nonetheless, by focusing on how to “build back better,” we avoid questioning the underlying “development” paradigm itself, one in which the destruction of ecosystems has been a structural feature. Unsurprisingly, a tragedy of such a scale and impact has created a huge amount of private “wealth” in tech-driven sectors such as pharma and the digital industry.

Technology is the standard response of Modernity to any issue. Can it work against the limitations of its own framing? Based on a culture of separation, innovation is contributing to the destruction of the social fabric and creating more inequality, dehumanization, and a greater distance between the artificial creation of financial wealth and social and biophysical realities. Moreover, technology is spreading the idea that humans are defective. We are not creating robots like humans: we are expecting humans to behave like robots. The subtext in “Artificial Intelligence” is that people are

problematic, and our technical creations can be “better” than ourselves. AI tells us that we can and should get rid of humans. Ecological catastrophes could combine with radical robotization to achieve the destruction of ecosystems and humanity, at the same time.

Let me come back to the illusion of capital. The concept of “capital” was originally grounded in living processes: land can constantly produce resources useful to humans and hence feeds the idea that future returns can be expected. But this requires the sun, water, wind, and soil materials to contribute (no coincidence: these are the Four Elements of ancient traditions). Nowadays capital is given more and more abstract forms (e.g., AI algorithms), and legal practices ensure a number of privileges and keep alive the aura of future returns, without any biophysical grounding. This is hugely problematic as far as technology is concerned: if it is good for the creation of “capital,” there are good chances that it will mean a greater disconnection from the biosphere we need to regenerate.

This process of abstraction of capital is actually a feature of Modernity and its R&I processes. Modernity reframes the crises it creates in a way leading to further levels of abstraction and disconnection from Life, and then to a formulation of “problems” for which R&I are called upon to design “solutions” avoiding a deeper learning. This is not the way to get out of the [“suicidal war we are waging on nature”](#) (and hence on ourselves) about which UN Secretary General António Guterres has spoken.

If Modernity is only able to learn whatever reinforces its own foundations, we face a daunting challenge. How do we create conditions for the kind of R&I and learning that addresses the blind spots of Modernity? We need to learn in an ecosystemic framework in order to reconnect with our fundamentally relational nature. Instead of abiding by the separatist framing of Modernity, we should start repairing artificially broken interdependencies, learn the re-emergence of relationships, and regenerate ecosystems, and in that way give renewed meaning to what we already know.

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## About the Author



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## About the Publication

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