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Grappling with Complexity

Forum contribution: After the Pandemic: Which Future?

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The plethora of articles about the consequences of the COVID-19 crisis make me think of the Danish saying (sometimes attributed to Niels Bohr) that "it is difficult to make predictions, especially about the future." Many articles provide a mixture of highly plausible projections and wishful thinking. However, such prognoses typically consist almost entirely of what might be called first-order predictions: expectations about the immediate consequences of COVID-19. Another useful saying holds that the only law of sociology is the law of unanticipated consequences, and many second- and third-order effects may take us in entirely different directions, even if many of the first-order prognostications turn out to be correct. Indeed, the second-order consequences of any major socio-technical system change are often in the opposite direction of the first-order consequences—and bigger. Think of projections of IT leading to the paperless office, or of highway building leading to less congestion. The first-order effect indeed happened (for a given level of activity) but was overwhelmed by second-order effects in the other direction.

These considerations suggest that the COVID-19 crisis is a perfect illustration of the need, as the GTI framework emphasizes, to move beyond predictive forecasting approaches to thinking about the future of complex systems. Here, scenario analysis can help gauge which strategies may be resilient against the huge degree of uncertainty that stems from the fact that complex systems are characterized by inherently unpredictable emergent properties. In particular, high-confidence predictions of the outcomes of the COVID-19 crisis are not possible given the huge amount of uncertainty about how this will play out. This, of course, is not to say that we should

not try to model outcomes, based on the best possible data and science, but simply that we need to plan for quite divergent possibilities.

My view of how best to think about the different GTI scenarios in this context would be along similar lines. To me it is a question less of the relative plausibility of the GTI scenarios (a question which shades uncomfortably close to a predictive orientation), than of how the pandemic (and the plethora of other massive global disruption events that are plausibly in our future) might play out across the different GTI worlds, and what lessons we might glean from that. Which GTI worlds are more resilient to such events, or, better still, how does resilience play out in the different worlds? I think we could expect both differences of degree and of kind.

A second, and related, issue is how our policy prescriptions would change once we internalize pandemic-like disruptions. I am struck by how often people are using this crisis to promote exactly the same policy proposals that they were advocating before COVID-19. Does the pandemic not suggest ways in which we should adapt that advice? Should we now not be subjecting our proposals to a much more serious scrutiny with regard to how they might play out in a post-pandemic world?

One way to approach such scrutiny is to focus attention on higher-order consequences, or knock-on effects, which are potentially large and counterintuitive. An example is the effects of COVID-19 on commercial office space in large cities. One can imagine quite opposing outcomes, even if we just consider some obvious possible first-order effects (more distancing in offices, more work at home). When we start to add in higher-order effects on mobility; food production, delivery, and consumption; housing; the hospitality and events industries; and other sectors—as well as possible feedback loops—the situation becomes very complex. But it might be quite instructive to look at such consequences though a Market Forces, or Fortress World, or New Sustainability Paradigm lens.

The GTI scenarios could provide powerful ways to think about the possible kinds of consequences of COVID-19 (and other global disruptions), what kinds of measures would we now see as important to achieving our preferred world (i.e., how our pre-existing proposals might change), and what strategies could best hedge against deep structural uncertainty about what kind of world we will end up in.

In that vein, given the virtual inevitability of significant tipping points from COVID-19 (and also from climate change, as well as many other changes), a key question is how to find and evaluate leverage points for positive normative change, and indeed how best to create positive change. My three-part proposition is that we need to steer change, not create it; focus on the underlying development paths (not just policies and technologies); and normalize sustainability by making it the default, not the change.[1]

From a GTI point of view, this means using the GTI scenarios as a framework to help identify leverage points emerging out of the COVID-19 crisis that will allow us to foster and encourage more sustainable outcomes. The strong focus in many climate change strategies on identifying co-benefits, including health co-benefits, offers a starting point for such a search. Perhaps we need to resurrect the idea of "no regrets" or "worth doing anyway" strategies, but framed differentially in terms of the GTI scenarios. What is "no regrets" in Market Forces is likely to be full of regrets in Eco-Communalism.

We also need to pay close attention to how we think about the resilience of systems. In this connection, it is important to distinguish between "bounce-forward" resilience and "bounce-back" resilience, which of course is connected to the question of baselines. Bounce-back strategies assume there is a kind of current trends baseline (sometimes misleadingly called "business as usual"—misleading because all business as usual projections are so infeasible as to necessarily lead to massive non-business-as-usual change). The goal of bounce-back strategies is to return to this current trends scenario.

A basic insight of the GTI framework is that there is no "back" to return to in the search for a sustainable future; instead, there are many different alternative paths, and even the *Conventional Worl*d scenarios are very different than the past. So we don't want to bounce back to current trends, but to bounce forward to more sustainable trajectories. It would be very interesting to look at the GTI scenarios in this light. Resilience strategies being currently proposed in response to COVID-19, for example, could be evaluated in terms of the GTI scenarios. As with "no regrets" options, I think we would see ways in which resilience itself takes on different forms in the different GTI worlds. This also raises the question of whether we can think in terms of meta-resilient bounce-forward strategies. Do some approaches work fairly well across the array of plausible futures? Do some pull us more strongly in GTI directions?

In summary, the different future worlds imagined in the GTI framework have a lot to offer us in these pandemic times. But I think we need to remain true to the non-predictive orientation of all good scenario analysis, and to the normative motivation of backcasting analyses to explore the lineaments of sustainable futures. The value of the GTI scenarios is less to map the specific requirements of a sustainable future than to push us to think in new and creative ways about what a sustainable future might look like.

Notes

1. I expand upon these points in the blog post here: www.strings.org.uk/covid-19-and-sustainability/.

About the Author

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