

# Control in Crisis

Expanding scientific knowledge and expertise yields increasing control that generates, monotonically, social betterment. That is the central animating, deeply utopian ideal of the modernist project of the twentieth century. It was widely shared without question by generations of academic researchers, applied social and natural scientists, and public policy wonks dating back to at least what in the United States is known as the Progressive Era. The period was marked by the rise of the modern university, the emergence of the professions and the professional class, and an uncompromising faith that science would provide the way forward in solving once and for all society's deepest challenges. As late as the closing decades of the century the modernist project went largely unchallenged—in the academy, and beyond.

How things have changed in a virtual blink of an eye. The modernist project has been upended by a series of deep and unpredicted crises in economics, politics, security, technology, climate, and now, with COVID-19, in public health. Across the disciplines, attention is increasingly being paid to the failures of the social and natural sciences to control events within their domains. After a century of repressing true uncertainty, courageous scholars and practitioners are now calling attention to what we don't know now, and what we can't in principle ever know.

In "COVID-19 and the Futility of Control in the Modern World" (*Issues*, Summer 2020), Andrew Stirling and Ian Scoones emphasize what strikes us as the fundamentally correct, deeply radical implication. We live in a world of what we call "irreparable ignorance," where control is elusive—an illusion the pursuit of which is not just wasteful of immense resources that could be better used in other ways, but wrong-headed and even very, very dangerous.

Taking this idea seriously would require massive changes in how we think about expertise and train experts, and how those experts would engage a world beyond control. Public policy training comes to mind. For too long public policy has taught students that they can know the impacts of policy choices and, by applying moral geometry, can advocate those policies that will maximize social betterment. If Stirling and Scoones are right, as we think they are, that pedagogy would need to be displaced by training that challenges students to pursue social betterment in the face of irreparable ignorance.

Fortunately, there is today a wide range of initiatives looking to enact the transition away from modernist utopianism. For example, the *Diverse Economies* project is enacting projects consistent with the ideas of the deeply antimodernist economist Albert Hirschman. The project looks to promote an economic polyculture of diverse enterprise forms and other economic arrangements. The goal is to build just and sustainable economic practices through extensive local experimentation, without any pretense of control.

In many other policy areas as well, such as climate change and infrastructure planning, practitioners in the new "decision-making under deep uncertainty" tradition are foregrounding irreparable ignorance in confrontation with "wicked problems" that are increasingly recognized as the norm in public policy, rather than the exception. If twentieth-century expertise sought control, twenty-first-century expertise might, we hope, embrace humility in the face of irreparable ignorance, inclusion, empathy, and harm minimization, especially for vulnerable social groups and nations.

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One lesson that undoubtedly has emerged from the COVID-19 pandemic is that we are not as much in control as we thought. The fault lines exposed run along the dimensions of unpreparedness, incompetence, confusion, and outright denial. They are found everywhere, from global to national to local levels. The question is whether this stands for the futility of control, as Andrew Stirling and Ian Scoones claim. True, this experience does not bode well for the future of control and prediction, especially when more ambitious goals such as global energy transition or sustainability are to be confronted.

Still, however much hubris and overconfidence fuel the claims that we can steer the world, it is a bold step to assert that control does not exist. This is not a criticism; it is simply a fact. As if surprised by their daring statement, the authors quickly add that daily experiences such as controlling a bicycle or a water pump are exempt. Control was the backbone of modernity, and apparently we succeeded in gaining control of our relations with, in the authors' term, "working machines." What they forget to add is that it took enormous engineering efforts and the combative pressure from political mobilization to attain the safety levels and quality control now taken for granted.

Thus, control is not an either/or. It comes in degrees and is situational. Such things as prevention and care, regulatory measures, and scientific-technical and citizen expertise are integral parts of control systems. Many are designed to prevent situations where control becomes a critical on/off. We have to contextualize control, from daily life to the global interdependencies of large sociotechnical infrastructures. Control depends on the resources that can be mobilized, on different kinds of expertise, on practical knowledge—and on the parties involved. Who exerts control? Who is the collective "we"?

This "politics of uncertainty" pleads for an emancipatory politics of hope and care. Agreed. But how will it be operationalized? How will it face uncertainty differently? The authors want to embrace uncertainty and challenge "the notion that increasingly precise predictive knowledge can form the foundation for controlling a singular pathway for collective human progress." But we left behind the idea of a singular pathway when multiple modernities and multiple capitalisms took over. Instead, the uncertainty to embrace is the inherent uncertainty of the future.

Humanity has entered the digital age, and predictive algorithms will be crucial whether or not collective human progress can be achieved. Predictive algorithms cannot predict the future either. They can reveal only probabilities. Here lie the real challenges for a politics of uncertainty. Predictions can either help us extend the range of control when the simulation of complex systems allows us to identify potential tipping points that may lead to collapse, or they can induce a false sense of certainty when we forget their probabilities and turn them into self-fulfilling prophecies. We then risk a return to a deterministic world with a predetermined future that will take care of us. It will also be controlled—but not by us.

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*It took enormous engineering efforts and the combative pressure from political mobilization to attain the safety levels and quality control now taken for granted.*

Andrew Stirling and Ian Scoones's essays, expanded on in their *Issues* article, usefully point to a deeply embedded cognitive and cultural dissonance of modernity: because of thirst for control and denial of uncertainty, modernity and progress are hard-wired into a one-track race to the future. But futures themselves disappear under a web of calculations that transform futures into presents that the financial system can process with an appearance of order and control. Victim of its Cartesian anxiety or dream, modernity is caught into a vicious circle whereby each crisis is bound to be worse than the previous one, even with all the expedients and controls set in place to offset it.

Where, though, did the rot set in? Was this cognitive and cultural dissonance the root cause? What are the reasons for this "sticky" modernity?

Observers have written that the present (old) modernity, with its immature relationship between science and society—which is perhaps at the root of the dissonance—should have ended in the first half of the twentieth century. It did not because of the wars, the need to mobilize one romantic image of science against a romantic image of antisience, and the revolt against Communist science during the Cold War. What prevents today the adoption of a new covenant between science and society, one possibly helpful with our cognitive ailments?

It is said that culture eats strategy for breakfast; yet it is worth remembering that there are strategies at play that keep the system in place. Capitalism's capacity to promote a continuous science-and-technology-based revolution sometimes means that one does not even know what head of a capitalist hydra is running the show. Is it regulation capitalism? Is it platform- or surveillance-capitalism? Without attributing anthropomorphic features to the neoliberal project, there is no denying its philosophical and epistemological dimensions, leading to the present tragedy of commodification with science enslaved to the process of capital accumulation and concentration.

As the authors have written here and elsewhere, visions of modernity and development, established over the past 75 years in the West, are unravelling. Is COVID-19 the system's terminal accident? Or is it instead just a gentle reminder? Of course, no computation can tell us that.

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*Where, though, did the rot set in? Was this cognitive and cultural dissonance the root cause?*

I totally agree with the ideas that Andrew Stirling and Ian Scoones present, especially their assertion of the historical futility of control as an institutional response to novelty and uncertainty. I would add only one point: This is that the ubiquitous claim from public authorities that they have control of whatever is their object of responsibility is a major unacknowledged factor in exacerbating the problem of noncontrol in the first place. Public skepticism and mistrust is generated by previous experience (in *Legitimacy and Crisis*) have argued that modernity's main legitimization strategy has been the public political interests. Since the rise to dominance of democratic states by neoliberal political-economic interests in the late twentieth century, this concern has also—without sufficient critical public reaction—encompassed attempted state control of recalcitrant citizens in the same classifications as possible terrorists.

As has been painfully apparent in many COVID-19 press conferences, top government officials and top scientific advisers, the politicians repeat the mantra of "just following the science," while the scientists manifestly have no adequate science for anyone to follow. Yet no single, neither scientists nor politicians, has been able to speak about this predicament. This is, I suggest, thanks to a culture of policy that is imbued with the reflexes of control and anxiety about control over citizens who are, falsely imagined to be obsessively fearful of uncertainty. Yet research evidence, not to mention everyday experience, shows the opposite: people counteract, yet research, and without much complaint, handle a lack of control all the time. It's the contrary: people claim control by those in authority—that engenders a mistrust and concern from the public. Ignorance and noncontrol are normal. So too is the conditionality or contingency of scientific knowledge, and of any situation where we might claim control, which may exist but only ever under particular conditions.

As Stirling and Scoones rightly emphasize, "control" can become a synonym for exclusion and a lack of responsibility for anything and anybody outside "our own." Counterintuitively, this shared exclusion of the "epistemic other"—namely, ignorance and surprise from unpredicted effects in institutionalized science culture. Our human incapacity in the face of scientific ignorance, cultural epistemic other, is no different from our human incapacities in the face of scientific otherness, cultural diversity. We need to risk embracing both, and to risk a deliberate refusal of control in both.

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