

The Nobel Prize in climate chaos: Romer, Nordhaus and the IPCC

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Yale economist William Nordhaus.

The IPCC report pulls its punches - while economists are still punch drunk when it comes to ignoring the climate risks of economic growth.

Mobilising for social justice, Richard Wilkinson and Kate Pickett have [shown](#), encourages that richer sense of community, public-spiritedness and solidarity which is indispensable to a socially just and ecologically habitable future.

Two news releases this week revealed a startling, if predictable, lack of seriousness and imagination with which global elites confront environmental crisis.

One was the latest IPCC [report](#). It did reflect something of the growing alarm among climatologists, and it did urge expeditious action. But the IPCC continues to underplay the risk of catastrophic nonlinearities, of the sort that knocked the world into the [Younger Dryas](#), or which, via [cascading climate tipping points](#), could before long propel runaway warming. This latest report refers to tipping points, but as limited, regional phenomena. And even they are excluded from the summary, ensuring that most of the world's media remain oblivious.

This continues the IPCC's tradition of ignoring "fat tails" at the catastrophic end of the climate-scenario spectrum. It's as if, when practising knife-throwing, you dismiss the risk of butchering your accomplice because scientists estimate its likelihood at only ten percent.

A similar conservatism applies to its pages on the socioeconomic transformations required. The IPCC's policy advice is constrained to fit, fairly snug, within the prevailing [economic model](#). Early drafts of its reports get steadily weakened and adulterated as political and corporate paws—some of them oil-drenched—get to work. Dissenting voices are marginalised. The upshot is a programme geared around market mechanisms and techno-utopianism. And it exudes a specious confidence that still-to-be-invented or untested technologies (such as carbon capture and storage) will rush into the breach. It indulges, in short, in [intergenerational buck-passing](#).

In its economics, the IPCC pretends to neutrality but hews to the dominant neoclassical codes. It claims that the main driver of climate change is "[the spread of fossil-fuel-based material consumption and changing lifestyles](#)." The world economy is driven by us, the consumers. No mention of the central economic role of corporations, a mere one hundred of which account for [71 per cent of global greenhouse gas emissions](#). No hint that the world economy might be, at bottom, a system of competitive capital accumulation geared to profit maximisation irrespective of human need.

In the report's "Mitigation pathways" chapter, one of the most cited economists, particularly during discussion of market-based policies such as carbon pricing, is the Yale economist William Nordhaus.

The Bank of Sweden Prize in Erasing Politics

In Monday's other announcement, Nordhaus, together with Paul Romer—a Chicago alumnus, now at New York—was awarded the so-called Nobel prize in economics. (In reality, the "Bank of Sweden Prize in Economic Sciences." In instigating it, the Bank's objective was to [frame economics as purely scientific](#), obscuring the political.)

In their locations and ages (62, 77), Romer and Nordhaus were not quite the typical winners. Maggie [Koerth-Baker](#) has pinpointed the average economics laureate as a 67-year-old white man, born in the USA and employed at the University of Chicago. But they were hardly anomalies.

Nordhaus' approach to environmental economics has been pithily summarised by [Alyssa Batistoni](#): he consistently minimises the risks posed by climate change and, relatedly, advocates a high "discount rate" in cost-benefit modelling. This is the parameter that weighs the welfare of future generations against those of the present. If the rate is zero, people in the indefinite future are treated equally with those alive today. A positive rate means their welfare is reduced ("discounted") when assessing the impact of policies today.

Chopping the fat tails

The politics of the discount rate are best approached through two debates involving Nordhaus. One was with Nicholas Stern. A former chief economist at the World Bank, Stern's neoliberal credentials are as pukka as Nordhaus'. But his is the voice of environmentally-concerned sobriety, against Nordhaus' "take a chill pill" dismissal of scientists who warn of catastrophic global warming.

Stern advocates a low discount rate (1.4% p.a.). This, by valuing future generations, enjoins fast and decisive emissions reduction efforts. He holds that it is [morally inexcusable](#) to impose the costs of the problems we are generating onto our descendants.

Nordhaus by contrast discounts the future at a high rate (6%). This says, in effect: rapid and continuous economic growth will help address the problems of climate change. It ignores that growth, in many ways, will exacerbate the climate crisis.

But he goes further, rebuking Stern for advocating a low discount rate. It implies, in Nordhaus' [gloss](#), "that the globe is perilously close to driving off a climatic cliff in the very near future," which would require any "sensible person" to "reconsider current policies" (heaven forbid!).

Nordhaus makes his low discount rate assumption in part because he, more than the IPCC, ignores [fat tails](#). As he [himself notes](#), his climate models fail to account for tipping points. This came out sharply in his debate with Harvard economist Marty Weitzman.

Weitzman [pointed out](#) that Nordhaus' models take little account of the potential for unexpectedly accelerating climate change. He warns that such scenarios may [invalidate Nordhaus' predictions](#). Hence, more determined emissions-reduction initiatives are needed right now. To this, Nordhaus responded with airy [insouciance](#). If faced with rapidly-escalating climate chaos, he shrugged, human beings will simply introduce "mitigation policies, quickly and sharply," including [geoengineering](#), thereby ensuring that "catastrophic outcomes" are prevented.

But there's worse. The policies Nordhaus recommends would themselves deliver global catastrophe. His models propose that atmospheric greenhouse gas concentrations ("CO₂-e"), currently around 460ppm, need not be stabilised until they reach 700ppm. As Weitzman summarises, Nordhaus' plan would subject the planet to a colossal climate shock—and yet he doesn't bother to consider, or even mention, "the unprecedented nature of this planetary experiment."

Underpinning Nordhaus' approach—and, less dogmatically, that of the IPCC—is the faith that, as Kate Aronoff puts it, reducing emissions requires finding incentives to wean the corporate sector slowly from hydrocarbon dependence through pricing mechanisms, rather than a [breakneck regulatory phase-out](#) of fossil fuels. In [one paper](#) he compares cap and trade methods with carbon taxes, but rules out muscular state regulation without even deigning to say why. For Nordhaus, nothing can be allowed to disrupt capital accumulation. As he said to [his students](#) when news of his prize was announced, "Don't let anyone distract you from the work at hand, which is economic growth."

The fantasy X-factor

Growth itself is the metier of the other 2018 laureate, Paul Romer.

Romer, scion of a politician, business owner and [airport builder](#), is a guru of growth. He advocates, for example, making the spelling of the English language more phonetic because he believes this [would boost the rate of economic growth](#). In the belief that they would spur growth, he is a prominent advocate of [charter cities](#)—territories in the Global South that hand the reins of power to external, sometimes foreign, actors. (In view of the neo-colonial subtext, it's fitting that Romer received his Nobel on Columbus Day.)

Underpinning Romer's work is the desire to hasten economic growth, towards the infinite. In explaining why it will be infinite, he came up with "endogenous growth theory."

The theory centres on the role of technology and knowledge—"human capital" in Chicago-school lingo.

There were predecessors. The nineteenth-century German economist Friedrich List spoke of "mental capital" (Geistiges Kapital) as the source of a nation's productive power. In that same century, science was pressed into the direct service of industry. This was scarcely addressed in classical political economy, although Marx touched on it. But the process deepened. R&D became professionalised and internalised within industries—it was no longer "exogenous" to the firm.

Joseph Schumpeter was the economist most alert to this. In the interwar era he identified “bureaucratized R&D” as vital to the competitive superiority of the large corporations. He talked up innovation and entrepreneurship as the engines of growth, to be encouraged by monopoly rents.

In the post-war decades, *exogenous* growth theory recognised the role of science and technology but conceived of them as public goods, exogenous to the sphere of firms and markets. It located the source of growth in the expansion of capital and labour inputs. These are subject to diminishing returns to scale, and may therefore tend toward a no-growth state.

Romer sought to overturn the prevailing theory on both counts.

By postulating knowledge/technology, which are typically subject to increasing returns to scale, as the elixir of growth, he set aside the physical limits that attach to capital and labour. Science, skills and know-how are invoked as a fantasy X-factor, a mysterious kind of surplus knowledge/technology over and above that which is already embodied in labour and in capital goods.

The Gospel of Paul

Endogenous growth theory was dismissed by some economists for resting on “assumptions about how unmeasurable things affected other unmeasurable things.” And yet in claiming to have put scientific heft behind the creed that the growth horizon stretches to infinity, it found support among many economists and policymakers.

The other assumption of exogenous growth theory that Romer overturned was that knowledge should be treated as a pure public good. If firms are to have the incentive to invest in R&D, he argued, knowledge must be monopolisable. Ownership of knowledge enables firms to earn monopoly rents, rewarding the investment. In his words, “What endogenous growth theory is all about is that it took technology and reclassified it, not as a public good, but as a good which is subject to private control.” Growth, in the doctrine of Romer, is driven by technological change implemented “by profit maximizing agents” (i.e. private firms). And because technology is a “nonrival, partially excludable good,” the market realm is necessarily “monopolistic.”

It’s little wonder that endogenous growth theory was all the rage in the 1990s. It championed globalisation, for world-market integration, in Romer’s words, will straightforwardly “increase growth rates.” It was zealously neoliberal, in its insistence that knowledge is a field that must be enclosed, monopolistically, by private corporations—and yet, in recognising a role for government in feeding private business with human capital, it was more flexible than some variants of the neoliberal genus. The state, Romer and his cothinkers maintained, should assist private capital, building infrastructure and fostering R&D. This should not be thought of as provision of public goods but investment in individual human capital. All this explains why endogenous growth theory was taken up by Third Way neoliberals such as Tony Blair and Gordon Brown.

Environmental economics is not Romer’s specialism, but his general stance resembles Nordhaus’. When asked to comment on the IPCC report, Romer was as blasé as his co-laureate: “Once we start trying to reduce carbon emissions, we’ll be surprised that it wasn’t as hard as we anticipated.” Breezily dismissing those who issue “alarming forecasts” about the future of the planet, he said reducing carbon emissions while also “sustaining growth” would be “totally doable.”

A retrospective rogues gallery

When future generations compile a retrospective rogues gallery of the major abettors of climate chaos, which of our laureates will they pin up? Many will pitch for Nordhaus. After all, his “discount rate” is explicitly designed to belittle their lives. There is, too, his attempt to translate all ethical questions of environmental concern into utilitarian cost-benefit analysis, his definition of “catastrophic” change solely in terms of reduced consumption and, relatedly, his complacent neglect of the risks of non-linear environmental lurches, his chiding of climate campaigners for demanding rapid action, and his downplaying of the perils of the “700 ppm” scenario.

Others will make the case for Romer. His defence of monopoly rent and corporate power helped sanctify a global policy regime, neoliberalism, that is uniquely resistant to the sort of [Marshall Plan](#) transformation of the society's productive capacity that swingeing emissions reductions will require. And Romer has done as much as any economist to naturalise the [growth paradigm](#).

In tackling environmental crisis, growth needs to be critically desacralized. Some sectors will have to increase rapidly, including renewable energy, public transport, forestry, and the weatherisation of buildings. Others, especially in the Global North, should shrink: advertising, automobiles and aviation, the military and meat (especially beef), and the [high-carbon lifestyles of the top 20%](#).

Such demands will gain little traction if citizens are atomised in their private cubicles. But resistance to oppression—on all fronts: neoliberal, misogynist, authoritarian-populist and all—recurrently emerges, coalesces, and can build. Coalitions emerge, and the horizons of solidarity expand. It is through struggles—by no means only environmental—against oppressive conditions that collective subjects can constitute themselves, find their voices, discover and expand their capacities, and realise world-transformative change.

Mobilising for social justice, Richard Wilkinson and Kate Pickett have [shown](#), encourages that richer sense of community, public-spiritedness and solidarity which is indispensable to a socially just and ecologically habitable future. Where an expansive sense of solidarity arises, reaching out from ego and family to distant shores, it tends to extend temporally too, embracing the lives of generations yet unborn—and hushing the laureates with their “high discount rates.”

This Author

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