



Book Review Essay: The Environmental Crisis and Its Capitalist Roots: Reading Naomi Klein with Karl Polanyi*

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Naomi Klein: *This Changes Everything: Capitalism vs. the Climate*. New York: Simon & Schuster, 2014. 566 pp. \$30.00, hardback.

According to the World Wildlife Fund's 2014 report on our "ecological footprint," humanity is currently using the earth's resources 50 percent faster than they can be replenished. In the United States, that rate is nearly 600 percent. And the best evidence suggests that we have only years, not decades, to restore the balance before we tip the planet's natural systems into irreversible cycles that will wreak havoc on vast swathes of nature and on the lives of billions of people around the world. Klein's book marshals evidence for this prognosis and offers a diagnosis and a strategy for responding, though her diagnosis is somewhat blurred. At some points, she claims that the root cause of this environmental crisis lies in the capitalist character of our economy. But at other points she indicts not capitalism as such but rather its neo-liberal variant, and at yet other points she attributes the crisis to an "extractivist mindset." This blurred diagnosis is problematic because such different diagnoses point to very different remedies.

Polanyi (2001) offers a theory of capitalism that helps us decide among the alternative diagnoses. Polanyi's argument supports an indictment of capitalism as such rather than its currently dominant neo-liberal variant or an extractivist mindset. This radical-critical edge in Polanyi's argument has been largely blunted as his work has been absorbed into management studies, in particular by the way our field has misunderstood his concept of embeddedness. Restoring that edge to Polanyi's argument and then reading Klein's book through these lenses leads us to a theoretically grounded diagnosis and from there to a possible remedy—along with some other, far darker possible scenarios for our future.

KLEIN'S ARGUMENT

Klein's argument can be summarized in three blocks: problem, diagnosis, remedy. First is the scale and urgency of the climate-change problem. Klein

* Part of this essay is taken from my chapter, "Stewardship versus the Market: A Skeptical Perspective," in *Stewardship of the Future*, edited by Ed Lawler, Sue Mohrman, and James O'Toole, forthcoming from Greenleaf, 2015. Portions are reproduced here with the permission of Greenleaf.

reviews compelling evidence that because we have ignored warnings going back several decades, because we have delayed action on climate change for so long, because in the intervening period we have done so much to aggravate the problem, and because the climate change we have unleashed has high-momentum self-reinforcing effects that will soon reach a tipping point, we cannot rely on incremental paths or a soft transition to a more sustainable model. On this basic point, the work of Kevin Anderson at the Tyndall Center is particularly clear and cogent (e.g., Anderson and Bows, 2011; Anderson, 2012). If the rich countries do not make drastic changes to consumption patterns and production technologies in the coming two decades—and by drastic, I mean reducing our total environmental impact by at least 80 percent from current levels—the earth will become largely uninhabitable over the coming half-century or so.

Even accounting for the recent intensified efforts in Europe and elsewhere to reduce greenhouse gas emissions, we are headed toward 4°C (7°F) if not 6°C (11°F) warming within 50 years. Every serious scientist who has studied the issue concludes that such warming would very likely spell disaster for humanity (and for many other species too). Sea levels will rise by several feet, swamping hundreds of major coastal cities. Fresh water supplies will be dramatically reduced. Agriculture patterns will be radically transformed. In total, such changes will provoke chaotic mass migrations and a high likelihood of proliferating armed conflict within and between nations. Klein's summary of the evidence is very compelling, and while I am no expert in the underlying science, I have been struck by how often experts I've consulted on this have concurred with the dire analysis Klein presents—even if these experts hesitate to express such a dark view in public.

Second is the diagnosis. Klein identifies three main factors that have driven us to such an impasse, and it is not clear which she thinks is the most critical. First, as suggested by the book's subtitle, Klein points the finger at capitalism as an economic structure that drives enterprises to the relentless pursuit of growth and profits. In such a system, firms are driven to treat the environment as a mere externality—as a source of materials to be pillaged and as a receptacle for any and all wastes. Klein suggests that in any capitalist society, and notwithstanding the formal institutions of democracy, the actors who own and control the major enterprises enjoy a hugely disproportionate role in setting government policies, and as a result, it will be very difficult for governments to enact environmental regulations that hurt corporate profits. Second, an ideology of extractivism—"a nonreciprocal, dominance-based relationship with the earth, one purely of taking" (p. 169)—encourages us to think of nature as a resource we can use and abuse without consequences. Third, at numerous points in Klein's book the root issue is not capitalism as such nor an extractivist ideology but rather capitalism's latest, neo-liberal variant, characterized by extreme wealth polarization and extensive deregulation.

The blurred character of this diagnosis is, I submit, a critical weakness in Klein's argument, because each of these three diagnoses points to different remedies. If the root issue is neo-liberalism, the solution is surely a reassertion of intelligent government regulation. If the problem is extractivism, some kind of cultural transformation is needed. If the problem is the basic structure of capitalism itself, a far more radical change is called for. Indeed, in this case, reliance on the more moderate, reformist strategy focused on regulation or culture

would be highly irresponsible, as time is so terribly short if we want to avoid the 2° Celsius tipping point.

Third is what is to be done. Klein's recommended response is to build a mass movement that integrates very ambitious ecological goals with equally ambitious social- and economic-justice goals. She highlights the role of local resistance movements ("Blockadia"), campus movements for fossil-fuel divestment, and legal challenges by indigenous people. She expresses the hope that such movements can coalesce and make a compelling moral appeal to humanity at large. She finds some reason for optimism in the success of the movement to abolish slavery in nineteenth-century England and the United States.

Yes, she argues, the people around the conservative think tank the Heartland Institute are basically correct: those who want to act to forestall a catastrophic climate change are basically engaged in an effort to radically remake our free market economy. But Klein is remarkably vague on where this effort might lead. She endorses a range of ideas, such as community-controlled renewable energy, industrial planning based on local sourcing and job protection, worker cooperatives, and decentralized nonindustrial farming. But she is skeptical of larger-scale, national economic planning, citing the environmental failures of the USSR, and she seems to dismiss the potential contribution of international environmental and economic planning. She appears to endorse an anarchist vision with both a decentralized, cooperativist model for the future and a decentralized, "horizontal" social movement strategy for getting there. Social movement scholars will find much interesting material here to reflect on:

I agree that it would be reckless to claim that the only solution to this crisis is to revolutionize our economy and revamp our worldview from the bottom up—and anything short of that is not worth doing. . . . So this book proposes a different strategy: think big, go deep, and move the ideological pole far away from the stifling market fundamentalism that has become the greatest enemy to planetary health. If we can shift the cultural context even a little, then there will be some breathing room for those sensible reformist policies that will at least get the atmospheric carbon numbers moving in the right direction. And winning is contagious so, who knows? Maybe within a few years, some of the ideas highlighted in these pages that sound impossibly radical today—like a basic income for all, or a rewriting of trade law, or real recognition of the rights of Indigenous people to protect huge parts of the world from polluting extraction—will start to seem reasonable, even essential. (pp. 25, 26)

While vague on the nature of this change strategy, she makes rather compelling critiques of the alternative options. First, against relying on enlightened capitalists, Klein argues that there is just not enough profit in it, and too many big oxen are going to be gored in this transition. For example, fossil fuel companies still show collectively as assets on their balance sheets some 2,795 gigatons of carbon-based "proven reserves" of oil and coal yet to be mined. But this represents over five times the maximum amount of carbon that scientists say can be burnt by 2050 if warming is to stay below 2° Celsius. Writing these off as "stranded" assets is not something we can expect these companies to do voluntarily, and it is hard to see any government willing to force them to write off these assets. And if companies were forced to write them off, it is not clear that our international financial markets could handle the resulting turmoil.

Klein is similarly dismissive of technocratic strategies such as cap and trade. These systems have now been implemented in Europe, California, and the Northeastern U.S. and Eastern Canada region, where governments have been successful in bringing corporations to the table by giving away free emissions credits. But there is simply no evidence that these governments will be able to muster the political power to push the total emissions caps down far or fast enough given the massive opposition by such broad swathes of industry.

Klein is both skeptical and fearful of geo-engineering technological fixes. She reviews several, such as pumping sulfate aerosols into the atmosphere to reflect sunlight back into space (thus dimming the sunlight and slowing the warming trend), putting iron in the oceans to increase carbon absorption by marine organisms, or putting vast arrays of mirrors in the sky or on the ground to reflect back sunlight. Some readers might recoil at the anti-science sentiment that comes through here and there in Klein's writing, but she makes a convincing point that for better or worse, absent a massive social movement, there will be insufficient political will to pursue such massive schemes.

And Klein is scathing about the role of the mainstream environmental movements: "Big Green." Many of these organizations now partner with big business, and in the process they have relinquished the credibility they would need to help galvanize the social movement we need. Klein describes how the Nature Conservancy allows oil drilling on land it received as a gift from the Mobil oil company. And she points out that Conservation International, the Conservation Fund, World Wildlife Fund, and the Environmental Defense Fund all have links, direct or indirect, via donations and board members, with major energy companies, Walmart, and other corporations driving climate change.

WHERE POLANYI MEETS KLEIN

Is the root of our environmental problem capitalism, neo-liberalism, or extractivism? An accurate diagnosis is critical if we are to respond effectively. In what follows, I outline what I think we can learn from Polanyi's classic work, *The Great Transformation*. Polanyi's book was originally published in 1944, but his argument seems even more compelling today than when he formulated it. He offers us a compelling reason to think that the root of our environmental problem is capitalism as such.

Following Polanyi's line of reasoning, we are led, I believe, to conclude that the nature of the capitalist system drives far too many enterprises toward environmentally destructive practices, drives far too few enterprises toward stewardship practices, and ensures that governments will fail to meet the resulting sustainability challenge. My reading of Polanyi suggests that enterprises in a capitalist economy cannot change their environmental practices far or fast enough to avert environmental crisis—neither spontaneously under the influence of wiser corporate leaders, nor pushed by greener consumers, and not even forced by more active government regulation.

Our "Market-based," Capitalist Economy

Polanyi explains that markets, as places where people exchange a surplus of something they have produced for something else that they need or want, have existed for millennia. For the much greater part of this period, the market

figured as an adjunct to people's production for their own use. The market-based economy is a much more recent invention, dating from eighteenth-century England. Here the market moved from an adjunct to a central role, and the entire economic system shifted toward the capitalist ideal of a self-regulating system based on the supply and demand of commodities produced by means of other commodities.¹

Before the market-based economy emerged, exchange was only a secondary, ancillary mechanism of economic coordination. The dominant mechanisms were reciprocity, in the form of gift exchange, householding, in self-sufficient household economies, and redistribution, in the form of tributes and taxes given to and redistributed by a clan or royal authority. Exchange was primarily between communities, rather than within them. Moreover, social and cultural norms powerfully shaped expectations about the types of exchange behavior that were acceptable. For a market-based economy to emerge, economic activity—production and exchange—had to be “disembedded” from these normative and authoritative constraints—freed from the weight of government, as well as moral, customary, and religious constraints, and thereby giving centrality to the untrammled pursuit of individual pecuniary advantage. This was the “great transformation” to which Polanyi refers, marking the passage from feudalism and other pre-capitalist systems to the market-based form of society we call capitalism, which in several variants—neo-liberal, social-democratic, hierarchical, etc.—dominates the globe today.

With economic activity largely freed of government and social controls, the scale of markets increased, as did the size of the participating enterprises. Small-scale domestic and craft producers were largely replaced by large-scale enterprises. Due to their scale and growth rates, these bigger enterprises needed to borrow investment funds. Specialized financial markets emerged to meet this need, and as these financial markets expanded in scope, investment funds flowed ever more efficiently to the most profitable uses available. The result has been that producers find themselves forced to aim for the highest possible rates of growth and profit—and to ignore social and environmental externalities—lest they become less attractive to investors than their faster-growing and more-profitable competitors. This growth-and-profitability imperative is just as ineluctable for virtuous business leaders as for greedy ones.

Fictitious Commodities and the Failures of the Self-regulating Free Market

Investment funds are not, of course, the only resource required by enterprises. Increasingly, capital equipment and intermediate goods are needed too. In due course, these appear as commodities on the market available for purchase by other enterprises. Natural and human resources too are required by this system on an ever-greater scale. In mobilizing these latter resources, however, the market-based system encounters a structural limit. Unlike the equipment and intermediate goods that businesses find available in the marketplace, natural and human resources are not truly commodities—they are not produced for sale on the market. On the contrary, natural resources are given by nature, and human resources are nurtured by families and communities. They are therefore

¹ Polanyi uses the term “commodity” in its political-economy rather than colloquial sense as something produced for sale rather than for direct use.

“fictitious” commodities, to use Polanyi’s term: they are resources whose treatment as commodities contradicts the actual conditions of their production and exchange.²

This contradiction manifests itself in two main ways. First, for these resources to appear on the marketplace at all, they must be freed from the control of traditional communal and authority structures. They must be withdrawn from the rules of reciprocity, householding, and redistribution, and instead subordinated to the rules of self-interested exchange. This process has everywhere been a rather violent one, dispossessing people of their traditional means of subsistence as peasant farmers and craftsmen and forcing them into wage labor, and dispossessing communities of their traditional communal relationship to the land and giving individual title to the land, enabling its sale and lease. The dispossession of labor and land was a particularly visible process during the initial, blood-drenched emergence of capitalism. And it continues to operate, typically contested and sometimes violent, as capitalism develops and draws into the orbit of the market economy new geographic regions, such as the formerly socialist countries, and new aspects of social intercourse, such as when ideas are transformed into intellectual property, communal lands are appropriated for private developers, and rotating credit associations are transformed into corporate microfinance programs.

Second, this contradiction is manifest in the effects on labor and nature once they appear on the marketplace. While the supply of real commodities can, at least in principle, adjust fluidly to changes in demand, the ideal of a self-regulating, self-equilibrating market process fails when it comes to these two fictitious resources. In the absence of sufficiently powerful normative or regulative constraints, the spontaneous working of the market economy proved to be very destructive of these two resources. Polanyi’s account is harrowing.

In the case of human resources, once dispossession has done its work, the enterprise finds labor services—“labor-power”—available on a labor market; but this resource cannot be detached from the people who embody it, and those people remain deeply embedded in families and communities. Unlike a real commodity, the supply of this resource cannot adapt to changing demand conditions without massive ripple effects on those families and communities. These effects can be, and in many cases have been, benign and welcome. Relative to prior forms of society, market-based economies have often afforded huge advances in individual freedom and material affluence. In many cases, however, in the absence of strong normative or regulative constraints on business operations, these effects have been destructive. When demand for labor-power falls, unemployment ensues, families lose their means of subsistence, and communities are stressed if not devastated. When demand for labor-power rises, working hours lengthen, often to the point of impairing the health of workers and the well-being of their families and communities, new categories of workers are drawn into the labor market—most distressingly, children—and workplace injuries and deaths multiply. In the most developed economies, it took many decades—close to a century—of protest and social strife before even modest regulatory safeguards were put into place to avoid these abuses

² Polanyi argues that money too is a fictitious commodity. It is not produced for sale but created by convention and government fiat. When it is treated as a commodity, its exchange value, as an object of speculation, undermines its use value as a critical medium of exchange (see Davis, 2009).

of labor resources. For example, the United States outlawed child labor only in 1938 when, over the vociferous opposition of the business community, passage of the Fair Labor Standards Act allowed the federal government for the first time to regulate minimum ages of employment and hours of work for children.³

Natural resources too are abused when they are treated as if they were commodities whose supply could adjust smoothly to changes in demand. Some resources, such as air, are appropriated as free gifts of nature and used as such by enterprises; others, such as land, are first appropriated as private property and then rented or sold. In the former case, we are dealing with common pool resources, whose overuse and inadequate maintenance can be avoided only by strong government or normative constraints. But precisely insofar as the economy has been disembedded from those constraints, and precisely to the extent that the maintenance of these resources appears as an externality to profit-driven firms, environmental degradation is almost inevitable. In the latter case, where private property is established, ownership creates at least some incentive for environmentally responsible behavior, because the owner of the resource does not want its future utility impaired. But insofar as these owners participate in the competitive marketplace, they cannot promise reliable environmental stewardship because they cannot afford to consider a time horizon longer than is permitted by investors' discount rates: mining companies, for example, leave as wasteland the open-pit and mountain-top mines that they have successfully exploited. The private ownership of land and water therefore does far too little to protect them from abuse.

The "Double Movement" and Its Prognosis

These abuses of human and environmental resources have provoked normative and regulative backlash aiming to "reembed" the market for these resources and to reassert a degree of social control over economic behavior. Polanyi called this disembedding–reembedding dynamic the "double movement" of market-based economies: the former movement, he argued, would inevitably provoke the latter. If we retrace this double movement and the factors that accounted for both its successes and its failures, we can use Polanyi's theory to formulate an assessment of capitalist societies' capacity to respond effectively to today's environmental sustainability challenge.

Concerning enterprises' stewardship of social resources, Polanyi suggests the following dynamic. The negative social externalities of business activity—insufficient work leading to poverty, too much work impairing non-work life, dangerous work putting lives and health at risk, unfulfilling work stifling human development, etc.—have often provoked protests by those who suffer from these externalities. Protest movements, labor unions, and labor parties emerged. Sometimes these movements gathered enough force to jeopardize the stability of the social order. Enlightened business and political leaders, responding to this challenge, sometimes enacted helpful laws and regulations—limiting work hours, abolishing child labor, instituting minimum wages and unemployment insurance, regulating workplace safety standards, institutionalizing basic education, legalizing unions, etc.—and these regulations

³ This act excludes agriculture, and as a result some 500,000 children currently harvest almost a quarter of the food produced in the United States (see York, 2012).

have enabled businesses to adopt more humane policies without risking that competitors would undercut their prices and force them out of business. Indeed, in many cases, the internalization of these social externalities eventually boosted productivity, wages, and consumer demand, creating a virtuous circle of economic growth and income levels. The result has been that over the past century and more we have seen progress—albeit slow, erratic, and uneven—in business's treatment of human resources. I see little reason to think the future would be much different from the past on this dimension—were it not for the effects of our environmental challenges, to which we now turn.

The past record of the business sector's environmental performance is far more negative, and our prognosis, I fear, must be far more pessimistic. If we follow the logic of Polanyi's analysis of reembedding movements in relation to labor and apply it to the problems of land and of the environment more generally, we are, I submit, led to the conclusion that regulatory or normative pressures will not succeed in pushing business to deal seriously enough and fast enough with our environmental challenge. While the negative environmental externalities of business sometimes provoke protests, and while Klein puts on display several cases of powerful protest mobilizations, and while these protests have sometimes prompted regulatory action, such environmental protests are typically less potent than social protests, and they are more likely to provoke more intense counter-pressure to block regulation. Let me take those two concerns in turn.

Environmental protests are typically less potent because most environmental externalities have a diffuse rather than geographically concentrated effect, and these effects are often slow to manifest their impact on humans. Greenhouse gas emissions, for example, affect the global climate rather than local conditions and do so only cumulatively, over a period of many decades. There are exceptions—sometimes local communities are affected dramatically enough by some environmental externalities to prompt the organization of very effective protest movements, but these exceptions are rare relative to the ubiquity of environmental degradation. Protests addressing broader, long-term environmental challenges are bound to be more difficult to organize, less compelling in their arguments, and less of a threat to social order.

Environmental protests are also more likely to provoke more intense counterpressures. While stronger environmental regulations will surely create some new business and job opportunities (for example, in solar energy), the very aggressive environmental regulations that we need now to forestall the looming environmental crisis will inevitably create massive regional losses in jobs and tax revenues as entire industries are dramatically downsized (for example, the oil, coal, and auto industries). Any regulations serious enough to deal with the impending crises will deter investment; investment funds will flow rapidly away from more heavily regulated regions; and the affected businesses will intensify their efforts to neutralize regulation at both the local and global levels.

The fundamental problem can be stated simply. If our environmental challenges were less serious, we might well expect that modest regulatory pressure would encourage rather than discourage investment and would thereby spark a new phase of "green growth." In reality, however, the environmental crisis has gone so far and is progressing so quickly that regulatory measures—at least those that are politically feasible today—will not suffice. The most credible evidence suggests that now—right now—we need dramatic cuts in production and consumption levels. As Klein points out, quoting Kevin Anderson

(Anderson and Bows, 2011), even if we assume that world CO₂ emissions peak in 2020, which is sooner than we can realistically expect, we would need an annual rate of reduction of over 10 percent each year from 2020 to 2040 to have even a 50-percent chance of staying under the climate-change tipping point of 2° Celsius average warming. If we agree that less-affluent countries, which have inflicted less cumulative environmental damage and which house populations in greater need, should shoulder less of this burden than the more-affluent countries, then the cuts we need in these latter countries will need to be of truly massive proportions and very rapid.

The conclusion seems inescapable: we need immediately to get on a path of radical “de-growth.” Everything we know about the market-based economy, however, suggests that such a steep negative growth trajectory would rapidly degenerate into economic crisis. The Stern Report, for example, estimated that reducing CO₂ emissions any faster than 1 percent a year would precipitate economic recession (Stern, 2007: 231–232). The reason is not hard to see: private-sector investment flows where it can expect a healthy rate of return, and where overall production is on a declining trajectory, private-sector investment will not be forthcoming—savings will be hoarded rather than invested—and the gears of private enterprise will stop turning.

Thus, in a market-based economy, regulatory efforts on behalf of the environment of the intensity and breadth that are needed now are most unlikely to create any virtuous cycle of economic growth but are instead very likely to engender economic crisis. As a result, business opposition is likely to be more tenacious, and other stakeholders are likely to be more ambivalent. There is therefore little reason to believe that regulatory and normative pressures on behalf of the environment can prevail over these counter-pressures in any market-based, capitalist economy.

A Note on Misreading Polanyi

The use of Polanyi I am making here is quite at variance with much of the understanding of his work in current economic sociology and political theory, as well as in the management scholarship that has leveraged these. My reading differs in two ways. First, the concept of embeddedness has been taken by many contemporary scholars to refer to the idea that all market transactions are generally, and contrary to the assumption of mainstream economic theory, embedded in ongoing social relations (for a review, see Gemici, 2008). Granovetter (1985) is the central citation in this reading. This reading finds its justification in Polanyi’s argument against the economic theorists of the free market, who postulate a timeless human nature that privileges individual material self-interest (Adam Smith’s “propensity to truck, barter, and exchange”). Polanyi criticizes this idea, arguing that it elevates one motive over all others in the wide array of motives that are typically intermingled in our social and economic interactions. Polanyi’s conclusion, however, was quite the opposite of Granovetter’s: capitalist societies are institutionally different from previous forms of society precisely in forcing market participants, on pain of bankruptcy, to privilege this one pecuniary type of motive. The powerful critique of capitalism advanced by Polanyi is based on an understanding of economic society that is exactly the opposite of Granovetter’s. For Polanyi, market-based,

capitalist societies are ones in which the market really is disembedded, and it is precisely this disembeddedness that endangers humanity.

Second, Polanyi's argument about the inevitability of a reembedding response to the ravages of the free market has been taken by many as an endorsement of social-democratic reforms that rebalance capitalist society by asserting government regulation and creating social welfare provisions. Polanyi's argument was here too almost the opposite. Such reforms, he argued, could not but provoke violent reactions by the social classes that dominate market-based societies. He was referring in particular to Nazism and other forms of "national-socialism," and today we can see much the same desperate reaction in the form of neo-liberalism's attacks on government regulation and the social safety net. Polanyi did not see social-democratic reforms as effectively stabilizing capitalism by mitigating market failures. He writes instead:

For a century the dynamics of modern society was governed by a double movement: the market expanded continuously but this movement was met by a countermovement checking the expansion in definite directions. Vital though such a countermovement was for the protection of society, in the last analysis it was incompatible with the self-regulation of the market, and thus with the market system itself. (Polanyi, 2001: 135)

And in analyzing the sources of the Great Depression, he writes:

Protectionism helped to transform competitive markets into monopolistic ones. Less and less could markets be described as autonomous and automatic mechanisms of competing atoms. More and more were individuals replaced by associations, men and capital united to noncompeting groups. Economic adjustment became slow and difficult. The self-regulation of markets was gravely hampered. Eventually, unadjusted price and cost structures prolonged depressions, unadjusted equipment retarded the liquidation of unprofitable investments, unadjusted price and income levels caused social tension. (Polanyi, 2001: 218)

In Polanyi's analysis, a market-based capitalist society is not, in the long run, a stable, reproducible structure, even in regulated form. Left disembedded, the market destroys its very conditions of existence; but efforts to stabilize it by government regulation are destined to fail, too. They fail in one of two ways: backwards or forward. They may fail backwards by provoking a violent reaction from the elites defending their wealth and privilege—this is the path of national-socialism and other reactionary movements. Or they may fail forward: efforts to impose regulatory constraints on the market process impair the market's ability to deliver; this leads to social strife; this strife results either in a wave of reaction (once again, falling backwards) or in an accelerating movement toward socialism:

Socialism is, essentially, the tendency inherent in an industrial civilization to transcend the self-regulating market by consciously subordinating it to a democratic society. It is the solution natural to industrial workers who see no reason why production should not be regulated directly and why markets should be more than a useful but subordinate trait in a free society. (Polanyi, 2001: 242)

THE CHOICE WE FACE

My reading of Polanyi thus suggests that so long as we live in a market-based, capitalist system, there are severe limits to the power of social norms or

government regulation to reorient economic decision making, and those limits preclude the kinds of reforms that would be needed if we are to avoid the looming environmental crisis. We need to get rapidly onto a radical de-growth trajectory, at least in the developed economies of North America and Europe; however, the market-based, capitalist economic system is simply incompatible with radical de-growth.

De-growth is of course possible in principle, but only if investment and production decisions are no longer primarily in the hands of private-sector enterprises operating under the capitalist system's growth-and-profitability imperative and are instead put in the hands of some overarching planning authority. What would such a society look like? Consistent with the vagueness of her diagnosis, Klein's book is vague on the form of society she envisages as an alternative. But as I noted above, she seems to suggest a largely decentralized world of cooperatives, serving local rather than global consumers and operating under community plans rather than market incentives.

I don't see how this can work on a decentralized basis. Given the globally interdependent nature of our environmental challenges, economic planning would surely need to be global rather than only local or even national in scope. As a result, the choice we face—if we have any chance of avoiding ecological catastrophe and the degeneration of society into dispersed survivalist communities—is whether this global planning authority will take a malignant and despotic form, a more benign but autocratic form, or a democratic form. Despotic and autocratic global planning are both in their different ways terrifyingly dystopian prospects. In contrast, democratic global planning seems implausibly utopian. But such democratic planning, Polanyi teaches us, is far less utopian than the dream that somehow our market-based, capitalist system can be regulated so as to avoid the looming catastrophe.

This diagnosis leads to no easy remedies, clearly. But it does point to two criteria, one negative and the other positive, that might guide our way. Negatively, it is important that we not encourage the illusion that firms will do better competitively if they exercise more environmental stewardship. In reality, sometimes greater stewardship will help the firm's bottom line, and sometimes it will not, and if we hinge our hopes on market competition driving firms toward such stewardship, we will be inadvertently accelerating, not decelerating, the unfolding crisis. While applauding the goodwill demonstrated by more enlightened corporate leaders, we should be clear that their efforts are not the path to a solution. Similarly, when governments take modest steps to encourage solar or recycling or water conservation, we should be clear that these are woefully inadequate, rather than applauding them as "a good start." When the patient has cancer and needs major surgery, dieting is nice but not a cure, and it is dangerous to encourage the patient to think otherwise.

Negatively too, we should not indulge the facile assumption that technological innovation will allow capitalism to adapt to the looming environmental challenges. Many economists have argued that the market will be able to deal with these challenges because the growing demand for energy-efficient equipment and buildings, for weather-resistant structures, for pest- and drought-resistant seeds, and so forth will incentivize private-sector R&D efforts in those directions. Indeed, I see no reason to believe that technological innovation could not allow a projected 10 billion people or more to live in comfort on this planet. But it defies credibility to imagine that the competitive market process, even aided

by government subsidies and regulations, could mobilize the massive, sustained R&D effort that would be required, *and* could drive the resulting new technologies into widespread use, *and* could get industry to abandon the huge accumulated capital assets thus rendered obsolete, *and* could achieve all this in time to avert the collapse of numerous ecological and social systems. Technology can probably save us, but it surely cannot save capitalism.

Positively, we need to celebrate instances in which we see the market being effectively reembedded—where investment and production decisions are being driven by social needs rather than private-profit considerations. Where city governments team up with local credit unions, pension funds, and unions to support the emergence of local cooperatives, where these cooperatives join together in planning processes that involve the local community, where these cooperatives' products respond to real economic, social, and environmental needs as determined by the people involved—here, even if the experiments are local in nature and far from the global scale we so urgently need, people can at least begin to see the contours of the kind of world we need to create. There is an impressive range of such new democratic institutions and institutional ecologies that have been quietly developing just below the surface of public awareness in recent years. They presage various ways of reembedding the economy, not as a return to pre-capitalist modes of embeddedness, but as the creation of a new form of society in which economic decisions are made under norms of democratic dialogue.

Such institutions, however, will need to find social movements powerful enough to propel their global diffusion. It is here that our disempowerment is most frustrating. At the moment, and sadly, the best hope for the emergence of such movements lies in the chaos that we are likely to see over the coming few decades as the environmental crises deepen. If current predictions are even approximately accurate, that chaos will involve a combination of widespread economic collapse, massive population transfers, intensifying tensions over fresh water and arable land, and proliferating epidemics. Such chaos may well galvanize mass movements powerful enough to reshape the economy on a national and indeed international scale.

The turmoil of the Great Depression in the 1930s provoked the emergence of new mass movements that prompted important changes in the economic system. By comparison, the chaos likely to emerge in the near future will be far more disruptive, and the movements it provokes will therefore probably articulate far more radical goals. Like the Great Depression, however, the looming chaos will represent a very dangerous period, as it will confront us with very stark choices between despotism or autocracy on the one hand—benefitting from a well-oiled arsenal of ideological as well as military weapons—and on the other hand, a highly uncertain path of social experimentation toward a radical deepening and broadening of democracy.

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