



The Imperfectionist

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In an August 1938 entry in his journal, the critic Walter Benjamin jotted down a “Brechtian maxim: Take your cue not from the good old things, but from the bad new ones.” This is an apt aphorism for Evgeny Morozov’s new book, *To Save Everything Click Here*. A coruscating and sometimes scathing polemic, the wide-ranging book challenges our culture’s uncritical approach to technology and attacks Silicon Valley’s assumption that we should genuflect to its many creations.

Taking as his heroes an eclectic group—philosophers and critics such as Ivan Illich, Jane Jacobs, Michael Oakeshott, and Hans Jonas, among others—Morozov, a contributing editor to *The New Republic* and frequent contributor to the *New York Times*, is an enthusiastic skeptic of self-appointed experts who claim to be able to mold human nature. He indicts our contemporary technologists for their “quest to fit us all into a digital straitjacket by promoting efficiency, transparency, certitude, and perfection—and, by extension, eliminating their evil

twins of friction, opacity, ambiguity, and imperfection.”

Morozov’s chief target is an ideology he calls “solutionism,” a term he borrows from architecture and urban planning. It “has come to refer to an unhealthy preoccupation with sexy, monumental, and narrow-minded solutions—the kind

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Solutionism*

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of stuff that wows audiences at TED Conferences—to problems that are extremely complex, fluid, and contentious,” he writes. Solutionists seek a technological fix to a problem without ever asking if the thing they are seeking to fix even *is* a problem. And they believe that the information and transparency our technologies make available to us will inevitably make us all freer and happier, a notion as misguided as its historical antecedent, the Enlightenment belief that knowledge is always liberating.

Take, for example, the Quantified Self movement—the obsessives who use computers, smartphones, and even wearable sensors to systematically record information about their lives. These self-tracking navel-gazers, Morozov claims, harbor a “hidden hope” that “numbers might

eventually reveal some deeper inner truth about who we really are, what we really want, and where we really ought to be.” They believe that their relentless analysis of data will solve complicated problems, like the obesity epidemic. Morozov argues that they make the fundamental error of equating information with knowledge—in this case, self-knowledge. And they ignore the reality that numbers themselves are never objective, since “how we choose to slice up reality, what elements we highlight, and what elements we shade will greatly influence what kinds of measurements we generate.” Expectations and assumptions are buried within each bit of software, within every app that compiles data. But solutionists rarely examine those assumptions, in no small part because “the urge to replace human judgments with timeless truths produced by algorithms is the underlying driving force of solutionism.”

Morozov also takes to task “Internet-centrists,” people for whom the idea of the Internet “effortlessly fills minds, pockets, coffers, and even the most glaring narrative gaps.” To these people, the Internet is imbued with a sense of magic and ineffability that makes it seem as if the ordinary public and policymakers could not possibly comprehend it, and so it certainly should be exempt from any meddlesome regulations. Morozov is even wary of the term “the Internet” itself, decrying the way we have

lazily relied on this label as a catch-all to describe a broad array of technologies. Throughout the book, the term appears in scare quotes.

Morozov’s critique of “the Internet” allows him to survey many of the questionable assumptions that plague our discussions of technology: that transparency for its own sake is always good; that efficiency is more important than ethics; that just because we can do something with technology, we should; that participation means understanding, and sharing is equal to caring; and that ranking Amazon purchases is the same as making decisions in democratic elections. “Like all religions,” Morozov argues, this sense of reverence for the Internet

might have its productive uses, but it makes for a truly awful guide to solving complex problems, be they the future of journalism or the unwanted effects of transparency. It’s time we abandon the chief tenet of Internet-centrism and stop conflating physical networks with the ideologies that run through them.

Morozov applies his argument most persuasively in the arena of politics, noting how the inefficient, mediocre, opaque processes of local, state, and federal governance frustrate the titans of Silicon Valley. He quotes Google’s Eric Schmidt, who once described Washington, D.C. as “an incumbent-protection machine”

in which “the laws are written by lobbyists”—a rich irony given the vast lobbying machine Google itself runs in the nation’s capital. As Morozov puts it, for solutionists and Internet-centrists, “politics is out; technocracy is in.” But it is a technocracy that is sophisticated enough not to lay claim to its elite status. Instead, like all good propagandists, these technocrats convince the masses (the “users,” as they would put it) that we are in charge. Click the “like” button on a candidate’s Facebook page, electronically sign an online petition, and you’re now an active participant in democratic politics.

But are you? A recent working paper by researchers in Madrid and Mannheim studied social-media use and online and offline political activities of Occupy Wall Street protestors in Spain, Greece, and the United States. Their findings confirm Morozov’s criticism of the hyperbole surrounding “Internet activism”: “Apparently, new social media are mainly used as another expansion of the action repertoire of people already mobilized for a specific cause,” according to the researchers. “No evidence is found for a general increase of offline mobilization among users of social media.” In other words: unless you are already actively involved in a cause, tweeting about it (or reading others’ tweets about it) is unlikely to inspire you to get involved in it.

Such Potemkin participation schemes are also evident in the “gamification”

movement, an effort by Silicon Valley social engineers who want to harness the motivating effects of video games to persuade you to do the right thing. If you don’t feel like taking care of your elderly neighbor, why not turn it into a game where you can earn points or rewards every time you shovel snow from her driveway? This idea that we can “game” our way to becoming better recyclers, neighbors, and citizens, Morozov argues, “rests on the assumption that the real world is inferior to the virtual one precisely because it lacks game mechanisms.” As gamification doyenne Jane McGonigal put it in the title of her book: *Reality is Broken*.

Morozov traces this movement back to the simplistic assumptions of psychological behaviorism. Such approaches view people as creatures of impulse and reward, and they invite us to outsource the difficult work of being virtuous. They encourage us to hand civic responsibilities over to technocrats, and to the technologies they design, in exchange for pleasant rewards and freedom from the hard tasks of citizenship. Gamification apps are little more than moral mercenaries, eroding our notions of civic duty.

Although Morozov makes only a handful of passing references to Marshall McLuhan in his new book—in addition to a few in his previous book, *The Net Delusion* (2011)—it is clear that Morozov is amused and annoyed by the Canadian

media theorist's vague pronouncements and prophetic pose. McLuhan's theories were appealing and accessible at least in part because they were simplistic; Morozov also points out that McLuhan's grand generalizations overlooked "the diversity of actual practices enabled by each medium" he criticized. By contrast, Morozov wants a technology criticism grounded in specifics and open to the possibility that competing claims and shifting circumstances make any sweeping statements about "the Internet" not just impossible but ridiculous. A devotee of the French sociologist and anthropologist Bruno Latour, Morozov wants to complicate the meaning of "the Internet" in the same way Latour and others have done with the practice of science by revealing the extent to which it is socially constructed.

This is all well and good, but what are we to do when we move from the realm of theory to practice? "The way in which technology companies resolve" practical questions, Morozov writes, "depends, in part, on what we, their users, tell them (provided, of course, we can get our own act together)." Perhaps I am more of a cynic than Morozov, but assuming we do get our act together, whatever that means, how, precisely, do we "tell" corporations like Google and Facebook what we want? The customer backlashes that plague Facebook every time the company rolls out a new privacy-eroding

feature is one way, of course, but the speed with which these criticisms subside hardly makes them a promising model for communication, much less a plausible way to address the challenges Morozov describes. In dealing with the makers of our technologies, do we need carrots, sticks, or some combination of the two? And whichever we wield, should we do so as individuals or collectively?

Toward the end of his book, Morozov criticizes the recent installation in Santa Monica of "smart" parking meters with sensors that gather data about locations and durations of parking sessions—and reset the meters when a car leaves a spot so as to keep the remaining fare from being used by anyone else, while also preventing people from feeding the meters beyond their maximum time (at least without re-parking the car). This scheme seeks to "maximize the economic efficiency of the parking system," Morozov writes, but it could have been designed with different values than the ones the city chose to emphasize. For example, it could instead have been designed to "maximize the deliberative efficiency of our democracy as a whole" by giving drivers the option to reset the meter, thus making them directly involved in a question of whether they want to provide a benefit to a fellow driver or to the local government that bears the costs of the service. Morozov believes that by

offering drivers such choices, and perhaps also by giving them statistical information about the cars that park in the area—whether they are “fancy new cars that only rich people can afford” or “old, decrepit cars used by grad students or illegal immigrants”—drivers will suddenly be compelled to “think about the severity of the parking problem and confront the factors creating it.”

But would Morozov’s alternative scheme for programming the parking meters really prod citizens “to think critically about the hidden costs of the invisible infrastructure that surrounds them”? Who is doing the prodding here? Would these citizens really, as he claims, be made more “likely to approach many other aspects of life with the same critical mindset”? Will the opportunity to reflect on the plight of grad students paying for parking somehow make people think more critically about their use of Facebook or their iPhones, or, for that matter, the myriad public policy problems that we face as a democracy? Is it really the role of technology designers to create “a truly smart system” that “would find a way to turn us into more reflective, caring, and humane creatures”? Mightn’t there be other institutions—such as the family or local communities—better suited to perform that molding?

Engineers and programmers could perhaps design their products to encourage people to pause and

reflect on the ways their technology use shapes civic virtues and political life—although how such tweaks would rise above the level of cheap tricks like Cass Sunstein’s “nudges” and gamified incentives is hard to imagine. It is not easy to reconcile the idea of enforced thoughtfulness with the ease of smooth designs, of a world where I can Skype with my sister on the other side of the country while downloading a new release from iTunes and—oh yes!—“liking” Ben Affleck’s new TED talk about the situation in the Congo. The seductive simulacrum of participation in something larger than ourselves is difficult to resist. In the battle for our collective conscience, one fears that TED-sized nuggets of Affleck will win over rigorous applications of Latour every time.

In Buddhist philosophy, people are encouraged to embrace discomfort and inconvenience as important aspects of a fully lived life. But most people aren’t Buddhists; they want convenience, and insofar as we are living in a convenience culture, we are actively discouraged from living with limits and instead taught to treat them as simply technical problems to overcome—bumps on the road to glorious efficiency and greater happiness. The technologies we buy to make our lives more convenient inherently discourage conscious reflection about our use of them. As a 2012 advertisement for the iPad put it, “When a screen becomes this

good, it's simply you and the things you care about." (And what the ads definitely do not want you to care about is whether the minerals inside that iPad, like tantalum and tungsten, have been mined in the Congo to fuel a warlord's murderous campaigns, or whether the Chinese factory workers toiling in unspeakable conditions to assemble the device with which you are having your special moment are being treated ethically.)

Morozov is more interested in (and better suited to) diagnosing the problems of solutionism and Internet-centrism than in offering, well, solutions to them. For example, he writes, "We need to develop a better way of evaluating, comparing, and discriminating across technological fixes—rather than repeating the same tiring message that social fixes are always better." True enough. And yet, there is a great deal of ambiguity in that simple "we." Does this mean "us," the users of technology, versus "them," the technologists? How do we encourage our technologists to "take the time to study what makes us human in the first place," as Morozov urges them to? Or should we expect them to do that on their own?

Morozov wants philosophical and practical limits placed on the solutionist impulse. But where will he find the justification for those limits beyond his own critique? He doesn't delve deeply into virtue ethics or religion, as other critics of technology have. Instead, he makes the case

for the imperfect give-and-take of democratic politics as the superior alternative to solutionism. But this approach assumes that the values people bring to the table haven't already been so decidedly shaped by the technologies they use that they will be unwilling to accept technological systems that enforce thoughtfulness or public-mindedness. The devil might be in the *-isms* Morozov identifies (Internet centrism, solutionism), but the details are now stored in our devices and Facebook timelines, easily summoned to remind us of who we are, or claim to be, or should be. And all of this is within the platforms created by technology companies—which are, of course, in the business of satisfying our wants, and once they are satisfied, creating new ones. So what if our use of new technologies changes our understanding of the self itself?

For his part Morozov embraces "a dynamic view of selfhood as something that emerges only slowly and gradually—both in the context of individual self-development and across generations in the broader historical context," and he correctly notes that our technologies "actively shape our notion of the self; they even define how and what we think about it." But apart from politics, he says little about other social and cultural institutions that contribute to the construction of the self, and that also offer havens from the relentless self-exposure that our use of technology

demands—havens that will become more important in the future.

One thing Morozov can claim to be is a fine pugilist. No gentle blandishments or caveats interrupt his criticism of the solutionists, and I confess to being as giddy as a school-girl reading his takedowns of techno-utopians like Steven Johnson and Clay Shirky (and, likewise, his eviscerations in *The New Republic* of the cult of Steve Jobs and the inanity of TED Conferences). The techno-utopians' particular brand of cant is long overdue for a thorough thrashing. Many self-appointed technology experts have been suckling undisturbed at the teat of the technology industry for so long that they think Facebook's and Google's organic cafeterias and subsidized massages and faux-humanitarian rhetoric render them immune to the kind of criticism of their business practices that are regularly leveled at the tobacco or oil industries.

But the techno-pundits Morozov criticizes aren't wildly popular merely because they are hawking Silicon Valley snake oil and using a so-broad-as-to-be-meaningless term like "the Internet" to do it. They are also telling people what they want to hear: that the time they spend playing video games makes them "smarter"; that retweeting is an act of civic engagement on par with organizing a protest; that quantity (measured in clicks, tweets, or likes) is the same as quality and determines the

worthiness of everything from art to music to literature; that the many hours they spend on "the Internet" help solve the world's problems.

And these tranquilizers of the conscience, to borrow a phrase from the tech apostate Joseph Weizenbaum, are much harder to fight. The critic must contend with the reality that not everyone will cotton to his criticism, not because he is wrong but because they can comfortably ignore what he is saying and instead feed on a steady diet of what they would prefer to hear. Software and technologies that allow us to personalize the content we see make this ironically much easier to do than in previous eras. Criticism itself has succumbed to this impulse, which is why Morozov is right to point out, in his discussion of restaurant reviews, that "the science that first Zagat and now Yelp offer is the science of aggregating opinions about food experiences." The problem is that many people, seduced by the ease with which they can get information, don't care or even notice that this isn't the same thing as thoughtful criticism. Perhaps they think, as they self-righteously upload yet another ornery restaurant review to Yelp, *I have just as much a right to air my opinion as any stupid food critic*. And in a sense they are right: the fact that some people don't have the knowledge or experience to judge a chef's cuisine is overshadowed by the power of the means they have at their disposal to do just that.

Criticism has its limits, however, and Morozov himself explores them. At the risk of sounding like an overly meddling referee in a heavyweight bout, it must be said that he is at times too dismissive of critics who, like him, are making a good-faith effort to chip away at our collective technoutopianism, but are using a different set of tools than the particular categories and *-isms* Morozov outlines in his book. For example, he recently engaged in a heated argument in the comments section of the blog of tech critic Nicholas Carr. As the argument escalated it became a kind of virtual duel—Pixels at dawn!—that left neither side persuaded of the other’s position. Morozov complains that Carr indulges in Internet-centrism, writing in his book, “For Carr, the brain is 100 percent plastic, but ‘the Internet’ is 100 percent fixed...he keeps telling us that ‘the Net’ is, well, shite.” But Carr is essentially criticizing the same thing as Morozov: our uncritical approach to technologies with which we spend an ever-increasing share of our waking hours.

Carr’s 2010 book *The Shallows* grapples with how our experience of certain human activities like thinking and reading is changing given our use of new technologies. He asks if this use is changing us physically (especially neurologically) and culturally. That Morozov wants Carr to be more precise in his critique—is he talking about a particular website

or the Kindle?—is fair. What seems unfair is the way he tars Carr with the same broad brush as hucksters like Clay Shirky.

This problem seems to happen in part because Morozov is determined to apply labels to all other contenders in debates over technology: they are solutionists and Internet-centrists; in other parts of the book he also discusses “technoneutrals” and “technostructuralists.” But just as a Facebook profile doesn’t capture the essence of a person, nor do these labels entirely do justice to the people they supposedly define. (For what it’s worth, I tried to divine what my appropriate Morozovian label would be and came up with: curious and irascible historian skeptical about solutionist claims, but who has no doubt committed heinous acts of Internet-centrism and who is on occasion cloyingly and unapologetically sentimental about particular aspects of our pre-digital past. You know the type: the person who never misses an opportunity to natter on about the smell of old books or the lost art of letter-writing.)

Morozov’s overzealous examination of others’ theoretical heresies means that he sometimes veers from vigorous critique to something that feels more like score-settling. As a result, although there is much to admire and support in Morozov’s desire to set clear theoretical boundaries for our contemporary debates about technology, one also at times

has the feeling of being scolded by the teacher for fidgeting too much when you're supposed to be standing patiently in line.

Morozov's argument is ultimately most persuasive when he appeals to history, urging readers to see the technologies we use today as part of a much longer story of man's efforts to alter his environment—a story of brilliant successes and spectacular failures. Among the beliefs of Internet-centrists is “the firm conviction that we are living through unique, revolutionary times, in which the previous truths no longer hold, everything is undergoing profound change, and the need to ‘fix things’ runs as high as ever.” What Morozov does so well is to tell us that we aren't that special; in fact, we are just as blind to our limitations as previous eras were to theirs—which opens the door for him to argue for ways of thinking about technology that are more “fruitful” and “humanistic.” This is why we have to engage directly and clearly with specific technologies if we are to criticize them properly. It is also why we are not wrong to be concerned when a company with Google's reach and influence hires the transhumanist cheerleader Ray Kurzweil as its Director of Engineering, and renames its Search Quality Team to its Knowledge Team.

“Technological amnesia and complete indifference to history (especially the history of technological

amnesia),” Morozov writes, “remain the defining features of contemporary Internet debate.” Or, as he puts it in a more plaintive moment, “Would it be too much to expect our geeks to know something about history?” No, it would not—and they might do well to read some poetry too. Although he was writing long before the ascendance of Silicon Valley, W. H. Auden once commented on a sensibility all too common in our times, one Morozov's book ably criticizes: “The tyrant's device: Whatever Is Possible Is Necessary.”

Beyond simply teaching children to code, we should strive to teach them the complicated and fascinating history of science and technology—not to seek out some mythical Golden Age when we lived in perfect harmony with technology and nature, nor to congratulate ourselves on our sophistication, but merely to do what history does best: allow us to see how others, under different constraints and in different eras, tackled the questions we should still ask today. What does it mean to be human? How might our tools enrich our humanity and how might they inadvertently undermine it? Why has every era, including our own, produced people who believe that the latest technologies, ideologies, and social arrangements will be the ones that finally solve the puzzle that is human nature? History offers us a chance to learn about something our techno-utopians utterly lack, something for which there is not and

never will be an algorithm: humility. “Thinking and deliberation are unavoidable; even the most perfect algorithms won’t spare us those,” Morozov writes.

Critics of technology are too apt to quote Aldous Huxley’s *Brave New World* to offer warnings and ominous projections of our future. But after reading Morozov’s description of the solutionist fixation with technofixes, including solving problems that aren’t problems, I couldn’t help but be reminded of a passage from Huxley’s dystopia in which the Savage explains to Mustapha Mond what it is that Mond’s perfectly controlled

and comfortable society lacks: “I don’t want comfort,” the Savage says. “I want God, I want poetry, I want real danger, I want freedom, I want goodness. I want sin.” What he wants is all of the messy complications of being human. So does Morozov. And that is why, although he makes the occasional misstep and stamps on some all-too-human toes along the way, his provocative book is well worth the journey.

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