

Book Review

Virginia Eubanks

Automating Inequality: How High Tech Tools Profile, Police, and Punish the Poor
New York, NY: St. Martin's Press, 2018

Reviewed by Howard A. Doughty

Technology is everywhere. Ubiquitous, pervasive, invasive, and determinative, it has passed from being a useful tool (a digging stick or a plough, a cutting stone or a sledgehammer) to being a prosthetic (a wooden leg or a pair of eyeglasses), or an electronic extension (an electron microscope or a radar telescope) of our very selves.

I, for example, am currently sitting before a keyboard, viewing a computer screen, being kept alive by a heart that is partly human, partly bovine and partly metallic—a small but significant step toward what is anticipated to be the “posthuman condition” (Haraway, 1991).

And now, it seems, we are being invited to contemplate technological innovations that go beyond the organic. We are being asked to think about machines that can think. We are already being seduced by smart phones, smart cars, and smart houses. We use domestic communications devices that allow us to view the world while, in return, our devices monitor us. We either relish or fear the prospect of deferring to smarter-than-smart machines that will make our lives easier to the degree that they make us redundant.

<p>The will to technology equals the will to virtuality. And the will to virtuality is about the decline of western civilization: a great shutting down of experience, with a veneer of technological dynamism over an inner reality of inertia, exhaustion and disappearances.</p> <p>– Arthur Kroker, 1993: 7</p>

Consider the following. You are sitting alone in a room with two computer terminals. In another place and electronically connected to your machines are: (1) a human being with a computer and (2) a computer only. Your task is to ask them both the same questions and, on the basis of the answers received, to determine which is the person and which the computer. If, on the basis of their answers to your questions, you cannot distinguish between the two, then you will be obliged to conclude that the computer can “think.” This is the essence of the “Turing test” for artificial intelligence (Turing, 1950). It provides a constant theme throughout this discussion.

But, be careful! Says Katharine Hayles (1999: xiv): “Think of the Turing test as a magic trick. Like all good magic tricks, the test relies on getting you to accept at an early stage assumptions that will determine how you interpret what you see later....As gaze at the flickering signifiers and scroll down the computer screens, no matter what identifications you assign to the embodied entities you cannot see, you have already become posthuman.”

Minds and Machines: Early Thoughts

Automating Inequality presents a thoughtful critique of computers, artificial intelligence (AI), and our attempts to use them to solve our problems. It's not alone. I have been reading books and articles with similar themes for almost sixty years. Many of them follow now familiar lines of argument. Most of them exaggerate, employ hyperbole, contemplate utopias or dystopias, or indulge in fantasy/science/post-apocalyptic fiction. Like most professional futurists, late twentieth-century tech-savvy inheritors of traditions established by the likes of Jules Verne, Edward Bellamy, and H. G. Wells have retired in embarrassment. They have been unable to keep pace with change. They have, however, left a legacy to which we turn hoping still to find readable tea-leaves and discernible images in lingering in their virtual crystal balls.

We are unable clearly to circumscribe the concepts we use; not because we don't know their real definition, but because there is no real "definition" to them.
– Ludwig Wittgenstein, 1991: 25

Here are four of their more common themes:

- computers acquire self-consciousness, turn evil, go rogue, and enslave humanity for their own nefarious purposes (whatever "purposes" may mean to mega-calculators);
- computers remain compliant but immeasurably powerful devices used to escalate human conflict resulting in either the extermination of our (and many/all other living) species or a devastated future in which some of us may survive but wish we hadn't;
- computers use "big data," "metrics," and "algorithms" to solve complex problems such as environmental sustainability, socio-economic equity, and world peace—allowing us time to pursue higher projects in aesthetics, spirituality, or polymorphous erotica;
- computers and flesh combine to blur the line between humanity and machinery, blending organic humans with computer chips, and trot merrily out into deep space to capture resources and maybe colonize mere organisms far, far away.

Maybe I'm just old-fashioned, but I'm not impressed by any of these options: the first two are gratuitously malicious, the third offends my inner John Calvin (though, on my more cheerful days, I suppose I could be persuaded that there *is* something quite splendid about having Freud's *pleasure principle* put paid to his *reality principle* once and for all), and the last reminds me too much either of noisily pubescent, morally regressive, cinematic extravaganzas or the late Stephen Hawking's ill-considered "escape from earth" strategies to take entirely seriously.

So, it's good to get back to basics, try to see things in "real time" and "real space" (however theoretically problematic such notions may be), and to start at the beginning.

Back to Basics

For me, that “beginning” could easily be Mary Shelley’s *Frankenstein*, a cautionary tale about bringing Prometheus up to date and being too smart for our own (or anyone else’s) good. I prefer, however, to begin with an article that originally appeared over fifty years ago in the *Review of Metaphysics* (Dreyfus, 1967) and that was later expanded into a book (Dreyfus, 1992). The initial piece was called “Why Computers Must Have Bodies in Order to Be Intelligent.” It addressed issues of interest to philosophers and especially to specialists in ontology, epistemology, and phenomenology (all people who worry—sometimes excessively—about questions such as “what’s what?” and “how do we know?”).

Dreyfus either spoke directly about or alluded to such matters as “consciousness,” “experience,” “intentionality,” “reflection,” and “judgement.” He even allowed for such notions as “feelings.” These are all terms that had previously been defined as literally *meaningless* by some of the greatest analytical minds (chiefly of the “logical positivist” variety) of the twentieth century. While now somewhat out of fashion, these terms have never completely disappeared. Some of the people who insist on retaining an interest in “subjective,” “emotive” ideas also have a habit addressing pesky problems of political power ... but more of that later.

Dreyfus had no trouble understanding that computers can “compute” and happily acknowledged that they can do so with incredible efficiency (speed and accuracy). They can imitate some of what the human brain can do, and they can do so very effectively. They might even pass the Turing test. That is to say that they can perform magic tricks—if they are properly programmed by clever computer code writers. Dreyfus, however, was not completely taken in by this sleight-of-hand/mind.

“The map is not the territory” – Alfred Korzbzski “The menu is not the meal” – Alan Watts “THINK” – IBM corporate motto

Applying the insights of representatives of other species of twentieth-century philosophy including Martin Heidegger and Maurice Merleau-Ponty, Dreyfus insisted that authentic human intelligence *depends on* and does not simply *replicate* conscious experiences and subconscious processes that AI specialists believe can be reduced to logical cybernetic information circuitry. His point was not that the human brain is more complicated than complex machines (though it is), but that organic brains and electronic computers are different *kinds* of things. They are superficially similar in that each can multiply 1×1 and get 2 under the right geometrical conditions and numerical assumptions (i.e., in plane but neither concave nor convex space where 1×1 can result in 0 or ∞ respectively); *but*, human beings (and other sentient animals) are neither merely nor exclusively rule-following devices. We are not simple stimulus-response (S-R) mechanisms; we are at the least S-O-R (organically mediated) learning systems (cf. Campbell, 1967; Campbell, 1979). We are not simply kinetically energized, externally programmed, perceptually neutral unreflective information-processors. We actually think that we *think*—which (as Descartes’ followers can tell us) makes *all* the difference.

The Magical Reply

This line of argument has not, of course, been lost on AI advocates. Ever since Dreyfus (and others of like *mind*), scientists and technologists have made remarkable technical improvements in their projects. They have accepted the main implications of Dreyfus' argument, but they have rather missed the central point by treating the matter as an "engineering" problem. Accordingly, they have responded by trying to answer the wrong question. They have undertaken the task of artificially replicating human organicity. They are endeavouring electronically to socialize and enculture their machines by adding stores of contextual data and having it take all sorts of artificial "memory" into account when imitating the logical steps and the data retrieval procedures in order to seem to do what human beings do when we "think."

AI inventors are having some extraordinary successes in emulating human thought today. So, AI enthusiasts say, it follows that they will have even greater successes tomorrow. If they can program devices to beat grand masters in chess tournaments and to outsmart human champions on clever television quiz shows such as "Jeopardy," they ask whether spooky questions about "mind" even *matter*.

<p>From an algorithm scoring newborn babies on their future risk of being abused to one million denials of welfare benefits in Indiana, <i>Automating Inequality</i> is a deeply unsettling exploration of the impact of automated decision-making on public services in America. – Louise Russell-Prywata, 2018</p>

If people cannot tell the difference between mind and machine, what difference does it make? If we are mainly interested in how best to do urban planning so that transportation is economical and efficient and if we want to make entertainment and education readily available, housing more affordable, employment more available, crime rates lower, medical facilities more effective and treatments more economical, mental health more successfully promoted, and supermarket shelves filled with products and produce precisely when customers wish to purchase them, what is the problem?

If a machine that can process appropriate variables and produce perfect public policies and plans in a matter of seconds and thereby render redundant hundreds of human experts who inefficiently spend months or years researching, deliberating, and bickering with competing social interests before coming up with only an almost perfect plan, are we not well advised to turn to dispassionate, disinterested, evidence-based, and ideologically uncorrupted computers rather than cater to self-interested, ill-informed, emotional human organisms?

AI engineers confidently answer all such questions in the affirmative. And, to be fair, it must be acknowledged that they appear to have taken Dreyfus' critique to heart and have tried to overcome his objections (Perez, Deligianni, Ravi & Yang, 2017). They have continued in their efforts to reverse-engineer the brain by simulating its neuronal structures. They claim that their replacement of analog neurons by digital simulacra have allowed them to mimic human decision making to a "reasonable level of accuracy." They have also purportedly, if not entirely convincingly, developed neural nets and evolutionary algorithms to approximate the subconscious mind. Moreover, additional effort is being expended into "sub-symbolic methods"

intended to capture tendencies and attitudes as well as digital data. They have therefore managed to improve their methods and their products. They have, however, not succeeded in resolving the “existential” problem. Their initiatives in cognitive science, connectionism, and robotics research may have taken the sting out of the argument from “continental philosophy” involving notions such as situatedness, embodiment, perception and gestalt, but the entire AI project still suffers from a conceptual gap (BeYou.com, nd). It’s getting better and better at doing “magic,” but magic it remains. However much AI inventors may improve their skills at mimicry, they have not succeeded in adequately defining the boundaries of the problems they hope to solve. Even when their immediate, practical results are astounding, they are built on inappropriate premises. As Arthur Kroker, Canada Research Chair and Director of the Centre for Technology and Culture at the University of Victoria in British Columbia concisely put it, contrary to the label it applies to data storage, “the computer has no memory, if by memory we mean the presence of political judgement and aesthetic reflection” (Kroker, 1993: 7).

The more any quantitative social indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor.

– Donald T. Campbell, 1979

Memory is not a *thing*, but a *process*. It is not placed in cold storage to be retrieved and utilized at will. From initial sensory perception, it is filtered, altered, edited, revised, jettisoned, and dialectically retrieved and remade according to unpredictable and immeasurable experience that alters its content, context, chronology, and coherence. Our memories, individually and collectively, are the stuff of subjective and selective reconstruction of events that provide solace for the past and hope for the future. They are, in Kenneth Burke’s useful phrase, “equipments for living” (Burke, 1937). They are stories we tell ourselves in the light of experience, and experience is precisely what computers *cannot* have.

Taking a Breath

Philosophically, the proposition that “technology is the ontology of the twenty-first century” (Lally, 2016) has encapsulated the worries of previous generations of techno-sceptics (Ellul, 1964; Franklin, 1989; Grant, 1969; Postman, 1993). It summarizes broad cultural apprehension about everything from allegedly declining literacy among the coming generations who seem “addicted” to electronic communications devices that suppress narratives of more than 280 characters. The anxiety it provokes about the surrender of public policy decisions to algorithms that manipulate megadata in order to reach metric-based decisions does not imply the negation of technology. It simply works to establish criteria according to which technology should be incorporated in the massing and assessment of useful information. It urges us to interrogate ourselves ruthlessly and to investigate our inventions uncompromisingly lest we acquire capacities that make us later regret what we wished for. Seduction too easily breeds subservience.

AI, like many technologies, can and does help to solve immediate and pressing human problems—though, of course, their unintended consequences can actually make matters worse. No doubt plastic water bottles seemed like a good idea at the time, but inquiries into the health of oceanic ecosystems tell another tale. The same logic may apply to aerosol sprays, certain herbicides and insecticides, the development of the internal combustion engine and the associated use of fossil fuels. In any case, where appropriate, technological devices are of particular utility in the domains of the natural and applied sciences and can be debated on their terms. Meanwhile, where policy priorities are seemingly settled, the work, for example, of epidemiologists and pharmaceutical researchers can arguably be helpful in order to develop public health strategies and efficacious vaccine treatments in a pandemic. Other effectual innovations can be cited, although as a sensible conservative aphorism reminds us: every change involves a loss. Ball point pens eliminated messy spills when composing letters by hand with a nibbed pen and an inkwell and cash registers reduced the errors in commercial transactions; both came, however, at the expense of chirography and mental acuity in arithmetic. Likewise, convenience of frozen pastries may save time, but will never equal my mother’s pies baked “from scratch.” At some point “wisdom” may be required to achieve a proper balance. But larger issues compel attention.

Electric information ... being utterly ethereal fosters the illusion of the world as a spiritual substance. It is now a reasonable facsimile of the mystical body, a blatant manifestation of the Anti-Christ. — Marshall McLuhan (2010): 120.

Computers are designed to take our place in the world. Their job is to do our jobs. Each major technological advancement alters not only the way work is done, but also the nature of that work and the social relations of the people overseeing and performing the job. Now, in the “virtual” world, both the tasks and the labour process that determines such matters as job classification and job security are under scrutiny as technology is increasingly used to replace human work. Instead of the computer being a tool used by employees to carry out their duties, employees are becoming adjuncts to the computers which perform some of the work and structure the ways that compel their human adjuncts to service their needs. In each step in the automation process, the deskilling and ultimate replacement of workers is the ideal end of technological change. So, whatever work people are doing, there are probably forward-thinking innovators who are already working on an “app” for it.

Practical Consequences

Virginia Eubanks is both a political scientist and a technologist. She is more than capable of swimming in deeper, darker waters, and she fully understands their nature and foundational importance; but, in *Automating Inequality*, she is content to leave the philosophical critique to the philosophers. (We will return to it briefly in due course). Her primary concerns, however, are with practical matters. Her vital interests are no less profound than those that probe the foundations of AI. She also fully appreciates Dreyfus’ impatience with the outlandish initial claims of AI, but she is more engaged in the current research, organization, advertisement and deployment of AI devices. She speaks eloquently of the economic and emotional pain that is meted out to living people whose treatment as a result of the abstract methods and the sometimes hidden, sometimes open political prejudices of public policy researchers, developers, and

administrators. Her book is a scathing rebuke of computer-based investigation of social problems and data-driven recommendations for ameliorative action. She amply demonstrates through concrete examples and case studies that quantitative research in general and computerized inquiries in particular not only do not work, but cannot work when we become overly or, worse, exclusively, dependent upon them.

The trouble is that contemporary organizations and their leaders have succumbed to what Meredith Broussard (2019) calls “techno-chauvinism,” which is not just a faith in the potential of AI to solve problems, but a belief that it is superior to human decision making. Techno-chauvinism arises from the false ideas that: (a) technology is immune to bias; and (b) that it is capable of sorting through information to produce the “best” result—by which is meant the most rational, impartial, evidence-based, and fair answer to any question. The difficulty is both that: (a) all technologies embody human values (they were, after all, designed to achieve “human interests” and “human purposes”); and (b) that those interests and purposes preconfigure the use to which the technology is put.

<p>The failure of automated systems to support the poorest and most vulnerable people in the richest country in the world is a theme that Eubanks highlights throughout the book. — Louise Russell-Prywata, 2018.</p>

Some may say, therefore, that the gathering data for a legal census is a “value-neutral” instrument. It can be used for good or ill, depending on the intentions of the user. If, therefore, it is subsequently used to apportion financial support to school districts or to establish the boundaries of electoral constituencies, then it appears to be being used for good; whereas, if it forms the base upon which people are rounded up for extermination, then its use is plainly bad (for an example of the latter, see Black, 2001). This, however, is a false moral calculation for anyone who accepts the implications of, for example, Kant’s “categorical imperative.” It advances the idea that human beings should be treated not as the means to an end, but as ends in themselves. By counting people, we primarily acknowledge that people are *things to be counted*. They are eligible to be used or treated in any way the possessor of their *being-as-information* desires. This is not an argument against social knowledge in principle, but it is a recognition that the will to quantification supersedes *any* moral argument about applications.

Both computers themselves and the data they process are socially constructed by human beings. So, even when people design computers to explain malign events and design policies to correct them, the machines will necessarily follow the instructions and replicate the inherent biases of their creators. When (as they always do), the designs include some categories of information, exclude others, and propose hypotheses that are in accord with their pre-existing political orientations, the broad parameters of the answers are set by the assumptions of those who ask the questions. Those assumptions are deeply embedded in the cultural values of the computational designs and therefore duplicate and perpetuate the social structures and pathologies they are ostensibly designed to solve.

When Virginia Eubanks addresses the implications of techno-chauvinism, her attention is focused on the American system of social welfare. Her critique of automated decision making does not begin with this new technology. It is just the latest installment in the history of social

class repression that has generally been disposed to “profile, police and punish” poor people. AI is therefore utilized to achieve the same purpose as previous policies that, consistent with the American cultural preference for “rugged individualism” over collective responsibility. Abetted by a religious tendency associating hard work with virtue, an ideology is produced that sees poverty as the consequence of personal flaws more than social circumstance. Accordingly, the prevailing attitude is that persistent poverty is attributable to individual (or racial, religious, or ethnic group) dispositions and that providing generous or even livable compensation to destitute people is to enable the deadly sin of sloth. Whether promoted by a crude social Darwinism or by an uncharitable religious doctrines, there has been an enduring reluctance to reward the alleged laziness and lack of ambition among the lower orders. *The American Declaration of Independence*, after all, promised the liberty to “pursue” happiness, not the guarantee that it would be captured. So, when legislators express the view that, even when people have lost employment due to COVID-19, we can still witness politicians arguing against expanded social benefits on the presumption that such assistance disincentivizes a prompt return to work (Haberkm, 2020; Harris, 2020).

Rumors of the imminent death of capitalism have often been greatly exaggerated. But that doesn't mean we must give up on making things better.
– Alyssa Battistoni, 2020

Eubanks, however, goes further. She argues that automating inequality, sometimes with animus and sometimes by accident, puts people in what she calls the “digital poorhouse” from which escape is often impossible. She uses personal encounters and interviews with welfare recipients to document her case. This is, by elevated social science standards, an exercise in anecdotal evidence gathering, but she is no agony-monger. Her book may not meet the most esoteric standards of empirical research, but it is a first-rate job of investigative journalism in the ethnographic tradition of Barbara Ehrenreich (2001). Considering the massive failures of American social assistance programs, it need make no apologies.

She dedicates the book to a six-year-old girl, who lost her marginal Medicaid payments because of a computer “glitch” that cut off her benefits because of a “failure to cooperate,” just as she was learning to walk for the first time and being sustained on a life-saving feeding tube. The problem? Her parents had made a minor mistake on an official form. The child, fortunately, was literally saved from death when the error was detected and rectified. She was lucky. The disempowerment engine too frequently shifts to the default position of benefits denied or suspended without recourse or recompense.

Eubanks deals specifically with AI-governed decision making in Indiana, automated allocation of living spaces to homeless people in Los Angeles, and child protection services in Pennsylvania. Her main theme is not that AI creates a system of surveillance and punishment ostensibly intended to save “taxpayers’ money,” but also to fulfill ideological expectations about the “undeserving poor,” and to legitimize the privatization of state services. With the new equipment, discriminatory practices and punitive procedures become far more invasive and far more self-justifying. Curiously, she explains how *not* being a drug addict, but too old to have expectations of employment can combine to render a person ineligible for assistance and how being unable to afford prescription medicines leaves people open to charges of child neglect.

Seemingly cool and detached, Eubanks gives the victims a voice, while forcefully pressing her case in terms of a more general analysis. Automated inhumanity, she argues, is the result of “our nation’s fear of economic insecurity and hatred of the poor.” This bias is built into the welfare system and is irredeemably expressed in the machinery of social control.

Acting on the premise that poverty is a product of psychology and culture, not politics and economics, the authorities cannot offer a useful diagnosis and therapy. They therefore perpetuate a system of castigatory and retaliatory action based on a preference for detection of illegalities and irregularities and leading to harsh discipline and a misplaced care for the public purse. Put positively and therefore simplistically, they reverse the causal relationship, mistake the *explanans* for the *explandum*, and thus not only preclude the possibility of beneficial change, but ensure further systemic failure. Since they locate the responsibility for inequality in those who are already disadvantaged, they are on additional invasive scrutiny and the application of punitive measures against the very victims they are intended to save. No matter how sophisticated the statistical techniques and how deep the probes, in a curious rotation of President Reagan’s quip about government being the problem and not the solution, it becomes inevitable that the solutions provided by AI become the problem.

Toward a New Diagnostics

Automating Inequality can no doubt be criticized for neglecting to offer up a strategy for change. Since her main argument rests on a condemnation of certain aspects of American political culture, she seems constrained to restrict herself to pleas for what amounts to “consciousness-raising.” As a preliminary, such efforts have yielded ameliorative results for racialized and gendered groups in the recent and even the distant past. So, her call for anti-poverty organizations and related social movements to engage on behalf of dispossessed and disenfranchised Americans to create a national dialogue, build empathy, and alter cultural attitudes toward the poor is a necessary first step toward serious reform, if not a revitalized “class consciousness” of the sort recommended by Marxist analysis. Given that, throughout American history, such efforts have conspicuously failed in the absence of organized political action, there is little cause to expect success today.

<p>This immediate task is nothing more or less than the self-conscious construction of a new political framework for approaching the question of inequality, through a deep and profound critique of our economic and social system.</p> <p>– David Harvey, 2020</p>
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If, however, promoting a political agenda to match the social class system is not a viable strategy, neither is submissiveness. If the current presidency, the unprecedented shift of wealth from the working and middling classes to the already obscenely rich, the obvious failure of the state to cope with the “perfect storm” of ecological degradation, incompetent and corrupt national leadership, intersectional identity issues and conflicts around race and gender, the multiple stresses of the current pandemic, and the overall incapacity of the private sector to manage the economy effectively have not combined to create the kind of crisis that affords both danger and opportunity, then none likely will. Much will depend on the singularity of the American

presidential election of 2020, about which prominent political leaders make the claim that it's the most important electoral decision in living memory, if not all of US history.

Virginia Eubanks does not extensively discuss what might come about in terms of public policy options. If, by some extraordinary combination of chance and effort, environmental, economic, civil rights, and other interests were to create an effective "common front" and press for systemic change in the event that the current president is removed in November and the Republican grip on the United States Senate is loosened, then policy choices could be made in the interest of the poor. If her book can help to publicize the problems of the dispossessed and draw attention to the role of high-tech tools in exacerbating rather than ameliorating their plight, then she will have made an important contribution to social and economic justice.

Some of the questions before us more than half-way through the *annus horribilis* of 2020 are:

- What will it take to elicit thoughtful suggestions and develop practical plans for tonic economic and environmental changes?
- What will it require to ensure that there is the political will for those changes to go beyond reassuring rhetoric and turn into practical action?
- What improvements in democratic decision making will be needed to counteract the impulse toward authoritarian governance and "illiberal democracy"?
- What cultural responses to the current disruptions in social life will be needed to ensure public support for life-enhancing change?
- What part can public sector innovation take to restore confidence in government in order to help bring constructive policy proposals to fruition?

These are not idle questions for there will be no going back to normal. Already established economic interests are taking seriously the admonition of Rahm Emanuel (2020). Shortly before taking his position as Chief of Staff to US President Obama, the future Mayor of Chicago famously told a group of corporate executives and senior bureaucrats at an event hosted by the *Wall Street Journal* that they should "never let a good crisis go to waste." They plainly paid attention. In the wake of the "great recession" of 2008-2009, the wealth of the richest 1% in North America soared by 31.4% while that of the bottom 99% gained only 0.4%.

So far this year, the billionaire class has fared even better. For example, Jeff Bezos' net worth climbed by \$13 billion in a single day in July, 2020, while Tobias Lütke, the CEO of Ottawa-based e-commerce company Shopify Inc. "watched his personal worth rise from \$3 billion (US) in March to \$8.5 billion" in August (Livesey, 2020). So, if anything, the "new normal" will likely be an exaggerated version of the old normal in which the wealth gap was already unsustainable. So, the overarching question is whether we will further entrench existing powers and authorities with a turn to the more fully technologized, managed "democracy," or will there be at least a modest shift away from prevailing neoliberalism in theory and practice so that ecological sustainability, economic equity and authentic democracy can be strengthened? The side AI will be on seems already to have been decided.

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