# 1AC — Haraam Gyal

### 1AC — Epistemological Luddism

#### The Sole Contention is Militarized AI

#### It’s growing at unprecedent rates even past COVID stagnation

M&M 3-1 (3-1-21Marketsandmarkets, "Artificial Intelligence in Military Market by Offering, Technology, Application, Installation Type, Platform| COVID-19 Impact Analysis | MarketsandMarkets™", https://www.marketsandmarkets.com/Market-Reports/artificial-intelligence-military-market-41793495.html)

Even though the COVID-19 pandemic has caused a large-scale impact on economies across the world, leading to many challenges, the Artificial Intelligence in military market has continued to expand. This can be seen from both, the demand and supply sides, as leading manufacturers like Lockheed Martin (US), IBM (US), Northrop Grumman (US), and others continue to invest heavily in developing AI capabilities, and governments continue to invest significantly in securing these systems. This can be attributed to governments realizing the potential of improved capabilities that these AI systems offer in terms of defense arsenal as the global AI arms race tightens.

However, even though the development of AI technology witnessed expansion, the overall building of the AI systems saw a hit. This was a result of the shortage of raw materials due to disruptions in the supply chain. Resuming manufacturing and demand depends on the level of COVID-19 exposure a country is facing, the level at which manufacturing operations are running, and import-export regulations, among other factors. Although companies may still be taking in orders, delivery schedules might not be fixed.

According to Stockholm International Peace Research Institute (SIPRI), the global military expenditure in 2019 was estimated at USD 1917 billion, an increase of 3.6% as compared to the 2018 spending. This can be due to the rise in conflicts between countries, leading to the strengthening of their defense forces. For instance, 2020 witnessed over nine major international conflicts, including the Syrian Civil War, the Saudi Arabia-Yemen conflict, US-Iran tensions, and India-China tensions.

Such conflicts result in increased procurement of advanced AI-enabled weapon systems and the incorporation of newer technologies into existing systems to make them more efficient.

Many governments have established special departments or agencies dedicated to planning, initiating, and integrating AI capabilities into the existing equipment as well as developing new capabilities. The National Science and Technology Council (US), the Strategic Council for AI Technologies (Japan), and the AI Council (UK) are some such agencies. For instance, in January 2021, the UK AI Council presented a roadmap to the UK Government recommending it to scale up and make sustainable public sector investment in AI and also invest in The Alan Turing Institute (UK), fostering development to gain a strategic leadership for the UK in AI research.

The UK Government’s Research & Development Roadmap of July 2020 also includes similar projects. This report states that the Defence and Security Accelerator (DASA) is working closely with the Institute for Security Science and Technology (ISST) at Imperial’s White City Campus (UK) to bring together government, academia, industry, and small & medium-sized enterprises (SMEs) to look at developing the next generation of solutions for security and defense problems.

With various governments adopting AI-powered systems for surveillance and automation, concerns are being raised, stating that human control over robots is necessary to ensure control and humanitarian protection. There is also concern among humanitarian organizations like Human Rights Watch regarding whether governments are secretly developing “Automated Killer Robots” to top the AI arms race. This compels governments to publicly declare their current capabilities and refrain from developing autonomous weapons and fully automated robots, as these will be incapable of meeting the standards of International Humanitarian Law.

Additionally, the possibility of errors is also high with AI systems. Since they make quick decisions, they may not be able to adapt to the inevitable complexities of war. As a result, these systems might not accurately distinguish between combatants and non-combatants or threats and system anomalies and ultimately be less accurate and precise than human operators. These problems could be magnified if systems are fielded before being adequately tested or if adversaries succeed in spoofing or hacking into them. These concerns are restraining market growth.

#### Military integration will continue — development is intrinsic to the commercial sector — its only a question of how many eggs we are willing to crack

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Artificial intelligence (AI) is a rapidly growing field of technology with potentially significant implications for national security. As such, the United States and other nations are developing AI applications for a range of military functions. AI research is underway in the fields of intelligence collection and analysis, logistics, cyber operations, information operations, command and control, and in a variety of semiautonomous and autonomous vehicles. Already, AI has been incorporated into military operations in Iraq and Syria. Congressional action has the potential to shape the technology’s development further, with budgetary and legislative decisions influencing the growth of military applications as well as the pace of their adoption. AI technologies present unique challenges for military integration, particularly because the bulk of AI development is happening in the commercial sector. Although AI is not unique in this regard, the defense acquisition process may need to be adapted for acquiring emerging technologies like AI. In addition, many commercial AI applications must undergo significant modification prior to being functional for the military. A number of cultural issues also challenge AI acquisition, as some commercial AI companies are averse to partnering with the Department of Defense (DOD) due to ethical concerns, and even within the department, there can be resistance to incorporating AI technology into existing weapons systems and processes. Potential international rivals in the AI market are creating pressure for the United States to compete for innovative military AI applications. China is a leading competitor in this regard, releasing a plan in 2017 to capture the global lead in AI development by 2030. Currently, China is primarily focused on using AI to make faster and more well-informed decisions, as well as on developing a variety of autonomous military vehicles. Russia is also active in military AI development, with a primary focus on robotics.

#### The speed and unpredictability of AI development renders traditional methods of regulation utterly ineffective.

Michael **Spiro 20**. JD from the University of Washington School of Law. LLM in Innovation and Technology Law from Seattle University School of Law. 12/19/2020. “The FTC and AI Governance: A Regulatory Proposal.” https://digitalcommons.law.seattleu.edu/cgi/viewcontent.cgi?article=1001&context=sjteil.

To date, very few laws or regulations specifically address the unique challenges that AI use poses.134 Looking forward, the legal system lacks the resources needed to make effective regulations that will keep up with AI’s rapid pace of research and development.135 The tech industry’s inherent complexities and tendency to reward “time-to-market at all cost” reinforce the pacing and other problems with governing AI effectively.136 A. AI and the Pacing Problem In addition to the sheer complexity of the technologies themselves, some of the major challenges to effective AI regulation are the scale, heterogeneity, and autonomous nature of many AI systems. 137 These challenges are further complicated by the uncertainties about how and in what directions AI will develop in the future.138 The possibility that many of the risks that AI poses are likely unknown and may even be unknowable further impedes traditional methods of regulation.139 Indeed, the uncertainty around AI’s potential makes even categorizing the various risks of implementing AI a complicated and arduous task.140 A major problem that regulators face regarding AI is that technological developments tend to outpace attempts to regulate them.141 Because of the increasing speed of innovation, the technology often disengages or decouples from regulation.142 This issue is known as the “pacing” problem, where attempts to “futureproof” legislation result in regulatory disconnect, whereby the adopted regulations end up being either too general or too vague to provide meaningful oversight or guidance.143 B. Regulators’ Disadvantages: Lack of Knowledge and Resources Of equal significance is the fact that many regulators do not have the resources to adequately address all of the issues that AI technologies present.144 This information and resource constraint can be particularly problematic in regard to new technologies, such as AI, because there is a steep learning curve and the ability to engage meaningfully with industry experts is necessary to gain the expertise needed to fully understand and act effectively in response to such advancements. 145 Even with sufficient knowledge and expertise, the speed of innovation in the field makes it difficult for regulators to react in a timely and appropriate manner. 146 Regulators also are at a disadvantage given that most of the world’s AI is being developed by a handful of large multinational corporations, whose capabilities in the area far outstrip other institutions, including the government.147 On one hand, this imbalance tends to exacerbate the opacity problem, since private firms are more apt to maintain secrecy over their technologies to safeguard their proprietary interests.148 These companies’ heavy investment in AI research and development also leads to “information asymmetries” between those companies and the regulators, the public, and others seeking to understand the technology.14 Compounding the problem of information asymmetry is even if regulators are able to obtain information, they likely will be unable to fully understand the technology or appreciate its impacts.150 Indeed, especially when an emerging technology, like AI, is in its beginning stages, only those directly involved in developing the technology may possess the necessary expertise to adequately assess its risks.151 Further, given demand for such expertise, regulators are less likely to be able to compete with industry for top talent. 152 As a result, regulators may be forced to overly rely on industry when attempting to regulate AI.153 C. Sectoral Issues, Autonomy, and Unforeseeability Another complicating factor is that governance of AI is likely to be overseen by more than one regulator, given that while a particular type of AI may be widely adopted, it will be used by different industries in different ways.154 Moreover, as AI systems become increasingly integrated and embedded into the social and economic environment, the potential for systemic risk becomes amplified, affecting multiple stakeholders, jeopardizing the effectiveness of traditional regulatory models.155 The nature of AI research and development also makes effective regulation more difficult. There are three general ex ante problems with regulating AI research and development: discreetness (AI projects can be developed with little physical infrastructure, and without the need for large-scale, integrated institutional frameworks); diffuseness (AI projects can be carried out by a variety of diffuse actors in widely dispersed geographic locations); and discreteness (parties can, without consciously coordinating with each other, make use of “discrete components and technologies ‘the full potential of which will not be apparent until the components come together’”). Traditional regulators are generally ill-equipped to handle these issues.157 Machine autonomy and algorithmic unpredictability pose other important regulatory concerns. It is inherently difficult trying to control the actions of autonomous systems, particularly when those systems’ decisions or actions are unforeseeable, even to their designers and operators.158 Indeed, the legal system is likely to struggle to manage these issues in such a way as to ensure aggrieved parties are adequately compensated when AI technologies cause harm.159 For instance, the legal system may view the behavior of some machine learning processes as so unforeseeable that it would be unfair to extend liability to their designers for harms they cause, leaving those injured thereby with little recourse.160 Moreover, because the workings of many AI systems are not visible to the public, it can be hard to detect when an AI system’s decision causes harm, or that the system even made the decision, making the concept of redress practically meaningless.161 A related issue concerns AI systems acting in ways that can make them difficult for humans to control.162 In the most extreme case, an AI system becomes so much smarter and faster than its human counterparts, that it can no longer be controlled by humans at all. 163 Flawed programming and design also can lead to loss of “local control,” which occurs when those humans who have the legal responsibility for controlling the AI system are no longer able to do so.164 Loss of control is especially problematic when the emergent nature of the AI system and the interests of its designers are no longer in alignment with each other.165 Given all of these challenges, new, innovative approaches to regulating AI are needed.166 The old state-centric, command-and-control regulatory model is no longer adequate.167 As discussed below, while this does not mean that there is no role for government oversight or that regulators do not have an important part to play–indeed they do–rather it is that the growth of machine learning and the emergence of AI calls for a more inclusive, or coregulatory, approach.

#### Scenario 1 is Obstruction Blockage:

#### Malfunctions, hacking, and risk-tolerance make AI uniquely dangerous---goes nuclear.

Klare 20, secretary for the Arms Control Association board of directors and a senior visiting fellow working on emerging technologies. (Michael T., April 2020, "‘Skynet’ Revisited: The Dangerous Allure of Nuclear Command Automation", *Arms Control*, https://www.armscontrol.org/act/2020-04/features/skynet-revisited-dangerous-allure-nuclear-command-automation)

The Perils of Heedless Automation

There are many reasons to be wary of increasing the automation of nuclear command and control, especially when it comes to computer-assisted decision-making. Many of these technologies are still in their infancy and prone to malfunctions that cannot easily be anticipated. Algorithms that have developed through machine learning, a technique whereby computers are fed vast amounts of raw data and are “trained” to detect certain patterns, can become very good at certain tasks, such as facial recognition, but often contain built-in biases conveyed through the training data. These systems also are prone to unexplainable malfunctions and can be fooled, or “spoofed,” by skilled professionals. No matter how much is spent on cybersecurity, moreover, NC3 systems will always be vulnerable to hacking by sophisticated adversaries.16

AI-enabled systems also lack an ability to assess intent or context. For example, does a sudden enemy troop redeployment indicate an imminent enemy attack or just the normal rotation of forces? Human analysts can use their sense of the current political moment to help shape their assessment of such a situation, but machines lack that ability and may tend to assume the worst.

This aspect of human judgment arose in a famous Cold War incident. In September 1983, at a time of heightened tensions between the superpowers, a Soviet nuclear watch officer, Lieutenant Colonel Stanislav Petrov, received an electronic warning of a U.S. missile attack on Soviet territory. Unsure of the accuracy of the warning, he waited before informing his superiors of the strike and eventually told them he believed it was a computer error, as proved to be the case, thus averting a possible nuclear exchange. Machines are not capable of such doubts or hesitations.17

Another problem is the lack of real world data for use in training NC3 algorithms. Other than the two bombs dropped on Japan at the end of World War II, there has never been an actual nuclear war and therefore no genuine combat examples for use in devising reality-based attack responses. War games and simulations can be substituted for this purpose, but none of these can accurately predict how leaders will actually behave in a future nuclear showdown. Therefore, decision-support programs devised by these algorithms can never be fully trusted. “Automated decision-support systems … are only as good as the data they rely on. Building an automated decision-support tool to provide early warning of a preemptive nuclear attack is an inherently challenging problem because there is zero actual data of what would constitute reliable indicators of an imminent preemptive nuclear attack.”18

An equal danger is what analysts call “automation bias,” or the tendency for stressed-out decision-makers to trust the information and advice supplied by advanced computers rather than their own considered judgment. For example, a U.S. president, when informed of sensor data indicating an enemy nuclear attack and under pressure to make an immediate decision, might choose to accept the computer’s advice to initiate a retaliatory strike rather than consider possible alternatives, such as with Petrov’s courageous Cold War action. Given that AI data systems can be expected to gain ever more analytical capacity over the coming decades, “it is likely that humans making command decisions will treat the AI system’s suggestions as on a par with or better than those of human advisers,” a 2018 RAND study noted. “This potentially unjustified trust presents new risks that must be considered.”19

Compounding all these risks is the likelihood that China, Russia, and the United States will all install automated NC3 systems but without informing each other of the nature and status of these systems. Under these circumstances, it is possible to imagine a “flash war,” roughly akin to a “flash crash” on Wall Street, that is triggered by the interaction of competing corporate investment algorithms. In such a scenario, the data assessment systems of each country could misinterpret signs of adversary moves and conclude an attack is imminent, leading other computers to order preparatory moves for a retaliatory strike, in turn prompting the similar moves on the other side, until both commence a rapid escalatory cycle ending in nuclear catastrophe.20

#### AI get spoofed---goes nuclear

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In this example, the spoofing attack on the weapon systems’ algorithm is executed in such a way that the imagery appears to the recognition system as indistinguishable from a valid military target, escalating the situation based on a false premise that would be unlikely to fool the human eye. AI experts have proven that even when data appears accurate to AI image recognition software, these systems often hallucinate objects that do not exist.

The explainability (or “black box”) problem associated with AI applications may further compound these dynamics. Insufficient understanding of how and why AI algorithms reach a particular judgment or decision would complicate the task of determining if datasets had been deliberately compromised to manufacture false outcomes — such as attacking incorrect targets or misdirecting allies during combat.

Furthermore, as humans and AI team up to accomplish particular missions, the opacity associated with how AI systems reach a decision may cause an operator to have either too much or too little confidence in a system’s performance.

Consequently, unless the system’s machine learn­ing algorithm is terminated, once deployed at the end of the training phase it could potentially learn something it was not intended to, or even perform a task or mission that its human designers do not expect it to do. This issue is one of the main reasons why the use of AI machine learning in the context of weapon systems is, for now, confined to mostly experimental research.

Even if nuclear early-warning systems might eventually detect the subversion, heightened levels of uncertainty and tension caused by an alert may impel the respective militaries to put their nuclear weapons on high alert status. This skewed assessment in the context of nuclear weapons, ready to launch at a moment’s notice, would likely precipitate worst-case scenario thinking that may spark inadvertent escalation.

Therefore, AI-augmented cyber intelligence gathering tools (or espionage) used during a crisis could easily be misinterpreted by an adversary as a prelude for a preemptive attack on its nuclear force.

#### Scenario 2 is Militarized Superintelligence:

#### AI will morph into militarized superintelligence.

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5.6. Military AI failure modes Recently many scientists signed a letter against lethal autonomous weapons (LAWs) (Future of life institute, 2017). But LAWs are not the same as military AI, and LAWs may be the safest part of military AI (Bogosian, 2017). De Spiegeleire and Maas et al. showed that military AI consists of several layers, where LAWs are on the lowest level (De Spiegeleire et al., 2017). Advanced military AI (an AI system created by humans for military proposes) will probably include several other functions, some of which already exist: 1. Strategic planning for winning in war, 2. Direct control of all units inside the country's defense systems, which may include drones, ships, nuclear weapons, humans, and other large and small units, 3. Nuclear deterrence part, which consists of the early warning system and “dead hand” second strike system (which allows retaliation even if the damage is extensive), 4. Manufacturing and constructing new advanced weapons, and 5. Cyberweapons, e.g. instruments "to affect democratic elections" or to turn off adversaries' AI or other critical infrastructure. Each of these 5 levels could have a global catastrophic failure, even without starting uncontrollable self-improvement. Strategic planning AI may have a superhuman winning ability when it comes to games, e.g. AlphaGo Zero (Singh, Okun, & Jackson, 2017), but not when used as an army commander. A strategic AI could fail if it suggests "to strike first now or lose forever"(Kasparov, 2008). In addition, a global military-controlling AI system could propagate a wrong command. An early warning system could create a false alarm—which has happened before (Future of Life Institute, 2016)—but in the case of an AI-driven warning system, it will be not so easy to recognize a mistake. There also could be a flash-crash-style unexpected war between two military AIs of two adversarial nation states. Weapons manufacturing AI may be unexpectedly effective in creating very dangerous weapons, which could later be used with global consequences perhaps more severe than nuclear war. For example, the nuclear program in the 1940s resulted in much more effective weapons than were originally planned, such as thermonuclear bombs and the idea of the cobalt bomb (Smith, 2007). The use of cyberweapons also may be regarded as an act of war or could help to elect a dangerously unstable president (Torres, 2016). Cyberwar may also affect the other side’s critical infrastructure or rewrite the goal functions of the other side’s AI, which could be a bad outcome. 6. Effects of the militarization drive on AI’s values 6.1. Value drift towards instrumental goal Some authors suggest the idea of orthogonality between AI goals and capabilities (Bostrom, 2014). However, the idea of basic AI drives is an example of the convergence of goals and capability, because any goal will create some set of subgoals, and these subgoals will require capabilities in turn. Available capabilities are cheap and tested instruments of problem-solving, so they will affect the ways the system will act. The capabilities may even have their own self-preservation drives. A good example of this is the military-industrial complex in nation states, which may try lobbying the government to increase military action. Military AI will be more effective in violence than in negotiation, and it will likely choose violence as its preferred problem-solving method. The AI could get stuck in the militarization and never disarm. This means that AI may never return to its initial beneficial goal, as it will spend most of its available resources on preparing for future war. This happened with the Soviet Union, which invested a prodigious amount of resources in the military, rather than its putative priority of workers’ wellbeing. In other words, the AI may never return to its main goal, as there will be other possible or imaginary enemies. It could have wars—or prepare for such wars—with its own copies, or with hypothetical aliens. This could be presented in a rather rational way: if another civilization exists somewhere in the universe at an unknown distance, it would be rational to prepare for a conflict with it, as the winner will be the one who is better prepared. Hopefully, the AI will be rational enough to be able to balance its hypothetical military preparations with actually doing good for people, and will not be a military maximizer. But this possibility should be taken into account during the AI’s programming. A militarized AI will likely spend most available resources on building defensive and offensive infrastructure in space. This may include starting a wave of intelligence explosion to colonize as much cosmic space as possible. However, as the speed of light limits communication over long distances, space exploration will require the creation of additional military AIs with their own subgoals. There is a non-zero probability that such AIs may mutate and return to Earth as dangerous enemies. So, the second level of defense is needed against such rebellion, etc.

#### Militarized superintelligence goes nuclear

Torres 17, founding director of the X-Risks Institute and an affiliate scholar at the Institute for Ethics and Emerging Technologies. (Phil, 10/24/17, "Why superintelligence is a threat that should be taken seriously", *Bulletin of the Atomic Scientists*, https://thebulletin.org/2017/10/why-superintelligence-is-a-threat-that-should-be-taken-seriously/)

The problem of misaligned goals. The important issue that Shermer notes in his article, but then fails to address, concerns the possibility of a superintelligence whose goal system, or “values” for short, is misaligned with ours. There are several ideas to unpack here. First, consider a canonical analogy to explain why value alignment is such a big deal: Think about the existential threat that humans pose to ant colonies. The goal of ants is to create underground colonies whereas the goal of humans, in this example, is to create suburban neighborhoods. These goals are misaligned. Now, since intelligence yields power—the smarter an organism is, the more effectively it can modify its environment to achieve its goals, whatever they are—our superior intelligence enables us to modify the environment in more forceful ways (for example, using bulldozers) than a colony of ants ever could. The result is an ant genocide—not because we hate ants or because we’re “evil,” but simply because we are more powerful and have different values.

Thinking about this same example, but with human civilization as the ant colony and a superintelligence as humanity, the real danger comes into focus. A superintelligence whose goal system is even slightly misaligned with ours could, being far more powerful than any human or human institution, bring about human extinction for the very same reason that construction workers routinely slaughter large populations of ants. How could a superintelligence be superpowerful? It wouldn’t need a Terminator-like body for this. Rather, the fingers or tentacles of a superintelligence would be any electronic device or process within reach, from laboratory equipment to nuclear warning systems to satellites to the global economy, and so on.

#### The impact is near-term, and the threat alone is destabilizing.

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However, the fact that these technologies are still emerging does not mean that they could not have a near-term impact on strategic relations. The knowledge or belief that one or several nuclear-armed states is planning to make AI technology a key component of its future conventional and nuclear capabilities could be sufficient to incentivize other states—whether nuclear-armed or not—to react with measures that could undermine the strategic relations of nuclear-armed states and potentially increase the likelihood of a nuclear conflict.

Indeed, the field of strategy is ‘highly psychological’.437 The perception of an enemy’s capability matters as much as its actual capabilities. This is where the inherent nature of AI technology becomes a major problem. The fact that it is based on software makes tangible evaluation of military capabilities difficult. Moreover, like electricity, it can be used in many different ways to enhance a state’s nuclear deterrence capability. A nuclear-armed state could therefore easily misperceive its adversaries’ capabilities and intentions in the field of AI. It could trigger destabilizing measures based only on the belief that its retaliatory capability could be defeated, now or in the near future, by another state’s advances in AI.

Depending on the technical, economic and political resources that it has at its disposal, an insecure nuclear-armed state might choose to (a) engage in a capability race on AI; (b) strengthen its commitment to the modernization or development of its nuclear arsenal; (c) change its nuclear policy and doctrine; (d) increase the alert status of its nuclear weapons; or (e) automate its nuclear launch policy.

#### Reject preventable future nuclear war---it’s more likely and devastating than we are trained to believe and the only survivors will be the agents of destruction

Scarry 19, PhD, Professor of English at Harvard, (Elaine Scarry, 2019, Interview, *Representations*, 146.1)

RA: At the Buffalo conference on pain, you gave a paper that built on some of the insights of your then most recent book, Thermonuclear Monarchy. 1 In the book, you demonstrate the incompatibility of democracy and nuclear arms at least in part on the grounds that, by the nature of their deployment, nuclear arms make it impossible for the populace to consent to their use. In your talk, you made a different but related claim that focused on the relative silence of the population regarding nuclear arms in the post-Cold War era. You were concerned, in particular, with the difficulties of imagining the consequences of nuclear war. I wonder if you could expand on this second point: why it is so hard to think about nuclear war. ES: The two points are deeply related. The architecture of nuclear arms requires that the population be eliminated from the decision about going to war. It also requires that Congress be eliminated from the decision about going to war—just because the nature of the technology requires a tiny number of people to do the launch. The result of that architecture is that people eventually, over seven decades, have internalized the fact that they’re worthless when it comes to the need to defend the country and to carry out acts of mutual aid toward one another. We now simply abandon the right of self-defense and the right of mutual aid and give unlimited injuring power to the executive branch of government and fall silent. RA: How much responsibility, how much blame, does one give to the population for remaining silent? ES: That has always been a question. Gandhi said, ‘‘You can wake a man who’s asleep, but you can’t wake a man who’s pretending to be asleep.’’ His statement marks a fork in the road. If the population has been anesthetized and is genuinely asleep, then they are morally innocent (even if infantilized and terribly reduced as moral agents). If instead the population is pretending to be asleep, we are morally culpable: the population is complicit with the genocide that’s standing in the wings waiting to happen. During my lecture and in many years of working on disarmament, I stressed the first path and tried to outline why waking up is difficult. In recent months, I’ve moved closer to the position that your question identifies, the responsibility of the population. I feel the force of Martin Luther King’s statement, ‘‘There comes a time when silence is betrayal.’’ I’m almost at the point of believing that there is a wanton refusal to [recognize] ~~see~~ the imminent peril, a refusal to understand not just that we have a responsibility to reverse it, to dismantle it, but that we have the ability to do so, and that if we don’t, it is going to happen. I don’t know if it’s going to happen this year. Or whether it’s going to happen this century. But it’s almost inconceivable that it isn’t going to happen. RA: Why is it that people have such a hard time understanding this? If you allow that people might honestly and ardently be trying to understand, what is it that is getting in the way? ES: Four or five answers come to mind. First, people often lack key pieces of information. If you ask someone in this country which nations have nuclear weapons, they are likely to say Iraq (which has none), Iran (which has none), or North Korea (which has fewer than 60; leading experts say fewer than 20). The United States has 6,500. The United States and Russia together own 93 percent of the world arsenal: the other 7 percent is owned by the other seven nuclear states—in order of numerical possession, France, China, the United Kingdom, Pakistan, India, Israel, and North Korea (see fig. 1). An equally profound misconception held by US citizens is the belief that our nuclear architecture is for ‘‘defense’’ and ‘‘retaliation.’’ In fact we have had a ‘‘presidential first-use’’ policy for the whole nuclear age. The profound obscenity of that arrangement, which has only begun to be glimpsed with the current president, has been an equally grave moral wrong from day one. Second, even when American ~~citizens~~ [denizens] and residents have this information, the outcome is derealized by its being future—that is, the unreality something has by having not yet happened is conflated with the unreality something might have by being merely imaginary. People, it’s true, are uninformed. But once they become informed, even then the flash of insight fades from their eyes after about ten minutes. RA: Why do you think that is? ES: Because they think ‘‘future’’ equals ‘‘unreal.’’ But we need to stop and understand what we mean by ‘‘future.’’ If it takes 10,000 steps to put a nuclear architecture into place, 9,999 steps have already been completed: we know how to split the atom; we know how to provide enriched uranium; we know how to deliver the bomb; we’ve completed not only the theoretical steps but the materialization steps: we’ve made the bombs; we’ve completed the delivery systems—Ohio-class submarines, the land-based ICBMs, and airdelivery B-2s and B-52s. Unlike in China and India, the weapons in the United States are already ‘‘mated’’ to the delivery systems; they are on alert; specific weapons have been assigned to specific cities in the countries of present enemies and, yes, even potential enemies. One step remains: the order to launch. So 9,999 steps are present and accounted for; one remains undone. While the 9,999 steps took vast amounts of time and resources, the last one is designed to be carried out in minutes. The word ‘‘future’’ does not apply to the 9,999 steps, only to the last one. When people decline to address the nuclear peril on the grounds that it is an ‘‘unreal’’ worry because ‘‘following the bombings of Hiroshima and Nagasaki it hasn’t yet happened,’’ they are unknowingly allying themselves with the position that our own Department of State and Department of Defense took in 1995. At that time, seventy-eight countries asked the International Court of Justice to declare the possession, threat of use, and use of nuclear weapons illegal on the basis of the humanitarian and environmental instruments such as the UN Convention on the Prevention and Punishment of the Crime of Genocide, the Geneva Protocols, the Declaration of Saint Petersburg, the Vienna Convention for the Protection of the Ozone Layer, the Rio Declaration on Environment and Poverty, and many others. Though the United States worked to invalidate the application of these protocols to our nuclear weapons one at a time, an argument they used over and over was that the firing of the weapons was ‘‘future,’’ hence ‘‘hypothetical,’’ hence ‘‘suppositional’’—this despite the billions of dollars that each year go into polishing and oiling the architecture of earth’s destruction to keep it in a present-tense state of constant readiness. RA: At the conference you also spoke about the problem of ‘‘statistical compassion.’’ ES: Let’s call that the third reason why the population is asleep. American indifference to our own genocidal nuclear architecture comes from the constraints on compassion when large numbers of people [become] ~~stand~~ to be injured. Public health physicians distinguish between narrative compassion (where one or two or three people are at risk) and statistical compassion (where thousands or millions are at risk).2 We’re fairly good at the first, and have many occasions to strengthen our capacity through daily acts of friendship and from reading literature. We’re terrible at the second, and have almost no training in strengthening our feeble abilities in this region. The nuclear peril of course entails the second: recent work on nuclear winter by Alan Robock and his colleagues shows that if even a small fraction of the current world arsenal is fired (one one-hundredth of one percent of the total available blast power), forty-four million people will be casualties on the first afternoon and one billion in the weeks following. The small shrug people make when the subject of nuclear weapons comes up—the little lift and fall of the shoulders—means they have just run a quick check on their interior brain-and-soul equipment and can report: nope, nothing in there in the way of statistical compassion. RA: Narrative compassion and statistical compassion seem to take place in widely separate spheres. How then do you see them coming into conflict with each other? ES: For me, a frightening example occurred in the Bulletin of Atomic Scientists, the wholly admirable body that sets the Doomsday Clock (now at two minutes to midnight) and that works round the clock to educate the people of the United States and the world about the hazards of nuclear weapons. Yet in commemorating the seventieth anniversary of the Nagasaki bombing in August of 2015, they published a historically factual narrative about the pilots of the plane delivering the atom bomb to Nagasaki, how many things went wrong and had to be repaired midflight. The lead-in read, ‘‘A typhoon was coming, the fuel pump failed, they had to switch planes, things were wired incorrectly, they missed their rendezvous, they couldn’t see the primary target, they ran out of gas on the way home, and they had to crash-land.’’ But the worst part was when ‘‘the Fat Man atomic bomb started to arm itself, mid-flight.’’3 The story, narrated in edge-ofyour-seat suspense, is an example of narrative compassion utterly preempting the possibility of statistical compassion: the crew might die, but if they had in fact died over the Pacific, tens of thousands of persons would not have been burned into nonexistence that day. RA: Your emphasis at the conference was on the nature of physical pain itself. ES: Yes, that was my central subject. In terms of our conversation now, we can say that a fourth and fifth reason for indifference arise from the difficulty of comprehending pain, whether it takes place in one person’s body or in the bodies of millions, and whether it occurs in the past, present, or future. (But if I were listing the reasons in the order of importance, these two would be near the top.) Once we exhaust a small handful of adjectives for physical pain, two (and almost only two) metaphors arise: the metaphor of the weapon (one may say it feels as though a knife is sticking in my shoulder blade even if it isn’t); and that of body damage (one may say it feels as though my elbow has snapped in two, even if it hasn’t). The Body in Pain concentrates on problems arising from the first; a later essay (‘‘Among Schoolchildren’’) concentrates on the second.4 Both metaphors, if carefully controlled, can help us understand the felt experience of another person’s pain; but both are highly volatile and can lead us far away from understanding. An example of the benign or genuinely expressive potential is provided by findings in neuroscience that we have mirror neurons that help us recognize another person’s physical pain. When you look at the actual experiments that were done, however, you see that the test subject is asked not to listen to a sufferer’s report of pain but to observe, for example, a pin being stuck into someone’s hand or the administration of a small electric shock. The experiments show not our comprehension of another person’s pain but our recognition of the aversivenes of being subjected to a weapon—often closely related to but by no means identical with physical pain. The very fact that a weapon can be separated from the site of the injury means that the attributes of pain can be lifted away from the sufferer and conferred on the agents inflicting the harm, so now it is not the pain that is world destroying but the inflictor of the pain. There are many examples of this in the case of nuclear weapons. For example, the mushroom cloud is often regarded as ‘‘awesome,’’ some even say ‘‘sublime.’’ But the hibakasha, the survivors in Hiroshima and Nagasaki, say, ‘‘We saw no mushroom cloud.’’ A mushroom cloud is what you see if you’re an observer far away, seated high in the sky in the airplane that dropped the weapon, or standing on the ground scores of miles beyond the radius of the harm. Like any sensible mortal, I admire J. Robert Oppenheimer, but his endlessly quoted statement following the Trinity test, ‘‘I remembered the line from the Hindu scripture ...I am become Death, the destroyer of worlds,’’ allows the scale of the injury to be transferred across the weapon and conferred on the agents, who now perceive themselves as magnificent, thrilling, almighty in their power. Oppenheimer even prefaces the quotation by saying that Vishnu here takes on a multi-armed form ‘‘to impress’’ the prince. The name he chose for the test, ‘‘Trinity,’’ shows this same fabrication of godlikeness. What if instead Oppenheimer had said, ‘‘I remembered the goddess Guanyin whose name means ‘The one who perceives the sounds of the world’ and the sounds I heard were excruciating cries, unbearable shrieks of tens of thousands scalded together in an instant of molten flesh.’’ The first statement is a fiction: Oppenheimer is neither a multi-armed god nor a three-personed god; the second statement (could we hear Guanyin) is accurate; if we could internalize and practice the second statement, we would disarm immediately. The image of the nuclear weapon, which might help make visible the pain and suffering it will bring about, instead captures the gigantic scale of the suffering, only to lift that ‘‘giganticism’’ away from the site of suffering altogether and confer it on the human agents—ordinary men, small in stature and in number, but who now appear gigantic. Insofar as any shred of ‘‘suffering’’ still remains visible, we believe it is the suffering of the now gigantic human agent who is in mighty peril. Thus the nation spends billions of dollars on a presidential fallout shelter while convincing the public that fallout shelters for the population are ridiculous. In Thinking in an Emergency, and again in Thermonuclear Monarchy, I contrast the Swiss shelter system—Swiss law requires that every house have a fallout shelter;5 the law was reaffirmed in a 2003 referendum that had an 80 percent turnout at the polls—with the staggering constructions that have been made in the United States for... the people? no—for the president and those close to him, a shelter inside a mountain, with buildings and a lake that is, according to observers, large enough for waterskiing. One country, Switzerland, believes in what the Swiss call ‘‘equality of survival’’; the other country, the United States, believes that only the agents of nuclear [disaster] holocaust deserve the chance for survival. Much more detail on the multiple presidential fallout shelters is described by Garrett M. Graff in a recent book, Raven Rock: The Story of the U.S. Government’s Secret Plan to Save Itself—While the Rest of Us Die. The nuclear architecture requires that either the weapon be invisible (buried in a submarine or buried in a cornfield, like the 450 ICBMs) or, when it is visible, it must become the path across which the magnificent prowess of the human agent is seen—he’s so thrilling, so important, so vulnerable; here, please, take my tax money, use all of it to protect the man who will launch our nuclear missiles. What should bring us to our knees in sorrow and shame instead brings about a dutiful salute to the thermonuclear monarch. If one thinks fallout shelters for the population are ridiculous (ignoring the fact that the medically sophisticated Swiss have data showing otherwise), then it is informative to contrast the money lavished on our nuclear architecture with ordinary forms of safety structures for the population like bridges, dams, roads, levees. The American Society of Civil Engineers, in their 2017 report on infrastructure, gave our bridges a ‘‘Cþ’’ (56,000 are ‘‘structurally deficient’’), our dams a ‘‘D’’ (2000 have a ‘‘high-hazard potential’’), our levees a ‘‘D’’ ($80 billion is needed for structural repair), and our roads a ‘‘D’’ (one out of every five miles of highway pavement is ‘‘in poor condition’’).6 Might Americans be given a choice on whether they want their taxes spent on infrastructure or—as is currently the case—on nuclear weapons and presidential fallout shelters? Or has ‘‘no taxation without representation’’ disappeared along with all our other basic democratic principles?(112-118) RA: That all follows from the instability of the weapon; what about the second field of representation, body damage? ES: The phenomenon of body damage is like the image of the weapon but works in a much different way—almost the opposite. Whereas the problem of the weapon is its very separability from the body (and the way to make it benign is to retether it to its referent in the body), the problem of body damage is that it overlaps, overrides, and eclipses the personhood of the one underneath the damage. Either one looks away, or, if one looks, one recoils. Visual artists and writers—from Peter Paul Rubens and Andrea Mantegna in the Renaissance to fin de sie`cle artists Ka¨the Kollwitz, Aubrey Beardsley, Edvard Munch, Joris-Karl Huysmans, to twentieth-century Guatemalan writer Miguel Asturias—all solve this problem by finding a way to double the location, so that personhood remains intact in our perceptual field even if the human body is at that moment being obscenely shredded. 118 Representations If you visit the Nagasaki Atomic Bomb Museum, you will probably find yourself, as I did, surrounded by young schoolchildren, who look with courage on the visages of those who were incompletely incinerated in the bombing of that city (see figs. 2, 3, and 4). In the United States, few adults face up to the faces of those harmed there. In February of 2016, the Central Square Library in Cambridge agreed to let me—and Joseph Gerson, an American Friends Service colleague—do a monthlong program on the bombings of Hiroshima and Nagasaki with weekly lectures and an exhibit of books, drawings, and photographs. The morning after we put up the exhibit, we found all the photographs of injuries had been removed. The effort to put on an exhibit about Hiroshima and Nagasaki at the Smithsonian Institution in 1994 led to such controversy that it had to be canceled—with one exception: the Enola Gay (the plane that delivered the bomb) was put on display. Here we circle back to the phenomenon of the weapon being perceptually severed from the site of the pain. It’s in part because of museums like those in Hiroshima and Nagasaki that so many people in the Japanese population are passionately in support of nuclear disarmament. In preparation for a disarmament demonstration in New York, Cambridge and Boston activists (I include myself) worked for months to bring supporters to the march: after endless work, approximately one hundred did so. But one thousand Japanese men and women arrived that morning in New York; they carried a petition signed by six million of their countrymen, who collectively paid for the travel costs of the thousand who came. RA: Can you provide any examples of authors who ‘‘double the location,’’ as you have just described, ‘‘so that personhood remains intact’’ while the ‘‘human body is being ...shredded’’? ES: Miguel A´ngel Asturias’s Men of Maize begins with a heroic Indian in Guatemala, who ordinarily protects his people no matter what; he is able to do so, in part, because he has a level of sensory acuity that approaches genius. He knows the scent of every flower; he can discern the whole recipe of scents present in the forest in any given moment. The European colonizers can commit a slaughter of his people only if they can divert this heroic leader; and the only way to divert him is to subject him to horrible, scalding, obscene pain. Asturias must convey to us the felt experience of pain, the turning of the body inside out, and he chooses to do this through the associated phenomenon of body damage; but in order to do so without eclipsing the personhood of Gaspar Il´om, he decouples the body damage from the hero. The book opens with a dog, which the invaders have used as a test case for their pain-inducing poison laced with glass. The dog, in excruciating pain, zooms hysterically through the village square, covered with open sores, his penis erect, howling in a way that is aversive to everyone who hears and sees. This horrible scene conveys the obscenity of pain, the obscenity of bodily damage. By obscenity, I mean interior substances in the body which come before us without our consent, come before us before we are mentally prepared to comprehend what we are seeing. But the story separates this bodily desecration from the person, for now, having seen the dog, we need only be told that Gaspar Il´om has drunk this glass-laced poison to understand why he abandons his post, submerges himself in the lake, drinks all its waters, and eventually comes out. He has survived. But during the moments when he disappeared below the surface of the water, his people have been slain. RA: I wonder how you think about the role of the visual in that context. Do you think of the visual as akin to a language? ES: In visual art one can see the same phenomenon taking place, as when Ka¨the Kollwitz refuses to let an injured victim be portrayed as what Shelley called ‘‘a monstrous lump of ruin.’’ In her 1900 etching and aquatint The Downtrodden, she pushes the wounds on the body just beyond the body’s edge onto a linen sheet on which the person is lying. These mouthlike, liplike structures of open wounds are there but are not permitted to compromise figure 4. Photographs of survivors of the atomic bomb in the Nagasaki Atomic Bomb Museum. An Interview with Elaine Scarry 121 our recognition of the sufferer’s personhood. Even somebody like Aubrey Beardsley, in one of his posters, puts the wound in a tree rather than on the body of the woman. And yet the woman has attributes that make the viewer see the analogy, just like Marty South and the trees in your account of Hardy’s The Woodlanders [Scarry is referring to Rachel Ablow’s account in Victorian Pain]. Her posture, for example, is exaggeratedly erect and treelike. She wears a high-waisted skirt that is made to be a visual analogy with the tree. But our perception of her personhood remains uninterrupted. RA: One issue you have raised recently is the particular difficulty of thinking about the specific kinds of injuries caused by nuclear war, namely burns. There was a striking moment in your talk when you discussed the protocols used in burn units to help doctors and nurses in looking at burn victims. It seems so intuitively right that caretakers would have difficulty looking at these patients. It seems to suggest something about the limits on the imagination in terms of suffering. I’m wondering what it is about burns that makes it so hard to imagine the suffering they entail. Is it about the skin as the site of humanity? Is it about the face? ES: It is the visage. Without preparation and help, when we see the complete mutilation of the body, especially the face, we mistakenly feel we are seeing the mutilation of personhood. The ‘‘rule of nines’’ is devised to enable rescue workers to look at a gravely burned person and (instead of having their own minds shut down in sorrow and confusion and revulsion) to assess instantly the gravity of the injury, start appropriate treatment, and report the scale of the injury to the hospital awaiting the person’s arrival. Each part of the body is assigned an easy-to-remember number that is a multiple of nine (see fig. 5). Counting forms a key part in many forms of emergency rescue, and this is one instance. The numbers, once totaled, tell the rescuer the next step, such as whether to insert an IV for fluid resuscitation. The need to train the perceptions of those who hope to help those who are burned is also illustrated by a procedure called ‘‘staying.’’ During the years when I was part of a research group on suffering at the Hastings Center for Ethics, I heard a lecture by a physician-nurse who worked in a burn unit. She mentioned that because of the difficulty oflooking at a severely burned person, nurses assigned to burn units may begin to avert their eyes when speaking with a patient, decline to touch the patient, or stand at a greater distance each day, or request a transfer after a few days. To counteract these problems, caretakers can participate in a class on ‘‘staying’’ where they recognize the temptation to withdraw from the patient and practice trying to overcome that withdrawal. While the ‘‘rule of nines’’ and ‘‘staying’’ are brilliant inventions, we should recognize that in nuclear war there will be few rescue workers and nurses. A study in the Netherlands of what would happen if a terrorist brought into Rotterdam a very small 12 kg weapon (the size used in World War II) found that of those who had not immediately evaporated, four thousand persons would require burn beds.7 They noted that in all of the Netherlands there are only a hundred burn beds. A leading hospital in Boston, Mass General, has seven burn beds. The burn beds themselves—what few there are—will disappear in a nuclear strike. On the floor of the UK Parliament, the possession of four Trident submarines has repeatedly been justified by the potential need to bomb Moscow. In response, a Scottish study by John Ainslie looked at the scale of damage that would actually take place if a nuclear missile were launched against the Ministry of Defense building in Moscow: along with the Ministry of Defense, four major hospitals would be destroyed and four others subjected to fire and radiation that would make them inoperable. Thirty-one schools would also be destroyed with at least 700,000 children slain.8 If the missile is larger, so, too, will the disappearance of hospitals be larger. An article by Steven Starr, Lynn Eden, and Theodore A. Postol in the Bulletin of Atomic Scientists shows that if an 800-kiloton weapon were detonated above Manhattan, the center of the blast would be four times the temperature of the sun, and, within ‘‘tens of minutes,’’ a firestorm will cover 90 to 150 square miles. figure 5. Pocket card showing ‘‘Rule of Nines for Adult and Child,’’ Northwest Healthcare Response Network, https:// nwhrn.org/wp-content/ uploads/2018/08/BurnPocket-Card.pdf. An Interview with Elaine Scarry 123 RA: Was the artistic strategy that you just described of doubling the location so as to protect personhood apparent in the real-world examples you were citing, the Nagasaki children, the ‘‘rule of nines,’’ ‘‘staying’’? ES: I think so. It is not accidental that the Nagasaki Atomic Bomb Museum is itself physically beautiful in its architecture, or that as you enter you pass lavish cascades of paper cranes, inspired by the child Sadako Sasaki, like cherry blossoms in spring, or that you see an inscription about Nagasaki’s exceptional generosity to outsiders—its many centuries of open trade with foreign companies, a level of cosmopolitan hospitality not at that time found to the same degree in other regions of Japan; you see engraved inscriptions from Dwight D. Eisenhower and from the ‘‘United States Strategic Bombing Survey, Summary Report (Pacific War), July 1946’’ saying unequivocally that the atom bomb was not needed to end the war. All these elements, and many others, keep the personhood of the city’s inhabitants in view, side-by-side with the excruciating vision of burnt faces. The ‘‘rule of nines’’ lets one reconstruct the body out of a beneficent invention, toylike in its simplicity. In ‘‘staying,’’ the very name of the procedure holds the injury within the frame of sympathetic personhood. RA: Let’s return to Ghandi’s forking path. You’ve sketched the reasons why the US population is innocently sleeping. But what if they’re feigning sleep? ES: I am sometimes floored by the discrepancy between the attention we give to injuries that have happened when we can’t do anything to change them and the attention we give to injuries that haven’t yet happened when by intervention we absolutely can prevent them. I don’t know how to explain this. I have always assumed that those acts of trying to talk about the pain of torture victims in the 1970s in my case, or the pain of people in World War II, the Holocaust, that those acts are meant to act as a warning to the future. What is our motive for thinking about the unchangeable injuries of the past if not to increase our ability to prevent such injuries in the future? Yet almost incomprehensible is the distance between the willingness to think about events from the past we can’t possibly change and the complete comfort with feeling that future massacres need not concern us. Or worse, that one is slightly superior to protesting a wrong: intellectually superior because the moral wrong is an obvious moral wrong, and we only like to address sophisticated, hard to discern moral wrongs. It might be embarrassing to have to stand on a street corner with a sign or attend a public meeting. Imagine, though, if we forgave the complicity with past acts of enslavement or genocide by saying, ‘‘People saw that it was wrong, but they considered it too intellectually obvious, too compromising of their dignity, to have to stand up and protest.’’ Or take the argument that the aspiration to dismantle nuclear weapons is now many decades old, and we must turn to fresh undertakings: imagine that someone tried to defend those who tolerated slavery in 1860 because they had been hearing antislavery sentiment since 1820 and now considered such sentiments ‘‘stale.’’ We would never give a ‘‘pass’’ to anyone in the past who excused their inattention to slavery or the transfer of people to concentration camps on either of those two grounds; yet we believe such arguments release us from addressing weapons whose outcome is instant genocide. There are historical periods in which people were dissuaded from protesting because dissidents were beaten (Charles Sumner on the floor of the Senate) or killed (Dietrich Bonhoeffer in Germany). No such beatings or death threats excuse our own silence today. RA: Staying with this point about the relative ease of imagining pain past as opposed to pain in the future, do you attribute that to sentimentality? It sounds so reprehensible put in those terms. I wonder how you account for it. ES: I think you are right to worry that our attention to the past begins to look like sentimentality. The argument is sometimes made by academics that sympathy is less about compassion or the desire to ameliorate pain than it is a kind of cultural signaling of our moral goodness. To me that thesis seems horrifying: it lets the many who ignore past pain excuse their own inattention on the grounds that the few who do attend to pain are only doing so to announce their own goodness. So I feel a strong aversion to that argument; it works to reduce still further the number of those who show any wish to help. However, if it turns out that we only speak about irremediable injuries from the past while a huge architecture of massacre [is] ~~stands~~ waiting to be used, then one has to ask oneself: why were we looking at injuries in the distant past? Is it just sentimentality? Is it just cultural signaling?9

#### The FTC is the optimal actor to regulate emerging tech, including militarized AI---BUT they lack rule-making authority.

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Yet, the United States is not without an agency that has both the experience and expertise to step in now to fill the regulatory vacuum: the Federal Trade Commission. For example, the FTC has demonstrated its expertise in the field of privacy, which is an area with a similar history of inconsistent or lack of comprehensive regulation.191 In this field, the FTC has moved to assert its authority when industries have not been subject to regulation due to gaps in the country’s sectoral laws.192 In doing so, the FTC has shown an ability to bring a “layer of coherence” to the regulatory system that has solidified over the years.193 The FTC is more than capable of taking on the role of regulatory gap filler and coherent AI policy developer.

Instead of simply imposing top-down, command-and-control rules, the FTC has favored a self-regulatory approach to protecting consumer privacy, gradually developing that approach into a regulatory system that over time has become more robust.194 In the privacy arena, the FTC has taken the position that protecting consumers through self-regulation is more flexible and costeffective than direct regulation, which at the same time allows for the pace of technological innovation to continue.195 Further, the norms the FTC has enforced over the years have been developed in accordance with industry stakeholders and consumer expectations; this enforcement strategy is in line with the co-regulatory model of governance.196

The FTC thus has been consistent in deferring to industry standards where appropriate, thereby avoiding the “dramatic regulatory lurches” that can accompany traditional top-down command-and-control regulation.197 Because such standards “dictate what is feasible in industry,” the FTC’s deference keeps its regulatory efforts from being disconnected from industry practice, and therefore from being arbitrarily implemented. 198 As a result, the FTC’s regulatory practices are both politically palatable and tend not to overly burden industry.199 AI can benefit from a similarly “light but steady regulatory approach,” through which the FTC can create an environment for AI to thrive, while also regulating to protect consumers and preserve public trust.200

D. Section 5 of the FTC Act

The FTC’s primary source of regulatory authority is Section 5 of the Federal Trade Commission Act, which prohibits “unfair or deceptive acts or practices in or affecting commerce.”201 An unfair or deceptive act or practice is statutorily defined: (1) “a material ‘representation, omission or practice that is likely to mislead the consumer acting reasonably in the circumstances, to the consumer’s detriment’”; or (2) “a practice that ‘causes or is likely to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition.’”202 Section 5 thus bars both “unfair” and “deceptive” trade practices, as well as “unfair methods of competition.”203

This legislative grant of authority is widely recognized as being extremely broad in scope.204 Generally, the FTC has the power to “prosecute any inquiry necessary to its duties in any part of the United States.”205 The FTC is further authorized to “gather and compile information concerning, and to investigate from time to time the organization, business, conduct, practices, and management of any person, partnership, or corporation engaged in or whose business affects commerce.”206 In addition, the legislative history of Section 5 evinces a clear Congressional intent that the authority the FTC exercises be “evolutionary and widereaching.”207

Deceptive trade practices include: false representations, sales of hazardous or systematically defective products or services without adequate disclosures, failure to disclose information, use of bait and switch techniques, failure to perform promised services, and failure to meet warranty obligations.208 In terms of such practices, the FTC pursues companies who “exploit consumer ignorance or create a false sense of trust.”209 The FTC also has hifted to focusing on broken consumer expectations, which incorporate “the universe of preexisting consumer backgrounds, norms, and dispositions,” in addition to elements of design and functionality factors. 210 The FTC takes consumers “as it finds them,” with all of their cognitive limitations, and prohibits exploitation of those limitations.211

In considering whether a harm is outweighed by countervailing benefits to consumers or competition in terms of “unfair” trade practices, the FTC takes into account both the cost to consumers to remedy the harm and the cost to society in general.212 In essence, this inquiry attempts to separate those instances where consumers are able to protect themselves from those where they are unable to do so.213 If consumers could reasonably have avoided the harm, the FTC will not find a trade practice to be unfair. 214 Accordingly, most FTC enforcement actions focus on behavior that unreasonably takes advantage of or exploits vulnerable consumers.215 However, the FTC also considers whether a trade practice violates established public policy. 216

The evolutionary and wide-ranging nature of the unfairness standard is the result Congress’s deliberate intention to frame that standard in general terms.217 Congress recognized it was not possible to draft a complete set of unfair trade practices, without creating regulatory loopholes or the list quickly becoming outdated.218 The breadth of Section 5 is apparent in that it authorizes the FTC to take action against unfair practices that more specific statutes have not yet contemplated.219 Indeed, the FTC has the authority to determine a practice is unfair, even if it is otherwise lawful.220 The result is that the FTC has significant flexibility in addressing new problems.221

The broad scope of authority Section 5 provides is ideal for responding to the challenges posed by new technologies.222 Partly as a result of this, the FTC has been able to quickly respond to technological change.223 In addition, the FTC has shown it is capable of fostering emerging technologies while protecting consumers, as it has done in response to the rise of the Internet and the Internet of Things.224 The FTC has been able to do this at least in part because the unfair and deceptive practices standard is largely technology neutral.225

E. The FTC can and Should Exercise its Section 5 Authority

Of particular relevance to emerging technologies, and AI specifically, the FTC has shown itself to be capable of regulating the communication, organizational, and design aspects of new technologies.226 It has acted to protect consumers from privacy and other harms, for example, by notifying commercial firms of their obligation not to act unfairly or deceptively in the design, sale, and use of emerging technologies that interact with consumers.227 In addition to the broad authority to regulate emerging technologies, the FTC’s efforts are further enabled to respond to unfair and deceptive trade practices by the diverse set of tools at its disposal.228

Although much of the FTC’s enforcement activity, vis-àvis emerging technologies, has been principally in the area of privacy and data protection, there is no reason that the FTC cannot also apply its broad Section 5 authority to machine learning and other automated decision-making processes. During its history, the FTC has repeatedly “recalibrated” how emerging technologies are used to deceive or harm consumers.229 And given its move to assert its authority in regard to the Internet of Things, the FTC does not need any new grant of authority to confront other new technologies.230 Rather, it is enough if a new technology is used in commerce to harm or mislead consumers.231

Indeed, the FTC has begun to address the issue of algorithms in the privacy context.232 Further, the many tools the FTC has – including disclosures and design requirements – can help ameliorate the harms that algorithmic decision-making systems pose.233 The FTC also has looked to hold commercial entities accountable “for design choices that indirectly harm consumers.”234 Because AI often is employed in the backend of systems with no direct consumer interface, this approach offers a potential solution to harms caused by hidden AI. It could also address harms caused by third parties, since those who facilitate “the wrongful conduct of another” will also trigger FTC action under this theory.235

For a trade practice to be unfair, the harm must be substantial.236 The harm can be monetary, but it also may encompass unwarranted health and safety risks.237 Thus, AI technologies that pose such risks can and should meet the unfairness standard.238 Many algorithmic decision-making processes, however, will not fall under this category of harm. Further, trivial, speculative, and “other more subjective types of harm” generally do not constitute an unfair practice.239 Since in many cases it may not be clear the exact extent to which a decision made by an AI system has injured a particular consumer, it may be difficult to establish the requisite level of harm.

On the other hand, notions of what constitute an unfair harm continue to evolve, and there is some indication courts may be open to recognizing more subjective, non-monetary harms under Section 5.240 In addition, the FTC has clarified that a small or incremental injury may constitute sufficient injury if it harms a large number of consumers or if it “raises a significant risk of concrete harm.”241 And even where harms might be incremental for only a single individual, if those harms pose a collective problem, the FTC may still be able to act on them.242 Further, the FTC may consider “the cost to society in general” in determining whether there are countervailing benefits to consumers or competition.243

The FTC’s authority to promulgate rules defining unfair or deceptive acts or practices is limited, and therefore it must enforce its authority indirectly on a case-by-case basis.244 As such, and because it generally lacks the ability to assess civil penalties, the FTC mostly relies on settlements resulting from its enforcement activities to communicate the rules it wants companies to follow.245 In addition, due to staff and budget constraints, the FTC often must rely on informal complaints and self-reporting of potential violations.246 The FTC’s Section 5 authority, furthermore, does not extend to non-profit organizations, common carriers, financial institutions, and certain other entities, nor can it regulate harms committed by consumers in non-commercial contexts.247

#### The plan solves by granting the FTC rule-making authority, enabling effective regulation.

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A federal agency already exists, however, that is both familiar with and experienced in regulating new and emerging technologies and can step in now to fill the AI regulatory hole. Even with its limited resources, the Federal Trade Commission (FTC) has proven adept at working with industry in the area of data protection, closing many of the “gaps” left by the sectoral approach to privacy regulation in the United States.16 The FTC has done so largely through its broad powers granted under Section 5 of the FTC Act which allows it to regulate “unfair and deceptive practices.” AI and its applications fall under the scope of that language and are thus regulatable by the FTC. Further, Congress can and should increase the FTC’s resources and give it greater rule-making authority. This will allow the FTC to more effectively meet the challenges that AI presents and will continue to present in the future.

#### Thus, we affirm Epistemological Luddism as a means of expanding the scope of core antitrust laws to prohibit militarized AI development via Section V of the Federal Trade Commission Act.

#### The 1AC affirms epistemological Luddism – you should treat the 1AC’s scholarship not as vacuous but rather as a contingent evaluation of technology’s relationship to sociality – the process must interrogate the participation, flexibility, dependency, and disassembly on technology in order to harbor new interpersonal relationships that are overcoded by networks

Mejias ‘13(Ulises Ali, associate professor in the Communication Studies department at SUNY Oswego, and the director of the Institute for Global Engagement. Off the Network: Disrupting the Digital World)

Perhaps the movement to disrupt digital networks will be akin to what the slow food movement is to fast food: an opportunity to stop and question the meaning of progress. To unthink the digital network would be to constantly decode the relationship between the map and what it represents and the ways in which the map determines or shapes our interaction with the world. Langdon Winner’s notion of “epistemological Luddism”9 might be useful here. Winner argues that we should be able to evaluate technologies based on the following criteria: the degree to which they incorporate participation in their design by the people who will use them, the degree of flexibility and mutability the technologies exhibit (their capacity to be altered and tweaked), the degree of dependency they create, and the degree to which they can be dismantled. But disassembly to Winner is not merely a destructive Luddite reaction to the technology (as justified as that may be, at times). Rather, it is a method, a learning opportunity, a chance to better understand how the technology works, and to better understand how our relationship to it is constituted. This kind of Luddism (what I am calling paranodality as method) might help rogue nodes exploit the entropy that envelops digital networks (an old network is replaced by a newer one; a forced upgrade eliminates a whole category of nodes; users simply stop using a service once the novelty wears off; and so on). In this manner, disassembly would mean the acceleration of the decay of the network, bringing about a reversal of its effects by causing the annihilation of the networked self.10 More egalitarian models of social participation might be achieved in the future by challenging the logic of the network. But realistically, today, the paranode might not be able to completely secede from its host and actualize alternatives. As tentative as they may be, strategies like the ones previously suggested can ensure that a critical theory of networks is of practical use to those of us whose social lives are already inexorably intertwined with the services provided by monopsonies. Nevertheless, we should be mindful that none of these proposals and tactics is sufficient or unproblematic. They must be undertaken along with the work of theorizing disidentification from the network, differentiating between what is made possible by the network (the models of participation it affords) and what remains possible only outside of it, and accounting for those parts of the node’s own identity that are excluded from the network, preventing it from fully actualizing itself. Thus the scope of what it means to unthink the digital network in the present time should be, beyond the strategies mentioned earlier, to illustrate how the network episteme has molded us, to explain how the network—as cultural metaphor and technological artifact—acts as a social determinant. Even as we continue to participate in digital networks, we should keep in mind that participation is full of contradictions, and those contradictions define our contemporary existence. In an economy where profit is derived by capitalizing on the participation of users (through advertising, data mining, etc.), and where a handful of buyers acquire and distribute the bulk of user-generated products, great power can be exercised by corporations in setting the conditions under which social exchange can take place.The more participants are willing to accept the conditions defned by the monopsony, the more opportunities there will be for exploitation, and the more the participants will experience an impoverishment as their wealth is reconfgured into immaterial social capital (which is, in any event, managed by the monopsony). An inequality is thus instituted between those who control the network and those who participate in it, an inequality that expresses itself through contradictions: Produce more, own less. Say more, communicate less. Participate more, matter less. Using paranodality as a method means to critique the ways in which the structures of networked participation seemingly make us more versatile actors, while making invisible the manner in which we are being acted on for someone’s beneft. In describing the propensity of the public to consume interactive media that creates the illusion of empowerment while solidifying the status quo, Andrejevik observes that “people will not only pay to participate in the spectacle of their own manipulation, but . . . thanks in part to the promise of participation, they will ratify policies that beneft powerful elites and vested interests at their own expense, as if their (inter)active support might somehow make those vested interests their own.”11 The admission that participation can work against our interests, while seemingly empowering us, should also be a reminder that participation and nonparticipation represent choices laden with values. Increasingly, we will see the question of networked inclusion and exclusion, participation and nonparticipation, framed in ethical terms. For example, students are already being urged by school administrators to forgo participation in some “unethical” digital networks—like the College Anonymous Confession Board12 —where cyberbullying is prevalent. Similarly, state employees were explicitly told not to participate in the “unethical” WikiLeaks network by reading the released cables, while corporations The OuTside Of Ne T wOr k s . 161 like Amazon, Bank of America, and Apple13 also took measures to prevent users from accessing or supporting the “unethical” WikiLeaks through their networks). But apart from considerations of whether it is right or wrong to participate in certain kinds of networks, the resistance of the paranodal must be read in terms of a principled negation of the network. It is only in exclusion (voluntary or involuntary) that alternatives are engendered, and only in exclusion can we find possibilities for disrupting the network, rejecting it, or fleeing from it. Paranodality is nonconformity, and at a time when the logic of the network has found its largest application in privatized systems where the compulsion to participate drives the maximization of proft and endangers the democratization of cultural production, paranodality as method means revitalizing nonconformity as the site of important debates. Digital networks and the network episteme (the network as a strategy for knowing the world) have already transformed who we are and how we interact with each other—at least for the third of the world’s population who have access to the Internet and the 70 percent who have access to mobile phones. It is impossible, perhaps even undesirable, to turn back the clock to a time of pre(digitally)networked societies. Thus the more realistic strategies for unthinking and unmapping networks will rely not on abandoning them in a technophobic reaction; they will rely on the intensifcation of the network: questioning the terms under which it includes and excludes, engaging in creative acts of disassembly by pushing the limits of its logic, and conceptualizing alternative modes of being through the paranodal.We are just beginning to imagine what disrupting the network might look like.

#### Vote aff to align oneself in a space in between the networks of hegemony — the paranodal — technology is ever present throughout the facets of the networks, whether that’s debate as an activity, antitrust as an economic theory, or interpersonal relationships — the paranodal is in the interstice of these nodes where information passes and the violence across the networks shares a new technological level of interconnectedness — the affs process seeks to interrogate the “inclusion and exclusion encoded in the logic of the network” by creating new political subjectivities based around our interrogation of technology

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IMAGINE A NETWORK MAP, with its usual nodes and links. Now shift your attention away from the nodes, to the negative space between them. In network diagrams, the space around a node is rendered in perfect emptiness, stillness, and silence. But this space is far from barren. We can give a name to that which networks leave out, that which fills the interstices between nodes with noise, and that which resists being assimilated by the network: paranode. In neuroscience, the paranodal defines a specific type of cellular structure that, while not part of the neural network, plays an important role in excitatory signal transduction. Here, I use the term to refer to the space that lies beyond the topological and conceptual limits of the node. This space is not empty but inhabited by multitudes that do not conform to the organizing logic of the network. As far as the network is concerned, the paranodal exists only to be bypassed or collapsed in the act of linking, of reducing the distance between nodes. But whether it is acknowledged or not, this space gives nodes their history and identity. In other words, the paranodal is not passive; its existence shapes nodes and the relationships between them (much like in urban planning, a “bad” neighborhood “forces” city planners to build a highway around or across it, so that cars can bypass it). The instability of paranodal space is what animates the network, and to attempt to render this space invisible is to arrive at less, not more, complete explanations of the network as a social reality. To the extent that nodocentrism becomes the dominant model for organizing and assembling the social, only the paranodal can suggest alternatives that exist beyond the exclusivity of nodes. Digital networks create new templates for organizing sociality, but it is only by going beyond the logic of the network that difference from established social norms can be claimed. Furthermore, the paranodal is a site for correcting the nodocentrism that reduces social interaction to self-interested exchange. It is the launching pad for social desires that cannot be contained by the network. These new desires end up causing new shifts and transformations within the network. The paranodal is what forces nodes to react and rearrange themselves according to possibilities that before only existed virtually, causing the network to expand in new directions or even cease to exist. The node, with its static identity and a predefined place and purpose, dissolves into something that can occupy other modes of being and evolving. The point of conceptualizing the paranodal is not simply to locate and identify what is outside the network in order to bring it within, to assimilate it. Rather, the point is to uncover the politics of inclusion and exclusion encoded in the logic of the network, and to suggest strategies for disidentifying from it. As Rancière suggests,1 new forms of political subjectification (of shaping consciousness) are always accompanied by disidentification, as certain parts of society reject the whole. The paranodal becomes, to use Rancière’s terminology, the part of those who have no part. If digital networks are machines of capitalist subjectification, producing social subjects capable of operating in the privatized pseudopublic space of the network, then it is only in the paranodal where disidentification can take place and alternative subjectivities can emerge. While the primary directive of the network is linking, paranodality is concerned—to paraphrase Lovink2—with whatever the mirror phantom of linking is. A few examples of paranodalities might help to illustrate the concept: a close friend or family member who refuses to participate in the latest social media craze and remains a conspicuous hole in our social network is an example of a paranode; broken web links pointing to pages that no longer exist or cached versions of pages no longer active are paranodal because they represent phantom nodes; signal jammers such as RFID (radio-frequency identification) blockers that prevent network devices from being found are examples of technologies that create paranodality; public spaces without surveillance cameras are paranodal spaces; radio operators without a license (pirate radio) are paranodal because they function without validation from the network; any kind of wilderness where signal reception cannot be established is paranodal; digital viruses and parasites that obstruct the operations of a network are also examples of paranodal technologies; obsolete technology is paranodal because its usage is no longer required to operate the network; digital noise and glitches are paranodal because they interfere with the flow of data in the network; paranodality is a lost information packet on the Internet; populations in a dataset that are excluded or discriminated against by an algorithm become paranodal; punk or rogue nodes—nodes who belong to a network only in order to destroy it—are paranodal. Given the multiplicity of networks an individual can belong to at any given time, being paranodal in relation to one network can obviously serve as the basis for belonging to another network. As a starting point, a theory of paranodality can help us account for our participation across these multiple, complex, and open networks. Traditionally, we have thought of the outsides of networks merely in terms of nonmembership, a definite in-or-out status that defines the subject. For instance, Sally Wyatt, Graham Thomas, Steve Woolgar and Tiziana Terranova3 mapped four types of Internet nonusers: the resisters, the rejecters, the expelled, and the excluded. These categories can be easily transposed to our study of the peripheries of any digital network. The resisters encompass those subjects who have decided voluntarily not to belong to the network; the rejecters used to be nodes in the network but then decided to disidentify from that network voluntarily; expelled nodes also used to be part of a network, but they have been forcefully pushed to the outside; finally, the excluded subjects have always occupied the outside, although not necessarily by their own choice. While these categories are useful for defining what is excluded in terms of a lack of access to the network, they provide too limiting a framework for the construction of manifold networked identities. When it comes to networks, the outside is not just without but within—an outside that is everywhere. The paranodal is a multiversal space that coexists simultaneously with other outsides as well as other insides of networks. It unfolds across various spatiotemporal domains and facets of consciousness. Instead of neatly occupying one of the aforementioned four categories and assuming the corresponding identity, we often find ourselves simultaneously inhabiting a combination of these categories vis-à-vis different networks: one can simultaneously belong to digital technosocial network A, while rejecting network B; find oneself expelled from network C, while continuously resisting belonging to network D; and so on. Furthermore, the peripheries of nodes can involve different kinds of actors (human and nonhuman, material and immaterial) and occupy different topological positions (from the space between nodes, to the borders of networks, to their outsides). Their disassembly can implicate different strategic responses (from passive resistance to active refusal). Each of these possibilities can impact the formation of identity inside and outside the network differently. The point is that across sites, moments, and identities, we simultaneously occupy the place of resisters, rejecters, expelled, and excluded in relation to different digital networks. A theory of the outside of networks should give us more sophisticated ways to talk not only about nonuse as a mode of disidentification but also about nonparticipation as a mode of resistance. In other words, apart from a more nuanced taxonomy of participation and nonparticipation, the paranodal can help us question the idea of the network itself, in particular with respect to digital networks. Accordingly, the paranodal can provide sites for subverting the idea of the monopsony as the dominant template for our social lives. Theorizing the outside of networks is about uncovering the paranodal contributions that nodocentrism renders invisible. According to Nick Lee and Paul Stenner, “[W]hatever variable shapes the network may take, the energy required to maintain those shapes is taken, indirectly to be sure, from those who are excluded from the networks.”4 The wealth of networks, in other words, is premised on the ability to create systems of exchange that transfer part of the production cost to an external third party: the suppliers of labor, the colonized, the weak, the exploited, and so on. In economics, the term used to describe this deferral is called, aptly enough, an externality (e.g., when a company is able to dispose of industrial waste without paying any cleanup costs, this represents an external cost to society or the environment). The surplus value that is created by not fairly or fully compensating the paranodal creates the wealth that propels the growth of the network. Even within the network, this wealth disproportionally benefits some parts of the network more than others, which is a way of explaining why in scale-free networks some nodes are more fit than others (i.e., they are able to acquire links at a faster rate than others5). It is under these circumstances that the resistance of the outside becomes important. Following David Couzens Hoy,6 we can say that the resistance that the outside poses to the logic of the inside is an ethical resistance because of the kinds of obligations it imposes on nodes. By its mere presence, the outside discloses a site of opposition, making the network aware of the refusal of the unnetworked. Nodes are confronted with a certain obligation to acknowledge the resistance of the outside, even if they opt to actively ignore it or do nothing about it. Nonetheless, this resistance is the only thing that brings the inequalities of the network to the fore. The paranodal can therefore shape the network in very powerful ways, focusing the attention of nodes on the limits of the technosocial systems used to structure their reality. In other words, it is only when nodocentrism is perceived or experienced as an injustice that inequality (between those who participate and those who capitalize on participation) becomes apparent, usually in the form of questions about the politics of network inclusion and exclusion. Through its encounter with the outside, a node can thus run against the limits of its own logic, and be forced to search for horizons beyond its existence and experience as a node in the network. Standing in the way of such realizations is the fact that the network template has become like the map in the story by Jorge Luis Borges7 in which a document was drawn with such meticulous detail that it ended up being of the same scale as the territory it sought to depict (in other words, one could overlay the map over the actual space and they would match exactly). Likewise, digital networks do not merely map our current social realities; they organize them and operationalize them so enticingly (promising more friends, more opportunities, and more fun) that the new map replaces the actual territory as the preferred social reality. Thus instead of the map becoming useless—abandoned in the desert like in Borges’s allegorical story, populated by the occasional beast and beggar —we increasingly live in the (privatized) network maps created for us. To talk about disrupting the network under these circumstances may seem like an impossible endeavor. Even if monopsonies are responsible for privatizing and commodifying social relations, it could be argued that they have made sociality more vibrant and interconnected, making it easier (not harder) to express oneself, exercise one’s rights, organize against injustice, give voice to minorities, democratize knowledge and cultural production, and so on. By many accounts, the benefits outweigh the costs, making it unrealistic and undesirable to say no to the network. There is much that is valuable in networked participation, and it would be folly to call for its complete rejection. But to engage in a critique of network logic is not to advocate a simplistic form of network rejection. It is to strive to specify the ways in which the network episteme orders our reality. As a philosophical project, disrupting the network is about challenging the determinism of network logic, pointing out the limits of nodocentrism as a form of othering that subsumes difference to the contours of the node. As a political project, the point of unmapping the network is to develop the (non)participatory strategies for disrupting the monopsony as a model for organizing the social along profit considerations. Paranodal resistance might take the form of a refusal to do business with certain companies, or a rejection of the premise that we must upload our content to the network with the most users. It might actualize itself as the struggle to get corporations to change their terms of service; or the promotion of open-source, open-content, or peer-to-peer alternatives to monopsonies. It might take messy forms of intensification like the ones Haisam Abu-Samra describes, when Egyptian activists faced an Internet shutdown and were forced to rethink their strategies. Or it might unfold as a form of intensification, which starts within the digital network but moves beyond it, as when some members of the hacker–geek collective Anonymous went from simply “trolling for the lulz” (engaging in various acts of cyber mischief and vandalism just for laughs) to organizing actual on-the- street protests against institutions (the Church of Scientology) and governments (Tunisia, Egypt, Italy, Wisconsin, etc.). According to Gabriella Coleman, the Anonymous “care packet” distributed to participants in the Tunisian operation included language that recognized the limits of cyber activism and encouraged participants to go beyond it: “This is \*your\* revolution. It will neither be Twittered nor televised or [sic] IRC’ed. You \*must\* hit the streets or you \*will\* loose [sic] the fight.”8 Any kind of project that seeks to give users more control of the data they generate while participating in digital networks should be encouraged: for example, projects that give participants real ownership and portability of their social networking profiles, allowing them to maintain control of privacy settings as they subscribe to various digital networks; or projects that guarantee anonymous searching and browsing of the Internet; and so on. Likewise, the public needs to be better represented when corporations draft the policies that govern their interaction with participants and spell out their rights. The public needs to put pressure on the government to ensure that these agreements are fair, transparent, and binding. Currently, corporations can abuse and exploit users with impunity, and while they are acting within the bounds of legality, a dialogue needs to be started about corporate responsibility in the age of social media. These forms of involvement might not be enough; they merely seek to improve the network rather than unthink it, and they continue to frame participants as somewhat passive recipients of corporate largess—but at least it would be a start.