Of Ethics and Algorithms

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Henry Lara-Steidel does an excellent job of making the case for more oversight and regulation of social media sites (SMS). Lara-Steidel invokes Frances Haugen's testimony before congress, as a whistleblower, as well as a Deweyan appeal to public values and the public good, to justify the need for governmental intervention and the creation of a regulating body that would police SMS to cut down on misinformation and posts that affect the public in a negative way. Lara-Steidel does not map out how this regulation or policing would occur, or even the grounds on which the regulation would be predicated, but Frances Haugen makes the case that, for SMS to be regulated, a regulating body would need to have access to and governance over the algorithms that are used by SMS to suggest, rank, and even censure content. Haugen testified: "I encourage reforming Section 230 decisions about algorithms. Modifying 230 around content—it gets very complicated because user-generated content is something companies have less control over," but "[t]hey have 100 percent control over algorithms."[1] Haugen is referring to Section 230 of the United States Communications Decency Act of 1996. This act protects companies from being sued over the content that is posted on their platforms and also protects companies' intellectual property so they need not divulge their algorithms that are the backbone of their platforms. For Lara-Seidel's quest toward government regulation to be realized, there needs to be a much stronger sense of ethics of/for algorithms. The remainder of this paper will be concerned with laying out the ethical concerns with which we need to wrestle before a regulating body might be effective. First, though, I'll define an "algorithm."

WHAT IS AN ALGORITHM?

There is debate in the field over the definition of "algorithm."[2] The term can be used to specify a mathematical command construct that is meant to accomplish a given task, as well as a program that includes the implementation of multiple mathematical constructs working as a whole toward a given

task. As we consider an ethics of/for algorithms, it is important to consider how algorithms function. Algorithms "are used to (1) turn data into evidence for a given outcome, which is used to, (2) trigger and motivate an action that may have ethical consequences. Actions (1) and (2) may be performed by (semi) autonomous algorithms—such as machine learning (ML) algorithms— and this complicates, (3) the attribution of responsibility for the effects of actions that an algorithm may trigger. Here, ML is of particular interest, as a field which includes deep learning architectures. Computer systems deploying ML algorithms may be described as 'autonomous' or 'semi-autonomous', to the extent that their outputs are induced from data and thus, non-deterministic."[3] Machine Learning makes it much more difficult to create an ethics for algorithms because programs can "learn" to apply algorithms in different ways, or even change algorithmic structures, based not on what the initial creators of the algorithms stipulated, but based on what the machine or program has "learned" given cases that the program encounters. For a regulating body to do its job, there needs to be a set of codes, guidelines—indeed ethics—guiding the regulation. Right now, we do not have an agreed upon set of ethics for algorithms.

ETHICS OF/FOR ALGORITHMS

What are the ethical considerations of/for algorithms? Ethics entail a set of value propositions where, not only do we make claims about what we value, we make claims that guide us when two or more values conflict with each other. Ethics guide us as we make decisions about what to value more or what to preference in a complex system where "virtues" and "goods" are not always clear. There are many researchers who argue the need for an ethics of/ for algorithms.[4] There have been proposals of ethics of algorithms that focus on "fairness, accountability, and transparency" as well as an ethics that focuses on outcomes that promote an equitable future.[5] Still others ground their ethics of algorithms on its uses in/as evidence (inconclusive, inscrutable, misguided), its outcomes (unfair), its effects (transformations) and its traceability.[6] At this time, there is not an agreed upon ethics of/for algorithms, which makes regulation of algorithms extraordinarily difficult (if not ripe for misuse and abuse).

We have no guidelines that govern how to proceed if the outcomes of an algorithm can be traced back to machine learning rather than the developer. We have no stipulations that undergird decisions regarding equity versus equality in how information, news, or even platform users are treated. We have no "line in the sand" that grounds a decision to allow some forms of misinformation to spread, to hunt down other forms of misinformation, or even how to define misinformation versus fraud versus inconclusive facts versus a difference of opinion. Even after we develop an ethics of/for algorithms, we would then need to consider who gets to apply these ethics as part of a regulatory body.

WHO MAKES THE DECISIONS?

Application of ethical considerations are made by humans, and humans are influenced by time, place, background, case/instance, embodied positionality, and other factors. How is this considered when we form a regulating body? While ethics can guide decision making, it is still left to humans to apply those ethics as they make policy decisions. This question has more at stake than the Dewey-Lippman debate referenced in Lara-Steidel's paper. Dewey's work, at least the sections quoted by Lara-Steidel, tends to subsume difference into one unifying and essentializing "public." However, there isn't just one public, nor just one public good at play in decisions over what can and cannot be posted on SMS. If we are to have a regulating body, what are the qualifications for the regulators? Do we have an ethical need to ensure that different voices (and indeed, different publics) are represented on this body? Questions about how to make judgements about regulations and who should be doing the "judging" should also take into consideration the global nature of SMS.

SMS IN A GLOBAL CONTEXT

One of the unique challenges of regulating SMS is that these platforms transcend national borders, but regulating bodies tend to be embedded in a national context and only wield the authority of one nation. Furthermore, the same questions about regulation arise: How are decisions being made? Upon what grounds? Is there an ethics of/for algorithms that transcends national context? Once again, we are back to the debate of a universalizing ver-

sus contextual ethics. Additionally, we must grapple with who makes regulatory decisions. Is there a different regulatory body in France versus Russia versus the U.S.? How will those national contexts shape the application of ethics of/for algorithms? How will the variability of regulatory bodies shape where SM companies choose to locate? Does the regulatory body of the country where the company has its headquarters get to make the decisions that govern the whole platform, or do the different regulatory bodies of each country get to outlaw the platform in different ways? This brings up the final question: How will regulation be enforced?

IMPLEMENTING OUR OWN GREAT FIREWALL

Regulation must, inevitably, bring up the question of enforcement. If regulations are set, and violated, how are violators held accountable? This has particular resonance in a globalized world where any SMS can move to a country with a more open and accommodating regulation body or set of regulating ethics. How will the US respond? Are we willing to set up a virtual wall to protect us from anything online that goes against our ethics? How is that different from the "great firewall" of China? What set of values guides decisions about enforcement of these regulations, including the idea of banning access to platforms from inside a country? Who makes the decisions about how to enforce these regulations? If we do not have an enforcement plan than regulation will either be arbitrarily enforced or not enforced at all. Furthermore, we must ask: Does the enforcement of our ethics bring about more harm to various publics than not regulating SMS at all?

Lara-Steidel's argument for the need of governmental regulation of SMS is intriguing, but the actualization of that regulation is complex and necessitates a number of structures (both ethical and political) that do not exist. As we all hone our thinking about how to live in a world of misinformation, it will become even more imperative to develop an ethics of algorithms, as well as a sense of the nature (universal or otherwise) of those ethics.

1 Shirin Ghaffary, "Facebook's Whistleblower Tells Congress How to Regulate Tech," *Vox,* October 5, 2021, https://www.vox.com/recode/22711551/

facebook-whistleblower-congress-hearing-regulation-mark-zuckerberg-frances-haugen-senator-blumenthal.

2 Andreas Tsamados, Nikita Aggarwal, Josh Cowls, Jessica Morley, Huw Roberts, Mariarosaria Taddeo, and Luciano Floridi, "The Ethics of Algorithms: Key Problems and Solutions." *AI & Society* (2021): 1-16.

3 Tsamados et al., "The Ethics of Algorithms," 3.

4 Catherine Stinson, "Algorithms are Not Neutral: Bias in Collaborative Filtering." arXiv preprint arXiv:2105.01031 (2021); Kirsten Martin, "Ethical Implications and Accountability of Algorithms," *Journal of Business Ethics* 160, no. 4 (2019): 835-850.

5 Anna Lauren Hoffmann, Sarah T. Roberts, Christine T. Wolf, and Stacy Wood, "Beyond Fairness, Accountability, and Transparency in the Ethics of Algorithms: Contributions and Perspectives from LIS," *Proceedings of the Association for Information Science and Technology* 55, no. 1 (2018), 694.

6 Brent Daniel Mittelstadt, Patrick Allo, Mariarosaria Taddeo, Sandra Wachter, and Luciano Floridi, "The Ethics of Algorithms: Mapping the Debate," *Big Data & Society* 3, no. 2 (2016), https://doi.org/10.1177/2053951716679679.