Nikki Stevens
HSD602 / week 2

Algorithms and Civilization

"Can one distinguish and define the specific properties of a technics directed toward the service of life: properties that distinguish it morally, socially, politically, aesthetically from the cruder forms that preceded it?" [1] Lewis Mumford asked this question in 1934 as he wondered what could become of humankind's relationship with "the machine." Just as Mumford abstracted the sum of individual technologies into a monolithic concept of the machine, so too have we abstracted the sum of individual computational instructions into a homogenous concept to be simultaneously analyzed, feared and revered: "the algorithm." And, while we would do well to think about society in relation to "the algorithm," in this moment we need to deconstruct and demystify the concept.

An algorithm is simply a set of computer instructions designed to solve a problem or produce an outcome. Programmers have been using algorithms since the first lines of computer code were written, and algorithms, as a concept, are fairly value-neutral. It is the *steps* within the algorithm that determines its value. With the release of books like Safiya Noble's *Algorithms of Oppression* and Virginia Eubanks' *Automating Inequality*, as a society, we are paying closer attention to the ways that algorithmic presence is influencing our society and our social interactions. However, with this shift in attention, we need to remember that without algorithms, there are no computers, no cell phones, no cloud-connected coffee makers, and no Internet of Things. The questions and objections that we raise should be not against algorithms themselves but against the authors of those algorithms and the ends to which we leverage algorithms as technics of social injustice and oppression.

Combining all algorithms, or even all algorithms of a certain type, into broadly "good" and "evil" categories disarms us of our ability to discern between the source of the problem (the authors of algorithms) and the results. Obfuscating the differences between the algorithms of "make coffee hot" and algorithms of "sentence more black people to longer prison sentences" further weakens our ability to focus objection, protest and reform tactics where they belong – on the individuals and teams creating software that perpetuates injustice.

I believe that we are now in the "cruder forms" phase of algorithmic development and algorithmic sensibility. In order for us to move to a technic of algorithms that is truly in the service of equitable life for all, we must be able to think critically about individual algorithms, their biased authors, and we will, to paraphrase Mumford, have to reprogram the algorithm while the computer is running. But "nothing is impossible." [2]

---

[1] Mumford, *Technics and Civilization*, 7.
[2] Mumford, 435.