

Article

Thomas Aquinas, Ronald Dworkin, and the Fourth Revolution: The Foundations of Law in the Age of Surveillance Capitalism

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Abstract: Since the publication of Shoshana Zuboff's *The Age of Surveillance Capitalism*, the strategies of Surveillance Capitalists and appropriate responses to them have become common points of discussion across several fields. However, there is relatively little literature addressing challenges that Surveillance Capitalism raises for the foundations of law. This article outlines Surveillance Capitalism and then compares the views of Thomas Aquinas and Ronald Dworkin in four areas: truth and reality, reality and law, interpretation and social custom, and virtue and law; finally, it closes by asking whether the law alone can provide a sufficient response to Surveillance Capitalism. The overarching argument of the article is that, while Aquinas's view of the foundations of law accounts for and responds to the challenges of Surveillance Capitalism more effectively than Dworkin's, law alone cannot provide a sufficient response to this emerging phenomenon.

Keywords: surveillance capitalism; Shoshana Zuboff; Thomas Aquinas; Ronald Dworkin; truth; reality; virtue; technology; behaviorism; fourth revolution

1. Introduction

In 1944, C. S. Lewis predicted the possibility that a new priesthood of scientists, the Conditioners, would seek to rewrite human nature in order to exert absolute or near absolute control over the world (Lewis [1944] 2001, pp. 56–73). He imagined that control would be exerted through the manipulation of human capacities, desires, and intentions. Over a decade later, in 1958, Hannah Arendt echoed Lewis's sentiment with a more precise target. Arendt worried that "the trouble with modern theories of behaviorism is not that they are wrong, but that they could become true, that they actually are the best possible conceptualization of certain obvious trends in modern society" (Arendt [1958] 2018, p. 322). Her concern, like Lewis's, was not that behaviorist theories were true in and of themselves, but that they might be made true through the capacities for control brought about in the modern age.

The rise of what Shoshana Zuboff calls Surveillance Capitalism, hereafter SC, has given life to the worries of Lewis and Arendt (Zuboff 2019a). It also helps to clarify the phenomenon that Haidt has described as a new Babel. This has been made possible by a confluence of technologies that allow for what Alex Pentland has described as reality mining, or the ability to create living labs by using a variety of devices to track the movement, communication, and behavior of large clusters of individuals (Pentland 2014).¹ Zuboff's work has garnered significant attention from ethicists, lawyers, and technologists.² Further, Zuboff claims that the only solution to the challenges of SC is in state law (Zuboff 2021). However, there has been comparatively little discussion about the relationship between SC and human nature or the moral foundations of the law. Further, I have not encountered any



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¹ An article in *MIT Technology Review* about Pentland's work earlier introduced the term 'reality mining' (Greene 2008).

² For instance, see: (Amardakis 2020; Landwehr et al. 2021; Laniuk 2021).

work on SC from a Thomist perspective.³ Finally, what Mark Greenberg dubs Dependence Views of law have received significant attention recently, and Ronald Dworkin's influential view is one of the most important of such views (Greenberg 2017). However, again, there has been little interaction between these views of law and SC. This article will take a small step towards filling that gap.

Zuboff's claim raises several related questions. First, what are the particular challenges of SC? Second, what would be required of a theory of law to successfully meet these challenges? Third, is law *alone* sufficient to meet these challenges? In Section 2 of this article, I will outline Zuboff's analysis of SC and clarify the specific challenges that it presents. In Section 3, I will compare the views of Thomas Aquinas and Ronald Dworkin on the relationship between reality and truth; reality and law; social custom, interpretation, and law; and virtue and law. There are, in the contemporary conversation, many approaches to reading Aquinas, and there is not space here to fully defend my interpretation as *the correct* interpretation of Aquinas, against all objections. In this section, I will argue that Aquinas's understanding of law gives it certain advantages in addressing the challenges raised by SC, while Dworkin's understanding of law suffers from comparative weaknesses. Given that the focus of this Special Issue is on the philosophical foundations of law, the theoretical discussion will be extensive. Finally, in the last section of the paper, I will suggest that on either of these views, current efforts to regulate data are insufficient to address the challenges that SC presents. Drawing on Aquinas's view, I suggest that law and policy could add efforts to support the inculcation of moral virtues in the populace at large, and ethics initiatives during the education of engineers and data scientists.

The selection of Aquinas and Dworkin may seem arbitrary. Why put these thinkers into conversation? First, while it would be the work of another article to defend this claim, I operate on the presumption that the challenges raised by SC can be more effectively addressed from a Dependence View than from alternative views of law. As I defend below, SC operates at the level of the social imaginary. To sum up, the challenges that I will illustrate below, SC erodes the very basis of human interaction with the world and society: truth, reason, and the virtue of civility. Because of this, the more distant a theory of law is from the metaphysical, epistemic, and anthropological foundations of these views, the more difficulty it will have in addressing SC. Dependence Theories, because they posit a fundamental connection between morality and law, in my view tend to be more attuned to these concerns.⁴ Second, Aquinas and Dworkin both fit into the category of Dependence Theories of Law, and both are marked in significant ways by interaction with Aristotelian thought. This makes them natural and interesting conversation partners. Third, my methodology in this article is one of comparative retrieval. Aquinas was a medieval Christian thinker with classical roots while Dworkin was a post-Enlightenment thinker with a strong Kantian influence. Thus, specific attention will be paid to areas in which Aquinas and Dworkin differ and areas of Aquinas's thought that address specific weaknesses in Dworkin's view. SC serves to highlight several such areas.

There are three primary drawbacks to this methodology. First, Aquinas and Dworkin are separated by eight hundred years of historical development. Within the confines of this article, it is not possible to effectively address all of the relevant transitions that occurred during this period. Thus, while I will attempt to be sensitive to their different contexts, I will not be able to fully account for those differences. Second, and closely related, Aquinas and Dworkin stand on separate sides of the Enlightenment. The rise of individualism will, in particular, create notable tensions that I can recognize, but cannot fully address. Third, Dworkin's views may well highlight significant weaknesses in Aquinas' approach. Because my methodology focuses on retrieval, I cannot fully assess these weaknesses here.

³ Outside of contributions from both classical and new natural law thinkers to the field of bioethics, there has been very little discussion of emerging technologies from a Thomist perspective, and particularly involving his theory of law.

⁴ I am inspired by Greenberg's critique of the Standard Picture (Greenberg 2010). However, I do not attribute the details of my claim to him.

2. Surveillance Capitalism and the Fourth Revolution

In *The Age of Surveillance Capitalism*, Shoshana Zuboff identifies the emergence of a new model of capitalism that is organized around the collection and manipulation of a behavioral surplus. Behavioral surplus is data gathered from the remnants of regular human interactions monitored by the ubiquitous cookies, cameras, microphones, and other tools that litter our physical and digital worlds (Zuboff 2019a).⁵ Data can be understood as a collection of data points, and a data point can be as simple as the click of a ‘like’ button, a login attempt at Starbucks, or an Amazon purchase. The acquisition of increasing amounts of behavioral surplus, using tools such as Google’s search, Facebook’s ‘like’ button, and various methods of digital communication and payment, across multiple areas and levels of human life lead to what Zuboff calls economies of scale and economies of scope (Zuboff 2019a). Economies of scale refer to the breadth with which behavioral surplus can be accessed—millions of data points spread across thousands of websites are needed. Economies of scope refer to the depth at which behavioral surplus can be accessed—data points must be accessed not only from a user’s active online interactions, but passively by monitoring the mundane aspects of their daily lives.

These economies rely on the increasing expansion of what Luciano Floridi describes as ‘the infosphere’ (Floridi 2008, 2014). The fourth revolution, or the digital revolution, has brought about what Mark Weiser called ‘ubiquitous computing’ (Weisser 1991). The goal of ubiquitous computing is to “infuse the real world with a universally networked apparatus of silent, ‘calm,’ and voracious computing” (Zuboff 2019a, p. 198). Information and communication technologies (ICTs) can be understood as “forces that change the essence of our world because they create and re-engineer whole realities that the user is then enabled to inhabit” (Floridi 2014, p. 97). They offer us a gateway into a virtual world constituted by the environment of networked machines and the information that they hold. This virtual world is one increasingly inhabited by humans for purposes of work, play, and social interaction (Floridi 2014). Consider, for instance, the chat features of Facebook or the roles that Ebscohost or Jstor play in academic research. This virtual world is accessed through specific gateways—a laptop or tablet for instance—and must be accessed intentionally. This creates a sharp distinction between online and offline interactions.

The explosion of networked devices, commonly called the Internet of Things (IoT) has increasingly blurred the lines between online and offline interactions. We can understand this as the enveloping of the real world within the virtual world. Envelopment is a process by which a technology with limited capacities encapsulates as space within itself in order to make that space suitable for the limitations of the technology. Think here of railroads. Trains have very limited capacities. They are a powerful means of transportation within the context of those limits, but the space of the railroad must be manipulated to make it suitable to the limitations of the train.⁶ Similarly, the expansion of networked devices that monitor and record virtually every aspect of human life (think, for example, of digital assistants like Siri or Alexa, or of devices like the Fitbit or Apple iWatch) increasingly envelope the real world and allow SC to develop economies of scope. These economies of scale and of scope provide millions of datapoints on individual users that can be collected into meaningful, well-formed, and startlingly accurate profiles of both individual users and extended societies.⁷

⁵ Zuboff’s entire work is an analysis of these three imperatives, their development, and their implications. However, the pages listed provide a concise and helpful summary of the operation of surveillance capitalism. Hal Varian outlines Google’s strategy (Varian 2010, 2014a, 2014b).

⁶ The idea here is Floridi’s, but the example is my own. There is a deeper element of Floridi’s argument. This concerns the fundamentally informational nature of reality itself and Floridi refers to it as informational structural realism. For the moment, I have set this to one side as it is a complex concept that is not strictly needed to understand ubiquitous computing. See (Floridi 2008).

⁷ That the data are meaningful, well-formed, and accurate allows it to conform to Floridi’s definition of information rather than simply a collection or heap of individual bits of data. See (Floridi 2003, 2007). Though it is outside the scope of this paper, Floridi’s view is not without critics. See (Fetzer 2004). On the profiling of extended societies see (Pentland 2014).

From these profiles, meaningful predictions can be made about how individuals or social groups will respond to specific kinds of stimuli. The end of ubiquitous computing is “ubiquitous intervention, action, and control,” (Zuboff 2019a, p. 292) and, as Zuboff argues, “the aim of this undertaking is not to impose behavioral norms, such as conformity or obedience, but rather to produce behavior that reliably, definitively, and certainly leads to desired commercial results” (Zuboff 2019a, p. 201). These results are achieved through what Spanish sociologist Manuel Castells calls persuasive power (Castells 2017).⁸ However, SC thrives when it is able to simultaneously keep the attention of its users directed towards a particular SC platform, Google, Facebook, etc. while simultaneously distracting the user from the nature and implications of their interaction with that platform. Like a magician, SC platforms are designed to attract a user’s interaction while distracting them from the impact of their interaction (Amardakis 2020).

This allows the mechanisms SC uses to modify behavior—tuning, herding, and conditioning—to operate at the level of the social imaginary. Social imaginary, a term coined by Charles Taylor, refers to a “contemporary lived understanding; that is, the way we naively take things to be The construal of the world we just live in, without ever being aware of it as a construal, or—for most of us—without ever even formulating it” (Taylor 2007, p. 30). This naive view of the world is formed in significant ways by our daily practices, the narratives we imbibe, and the environments that we encounter (Smith 2009, 2012).

One good example of the use of tuning to modify the human social imaginary is the use of nudges. The nudge, introduced by Richard Thaler and Cass Sunstein, is “any aspect of a choice architecture that alters people’s behavior in a predictable way” (Thaler and Sunstein 2008, p. 6). This assumes that design is never neutral and always involves the subtle manipulation of the possibilities of choice, or choice architecture, within an environment (Thaler and Sunstein 2008). Consider, for instance, how the design of a classroom directs attention towards the teacher, or placing salad first in a cafeteria line encourages patrons to healthier eating. Early experiments at Facebook showed that small manipulations in the design of the online environment had a significant impact on the practices of users (Bond et al. 2012).⁹ Further, as Evgeny Morozov has pointed out, SC organizations often present themselves—and are often accepted—as offering objective truths about the world (Morozov 2013; Amardakis 2020).

Alex Pentland further exemplifies this kind of tuning as a part of broader, Skinnerian-style conditioning in his discussion of the manipulation of the eToro community (Pentland 2014), and later extends this to the manipulation of large social populations (Zuboff 2019a). While Pentland argues for the use of tuning and conditioning techniques to create a utopian society, Zuboff argues that the driving goal behind it is “the instrumentation and instrumentalization of behavior for the purposes of modification, prediction, monetization, and control” to the end of accruing power and resources to SC organizations (Zuboff 2019a).

The impact of Facebook on the polarization of American politics offers a helpful example of this dynamic. Facebook keeps user attention, in part, by giving the user more of what they have already sought out. While early investigations argued that Facebook created echo-chambers by providing individuals with easy access to others who share their political opinions, more recent studies have emphasized the affective impact on the formation of tribal social identity groups (Törnberg et al. 2021). Facebook does not *cause* polarization per se (Piore 2018). However, it does provide a social environment that subtly encourages rather than discourages the formation of tribal identity groups.

In this summary of Surveillance Capitalism, I have illustrated three elements of SC that challenge the foundation of a standard view of law. First, SC operates by attracting continual user attention and, through that attention, both extracts behavioral surplus and

⁸ Yevhen Laniuk claims that it is not persuasive power. He argues that SC does not attempt to change its subjects. However, he accepts that SC does attempt to modify its subjects, and it is unclear what modification is if it is not change (Laniuk 2021).

⁹ For discussion see (Zuboff 2019a, pp. 298–304).

shapes user environments in ways that result in predictable behavior. Second, SC exerts power by profiling individuals in order to predict and modify the behavior of individuals and social groups through manipulating the social imaginary. I have argued elsewhere that the social imaginary can be understood as providing the first principles for higher reasoning (Smith 2022). On this account, SC does not only claim to provide an objectively true picture of the world to users (Morozov 2013, p. 143; Amardakis 2020, p. 71), it becomes the ground of a user's understanding of 'truth.' Third, because the goal of SC is to increase its share of user attention in order to accrue resources and power, it has no investment in bringing about a stable society. Thus, while some authors suggest that tuning, herding, and conditioning can be used to bring about a utopia, the result has been a steady dissolution of the social bonds that ground civil discourse. In sum, SC challenges the foundations of law by eroding the ontological, epistemic, and anthropological basis of that foundation: truth, reason, and the virtue of civility.

3. Surveillance Capitalism and the First Principles of the Law

In order to address these challenges from the perspective of law, it will be helpful to compare how two prominent theories of law would articulate three important aspects of the first principles of law. A first principle, as I use the term here, is 'the point at which one begins' or 'the most foundational element' of a thing. For example, in Christian theology, God is the first principle of all created things. In Foundationalist Epistemology, properly basic beliefs are the first principles of other beliefs. The first principles of law are, then, a reference to the proper foundations of legal reasoning, and distinct theories of law may identify different first principles of law. A discussion of these principles engenders at least three questions. First, how is law related to reality and truth? Second, how is the law related to socio-cultural custom? Third, who makes the law and does their moral character matter? Answering these questions will help us to understand how each of these theories might respond to the elements of SC that have been illustrated in the previous section.

3.1. Reality and Truth

In his late work, *Justice for Hedgehogs*, Ronald Dworkin draws a sharp distinction between scientific truth and interpretive truth. Scientific truth corresponds to realities in the world and thus depends upon external realities for its justification (Dworkin 2011, p. 121). Interpretive truth must be shown through argument to cohere within an existing network of other rationally coherent beliefs, but it does not presume any external physical or metaphysical reality upon which it depends (Dworkin 2011, pp. 116–17). This distinction relies on an equally sharp distinction between criterial and interpretive concepts. A criterial concept is a concept that finds thick agreement within the context of a society because it corresponds with some accessible reality (Dworkin 2011, pp. 158–59). For instance, the term 'fork' refers to a particular type of pronged eating utensil while the term 'spoon' refers to a different type of eating utensil. A key feature of criterial concepts is that they correspond to specific and identifiable, but not necessarily precise, realities in the world (Dworkin 2011, p. 158). Thus, 'fork' might be a more precise criterial concept while 'baldness' is an inherently vague criterial concept. Natural-Kind concepts are equivalent to criterial concepts in that they are subject to verification in reality; but Dworkin connects them to experimental verification rather than common agreement (Dworkin 2011, pp. 159–60). For my purposes here, the distinction is minimal and when I use 'criterial concepts' below, the reader should understand natural-kind concepts to be included. Vagueness may result in spurious or verbal disagreement, but neither 'fork' nor 'baldness' is open to deep disagreement. Individuals may disagree about what counts as 'bald' in specific instances, but they do not disagree about what baldness is. Criterial concepts also remain context-dependent. For instance, 'fork' can also refer to a specific kind of musical tool, a tuning fork. However, when the term is used in context it is clear whether one is referring to a tuning fork or an eating fork. Thus, a criterial concept can be taken to provide a clear, accurate, and complete account of the object in question. On Dworkin's account, criterial concepts ground scientific truth claims

that are value free and thus can potentially be taken to correspond with reality—presuming that correspondence can be sufficiently well explained (Dworkin 2011, pp. 174–75).

An interpretive concept, on the other hand, is one that finds thin agreement within and possibly across societies, but not thick agreement. For instance, humility might be commonly taken to refer to ‘a right view of oneself.’ Jonathan Edwards, Thomas Aquinas, and Kongzi would all agree with this claim. However, Edwards, Aquinas, and Kongzi would disagree on what counts as ‘a right view of oneself’ (Aquinas 2012c, p. 161; Edwards [1894] 2011, p. 264; Kongzi 2003, ch. 1. sct. 10, ch. 3 sct. 7, ch. 4 sct. 13, ch. 9 sct. 4, ch. 12 sct. 1).¹⁰ Thus, humility is agreed upon as significant for understanding and holding a right view of oneself, but it is conceptually open to interpretation such that disagreements about what it means to be humble are not merely spurious or verbal. They can be meaningful in a way that disagreements over what counts as a baldness cannot be. Truth in interpretive concepts is a matter of holding sufficiently justifying reasons for believing that one’s understanding of an interpretive concept (1) fits within ones overarching structure of beliefs, (2) fits the practice that the concept claims to interpret, and (3) illustrates the value of that practice. Interpretive concepts are normative in a way that criterial concepts are not (Bustamante 2019, p. 10). Dworkin argues that attempts to codify ‘truth’ as correspondence, coherence, or pragmatic success as such are insufficient because none of these theories can successfully account for everything to which we want to apply the term ‘truth.’ However, each of these models of truth may have some domain specific value (Dworkin 2011, pp. 175–78). For Dworkin, correspondence models of truth find their domain value in scientific truth. Coherence models, on the other hand, find their domain value in interpretive truth.

Aquinas distinguishes between at least two kinds of truth: speculative and practical. Speculative “truth is in the intellect in so far as it is conformed to the object understood” and may be defined as “the equation of thought and thing” (Aquinas 2012a, q. 6 a. 1). Practical truth, on the other hand, “depends on the conformity with right appetite” (Aquinas 2012b, q. 57 a. 5 ad. 3).¹¹ Unlike Dworkin, Aquinas begins with the assumption that realities are ontologically deep. Aquinas claims that “no philosopher can completely investigate the essence of even one fly” (Aquinas, forthcoming, *Prologue*). For a thing to be ontologically deep is for it to have an essential nature that contains more than can be known by a limited knower. Aquinas does not base his claim on the infinite nature of the fly, but on the limitations of the human intellect. These realities may be entities (actual or mental), objects, or relations between entities and objects. Considering the contemporary discussion surrounding truth-falsifiers, we may wish to add real absences to this list. To my knowledge, Aquinas never addresses this issue, though an Aristotelian framework is equipped to handle it (Priest 2009). Unlike later essentialism, for Aquinas the essential nature of a thing is individualized. The essence of any individual thing, for Aquinas, includes both the material and formal components that are necessary to make that thing the specific thing that it is (Brower 2014, pp. 18–21, pp. 269–75).¹²

“The true resides in things and in the intellect” applies to speculative truth, and it is properly understood as the degree to which the concept in the intellect emulates the reality upon which it depends (Aquinas 2012a, q. 16 a.3 ad. 1). Perception and concept formation requires that a concept depends upon and to some degree emulates some reality in the

¹⁰ Kongzi does not give a developed or clear theory of humility or pride in the way that Aquinas or Aristotle do, nor is his thick view of humility as easily encapsulated as Edwards. However, several scholars have articulated his view of humility in comparison to alternative views (Rushing 2013; Klancer 2012; Li 2016).

¹¹ There are a variety of attempts to interpret Aquinas’s view of truth. Timothy Pawl argues that Aquinas holds a version of Truthmaker theory (Pawl 2016). J. Budziszewski argues that he holds a more general correspondence theory. John Milbank argues that Aquinas holds a more extreme participatory view of truth than I have defended (Budziszewski 2014, pp. 119–21). I think the participatory theory of truth that I offer here encompasses the heart of Budziszewski’s view while more clearly grounding truth in the concept of participation, defended by John Milbank, and distinguishing between speculative and practical understandings of truth (Milbank and Pickstock 2001).

¹² For a more generally Aristotelian articulation of a similar view see (Inman 2022).

world. Aquinas famously argues that “nothing is in the intellect unless it has first been in the senses” (Aquinas, forthcomingg, q. 3 a. 2 ad. 19). This is literally the case for Aquinas’s view of perception. As Anthony Lisska has persuasively argued, Aquinas’s understanding of perception depends upon the transmission of forms such as color, texture, shape, size, or volume from an object into the human cognitive apparatus. These forms are collated to form a coherent object, and this object is interpreted and developed into a phantasia (Lisska 2019). There is a significant amount of debate surrounding the details of this process, but the key point for our purposes is that aspects of the formal nature of the object are actually transmitted to the cognitive apparatus of the perceiver. This point is widely agreed upon. The creation of an intuitive concept is caused by the transmission of forms from objects into the human intellect. Again, the details of this process are debated, but Theresa Scarpelli Cory provides a very good argument that the phantasia is transformed by the mind into the kind of thing that can cause an intelligible form to come about (Cory 2015, 2017). As we shall see later, this is not simply a passive reception of form, but an active acquisition of forms and reconstruction of the substance as a concept. The key point, however, is that the concept is grounded in the formal nature of the object of sensation, perception, and intellection. The work of speculative reason is to investigate these intuitive concepts so that they might be more clearly and completely understood, and the work of speculative reason ends in a more precise intuitive concept (Aquinas, forthcomingg, q. 15 a. 1; Smith 2022, pp. 161–69). Aquinas holds that this is as much the case for more complex and esoteric value concepts, such as justice or goodness, as it is for concepts of sensible entities such as cats and lions. All human concepts are built up from the foundation of sensory experience of the world, and these concepts are true to the degree that they successfully emulate the formal nature of real entities, objects, and relations (adding absences) of that world (Aquinas, forthcomingb, bk. 1 l. 20; Aquinas, forthcomingc).

There are four key points to note. First, Aquinas’s approach to truth does not assume that truth is binary. Concepts are true to the degree that the concept emulates the reality. This allows us to understand concepts as more or less true rather than simply true or false. Second, for Aquinas, sensation, perception, and intellection are grounded in the formal nature of real entities, objects, and relations (adding absences). Phantasia and concepts emulate this formal nature, though they do not do so completely or perfectly, and thus their truth is dependent upon the formal nature of these things. Third, while Aquinas believes that things have essential natures and that these essential natures are knowable,¹³ he does not believe that humans can achieve a complete knowledge of the essential nature of an object. This leaves human concepts inherently incomplete.¹⁴ Fourth, Aquinas distinguishes between distinct kinds of truth by distinguishing between the goal of the reason in pursuing that kind of truth. The goal of the speculative reason is to develop a deeper and more precise intuitive understanding of the reality in question. The goal of the practical reason is to guide the appetites of the individual towards actions that result in what is actually good for the individual and the community.

Dworkin’s distinction between criterial and interpretive concepts attempts to divide kinds of truth depending on their content and nature. Value-dependent concepts are interpretive, and truth depends on having sufficient reason to accept that the concept fits into the overarching structure of concepts within a tradition of thought. Value-independent concepts are criterial, and truth depends on whether the concept accords with the reality

¹³ I do not have space here to defend the concept of essences as such. However, for a recent defense of a generally Aristotelian concept of essence see (Oderberg 2007).

¹⁴ One immediate objection to the view that I have laid out here will come from Aquinas’s claim that speculative truth is the same for all, even if it is not equally known to all (Aquinas 2012b, q. 94 a. 4). However, the example that Aquinas gives is the truth of a mathematical necessity: the three angles of any triangle will be equal to two right angles. Given this, Aquinas seems to be restricting speculative truth here to logically necessary propositions which can be known with absolute certainty. However, Aquinas also claims that propositions are the products of reason (Aquinas 2012c, q. 47 a. 2 ad. 3). This creates a clear divide between concepts, which are the focus of the discussion of speculative truth in view here, and the focus of Aquinas’s claim that speculative truth is the same for all.

being picked out. For Aquinas, on the other hand, the formation of any concept involves both a reception of the accidental aspects of a thing through the senses and an active consideration and interpretation of that thing, both as a particular thing and in regard to its universal qualities (Aquinas 2012a, q. 85 a. 2). The concept is not the object of the reason, it is the means by which the reason interacts with realities in the world (Aquinas, forthcomingf, q. 14). Further, for Aquinas, because all human concepts are inherently incomplete, they are both subject to change, a claim that Dworkin can accept even for criterial concepts (Dworkin 2011, pp. 164–66), but also subject to substantive disagreement. This is especially true between traditions of thought.¹⁵

Dworkin's view of scientific truth and criterial concepts are too closely tied to specific traditional understandings of reality to effectively accommodate alternative traditions (Doppelt 2011). To gloss his view, scientific truth depends on the degree to which criterial concepts identify the realities that they propose to describe. Interpretive, and moral, truth depends on the degree to which the process of interpretive reasoning fits within the web of beliefs already held by the individual and explains the value of the practices in which they engage. Criterial concepts are, in Aquinas's terms, self-evident. However, an individual's sense that a term is self-evident arises from that individual's inculcation in a particular tradition of thought. This leaves Dworkin's criterial concepts value-laden and tradition dependent in ways that he does not evidently recognize. However, what is the viable alternative? Instrumentalism in the sciences argues that scientific truth does not describe nor depend upon the reality that it attempts to describe, but upon the predictive power that its concepts provide. This amounts to something like relativism in the sciences. This approach is popular among some, and it serves to unify views of scientific and interpretive truth. Scientific truth just is interpretive truth. However, it does not ground predictive claims in demonstrable realities, and it does not explain how interpretive claims could be grounded in reality. Similarly, Dworkin's view of interpretive concepts is not tied tightly enough to reality. Interpretive concepts are always 'up for discussion' and truth is simply a reasoned fit with one's beliefs and efficacy in achieving the purpose of the practice under consideration. A more plausible alternative is the Critical Realism promoted by Roy Bhaskar and Christian Smith, among others (Bhaskar 2008; Smith 2010). On this view, as on Aquinas's, things have ontological depth which both grounds the capacity to form knowledge about those things and also grounds a limited array of alternative interpretations of those things. Humans are capable of evaluating these interpretations, and some interpretations will clearly be better or worse than others, but fundamentally different interpretations may be equally plausible accounts of the thing in question because both pick out salient features of the reality of that thing. Scientific truth, on both Aquinas's and a Critical Realist view, is a bit more interpretive than Dworkin allows, but interpretive truth is a bit less interpretive. On both views, scientific and interpretive truths are both grounded in real things and dependent upon human interpretation.

3.2. Reality and Law

How, then, does truth relate to morality and law? For Dworkin, Hume's principle is paramount. Dworkin's version of Hume's principle is that "no amount of empirical discovery about the state of this world . . . can establish any conclusions about what ought to be without a further premise or assumption about what ought to be" (Dworkin 2011, p. 17). Dworkin argues that this principle does not support moral skepticism, but instead should be taken to support a strong view of the independence of morality (Dworkin 2011, p. 17). His primary target is a causal impact theory which holds that moral facts existing in the world "cause people to form moral convictions" such that true moral convictions are those that match moral facts (Dworkin 2011, p. 69), and the accompanying causal dependence hypothesis that apart from a causal impact theory there can be no coherent or meaningful

¹⁵ A good example of this in Aquinas is his discussion of Augustine's view of God and change in (Aquinas 2012a, q. 9 a. 1 ad 1). One contemporary example is the attempt to unify Western and Chinese Traditional Medicine.

concept of moral truth (Dworkin 2011, p. 70). While his primary target is limited, Dworkin's account of moral independence suggests that there can be no meta-ethical discussion that does not explicitly or implicitly depend upon some ethically normative claim such that all meta-ethical discussions are in fact ethically normative discussions (Orsi 2020). It also suggests that ethically normative discussions involve interpretive concepts that are value dependent in such a way that they are effectively immune to the arbitration of empirical demonstration (Dworkin 2011, pp. 21 and 221).

Aquinas believes that the cosmos is an ordered system that is emanated from and participates in the rationally ordered mind of its creator (Aquinas 2012a, q. 45 a. 1, 2012b, q. 93 a. 3 ad. 5). While the terms 'emanation' and 'participation' may be contested through the history of philosophical thought, the key point for our purposes is that Aquinas believes that all things are, are what they are, and are fundamentally oriented towards certain kinds of ends by dint of their continual dependence upon the creator. Particularly important is that things are both the kinds of things they are (form) and the specific things they are (essence) because they express and reproduce exemplars in the divine mind (Aquinas 2012d, q. 4 a. 41 ad. 3).¹⁶ While Aquinas did not conceive of the gravitational force that is fundamental to modern physics, the law of gravity provides a helpful illustration of his perspective. We might imagine that the planet Jupiter is a particular kind of thing: a celestial body that orbits a star, has sufficient mass to produce sufficient gravity to maintain a spherical shape, and dominates the area around its orbit.¹⁷ Further, Jupiter is a specific example of that kind of thing with a wide array of particular aspects, size, composition, location, etc. that make it unique. The key point, for our purposes, is that God has invested Jupiter, and all other things, with an orderly nature that leads to regular and predictable behavior.

In the same way, all existing reality is set in order by a divine mind that invests in things basic inclinations that to varying degrees determine their actions. Aquinas takes this to be true of both inanimate and animate objects. For instance, the law of gravity requires that bodies of appropriate mass are inclined toward one another in regular and predictable ways. If the moon breaks Earth's orbit and begins hurtling towards Jupiter, it is a sign that something has fundamentally changed in our solar system—perhaps the presence of a new star or black hole. Similarly, trees also have a predictable and orderly nature that allows us to ascertain the overall health of the tree and its immediate surroundings. For instance, Trees of all kinds grow root systems, and these roots have a variety of effects on the tree itself and the surrounding environment. Root systems provide anchorage for a tree that allows it to stand upright, they also gather nutrients and water from the ground and can help prevent soil erosion in the surrounding environment (Hairiah et al. 2020; Ryan et al. 2016). If a tree does not grow roots, it is a sign that something is gravely wrong with the tree.

These laws of nature can also be understood as a kind of ontological normativity. Dworkin does not give significant attention to any form of normativity outside of ethical normativity. However, we can and do speak of various kinds of normativity such as prudential or epistemic normativity (Orsi 2020, p. 437). In these terms, we can say that Aquinas took all normativity to be ultimately grounded in what we can call ontological normativity. Ontologically normative claims describe things "as they are and ought to be" and can be understood as descriptive ought statements that articulate the inherent orderliness of the cosmos and the interactions of the powers and possibilities inherent in things within that cosmos (McCall 2009; Tierney 1997). The historian of science Joseph Needham once argued that the reason that the western world developed the scientific method while China did not was precisely because this concept of ontological normativity grounded an expectation of the predictability of the natural world (Needham [1956] 1991,

¹⁶ There has been a great deal of discussion lately of the concept of divine ideas. For a good overview of the views and problems see (Gould 2014).

¹⁷ I borrow the definition of a planet voted for by the 2006 General Assembly of the International Astronomical Union.

pp. 519–42).¹⁸ What is significant here is that both classical natural law theory and the idea of laws of nature are grounded in the belief that the cosmos is an ordered and predictable system. Further, neither Aquinas nor modern scientific theories take this ordered system to be the result of divine fiat. For Aquinas, ontological norms are grounded in the essential natures of specific objects and the ways those natures interact. Law is grounded in and descriptive of, substances; substances are not defined or determined by law. These specific natures are, in turn, grounded in God’s creation which is an expression of his infinite and ordered being. Simply put, in Aquinas’s view, Jupiter does not orbit the sun because God commands it to orbit the sun. Jupiter orbits the sun because God created and maintains a universe with fundamental forces such as the gravitational force that allows Jupiter to form and causes it to orbit the sun. The claim that there are ontological norms, while not expressed in these terms, is as fundamental to the scientific method as it is to Aquinas’s ethics.

In Aquinas’s view, the more sentient a creature is, the more capable it is of directing its own actions. It is ontologically normative for animals to seek food. However, some animals have displayed a willingness to starve themselves in unfavorable circumstances, such as captivity or high stress environments. Animals have also displayed a form of learned helplessness, allowing themselves to starve because of the perceived (but not actual) inaccessibility of food, in laboratory experiments (Preti 2005, 2007). While the moon cannot decide to break the earth’s orbit, an animal can decide to act in ways contrary to what is ontologically normative for it. Aquinas believes that humans also have an array of natural inclinations that have been the topic of much discussion and have a much stronger capacity than animals to act in ways that go against these natural inclinations (Aquinas 2012b, q. 94 a. 2; 2012a, q. 81 a. 3).¹⁹ Apart from Thomists, universal human nature or common human needs, inclinations, or capacities have seen significant interest, at least since Donald Brown’s *Human Universals* was published in 1991 (Brown 1991). Brown identifies human universals across several domains, including culture, language, social relations, behavior, and cognition (Brown 2004). David Wong identifies universal human needs and uses them to ground moral judgment in his pluralistic relativism (Wong 2006). Given this, the claim that there is some kind of universal human nature, while it may seem implausible in some circles, has significant support both across fields and across traditions in the contemporary conversation.

However, Aquinas does not merely claim that humans have a common nature. Natural inclinations are teleological in nature—each is aimed at its appropriate end (Jensen 2019). Traditional interpreters of Aquinas will generally agree that “nature is in some way normative” (Lacki 2008, p. 41). This claim is stronger than Wong’s claim that there are universal human needs because it attempts to describe a *proper* functioning of specific human powers such as cognition, a desire to overcome challenges, and the capacity to sense, perceive, and interact with the world in greater depth. Again, though, the contemporary conversation engages with the concept of end or proper functioning as well. Amartya Sen and Martha Nussbaum ground their theory of human capabilities on a concept of functioning that involves both universality and claims about proper functioning (Nussbaum and Sen 2004; Nussbaum 2011; Sen 1992). The teleology of living systems, including human systems, is also a lively discussion in contemporary biology (Allen and Neal 2020). For

¹⁸ However, there are important arguments against the idea that the Chinese did not develop a meaningful concept of a regularly ordered or lawful world, for one example see (Sivin 1982).

¹⁹ This article has been the subject of much debate in and around New Natural Law Theory. Aquinas lists five natural human inclinations: preservation, sexual intercourse, education of family, the pursuit of truth, and social interaction. John Finnis draws from it a list of seven basic goods: life, knowledge, play, aesthetic experience, sociability, practical reasonableness, and religion (Finnis 2011). Jonathan Crowe expands this to nine basic goods: life, health, pleasure, friendship, play, appreciation, understanding, meaning, and reasonableness (Crowe 2019). The position assumed here is that Aquinas’s list is not intended to be complete. First, as Steven Jensen points out, it echoes the distinction between the inclinations of different powers of the soul. Second, Aquinas mentions other inclinations at various points that are not included in this list (Jensen 2019).

Aquinas, these natural inclinations serve as one set of general first principles for moral reasoning. Natural inclinations serve as general first principles because they can be satisfied in a variety of ways, some appropriate and some inappropriate. However, even limited to appropriate modes of satisfaction, there may be many appropriate ways to satisfy a particular inclination (toward hunger for instance) (Aquinas 2012b, q. 94 a. 4).

Aquinas's view offers several advantages over Dworkin's in responding to the challenges SC raises. SC operates at the level of the social imaginary and seeks to control human behavior by modifying the presuppositions, desires, and pre-theoretical beliefs of users. However, as James K. A. Smith argues, interpretation is grounded in the social imaginary (Smith 2010, 2013). In Dworkin's terms, if interpretive truth is not grounded in some way in scientific truth, then it is defined by the social imaginary. As above, this is a weakness of Dworkin's view. Aquinas's theory offers two primary benefits. First, it grounds moral reasoning in external reality. This external reality does not determine the content of moral reasoning, nor is it best understood as providing ethically normative propositions. However, it does provide a point of contact between the reasoning subject(s) and the reality in which that subject(s) reasons. Second, it grounds the natures of existing things in a higher reality, and this provides grounding to the array of actual powers and possibilities from which valid human value judgments arise (Inman 2022).

One immediate objection to Aquinas's view is that it is decidedly Christian and cannot work in a contemporary society. One possible response to this concern would be to rework Aquinas's view into a secular argument.²⁰ However, as is evident from the above, Aquinas's philosophy is deeply integrated with his theological beliefs, and attempts to separate them lose valuable components in the process. An alternative approach would be to accept Aquinas's view as one possible view to be compared with alternative religious and secular theories. Aquinas's approach highlights weaknesses in Dworkin's distinction between scientific and interpretive truth and in his distinction between criterial and interpretive concepts. Dworkin's theory may well also highlight weaknesses in Aquinas's approach. Aquinas's approach might also be fruitfully compared with the thought of Zhu Xi and other Neo-Confucian thinkers. For instance, Philip Ivanhoe compares the ontology of the Neo-Confucians to the great chain of being in the Medieval tradition of which Aquinas is a part (Ivanhoe 2017, pp. 13–17). Aquinas's view has also been compared to Islamic and Jewish approaches to Natural Law (Emon et al. 2014). Such comparisons, while not the work of the current project, would serve to illuminate strengths and weaknesses in each view and highlight points of commonality between them to inform and guide contemporary theorists. This approach also serves to advance the dialogue between philosophers of various religious traditions and those who do not accept any religious tradition. Finally, it has the advantage of engaging all voices relevant to the conversation equally rather than quashing some for the sake of preserving a preferred tradition of rationality or promoting a faux peace that equates to silent dissent.²¹

3.3. Law, Interpretation, and Socio-Cultural Custom

At this point in the discussion, let us return to Hume's principle. Hume's principle demands that regardless of how many empirical facts are discovered, no set of empirical facts is sufficient in itself to determine ethically normative claims. Any set of empirically verifiable facts relies on an implicit or explicit moral argument to justify a claim to moral truth. Dworkin uses Hume's principle to ground his argument for the metaphysical independence of value, which is one of the two core arguments of *Justice for Hedgehogs* (Dworkin 2011, p. 9; Bustamante 2019, p. 19). Dworkin opposes the metaphysical independence of value to two hypotheses: the causal impact hypothesis and the causal dependence hypothesis explained above. The metaphysical independence of value denies that "mind-

²⁰ John Finnis does something of this kind in his *Natural Law and Natural Rights* (Finnis 2011).

²¹ I cannot, herein, make the argument for this position fully. However, Jean Beth Elshstain has made the argument quite well (Elshstain 2000). I have also made this argument previously (Smith, forthcoming).

independent' moral truth takes [us] outside morality into" a consideration of metaphysical entities that are in some sense half moral and half nonmoral (Dworkin 2011, pp. 8–9). Dworkin rejects the causal efficacy of such moral facts, though he never clearly rejects their existence (Dworkin 2011, pp. 438–39, n. 3). Dworkin makes this argument as a response to moral skepticism, and this is significant in understanding his overarching point. It is not the case that true moral beliefs could be caused by discovering true moral facts about the world, such as 'torture is wrong' (Dworkin 2011, p. 53). It is also the case that no argument against the existence of moral facts could successfully refute claims about moral truth (Dworkin 2011, p. 67). In Dworkin's view, interpretive arguments are "interpretive . . . all the way down" because the only thing that can cause a true interpretive belief is a set of reasons that causes that belief to cohere with existing beliefs and explain existing practices in a way that is sufficient to give them value (Dworkin 2011, p. 131). Moral truth, like any other interpretive truth, is simply not the kind of thing that can be received from the world through the senses.

On this account, moral epistemology is not best approached through a discussion of the accuracy of one's moral beliefs, but through a discussion of the concept of moral responsibility. Moral responsibility refers to "the degree that our various concrete interpretations achieve an overall integrity so that each supports the others in a network of value that we embrace authentically" (Dworkin 2011, p. 101). Moral responsibility is grounded, in turn, in the principle of humanity: "we cannot adequately respect our own humanity unless we respect humanity in others" (Dworkin 2011, p. 14). Dworkin draws on Immanuel Kant, both in his principle of equal concern and respect and in his principle of humanity. Following Kant as well, Luke McInnis glosses the meaning of humanity as "an individual's capacity to set, revise, and pursue ends through reason, and to systematize different ends into a rational order forming an idea of one's happiness as a whole" (McInnis 2015, p. 51). Thus, in order to be responsible, any moral reasoning must exemplify two principles that Dworkin takes to show that the reasoning individual is attempting to account meaningfully for the humanity of others. These two principles ground a sense of human dignity by ensuring that the humanity of others is at the center of moral consideration. These principles are self-respect and authenticity. Self-respect requires an individual that "accept[s] that it is a matter of importance that his life is a successful [moral] performance," and authenticity requires him "to create [his] life through a coherent narrative or style that he himself endorses" (Dworkin 2011, p. 203).

Dworkin acknowledges the existence of unreflective interpretive values—what Taylor would call the social imaginary—but he assumes that our moral opinions arise through an unreflective interpretation of our abstract concepts. This, he argues, allows for significant—even radical—moral disagreement. In the face of radical moral disagreement, I may not accept that the views of my opponent are true, but I can recognize that he or she reasoned responsibly in reaching them (Dworkin 2011, p. 100). He further argues that the law is a subset of political morality (Dworkin 2011, p. 405), and that the content of the law is "the community's accepted practices [and] also the principles that provide the best moral justification for those practices" (Dworkin 2011, p. 402). Dworkin's approach does not effectively account for the influence that the social imaginary has upon the beliefs and practices of the community. Dworkin is clearly concerned with the place of convention in our moral and social practices (Dworkin 2011, pp. 314–24). He allows that interpretive judgments "must take into account prevailing ideas within the political community" (Dworkin 2011, p. 322). However, he also assumes that conventional beliefs are relatively transparent, that they build on and specify more basic concepts of dignity and responsibility, and that they can be subjected to various independent testing (Dworkin 2011, pp. 314–15). These assumptions do not take sufficient account of the foundational role that social imaginary plays in human concept formation and reasoning. If the social imaginary delimits the horizon of my reasoning, then it will be more opaque and less accessible to independent testing than Dworkin allows. This becomes highly problematic in the face of SC, which has both the means and the intent to manipulate the social imaginary at the

scale of entire populations. Growing divisions within American and European nations are driven not by reasoned argument, but by their embeddedness in new and divergent social imaginaries. As Zuboff argues, these are the work of SC.

As shown above, Aquinas believes that good moral reasoning is grounded in, but not simply caused by, the reception of forms from real entities and objects that allow the individual to reconstruct the formal nature of real relations and absences in the world. This, in turn, allows the individual to recognize ontological norms within those entities, objects, and relations. However, he also recognizes the impact of the conditions of belief on human moral reasoning and he describes this using the term ‘custom.’ Aquinas uses the term ‘custom’ in two important ways: first to describe the influence of society on individual cognition much like Taylor’s social imaginary. Every individual operates within a social imaginary that shapes that individual’s perception and understanding of the world at a pre-theoretical level that serves as the horizon of the individual’s theoretical perspectives.²² In humans, natural inclinations are inherently general and require more specific direction. This direction is provided by the social customs of a society. Social customs shape the social imaginaries of children in a variety of significant ways.²³ The natural inclination to take in sustenance may direct me to seek out food, but it is my embeddedness in a particular culture that leads me to open a bag of chips, pick an orange, slice some cheese, or dig into a bowl of kimchi. Similarly, custom provides many of the specific principles that ground moral reasoning. Aquinas recognizes this and argues that “custom, especially if it dates from our childhood, acquires the force of nature” (Aquinas 2012d, bk. 1 ch. 11, forthcominga, bk. 3 l. 15 sct. 549). Used in this sense, custom describes the conditions of belief and practice that set the horizon within which an individual will seek to pursue his or her natural inclinations.

Second, Aquinas also uses custom to describe something akin to what Jonathan Crowe calls emergent law (Crowe 2019). Emergent law is “a set of customary legal standards that emerge as a form of spontaneous order.” Crowe’s initial model is the price system in a capitalist economy.²⁴ However, he argues that “social interaction . . . holds the potential to produce normative consensus in roughly the same way economic markets produce agreement on prices” (Crowe 2019, p. 122). Emergent law bears the force of law not because it is mandated or coercively enforced, but because it becomes internally normative for the members of a society. Emergent law arises spontaneously from the actions and attitudes of individuals within the society and the ways that they customarily interact, and in turn it shapes the social meanings, values, and practical norms that provide common ground within that culture.²⁵ Emergent law includes at least a set of customary social value judgements, normative assumptions, and social behavior expectations that are taken as given within the context of that particular society. If Taylor’s social imaginary effectively describes the internal aspect of the conditions of belief on an individual, Crowe’s emergent law effectively describes the external aspect of the conditions of belief within a community. When both are understood together, custom is expressed as much in social etiquette, such as stopping at an intersection even if the light is out, as it is in moral reasoning, and at the level of emergent law it may become difficult to distinguish the two (Olberding 2016). Aquinas draws an important link between these two senses of custom and human natural inclinations.

Taken in the first sense, the customs of society serve as part of the matter of any moral act. This matter is informed by reason. Aquinas believes that perception and immediate evaluation ground desire. However, perception is two-fold. As above, there is a reception

²² This is not the place for a full comparison of Aquinas and Taylor. However, it is notable that Taylor uses the term ‘social imaginary’ to refer to more, though not less, than what I describe here.

²³ This is one reason that SC is predictably more dangerous for children than for adults (Mertzani and Pitt 2022).

²⁴ He draws here on both Frederick Hayek and Adam Smith. There is a tension between Crowe’s emergent law and Taylor’s social imaginary that I can do little more than acknowledge here. I draw on these together because the tension between them reflects a real tension between the individual and the community that is implicit in Aquinas’s understanding of custom.

²⁵ Here I borrow slightly from Manuel Vargas’s idea of normative culture (Vargas 2020).

of sensible forms into the senses. This grounds perception in the realities perceived. In another sense, there is an active interpretation by the reason that transforms the sensed thing into a recognizable object such as a person, fork, or cat (Smith 2022, pp. 153–61). Because humans are taught from childhood to recognize specific kinds of things, custom shapes the perception and immediate evaluation of those things (White 2002). Desire arises when objects of perception are evaluated as desirable in some way, and this desire is the passive element in a moral act (Aquinas 2012b, 18.2.3). Reason is the active power in a moral act that serves as the form of the act and determines the kind of act it is (Aquinas 2012b, q. 18 a. 10; Rhonheimer 2008b, pp. 58–62). Thus, while custom helps to shape our desires, it is reason that informs and ultimately directs them. Custom, taken in the first sense, influences both human cognition and human behavior. It influences human cognition because concepts are shaped, in part, by our social experience of the world.²⁶ It influences human behavior because social practices become habits and acquire the force of nature through repetition (Aquinas, forthcomingb, bk. 2 l. 20).²⁷ The impact of custom on human cognition and human behavior can be either beneficial or detrimental to human moral formation, depending on the quality of the customs imbibed (Aquinas 2012b, q. 51 a. 2, q. 52 a. 1). In this sense, custom influences, but does not determine, the formation of all human concepts and all human actions.

Taken in the first and second senses, custom serves as a foundation for law. Aquinas claims that “custom has the force of a law, abolishes law, and is the interpreter of law” (Aquinas 2012b, q. 97 a. 3). He prefaces this claim by arguing that repeated actions, which create custom, can both obtain the force of law and in fact change the promulgated law. Further, he claims that this is because repeated external actions “seem to proceed from a deliberate judgment of reason” (Aquinas 2012b, q. 97 a. 3). Just as custom influences desire, and thus forms part of the matter that is informed by reason, custom influences deliberate and consistent social practice and thus forms part of the conditions from which promulgated law develops. Aquinas’s claim is that because of the very nature of promulgated law, no human law can escape the influence of custom, nor should it attempt to do so.

This limits what the law can require and leads to a stable legal and social environment. Aquinas follows Isidore of Seville, arguing that a law “should be just, possible to nature, according to the customs of the country, [and] adapted to place and time” (Aquinas 2012b, q. 95 a. 3).²⁸ Associating law with custom reasonably limits the force of law such that human law cannot command every virtue or condemn every vice (Aquinas 2012b, q. 96 a. 2–3), this is because any law should both guide its populace toward virtue and be possible “according to the customs of the country” (Aquinas 2012b, q. 95 a. 1, q. 96 a. 3). Aquinas points out that laws that are too stringent will destroy real social goods, such as freedom, and that laws that are too onerous will be rejected by the populace (Aquinas 2012b, q. 95 a. 1, q. 96 a. 2–3). So, using custom to limit law founds the law in the current state of the people. It also gives stability to the law. Any change in the law must provide sufficient benefit in guiding the populace toward virtue to compensate for the damage done to social stability (Aquinas 2012b, q. 97 a. 2).

At this point, a notable difference between Dworkin and Aquinas is evident. As shown above, for Aquinas, moral reasoning and moral truth are grounded in real entities, objects, and relations (adding absences) in the world. There may be a process of interpretation involved, and this process is certainly informed by cultural custom. This may allow for a limited variety of correct answers, but this process is part of how humans enter into moral reality as it actually exists in the messiness of the world. For Dworkin, moral truth is grounded in proper principles of moral reasoning rather than in an external reality. Moral reasoning begins from certain principles because they are inherently correct and, while I have not explored this point deeply here, there is a single correct answer to any

²⁶ For further discussion of this see (Smith 2022, pp. 153–60).

²⁷ For discussion see (Smith 2022, pp. 211–23).

²⁸ Aquinas follows (Isidore 2006, bk. 5 s. 3).

specific moral question (Dworkin 2011, pp. 94–95, p. 418).²⁹ While Dworkin allows that cultural conventions have some influence, he does not take them to be a foundation of moral reasoning, and this keeps him from accounting for their formative power. This does not suggest that Dworkin cannot give custom a significant place in deciding legal questions, but this comes into play in the practice of legal interpretation rather than in the foundation of moral concepts such as dignity, responsibility, integrity, or authenticity.

3.4. Law, Ends, and Virtue

Dworkin believes that the law is end-oriented. The end of the law—what determines whether a government is just—is the extent to which that government treats “each person in their power with equal concern and respect” (Dworkin 2011, p. 321). The degree to which any community displays equal concern and respect for the humanity—remember that humanity is an individual’s capacity to rationally self-will—of each of its citizens is what determines whether that government has “the moral power to create and enforce obligations” (Dworkin 2011, p. 330). Dworkin draws on this end in a variety of ways. For instance, he argues that higher taxation is justifiable because it succeeds in showing equal concern and respect for all (Dworkin 2011, p. 375). This is, in turn, best pursued by conceiving of the political community as a ‘collective agent’ (McInnis 2015, p. 66). Dworkin believes that a community is fundamentally a collection of individuals, but that political morality is best understood and discussed when we imagine that collection of individuals as a single agent and assess its actions as such (Dworkin 2011, pp. 327–28). The moral assessment of the actions of this agent are broadly understood as a matter of political morality. Ultimately, law is a branch of political morality that defines a set of rights which are “properly enforceable on demand through adjudicative and coercive institutions without need for further legislation or other lawmaking activity” (Dworkin 2011, p. 407).

Dworkin also sees virtue as related to morality and law. He specifically discusses moral responsibility as a virtue (Dworkin 2011, pp. 103–13), and he mentions, or engages, other virtues as well (Dworkin 2011, pp. 176–77). Dworkin does not clearly spell out, at least in *Justice for Hedgehogs*, how he understands virtue, though he suggests that Plato and Aristotle both follow his interpretive method in their own virtue ethics (Dworkin 2011, pp. 185–8, p. 457 n. 33). Luke McInnis, on the other hand, argues that a Kantian understanding of virtue is implicit in Dworkin’s thought (McInnis 2015, p. 65). The central virtue that Dworkin identifies—moral responsibility—supports this claim. He says that “morally responsible people act in a principled rather than an unprincipled way; they act out of rather than in spite of their convictions” (Dworkin 2011, p. 103). In a Kantian approach, virtue is best understood as an individual’s disposition to act from moral principle. This, in turn, represents the good will of the agent (McInnis 2015, pp. 64–65). McInnis’s reading is further supported by Dworkin’s claims that moral responsibility is always a work in progress, and that to achieve full moral responsibility “would be the achievement of Kant’s man of perfectly good will” (Dworkin 2011, pp. 109 and 117). On Dworkin’s account, as shown above, moral truth is grounded in interpretive moral reasoning that takes too little account of the shaping impact of the individual’s social imaginary and cultural context. The central virtue that Dworkin identifies is first based on a disposition to do that which one’s convictions require, and this is dependent upon one’s rational interpretation of moral duty to act with due regard to the humanity of others. Finally, the law is the ‘on demand enforceable’ aspect of public morality that allows individuals within a society to seek to enforce this moral duty when it is lacking in other individuals or in the institutions of the society.

Aquinas agrees that law is end oriented. However, he argues that the goal of the law is to bring about the common good which is best understood as a community of virtue.

²⁹ This claim is much more deeply explored by (Sinclair 2002–2003). However, Sinclair’s discussion relies on Dworkin’s ideal judge, Hercules, from *Law’s Empire* (Dworkin 1986). While Dworkin retains a version of the right answer thesis in *Justice for Hedgehogs*, Hercules is notably absent from the later work.

First, the explicit goal of law is to bring about the common good.³⁰ Aquinas includes this as part of his definition of law: law is “an ordinance of reason for the common good, made by him [or them] who has care of the community, and promulgated” (Aquinas 2012b, q. 90 a. 4). A brief series of definitions will help to clarify why Aquinas’s understanding of the common good is best understood as a community of virtue. Aquinas claims that the common good is the bliss or happiness of the community as a whole (Aquinas 2012b, q. 3, q. 90 a. 2). Happiness is the proper functioning of the human person internally and the society externally, and proper functioning is functioning in such a way that the natural inclinations can appropriately achieve their proper ends (Aquinas 2012b, q. 2 a. 7, q. 3 a. 1). Unlike Dworkin, Aquinas also holds that a virtue is the perfection of some particular power of the individual, and to be virtuous (overall) is for the individual to function properly so as to consistently achieve the proper ends of their natural inclinations (Aquinas 2012b, q. 55 a. 1, forthcominga, bk. 2 l. 6 sct. 307ff). Given this, the common good is best understood as the communal pursuit of virtue and the goal of the law is to move the society towards virtue (Aquinas 2012b, q. 95 a. 1, forthcomingd, q. 2, 2018, bk. 2 ch. 4).

Moral truth, for Aquinas, “depends on conformity with right appetite.” Moreover, the conformity with right appetites involves the individual willing to do things that are actually good for him or her within their social context. We can take this to further specify how the law functions to achieve its goal. The function of the law is to encourage appropriate appetites among the people who follow it. To follow the reasoning thus far: The goal of the law is the common good which is best understood as a community of virtue in which individuals work together to conform their appetites towards those things that actually aid them in achieving the natural ends of their powers or capacities. It is notable in this discussion that Aquinas does not assume that discrete individuals come together to make up a community, as Dworkin does. However, he also does not ignore the role of the individual. For Aquinas, as Taylor argues was the case for many early societies, the individual is enabled to become an individual through immersion within the society (Taylor 2007, pp. 157–58). In this view, humans do not know themselves as individuals first and then come to choose a society to which they can commit themselves. Rather, humans are embedded in a society that develops, shapes, and forms their social imaginary, sense of self, identity, and ultimately become individuals as they mature in this society. Though making a full argument for this is outside the bounds of this project, James K. A. Smith has argued persuasively that this embeddedness of the self is no less true today than it was in early human cultures (Smith 2009, 2012). Rather than escaping this embedded development we have simply hidden, ignored, and denied its influence.

Because the common good involves everyone working together to develop the right appetites, it is something that, properly speaking, can only be brought about by the people—the community as a whole. Aquinas thinks it best that a few wise people frame the laws to encourage virtue without discouraging the populace (Aquinas 2012b, q. 95 a. 1 ad. 2). While a full analysis of Aquinas’s understanding of wisdom cannot be offered here, a few principles that arise from such an analysis can be. To be wise, an individual must (1) be sufficiently intelligent and experienced to easily grasp the complexities involved in the organization of the community and the problems facing it (Aquinas 2012b, q. 94 a. 2, q. 100 a. 1, 2012c, q. 9 a. 2). (2) Exemplify the moral virtues in his or her own personal life so that he or she can act as an exemplar to citizens (Aquinas 2012b, q. 102 a. 1, 2012c, q. 46 a. 1, q. 47 a. 7, q. 95 a. 5). (3) Act to promote the good of the whole community rather than seeking his or her own gain (Aquinas 2012b, q. 90 a. 3, 2012c, q. 30 a. 2, 2018).³¹

Aquinas’s account of the relationship between virtue and law highlights three important points: (1) there is no single correct answer to a given moral situation, (2) the goal of the law is to enable a virtuous life, and (3) law should be made by the virtuous. First, like

³⁰ Common good is a topic that has seen much discussion lately into which I cannot enter here (Crowe 2019; Duke 2016; Finnis 2011; Murphy 2006).

³¹ Nathaniel A. Moats has recently published an interesting article on the response to the COVID pandemic in the United States that emphasizes this final point (Moats 2022).

Aquinas's understanding of the formation of concepts, his understanding of virtue and law does not assume that there is one right answer to any given moral situation. This is because virtue, for Aquinas, is not a fixed disposition to act in a manner that reflects one's principles. This *is* present in Aquinas's thought, but it appears in his discussion of the function of conscience, and he is clear that acting in line with wrongly held principles does not excuse one from wrongdoing (Aquinas 2012b, q. 19 a. 5–6). Aquinas's understanding of virtue, however, takes account of an essential facet of moral action that Dworkin's does not—the role of the acting subject. Aquinas's view of practical truth is grounded in the reality of the acting subject and human limitations in a way that Dworkin's view does not replicate. Put simply, Aquinas's view considers both what an ideal response to the moral situation might be and what kind of response the acting agent is capable of performing. The same actions on a battlefield from a trained soldier and a home maker would not be considered courageous. In fact, if the home maker tried to act as though he or she were a trained soldier, this would be reckless. This is because the soldier has skills and abilities that the home maker does not, and the home maker has responsibilities that the soldier does not. When put in the same moral situation, the soldier and the home maker have relevant differences that will demand different kinds of actions in response to the moral situation. This does not mean that there is no wrong action—in fact there may be a wide variety of actions that would be morally wrong for both the soldier and the home maker. However, it does mean that there are a variety of possible morally right actions rather than a single right answer.

Second, in Aquinas's view law is subordinated to virtue. As seen earlier, ontological norms—natural laws or laws of nature—arise out of the nature of things which, in turn, are grounded in the infinite and orderly divine being. Moral laws arise out of the natural inclinations of the lower powers and are properly specified and ordered by human reason to direct those powers towards their proper ends. Human laws, in turn, arise out of the natural inclination of the society as a whole to pursue a common life that allows the members of that society to best achieve their proper ends. Aquinas claims that “man has a natural aptitude for virtue, but the perfection of virtue must be acquired by man by means of some kind of training” (Aquinas 2012b, q. 95 a. 1). The function of human law is to train the members of a society to live virtuously by both pointing individuals towards their proper ends and restraining them from developing vicious habits. However, the capacity to do so depends on individuals who have already learned to live virtuously within the context of their community.

This brings us to the third significant point of Aquinas's account. As shown above, custom is a significant foundation of the law both because it provides stability and because making law in accordance with custom prevents lawmakers from requiring too much and thus destroying relevant human goods. Laws must point the populace towards a life of virtue without destroying their capacity to direct their own way of life to a significant degree and without breaking so harshly with the established order that the stability of the society falls apart. Aquinas requires that wise lawmakers understand and consider the way that laws will impact the populace and the degree to which they will actually *be able* to achieve the common good—even if they are otherwise morally appropriate laws. Aquinas also recognizes that good human laws arise from virtuous reasoning. He holds to a version of the unity of the virtues, and while Aquinas may mean more than this, Daniel C. Russell has argued that the unity of the virtues can be understood to require at least an interdependence between the virtues (Russell 2021). Thus, one cannot engage in virtuous practical reasoning without also maintaining a virtuous standard of life.³² Because of this, it is incumbent that lawmakers be morally virtuous individuals.

Finally, it is notable that Aquinas's account clarifies why and how a virtuous individual can attend to and correct for the influence of custom in both speculative and practical

³² It is notable that Aquinas does not claim that the same holds for speculative reasoning. Thus, on his account, an individual might be an excellent scientist and a morally vicious person, but one could not be an excellent lawmaker and a morally vicious individual.

reasoning. As shown above, Dworkin assumes that this is a relatively simple process. Aquinas does not. Examining and addressing the influence of custom on our concepts, beliefs, and behaviors requires focused intention, extended attention, and that potential challenges to our customary views be raised to our awareness either by practical experience or through the influence of others. Aquinas defends an array of intellectual virtues that operate alongside the moral virtues and that necessarily involve habits of focused intention, extended attention, and the seeking out of challenges to one's customary views (Aquinas 2012b, q. 57–58, 2012c, q. 47). One potential challenge to Aquinas's approach is the cultural subjectivity imposed by accepting custom as a foundation of either law or virtue. Virtue ethics provides a good example as virtue concepts tend to be thick concepts and this leads to disagreement across cultures (Floridi 2010). However, steps have already been taken to develop a globalist virtue ethic particularly suited to the technological and global society (Vallor 2016). Further, Shannon Vallor highlights the fact that Aquinas's assumption is both common to classical virtue traditions in Buddhism and Ruism, and an essential component of her technosocial virtue ethic as well. Following the classic traditions, a contemporary virtue ethic, and we will add here a contemporary approach to the life of the legislator, must "[presuppose] my ability and intentional choice to habitually reflect upon and *attend* to my own moral development" along with my willingness to actively pursue it (Vallor 2016, p. 199).

SCs approach to behavioral modification teaches us not to reflect and attend. As shown above, it disperses our capacity for deep attention and meaningful reflection in order to make us more pliable for tuning, herding, and conditioning techniques (Amardakis 2020; Vallor 2016; Zuboff 2019a). Further, it does so at the level of custom, by shaping social practices and individual assumptions about what is desirable and appropriate. A theory that assumes that custom arises from abstract ideas that are relatively transparent and easily evaluated and modified by reason will face significant challenges in addressing this. A theory that presumes that custom is relatively opaque to reason, is part and parcel of the formation of human concepts, moral reasoning, and laws, and that challenges must be intentionally sought out and given attention has better resources to address this challenge. While, as Zuboff and others have argued, law is one important part of the contemporary response to SC (Zuboff 2021), it requires both virtuous leaders and a virtuous populace who are engaged together in the project of bringing about a meaningful technological future that encourages and guides us to living well.

Vallor asks her readers to consider a key question: who are the moral exemplars of the technological society? Who are the sages that are equipped to lead human societies into a technological future? Do we trust Mark Zuckerberg, Alex Pentland, Hal Varian, and others who have shaped the SC model to be these sages? Recognizing virtue as both a foundation and primary goal of the law raises these key questions. Shoshana Zuboff, similarly, asks us to consider three essential questions: who knows? Who knows who knows? And who decides who knows? This epistemic divide requires us to more closely consider not only what the foundation of the law is, but also who we trust to formulate law.

3.5. Law and Surveillance Capitalism Summarized

SC presents a significant challenge to contemporary legal and social institutions. As shown in Section 2, this is because it draws upon advances in information and communication technologies to establish a world of ubiquitous computing in which massive amounts of data can be extracted and correlated to build meaningful, well-formed, and relatively true profiles of an ever-increasing number of individuals. These profiles can then be used to predict the future actions of those individuals. Further, the end goal of this model is perfect prediction, which requires control over the behavior of its subjects. Thus, strategies of tuning, herding, and conditioning are employed to modify the behavior of those subjects at the level of the social imaginary and emergent law. Incumbent in the operation of these strategies is the theft of attention and the guidance of intention toward goals suitable to achieving the end of SC. The end of this modification is to create economic gain and

resources of instrumental power for those who own and operate the apparatus of SC. In Section 3, we have examined Ronald Dworkin and Thomas Aquinas's views of concept formation, moral reasoning, and law and considered how they might be able to respond to the challenges raised by SC.

First, recognizing that all truth must be grounded in real entities, objects, relations, and absences provides one part of a response to SC. Recognizing that custom is an unavoidable element in concept formation, moral reasoning, and legislation is a second part of that response. The custom of the society provides the contextual horizon in which reasoning subjects function. This is true regardless of the society, and thus in one sense SC has simply taken over a model of social and behavioral formation developed in the west by Christianity and in the far East largely by Ruism). Taylor provides a lengthy and informative discussion of the development of the 'drive to Reform' in late Medieval and Early Modern Europe (Taylor 2007, pp. 25–218). The desire to remake society into an ideal image, however, is common to many religions and to secular movements. The impulse towards re-formation is not simply a religious drive, but one of several approaches to moral and social formation overall (Ivanhoe 2000; Van Norden 2007, pp. 43–59).³³ Moreover, as Sunstein and Thaler argue, any attempt to provide an organized architecture to a situation or experience will have a shaping impact on those who participate in it (Thaler and Sunstein 2008). The challenge of SC is not *that* it is shaping custom; the challenge of SC is the way, the reasons for which, and the degree to which it is shaping custom.

In the second and third sections of part two, I have compared Dworkin and Aquinas's views of the relation of law to reality and the relation of law to custom. The problems in Dworkin's distinction between scientific and interpretive truths and between criterial and interpretive facts were highlighted. Dworkin and Aquinas differ in significant ways in their view of the relationship between reality and human concepts, and thus in their views of the relationship between reality and justice and reality and law. Aquinas believes that moral truth is grounded in and dependent upon real entities, objects, and relations (adding real absences as well). While moral truths cannot simply be caused by or deduced from metaphysical or physical truths, Aquinas recognizes two points in which moral reasoning is grounded in reality. First, moral reasoning informs and directs existing ontological norms common to all human persons. It is noteworthy that Aquinas believes the practical reason, like all other human powers, has its own inclinations and ends. For Aquinas, the natural inclination of the practical reason is to set the lower powers in order, and its natural end is to do so in the way that best enables the lower powers to achieve their own natural ends (Aquinas 2012b, q. 74 a. 5). On this view, while there is an interpretive aspect to moral truth, it is not simply interpretive, but is grounded in the real aspects of particular situations and the responses that best direct an acting individual towards proper ends within that context. Second, moral reasoning is dependent upon desires that arise from actual objects of sensation that are perceived to be desirable in some way. Because moral reasoning is grounded in reality, empirical discoveries about reality shape and inform good moral reasoning. Moral reasoning that gets reality deeply wrong or that ignores relevant and verifiable aspects of reality is simply poor moral reasoning. As shown above, these are points that Dworkin's account does not effectively replicate.

However, Dworkin and Aquinas can both agree that "practical reason possesses its own and in this sense autonomous point of departure; practical judgments are not derivations from . . . theoretical judgments, which means . . . that ethics is not simply to be deduced from metaphysical premises" (Rhonheimer 2008c, p. 111).³⁴ No particles such as Dworkin's facetious morons cause true moral beliefs and moral reasoning is interpretive in an important sense. Practical reason deals with issues that depend not only upon necessary

³³ Ivanhoe focuses on articulating these models of moral formation in the context of East Asian traditions. However, Van Norden has a more explicit and developed discussion applying them to Western philosophical traditions as well.

³⁴ This is a point of contention among scholars of Aquinas. However, Martin Rhonheimer has argued this view consistently (Rhonheimer 2000, 2008a, 2010). For a critique of Rhonheimer's view see (Levering 2008).

truths, such as that humans must eat to remain alive, but on contingent situations and the infinite variety of possibilities that can arise within them. Aquinas says, “as to the proper conclusions of the practical reason, neither is the truth or rectitude the same for all, nor, where it is the same, is it equally known by all” (Aquinas 2012b, q. 94 a. 4). Practical truth is context dependent in a way in which speculative truth is not. An unavoidable part of that context is custom, which includes aspects of both the social imaginary of the individual and the emergent law of the society. Because custom is part of the initial formation of human concepts, the natural inclinations are shaped and specified by custom before they are informed by reason (Smith 2022). Aquinas uses an analogy of the relationship between matter and form to describe this. James K. A. Smith, among others, has developed this argument in greater depth and in a contemporary context. However, custom does not—as SCs behaviorist model assumes—simply determine human behavior. This is because reason *does* inform human actions, both reflectively after the fact and—as I have defended elsewhere—in the moment through intention, attention, and awareness of the ways that custom is shaping individual actions (Smith 2022). Neither Dworkin nor Aquinas agree with SCs behaviorist model, and both would agree that because humans have the capacity to recognize and actively assess the formative influences that operate upon them, recognizing the level and the ways in which SC seeks to shape both the individual social imaginary and human society helps us to address SC at its root. However, while this is possible, custom is neither transparent nor easily accessible to rational reflection, and theories that assume this will struggle to effectively address SCs approach to behavioral modification. Further, while legislation is one important aspect of a response to SC, this legislation is not sufficient alone, it must be accompanied by a number of other factors as well. This claim will be explored in greater detail in the third section of the paper.

Finally, the relationship between virtue and law was addressed. While Dworkin assumes that law is foundational to virtue, and the primary virtue that he addresses is simply a disposition to fulfill one’s recognized duties with integrity, Aquinas argues that virtue is foundational to law. Both are creatures of their time, but in this point Aquinas’s argument rings true. Substance is prior to law. Human law should both arise from virtuous reasoning, and point the populace back toward virtue, within the confines of custom, in order to achieve the common good that is a community of virtue. Accepting Aquinas’s account allows us to recognize that there may be a range of morally good responses to any moral situation. This does not suggest that all responses are morally good, nor does it suggest that all good responses are morally equivalent—they may be weighed and measured—but it does take account of the character of the acting subject within that situation. Aquinas’s account also allows us to recognize the importance of pursuing virtue individually and of pursuing a virtuous community, as well as the role of the community in shaping the character of the individual. It is important to maintain a balance in this case between the good of the community and the good of the individual but recognizing that individuals do not arise autonomously, and are not essentially self-shaping, helps us to understand and articulate the level at which SC operates. It also emphasizes the importance of intention, attention, and the awareness of alternatives in challenging the kinds of modification that SC utilizes to achieve its ends. Finally, Aquinas’s account argues that the character of legislators is significant. Because the goal of law is to train individuals in virtue, and because the virtues are at least interdependent with one another, morally vicious legislators cannot make truly good laws. They can certainly make laws that are effective at achieving certain ends. However, Aquinas’s account asks us to distinguish between what is effective at achieving instrumental goals and what actually guides humans as individuals and human communities as a whole towards the ends that have been set in place for them by God.

4. Law, Virtue, and Technology: Components of a Response to Surveillance Capitalism

In analyzing Aquinas, I have argued that there are significant points of similarity between Dworkin and Aquinas, especially in their view of the relationship between law

and political morality and in their view of the importance of interpretation in moral reasoning. However, the analysis of Aquinas suggests three foundations of moral and legal reasoning that Dworkin does not account for: (1) they are grounded in the ontological norms which, in turn, reflect a divine mind. I suggested that Aquinas's explicitly Christian view serves as one account of ultimate grounding that can be compared and contrasted with other accounts in the contemporary conversation. (2) The customs of the society which serve as the horizon of moral reasoning and legislation for members of that society. (3) Virtue—both as a source (the virtue of lawmakers) and as a goal (guiding the society toward a community of virtue). However, there is a further significant question that I will briefly consider in the final pages of this article. Can law alone provide a sufficient response to SC?

C. S. Lewis and Hannah Arendt feared that the technological age would bring about a world in which human nature would be fundamentally altered through behaviorist methods. As Zuboff points out, it seems reasonable to suggest that SC is currently in the process of making this fear a global reality. However, from a Thomist perspective, this must be more carefully nuanced. Nature and custom are distinct. Human nature and the natural inclinations that arise from it are, in Aquinas's view, hard-wired into human beings. They are not the kinds of things that can change—at least, not while the individual remains human (Aquinas 2012b, q. 94 a. 6). However, they are shaped and informed by custom and, as we have seen, Aquinas believes that custom can and does acquire the force of nature (Aquinas 2012d, bk. 1 ch. 11 sct. 1).

Zuboff suggests that to effectively address SC, it is necessary to cut off its head by legally regulating access to and the use of information in various ways. However, while regulation is certainly part of a concrete response to SC, given the challenges that SC poses to the foundations of law, we should consider the impact of these challenges on this kind of regulation. Several localities in the US, China, and Europe have passed regulations intended to do just this. Perhaps the most wide-ranging and significant of these is Europe's General Data Protection Regulation (GDPR). These regulations have several common approaches to regulating access and use of information. One common approach is to regulate the kind of data that can be collected—for instance, no data about an individual's political affiliation can be collected. A second way is to require that individuals are informed *about* the data that are being collected, how it could be used, and given the opportunity to opt-out. A third is to regulate how information derived from a data surplus can be used—for instance, an individual's information cannot be used to target political ads towards that individual.³⁵

As is often the case, this may be too little too late. Luciano Floridi once suggested that when it comes to technology, we tend to innovate, then attempt to regulate, and finally reflect and understand (Floridi 2010). This may be true in other areas as well, but Floridi is certainly correct here. Several difficulties arise from these attempts to regulate information flow. First, it is unclear how effective it will be to regulate the kind of data that can be collected about an individual. The machine learning techniques used to develop algorithmic modeling show an incredible capacity to draw conclusions from patterns of behavior rather than from individual expressions of position. Many laws still operate on the assumption that individuals can effectively determine what is worth sharing and what is not (Taylor and Purtova 2019). However, it is very likely that, for instance, my political or religious affiliation can be ascertained through the places I go, the things I buy, the books I read, the people I chat with, etc. (Christian 2020).³⁶ Further, SC has already normalized a variety of tracking methods that are used to collect such data, and some of the services upon which many people depend (GPS for instance) require collecting such data. Given this, it is not clear that current restrictions will keep SC profiling from identifying information

³⁵ This seems increasingly significant following the Cambridge Analytica scandal in the 2016 United States election.

³⁶ Brian Christian has shown how various kinds of machine learning tools can reach conclusions that are both accurate and surprising, from apparently unrelated data. This phenomenon is well-represented in literature on Machine Learning and bias.

that an individual wants to keep private, and restrictions that are sufficient may involve significant adjustments to services that many people take for granted.

Second, there are two significant problems with the idea that informing an individual is sufficient to protect individuals. On the one hand, we live in a culture in which ignoring such disclosures has already been normalized. This is understandable. As Zuboff notes, one company concluded that to sufficiently understand the privacy considerations in installing a NEST thermostat an individual would need to review 1100 pages of privacy policies (Zuboff 2019b). A 2016 study on social media use found that most participants did not review privacy policies at all, and for those who did, the average time of the review was fourteen seconds (Obar and Oeldorf-Hirsch 2018; Zuboff 2019a, p. 236). Even if shorter policies are required by law, in order for these to achieve the desired effect new habits must be intentionally engendered in the populace in order to address the existing habit of ignoring privacy policies. Law must be supported by changes in human behavior (Swisher 2020). On the other hand, for laws that continue to rely on individual awareness and rights as a tool to address privacy issues, it remains the case that many people are simply not aware of the variety of ways that data processing might impact them (Taylor and Purtova 2019).

Third, a more promising avenue is to regulate the ways that data can be used. One technical challenge to such legislation is that there are distinct kinds of AI algorithms (Christian 2020). In the case of some of the most advanced algorithms, neural nets, how conclusions are reached is generally opaque. In the case of predictions rendered by neural nets it may not be evident how an AI system reached the conclusions that it provided or what data were relevant to those conclusions (Christian 2020). Thus, while it may be plausible to ban all political advertising using the kinds of predictions provided by SC, it may not be possible to restrict advertising based on predictions made using certain kinds of data. This kind of legislation would have to tread carefully in order to be effective without causing significant disruption to the lifestyles of first-world citizens. It is, of course, plausible to conclude that legislation should cause significant disruption to the lifestyle of first-world citizens, but that is not the argument of this paper and would have to be made separately. Further, the development of new AI technologies could mitigate these problems. As Cory Doctorow has argued, attempts to legislate privacy issues need to be supported by advances in technology (Doctorow 2020, 2021).

Given this, it is plausible to ask whether SC has already taken control? Science Fiction has no shortage of stories in which civil governments are replaced by corporate monopolies. Is this the future to which the human race is now fated? I do not think that it is. However, to avoid this fate will require an adjustment in our strategy. Zuboff is correct that the primary raw resource of SC is data and moves to limit its supply are important. She is also correct that privacy is a public (perhaps common) good and should be protected as such. However, given the challenges raised above, this will be challenging and will likely be less effective than desired.

In Section 2, I showed that SC operates at the level of the social imaginary, and its impact at this level is significant because of the methods it uses to separate intention and awareness. This in turn allows SC to create distance between the conceptualized world of the user and the real world. Dworkin's distinction between scientific and interpretive truth reinforces this divorce. On this view, truth about the things that matter most to us are not matters of reality anyway, and thus the conceptualized world of the user does not need to be anchored in known and demonstrable realities. The separation also allows SC to manipulate the goals and desires of the user to bring about a new social imaginary in which the ultimate concern of the user aligns with the instrumental ends of the SC entity. Dworkin's approach fails to account effectively for the role of the acting subject, and this is of crucial importance in addressing SC. The potential of law to directly mitigate SC is limited in a variety of ways. However, Aquinas would argue that the primary role of the law is not to protect people from SC, but to help shape them into the kind of community that can successfully resist SC.

There are two sides to this. On the one hand, the law could support work to develop the populace into a community of intellectual virtue—to awaken those that SC would keep asleep as it were—that is better able to recognize and resist the kind of manipulation employed by SC. The development of practical wisdom will be important in this endeavor. Practical wisdom is the virtue responsible for both reflective assessment on, and in-the-moment guidance of, the relationship between an individual's actions, proximate ends, and ultimate ends (Russell 2009; Smith, forthcoming). While there is much discussion among philosophers and psychologists about the exact nature and function of practical wisdom, it is widely recognized as a key component for connecting intellectual and moral virtues (Lapsley and Chaloner 2020; Kristjánsson et al. 2020).³⁷ Lapsley connects practical wisdom with existing work on developing metacognitive capacities and moral identity through education.

On the other hand, the law could encourage and support programs aimed at developing intellectual and moral virtues in the computing and data professions. Qin Zhu points out that, while some accrediting boards do include ethics as an element of their requirements for engineering programs, this requirement is generally vague, and most engineering programs have little more than a token ethics content. Further, this content is focused on transmitting generalized rules rather than forming the moral character or moral identity of members of these professions (Zhu 2021). Professional Ethical Codes such as that of the Data Science Association or the Association of Data Scientists also exemplify this trend. Other professional organizations, such as the Association of Computing Machinery provide more robust statement of ethics that includes some emphasis on the development of metacognition and moral character (Gotterbarn et al. 2018), but there is significant room to develop these emphases. Further, at least in the United States, there is no clear requirement for continuing moral education for Engineering professionals (Zhu 2021).

Given the theoretical focus of this article, there is not enough room to develop these suggestions in greater detail. However, legislative and policy initiatives designed to respond to the development of SC should not only focus on controlling the acquisition and use of data by SC entities. It should also focus on upbuilding the moral character and intellectual virtues of both the general populace and the community of data professionals in order to mitigate the potential impact of SC.

5. Conclusions

In this article, I have summarized what Surveillance Capitalism is, how it operates, and the challenges that it presents to attempt to regulate it through the law. SC seeks to rewrite the emergent law and social imaginaries of human society and individuals. Surveillance Capitalism does this by gathering increasing amounts of behavioral data that can be used to build well-formed, meaningful, and accurate profiles of individuals, and in turn of entire communities. It uses these profiles to effectively employ behavioral modification techniques on a massive scale in order to accumulate even greater access to behavioral data resources and instrumentarian power.

I compared the views of Ronald Dworkin and Thomas Aquinas on the relationship between truth and reality, the relationship between reality and law, the relationship between law and custom, and the relationship between law and virtue. From this comparison, I articulated three foundations of moral and legal reasoning: (1) they are grounded in ontological norms, (2) they operate within the horizon of custom, which can be analyzed through the concepts of social imaginary and emergent law, and (3) they rely upon virtuous exemplars in their formation and aim at virtue in their application. Because SC operates at the level of social imaginary and emergent law, our approach to moral and legal reasoning must both ground itself in the real world and simultaneously account for the influence of social custom in our understanding of and interaction with that world. Because SC operates, in part, by modifying behaviors to suit the needs of the owners and operators of

³⁷ For concerns about the focus on practical wisdom see (Lapsley 2019).

instrumentarian power, legal responses to SC must account for the role that law plays in forming a community of virtue that can more effectively resist such behavioral modification.

Finally, I raised the question of whether any understanding of the law could provide a sufficient response to SC, and argued that the law cannot, in and of itself, provide a sufficient response. I argued that attempts to regulate access to and use of data, while important, are not sufficient to address the challenges posed by SC. Law and policy, personal habits, and technology have all been suggested as the solution to the challenge presented by SC. Each of these provides an important element. However, I suggested that law and policy could not only address the regulation of data, but also encourage and support the moral development of both the general populace and the data engineering and science community. I do not believe that the human race is destined to be dominated by SC. In fact, I suggest that, in the long view, it will be little more than an important footnote. However, whether this comes to pass will be determined by the decisions that we make today as a global community.

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