RECONFIGURING THE SPACE OF AGENCY IN THE DIGITAL AGE

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[T]hey that study natural philosophy, study in vain, except they begin at geometry; and such writers or disputers thereof, as are ignorant of geometry, do but make their readers and hearers lose their time.

- Thomas Hobbes¹

In their efforts to establish the true nature of being through reason alone, Enlightenment philosophers took as their model Euclid's axiomatic system of geometry.² They sought to extend the timeless perfection of its uncompromising logic from the natural register to the moral, as it is the "want of moral science" that, according to Hobbes, visits the greatest harm on humans. The rationalization of the moral code, then, was an attempt to ground the regulation of social relations in natural law—or those logics and ratios by which God's perfection was made manifest. Hobbes's concept of the social contract, by which individuals willingly cede certain rights in exchange for the protection of a dispassionate, civil society, was his attempt to demonstrate how a moral science based on the logically accessible eternal truth of geometry might form the basis of a new social order. After undergoing some revisions by Locke and Rousseau, a version of Hobbes's social contract was

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^{1.} THOMAS HOBBES, METAPHYSICAL WRITINGS: ELEMENTS OF PHILOSOPHY CONCERNING THE BODY 25 (Mary Whiton Calkins ed., 2d ed. 1974).

^{2.} See THOMAS L. HANKINS, SCIENCE AND THE ENLIGHTENMENT 1–2 (1985) (explaining that the "Scientific Revolution" was a revolution in geometry).

^{3.} HOBBES, supra note 1, at 13.

See J.B. Schneewind, Modern Moral Philosophy, in A COMPANION TO ETHICS 147 (Peter Singer ed., 1993) (explaining that ancient Western philosophical thought about how to live focused on one's relations with others and obedience to God).

^{5.} See JEAN HAMPTON, HOBBES AND THE SOCIAL CONTRACT TRADITION 1 (1986) (discussing Hobbes's social contract concept).

incorporated into the foundations of the American system of jurisprudence.⁶ It offered guarantees of equal protection under the law, deemed essential at the time to the formation of a democratic state, and its legal framework has since proven flexible enough to adjust to changing social norms, such as the need to include individuals originally denied protection (slaves, women, corporations).⁷

As with any institution or school of thought, however, American jurisprudence is not monolithic. Dominated initially by formalists, or those who argue that legal decisions should be based on a logical analysis of original texts, the philosophy of law gradually shifted, around the end of the last century, towards a realist approach, an approach which emphasized the importance of considering the social and political context out of which cases arose.8 These two philosophical approaches are perhaps evenly matched at present, the pendulum of public opinion having swung back towards a more formalist approach in the last thirty years.⁹ Although their respective philosophies may differ markedly in their approach to questions involving interpretation of the law, both sides agree on at least one thing: the space of agency recognized by the law is reserved solely for humans. In keeping with the humanist perspective of Enlightenment philosophy, they both recognize that it is humans, and humans alone, who are capable of willful activity, as the actions of all other entities are attributable either to physical properties (as in the case of mineral or vegetable matter); instinct (as in the case of animals); or to the conscious behaviors of the humans that comprise them (as in the case of "artificial persons" or corporations).

Opposing camps in the humanities and sciences are perennially involved in a similar philosophical dispute. They disagree on whether it is materialist (comparable to the formalist) or the discursive (comparable to the realist) analytical framework which best accounts for apparent causal relations (that is, those in the discursive camp argue that discourse is prior to and thus shapes

^{6.} Elizabeth Wolgast, *A World of Social Atoms*, in APPLIED SOCIAL AND POLITICAL PHILOSOPHY 226 (Elizabeth Smith & H. Gene Blocker eds., 1994).

^{7.} See ERIK A. BRUUN & JAY CROSBY, OUR NATION'S ARCHIVE: THE HISTORY OF THE UNITED STATES IN DOCUMENTS 398 (1999) (noting that the Fourteenth Amendment provides equal protection of the laws to all persons, including freed slaves).

^{8.} See Anthony T. Kronman, The Lost Lawyer: Failing Ideals of the Legal Profession 185–95 (1993) (discussing the emergence of the legal realism movement). Interestingly, this shift coincided with the introduction of alternative geometrical logics. See id. at 185–86 (noting various skeptics and ideas that surfaced during the movement).

^{9.} See Allen R. Kamp, Jurisprudence: A Beginner's Simple and Practical Guide to Advanced and Complex Legal Theory 40 (Jan. 15, 2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1328386 (stating that while legal realism dominated the jurisprudential landscape between World War I and World War II, the revival of a formalist approach suggests that "no jurisprudential school is permanently out of fashion").

material relations while materialists argue the opposite), but both sides agree on the passive nature of matter and on agency as the prerogative solely of humans.¹⁰

But this sort of dualist philosophical construction is even more common than these brief examples might suggest, a point not lost on philosopher Richard J. Bernstein, who more generally defines the two sides of the dialectical debate as "Objectivism" and "Relativism." Objectivists (or the materialists and formalists in the above examples, who might also be likened to Platonists) hold "that there is or must be some permanent, ahistorical matrix or framework to which we can ultimately appeal in determining the nature of rationality, knowledge, truth, reality, goodness, or rightness."12 Relativists (or the discursivists and realists above, who might be compared with Sophists), by contrast, deny the possibility of such an ahistorical matrix and argue "that in the final analysis all such concepts must be understood as relative to a specific conceptual scheme, theoretical framework, paradigm, form of life, society, or culture."¹³ Despite his awareness of the long-running nature of this debate in various (predominantly Western) discourses, Bernstein is convinced that "a new pattern in the conversation concerning human rationality is now taking shape: the very framework, the unacknowledged assumptions and metaphors that have kept these debates alive are now being called into question."14 Political philosopher John Gray would agree with this analysis, but he appears to be far less sanguine about the possible outcome:

Over the past two hundred years, philosophy has shaken off Christian faith. [However], [i]t has not given up Christianity's cardinal error—the belief that humans are radically different from all other animals.... We are *persons*, whose actions are the results of their *choices*. Other animals pass their lives unawares, but we are *conscious*. Our image of ourselves is formed from our ingrained belief that *consciousness*, *selfhood* and *free will* are what define us as human beings, and raise us above all other creatures.... This is the creed of those who have given up an irrational belief in God for an irrational faith in mankind. But what if we give up the empty hopes of Christianity and humanism? Once we switch off the soundtrack—the babble of God and immortality, progress and humanity—what sense can we make of our lives? 15

This Article will form a tentative response to the question of how we might envision a world devoid of an epistemological gravitational center, one

^{10.} See Karen Barad, Meeting the Universe Halfway 106–15 (2007).

^{11.} RICHARD J. BERNSTEIN, BEYOND OBJECTIVISM AND RELATIVISM: SCIENCE, HERMENEUTICS, AND PRAXIS 8 (1983).

^{12.} Id.

^{13.} Id.

^{14.} *Id.* at 48–49.

^{15.} John Gray, Straw Dogs: Thoughts on Humans and Other Animals 37-38 (2002).

normally occupied either by a deity or the image of a perfectible human race. This Article takes the position that Enlightenment humanism did, indeed, incorporate within its "unacknowledged assumptions and metaphors" certain Judeo-Christian beliefs which, in turn, found their way into our philosophy of law. But this Article will also argue in favor of thinking of these beliefs not as a permanent armature on which the structural integrity of Western philosophy depends (as does Gray), but rather as a temporary scaffolding meant to support this epistemological edifice until such time as its ontological products precluded the need for such support. More specifically, this Article will argue that the technoscience which has emerged out of the Objectivist/Relativist debates—lasting hundreds of years—is beginning to reveal that these purported rivals actually share the same metaphysical substrate, a grounding in what appears to be an increasingly anachronistic faith in the viability of transcendental Reason and hyper-individualism as embodied in the humanist tradition. But additionally, it appears as though the new digital economy, through the use of simulation and mathematical modeling, is making it possible for us to visualize forms of truth, beauty, and justice inspired by neither Objectivist nor Relativist logics.

This unlikely feat is not to be accomplished by moving forward, as the progress narrative of modernism would have it, but rather by going back to revisit the metaphorical well of geometry that guided the thoughts of philosophers and metaphysicians who helped shape our current materialdiscursive reality. Much has changed since philosophers routinely looked to geometry for guidance in matters of moral and ethical thought. The geometry of Plato, Euclid, Galileo, and Hobbes has, in the interim, become the geometries of Riemann, Poincaré, Minkowski, and Mandelbrot. The system of logical proofs presented in the *Elements*¹⁶ and studied for the last twenty-four centuries has, in only the last two of these centuries, spawned multiple alternative systems. Some of these are devoted to the study of mathematical objects once deemed too "monstrous" and "pathological" for contemplation, ¹⁷ while others have made possible radically new understandings of space and time that differ as much from those held by Enlightenment philosophers as did the geocentric from the heliocentric view of the cosmos as held by medieval theologians. Concepts of agency, linear causality, objectivity, and reductive logics begin to look like metaphysical abstractions in light of the new geometries and the new physics they make possible. If, indeed, these concepts—fundamental to the American understanding of justice—continue to

See EUCLID, EUCLID'S ELEMENTS, at v (Isaac Todhunter ed., J.M. Dent & Sons 1961)
(1933) (stating that Euclid's Elements is the greatest mathematical textbook written in twenty-two centuries).

^{17.} See BENOIT B. MANDELBROT, THE FRACTAL GEOMETRY OF NATURE 197 (1982) (explaining that certain fractal attractors were often described as strange).

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mutate at the rate seen in the last two hundred years, it would seem unlikely that our system of jurisprudence would be able to thrive in its current form, even when allowing for the great plasticity it has demonstrated thus far. It might be time to consider Hobbes's advice anew and more fully begin to incorporate the principles instantiated in some of the new geometries into our moral science.

Moving "forward," however metaphorically, sometimes requires going back to get a running start, or what the French describe as reculer pour mieux sauter. Nature herself employs such a strategy, known as neoteny, when she "leaps over" the mature forms of certain species and takes the juvenile as the starting point for a new evolutionary experiment, as when the free-floating larval stage of the sea cucumber evolved into the first species of fish rather than live out a sedentary existence on the ocean floor. 18 Rather than try to invent a new form of jurisprudence from scratch, one which better reflects the logics of the new geometry, we will employ our own version of nature's neotenic strategy. We will review the law's evolutionary path to determine if there is evidence for the existence of a potential alternate route, one that anticipated the logics of today's geometries/physics and so necessarily avoided the philosophical errors of both the Objectivist and Relativist perspectives, but which was not taken at the time due to unfavorable environmental conditions. We begin this investigation with a brief overview of the origins of these dueling perspectives in Ancient Greek philosophy and then quickly move on to examine the iconoclastic views of early Enlightenment philosophers Spinoza and Leibniz. By combining into a single conjecture their unique contributions to the discipline, I believe we will find a possible point of departure for our post-humanist itinerary. The remainder of the Article is devoted to exploring what the implications of this post-humanist philosophy might be for our system of jurisprudence through an analysis of a contemporary legal controversy.

Three principles from Greek philosophy are germane to the argument being made here: the atomic theory of Democritus, ¹⁹ the quasi-dualist cosmogony of Plato, ²⁰ and the *scala natura* of Aristotle. ²¹ These three constructs found their way into the foundations of Enlightenment philosophy and from there into our own philosophy of law.

^{18.} See STEPHEN JAY GOULD, ONTOGENY AND PHYLOGENY 179 (1977) (describing such retention of larval features as neoteny). Gould argues that humans may also have evolved via a neotenic process. Id. at 361. In support of this argument, he quotes biologist, Louis Bolk: "If I wished to express the basic principle of my ideas in a somewhat strongly worded sentence, I would say that man, in his bodily development, is a primate fetus that has become sexually mature." Id.

^{19.} Andrew G. van Melsen, From Atomos to Atom: The History of the Concept Atom 17 (1960).

^{20.} BERTRAND RUSSELL, A HISTORY OF WESTERN PHILOSOPHY 143-48 (1972).

^{21.} SIR DAVID ROSS & JOHN L. ACKRILL, ARISTOTLE 118–22 (1995).

Fig. 1 The Sphere (Atom)

Democritus' atomic theory was an attempt to give a strictly materialist account of both physical and spiritual reality.²² Everything was thought to consist of small, indivisible units.²³ Infinite in number and variable in shape, size, and temperature, the units were indestructible and forever in motion within an indefinite void.²⁴ Though prescient, this theory held little sway with other natural philosophers until the seventeenth century when a strictly mechanical version of it was embraced by, among others, René Descartes and alchemist Robert Boyle.²⁵ While not particularly useful scientifically until the nineteenth century, the idea of "social atoms" was used quite liberally by political philosophers such as Hobbes and Locke to describe their concept of essentially equal, rational, self-contained individuals.²⁶ After being given a moral dimension by Kant and others, it made its way into American jurisprudence.²⁷ "Ethical atomism combined with Hobbes's and Locke's social atomism [to] suppl[y] some of the most important and characteristic features of American political theory, and the imprint of these ideas is evident and fixed in the Constitution."²⁸

The origins of our arguably dualist system of jurisprudence are, meanwhile, supposedly found in Plato's cosmogony, the *Timaeus*, where he describes an all-good demiurge bringing forth from a preexisting chaos the

^{22.} RUSSELL, supra note 20, at 72.

^{23.} Id. at 65.

^{24.} Id. at 2.

^{25.} Robert Kargon & Walter Charleton, Robert Boyle, and the Acceptance of Epicurean Atonism in England, 66 ISIS 184, 187–88 (1964).

^{26.} For a critique of this philosophical construct, see MARILYN FRIEDMAN, WHAT ARE FRIENDS FOR? FEMINIST PERSPECTIVES ON PERSONAL RELATIONSHIPS AND MORAL THEORY 234–35 (1993) ("This self—atomistic, presocial, empty of all metaphysical content except abstract reason and will—is allegedly able to stand back from all the contingent moral commitments and norms of its particular historical context and assess each of them in the light of impartial and universal criteria of reason.").

^{27.} See Elizabeth H. Wolgast, A World of Social Atoms, in APPLIED SOCIAL AND POLITICAL PHILOSOPHY 226, 228 (Elizabeth Smith & H. Gene Blocker eds., 1994) (explaining that the atomism developed by Kant, Hume, Shaftesbury, and Reid inform Americans' discussions and actions regarding social problems).

^{28.} Id.

geometrical forms from which the cosmos will be constructed.²⁹ Plato divides the soul of this cosmos into two levels, the Same and the Different, or the sphere of the ever uniform and the sphere of becoming.³⁰ From these are derived the "Forms," which, in turn, give rise to the sensible things: "a first principle, taking an increment (line) passes into its second transformation (plane) and from this to the next (solid), by three transformations having made perceptibility available to percipients"³¹ "Thus, it seems that Plato had in mind a sort of procession from the two ultimate principles to ideal numbers, and thence to lines and plane and stereometrical figures"³² But Plato's "*Timaeus*, when read literally, revealed, like the doctrine of the Jews, a oncefor-all act of creation by a divine craftsman according to a definite plan."³³ Thus, although this final dialogue of Plato makes it clear that he envisaged a world generated by two coeval principles, this and his other works were later given a monotheistic cast by various groups including the Neoplatonists.

Plotinus, the third-century founder of the latter religio-mystical school of philosophy,³⁴ would attribute to Plato in his *Enneads*, a Neoplatonist text aimed at reconciling certain aspects of Plato's and Aristotle's philosophies, the concept of a totally transcendent "One."³⁵ Also included was a version of Aristotle's concept of the *scala natura*, a taxonomic model by which 'animals' and, later, souls might be arranged in a linear order of perfection "according to the degree to which they are infected with [mere] potentiality."³⁶ Combining these two elements—Aristotle's scalar hierarchy and a dualist interpretation of Plato's cosmogony (along with Plato's principle of plenitude or the necessary generation of every possible Idea and being), Neoplatonists constructed the "Great Chain of Being," a continuous and complete extension of ranked kinds, separated only by infinitesimal degrees of gradation on a static ladder of Perfection.³⁷ It was only left to the Scholastics to articulate these concepts within an ecclesiastical framework for us to arrive at the contours of the worldview shared by most, if not all, Enlightenment thinkers that:

^{29.} Plato, *Timaeus*, *in* PLATO: THE COMPLETE WORKS 1224, 1234–35 (John M. Cooper ed., 1997).

^{30.} Id. at 1239.

^{31.} JOHN D. TURNER, SETHIAN GNOSTICISM AND THE PLATONIC TRADITION 325 (2001); Plato, Law X (894A), in Plato: The Complete Works, supra note 29, at 1318, 1550.

^{32.} TURNER, supra note 31, at 325.

^{33.} Id. at 347.

^{34.} John R. Kroger, *The Philosophical Foundations of Roman Law: Aristotle, The Stoics, and Roman Theories of Natural Law,* 2004 WIS. L. REV. 905, 914 n.39 (2004).

^{35.} Plotinus, *The Fifth Ennead*, in PLOTINUS: THE ENNEADS 347, 382 (Stephen MacKenna trans., 1991).

^{36.} ARTHUR O. LOVEJOY, THE GREAT CHAIN OF BEING: A STUDY OF THE HISTORY OF AN IDEA 58–59 (Harper Torchbooks 1960) (1936) (citations omitted).

^{37.} Id. at 59.

[T]he conception of the plan and structure of the world which, through the Middles Ages and down to the late eighteenth century . . . most educated men, were to accept without question—the conception of the universe as a "Great Chain of Being," composed of an immense, or . . . infinite, number of links ranging in hierarchical order from the meagerest kind of existents . . . through "every possible" grade up to the ens perfectissimum.³⁸

Fig. 2 The Pyramid (Hierarchy.)

Given the longevity of the great chain construct (roughly fifteen hundred years) and the breadth of its epistemo-ontological reach, it would seem odd if its influence ended abruptly in response to the rise in popularity of the rationalist approach that was to supplant it. And, indeed, one might reasonably argue that its basic framework was not so much summarily discarded in favor of the scientific model as appropriated by the incoming rationalists. Great chain concepts such as linear causality, a transcendent Prime Mover, and a hierarchy of being track fairly closely with certain of modern science's epistemological constructs. It is, for example, a relatively short jump from the Aristotelian notion of an "unmoved mover" and "initial cause" to science's concept of "force" (whatever can cause an object with mass to accelerate).³⁹ We also find science contrasting this "active force" with a "passive matter," or that substance on which force works through top-down, linear causal chains.⁴⁰ This view of matter as passive, together with the formal structure of the great chain's static, perfection hierarchy, closely mirrors modern science's tendency to classify entities according to an ill-defined complexity hierarchy. Where the great chain used criteria such as the capacity for self-movement or reflection to rank entities on its scale of "being," modern science often uses a similarly less-than-rigorous analysis of an entity's "complexity" (for example, intellectual, computational, morphological, or genomic) to impute varying degrees, or withhold designations of "sentience" or "intelligence." Thus, the objects of study in physics, chemistry, biology, psychology, etc., increase in

³⁸ *Id*

^{39.} This is comparable to the Scholastic understanding of the "Will of God' which everywhere acts directly, without any intermediate intelligent agents!" *Origins of Scientific Materialism*, 28 THEOSOPHY 543, 546 (1940).

^{40.} See LOVEJOY, supra note 36, at 282 (discussing the active force inherent in matter).

^{41.} Id. at 90.

complexity and unpredictability as they approach the level of the adult human. In effect, agency—or lack thereof—is still correlated with an entity's ability to demonstrate consciousness or self-locomotion, with adult humans' own presumed superior capacities for these phenomena setting the standard against which all others are measured. Thus the shift from a Christian to a scientific version of the great chain schema did not so much eradicate its tacit teleological *modus operandi* as redirect it towards the perfectibility, not of the soul, but of the species.⁴²

Fig. 3 The Cube (Rational Man)

Early-Enlightenment scholars Descartes, Spinoza, and Leibniz, all avowed rationalists, were heavily influenced by this metaphysical schema and its ontology.⁴³ geometrical This underlying convergence of metaphysical/theological tradition with the new scientific perspective generated a particularly creative intellectual turbulence, a metaphorical, epistemological rapids in an otherwise laminar flow as evidenced by the highly original philosophical contributions of each.⁴⁴ Descartes has famously been credited with setting the Western world on a dualist path, establishing a radical separation between mind and body in an attempt to rationally ground proof of his existence in his ability to conceptualize his own doubt. 45 The great chain of being could never provide such an existential certainty, as the ground of its being remained inexplicable, determinate upon the actions of the "unmoved mover" at the top of the hierarchy. 46 Descartes' argument for the existence of God and, by extension, his cogito, would similarly require he attempt to ground his proof in what amounted to a circular argument (put forward in his third and fourth Meditations).⁴⁷ That his theory of an absolute interiority and

^{42.} Id.

^{43.} LOVEJOY, supra note 36, at 188.

^{44.} We should perhaps not find this too surprising for, as Hegel noted, "Dichotomy is the source of the need of philosophy." *See* G.W. F. HEGEL, THE DIFFERENCE BETWEEN FICHTE'S AND SCHELLING'S SYSTEM OF PHILOSOPHY 89 (H.S Harris & Walter Cerf trans., 1977).

^{45.} RUSSELL, *supra* note 20, at 561 (explaining Descartes' belief in an interactive, but separate mind and body).

^{46.} See LOVEJOY, supra note 36, at 144 (explaining the hierarchy of being from God to lower forms).

^{47.} RENE DESCARTES, MEDITATIONS ON FIRST PHILOSOPHY: WITH SELECTIONS FROM THE OBJECTIONS AND REPLIES, 24–43 (John Cottingham ed. & trans., 1996). There is much debate on

absolute exteriority ultimately required grounding in a transcendent God was not lost on other philosophers.

Among these philosophers was Spinoza, who ultimately rejected Descartes' dualist argument in his posthumously published, five-part magnum opus, *Ethics*. ⁴⁸ Modeled after Euclid's *Elements*, ⁴⁹ it argued for the existence of a single "substance" out of which both mind and body precipitate. ⁵⁰ Instead of a cosmos where God, Prime Mover or "mind" stands outside of and directs or initiates action, Spinoza posited a "neutral" or "priority" monism. ⁵¹ In his cosmogony, "God *is* the created world—'Deus, seu Natura . . . una, eademque est" or "God, *or* Nature . . . are one and the same'—'and not some creator or first cause preceding its effect, the created world." ⁵² He was well aware that "causes and effects" necessarily evokes the concept of a prime mover or "first cause" through "infinite regress' . . . [and that f]ar from explaining anything about the world, knowledge invariably proved that something entirely different than the world (God) necessarily exists." ⁵³

Spinoza showed that, paradoxically, secular reason can extricate itself from the circular reasoning of the Cartesian type only by acknowledging its circularity—in this case, the fact that the presumed ground of its truth (God) is arbitrarily posited by itself. . . . Secular thought is one that accepts that "truth is the standard both of itself and of the false."



Fig. 4 Klein Bottle (Spacetime Manifold)

For Spinoza, not only is there no first cause or Prime Mover, and therefore no determinate causal structure, but attempts to prove the existence of such a

whether Descartes' argument is truly circular. See, e.g., Michael Della Rocca, Descartes, The Cartesian Circle, and Epistemology Without God, 70 PHIL. & PHENOMENOLOGICAL RES. 1, (2005) (defending the view that Descartes's work is not circular because he viewed us as having a normative certainty of ideas while we perceive them). I will focus here on Spinoza's interpretation.

- 48. STUART HAMPSHIRE, SPINOZA AND SPINOZISM 80–84 (2005) (discussing Spinoza's objection to Descartes' circular argument).
- 49. See EUCLID, supra note 16, at 1–7 (showing Spinoza prefaced his text with 43 definitions, axioms, and postulates, followed by 259 propositions, each with its own proof).
 - 50. See HAMPSHIRE, supra note 48, at 84.
- 51. See Jonathon Schaffer, Monism: The Priority of the Whole, 119 PHIL. REV. 31, 36, 65–67 (2010), available at http://philreview.dukejournals.org/cgi/reprint/119/1/31.
- 52. A. KIARINA KORDELA, \$URPLUS: SPINOZA, LACAN 30 (2007); see also SPINOZA, ETHICS 226–27 (G.H.R. Parkinson ed., 2000) (describing God and Nature as one and the same).
 - 53. KORDELA, supra note 52, at 31.
 - 54. Id. at 32 (citation omitted).

transcendent Being through the attainment and deployment of rational knowledge are doomed to result in logics of the circular type. 55 Both good and evil, truth and falsity, are necessary to complete and perfect the world, but neither dyad exists in any absolute sense, being purely relative to the experience of a given individual. No Archimedean point exists, from neither outside nor from inside the system, from which to judiciously weigh the situation or leverage knowledge of the Truth, and there is no free will but only a better or worse understanding of why one behaves as one does. The only thing that can be altered about the world is one's approach to it. Through gaining an understanding of one's emotions and affections (or one's internal environment), one might hope to become the adequate cause of one's own Thus, Spinoza's God is both radically immanent and radically reflexive. One acquires knowledge of God through greater knowledge of oneself and in this way brings into alignment one's internal and external environments or betters the fit between oneself and the world, with the lines between the two being uncertainly drawn.

Spinoza offended Christians and Jews alike with these unorthodox views, including Leibniz, a pious Lutheran, who believed in a transcendent God but who constructed a pluralist cosmology which would ultimately come to serve as the foundations for a comprehensive theory of immanence. 56 Leibniz believed the cosmos reducible neither to "mind and body" nor to "substance," but required explanation through a plurality of substances which he termed "monads"—unique, indivisible, timeless unities of matter and soul which coalesce in greater or fewer numbers to form the ground of all being.⁵⁷ Each monad is a microcosm of the larger universe. But, as with a shattered holographic plate where each progressively smaller shard reflects an image of the whole only with diminished resolution, so monads, like fractured bits of the Unity they reflect, "all reach confusedly to infinity, to everything; but they are limited and differentiated by their level of distinct perception."58 The level of perception attained by each is determined by or reflected in its proximity to the Creator, its resolution dropping off in relation to the quality of its soul, that is, rational, sensitive, or nutritive.⁵⁹ Where monads' perceptions necessarily distort and limit knowledge of the whole, the impingement of each monad's movement on that of every other, a "communication [which] extends

^{55.} Id. at 30-32.

^{56.} See G.W. LEIBNIZ, PHILOSOPHICAL TEXTS 273–74 (Richard Francks & R.S. Woolhouse eds. & trans., 1998) (stating that God is a supreme substance incapable of limits and is distinguished from other created things by being absolutely and infinitely perfect).

^{57.} Id. at 268-69.

^{58.} Id. at 276.

^{59.} See id. at 275.

indefinitely" instills in each a proprioceptive sense of the universe's interconnectedness. ⁶⁰

Fig. 5 Mandelbrot Set (Fractal Geometry)

While Leibniz's "monadology" clearly exhibits scholastic influences in its establishment of a perfection hierarchy, it also includes elements drawn from the then-nascent rational discourse.⁶¹ We can see, for example, the influence of Leeweuhoek's then-recent discovery of microorganisms in Leibniz's vision of the formal structure of the universe:

Every portion of matter can be thought of as a garden full of plants, or as a pond full of fish. But every branch of the plant, every part of the animal, and every drop of its vital fluids, is another such garden, or another such pond. . . . [T]here is no uncultivated ground in the universe; nothing barren, nothing dead. 62

Where this image conforms to the dictates of the great chain (in that it disallows the possibility of a gap), this image also differs from the great chain in envisioning the universe to be a system of interpenetrating nested realms, of worlds within worlds. Leibniz's monadological system as a whole adds a new dynamism and dimensionality to the great chain's otherwise static, planar schema, which allowed for bodies to exist only above, below, or alongside each other. We are now in a position to summarize the insights of Spinoza and Leibniz and assess whether they might indeed represent a point of departure for the constitution of a post-Enlightenment jurisprudence. In other

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^{60.} Id. at 276.

^{61.} LEIBNIZ, supra note 56, at 277-78.

^{62.} *Id.* at 277.

^{63.} See Casey Alt, The Materialities of Maya: Making Sense of Object-Orientation, 10 CONFIGURATIONS 387, 415–16 (2002) (explaining that Leibniz calculated object movement integrally by referencing the movement of other objects thereby not requiring an absolute time-space referent). We see elements of this vision in his mathematical formulations as well. His version of calculus differs significantly from Newton's in that, rather than calculate the vectorial movement of objects derivatively from a fixed point of reference, it calculates such movement integrally. That is, it is calculated relative to other objects in the modeled system (meaning that, like Einstein's concept of spacetime, it describes "a network of distributed force relationships among various objects"). Id. at 416. As such, Leibniz's integral calculus requires no external time-space referent and might thus be considered "to describe an affective space," while Newton's derivative version "describes an effective space." Id. at 415.

words, do they help us envision alternatives to dualist/humanist systems of thought that lead inevitably into unproductive Objectivist/Relativist, formalist/realist debates?

The answer would appear to be yes, in that both men managed to invent/intuit a logically consistent, geometrized cosmos that was both non-dualistic and yet deeply ethical, one which, in other words, had no need for the hypothesis of a transcendent God, because it was able to ground itself in the process of its own becoming.⁶⁴ This is not to say that their two versions of this cosmos were identical, or that either of them claimed to have, or had even sought to create, a cosmogony that undermined faith in the one, true God. Rather, while Spinoza seems to have been, for the most part, indifferent to such characterizations of his philosophy, Leibniz believed that his cosmology (his theory of monads) offered proof for the existence of a transcendent God.⁶⁵ Today, however, his monadology and some of the theories contained within his version of "the calculus" instead provide the first comprehensive foundation for the concept of immanence.⁶⁶ And their positions on such fundamental issues as causality, agency, and the existence of good and evil were widely divergent.⁶⁷

But their views were complimentary in other ways. Where Spinoza anticipated the development of topology by some two hundred years in his vision of the universe as a self-enfolding, dynamic manifold throughout which agency was uniformly distributed, ⁶⁸ Leibniz articulated a scale-invariant world of self-similar, nested entities each of which reflected the other and the whole of which they were a part. ⁶⁹ Neither of these theories met much support during their authors' lifetimes, but the past century's technoscientific advances have

^{64.} See W.W. ROUSE BALL, A SHORT ACCOUNT OF THE HISTORY OF MATHEMATICS 418 (1960) (referring to Laplace's famous reply to Napoleon when asked why he hadn't mentioned God in his tome on the system of the universe—"'Je n'avais pas besoin de cette hypothèse-là.").

^{65.} LEIBNIZ, supra note 56, at 273.

^{66.} See id. at 221 (discussing Leibniz's famous "Maxima-Minima Principle"—the idea that every point in the universe, no matter how small, contains a replica of the universe within itself, and thus of God); see also CARL B. BOYER, A HISTORY OF MATHEMATICS 404 (2d ed. 1991) (stating that Leibniz was not deterred by uncertainty which led to a readier acceptance of differentials).

^{67.} Leibniz strenuously objected to Spinoza's relative, rather than absolute, characterization of the good as being "that which we certainly know to be useful to us" and evil as "that which we certainly know to be an obstacle to our attainment of some good." PAULINE PHEMISTER, THE RATIONALISTS: DESCARTES, SPINOZA, AND LEIBNIZ 79–81 (2006).

^{68.} See KORDELA, supra note 52, at 30 (discussing Spinoza's argument that to know a substance is to expose it as the cause of its own properties).

^{69.} See LEIBNIZ, supra note 56, at 275 (discussing the interconnectedness of created things and explaining that simple substances have relationships with one another creating a mirror image of the universe).

made their relevance for the present day, including for our philosophy of law, inescapable.⁷⁰

That we are beginning to understand the potential practical use of these ideas is reflected in, or due to, ⁷¹ at least in part, the new geometries developed around the turn of the last century. Topology, which deals with qualitative descriptions of connections and boundaries (Möbius strip or Klein bottle, for example) as opposed to the more familiar Euclidean or Riemannian quantitative analyses of shape and size, was one of these new gemoetries.⁷² Its development, attributed in large part to Henri Poincaré, proved critical to the generation of the special theory of relativity in 1905 as well as the related concept of the spacetime manifold and might thus be viewed as the catalyst for one of the most profound epistemic and ontological upheavals since the Copernican revolution. 73 The philosophical implications of this upheaval are beginning to be explored in earnest today, due in part to our newfound technical ability to investigate the topology of the manifold in conjunction with the principal of indeterminacy as articulated by physicist Niels Bohr.⁷⁴ Together these developments not only contest the Newtonian idea of space as container and time as exterior parameter but force us to reopen debates about cause and effect, subject/object relations and autonomous agency that had been settled since the ascendency of the rational worldview.⁷⁵ Much of this Article, then, is devoted to tracing this on-going shift, prefigured in the philosophies of Spinoza and Leibniz, from a geometrical to a topological understanding of our world and selves, or, as cognitive scientist Francisco Varela described it, to realizing we "are beings not simply in time, but of time".

Spinoza's conception of a monistic universe, for example, is beginning to look prescient as experiments at the quantum level reveal the inherent

^{70.} Spinoza famously received a sort of "excommunication" from the Jewish community in Amsterdam for his heretical and "monstrous actions." PHEMISTER, *supra* note 67, at 8.

^{71.} The distinction between these terms is in doubt as a result of the adoption of the causal models being discussed.

^{72.} See Nicholas V. Swindale, Visual Cortex: Looking into a Klein Bottle, 6 CURRENT BIO. 776, 776 (1996) (discussing the Klein Bottle and Topology); David M. Walba et al., Total Synthesis of the First Molecular Möbius Strip, 104 J. Am. CHEM. Soc. 3219, 3219 (1982) (discussing the Möbius Strip and topology).

^{73.} K.S. Sarkaria, *The Topological Work of Henri Poincare*, in HISTORY OF TOPOLOGY 123, 123 (Ion Mackenzie James ed., 1999).

^{74.} John Polkinghorne, Space, Time, and Casualty, 41 J. RELIGION & SCI. 975, 979 (2006).

^{75.} *Id.* at 976 ("The Newtonian concept of space as the container in which isolated atoms are free to rattle around . . . has been replaced in modern physics by the altogether more integrated and relational picture of the interconnection between spacetime and matter that is offered by general relativity.").

^{76.} See Mark B. N. Hansen, New Philosophy for New Media 250 (2004).

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connectivity of all matter.⁷⁷ Niels Bohr was the first to "prove", that the dual particle/wave nature of light and matter was true not just epistemologically, as Heisenberg had argued, but ontologically as well. That this pointed towards the interconnected and fundamentally indeterminate nature of reality, he argued, "necessit[ated]... a final renunciation of the classical ideal of causality and a radical revision of our attitude towards the problem of physical reality. As physicist Toraldo di Francia more recently explained, "Since any particle has certainly interacted with other particles in the past, the world turns out to be *nonseparable* into individual and independent objects. The world is in some way a single object."

Meanwhile, complexity and chaos theory, which were anticipated in Leibniz's integral calculus and monadology, have demonstrated that an analytics of determinacy, linear causality, and reductionism is useful in only a prescribed area of investigation. They show, for example, that small causes need not have small effects, as was true in the classical model, because "tiny initial changes [even at the quantum level] can quickly be magnified and brought up to macroscopic expression." Thus complete determinacy, even at the macro level, is impossible, as it would require perfect knowledge of a given system, something not just epistemologically but ontologically unattainable, as Bohr demonstrated. They show that the reverse is also true, however, in that seemingly chaotic systems often display a deeply ordered structure, a discovery made only recently through the use of mathematical modeling and

^{77.} See Giuliano Toraldo di Francia, A World of Individual Objects?, in INTERPRETING BODIES: CLASSICAL AND QUANTUM OBJECTS IN MODERN PHYSICS 21, 28 (Elena Castellani ed., 1998) ("Two particles, having interacted in the past, form an inseparable whole, even if at present they are far apart.").

^{78.} See BARAD, supra note 10, at 106–15 (Bohr's proof was part of a gedanken, or thought experiment, which "demonstrated" the ontological impossibility of simultaneous determination and position and momentum).

^{79.} See Polkinghorne, supra note 74, at 979 (noting how Bohr interpreted Heisenberg's uncertainty principle of quantum theory as an "ontological principle of indeterminism and not merely an epistemological principle of ignorance").

^{80.} BARAD, supra note 10, at 126.

^{81.} di Francia, supra note 77, at 21, 28.

^{82.} See Geoffrey M. Hodgson, *Darwinism, Causality and the Social Sciences*, 11 J. ECON. METHODOLOGY 175, 186 (2004) (highlighting the analytical and computational limits of determinacy in light of complexity and chaos theories).

^{83.} N. KATHERINE HAYLES, CHAOS BOUND: ORDERLY DISORDER IN CONTEMPORARY LITERATURE AND SCIENCE 212 (1990).

^{84.} See Walter M. Elsasser, Quantum Mechanics, Amplifying Processes, and Living Mater, 18 PHIL. SCI. 300, 307 (1951) (highlighting Bohr's conclusion that operation of the vital functions of an organism precludes knowledge of the microscopic variables that determine its macroscopic behavior).

computer simulation. While Descartes' dualist philosophy, or that which undergirds the Objectivist/Relativist debates in our own era, has reached its apotheosis in the zeroes and ones of the digital economy, it has also, ironically, provided the tools for its own undoing—it has given us the means by which we might foreground the analog visions of Spinoza and Leibniz, or those topological logics which shift our focus from "the individual unit to [the] recursive symmetries between scal[ar] levels."

Both men operated under the assumption that any attempt to gain knowledge of our interior and/or exterior reality required the aid of geometrizing logics. All other (Western) epistemological or ontological endeavors necessarily unfold from the understandings of time, space, extension, and causality they serve to systematize.⁸⁷ The philosophy of the Enlightenment era, which continues to dominate our cultural imaginary and

85. Interestingly, Benoit Mandelbrot, the inventor of fractal geometry, a geometrical system used to model turbulence and other chaotic or complex systems, was inspired by Leibniz's investigations into self-similarity.

My Leibniz mania is further reinforced by finding that for one moment its hero attached importance to geometric scaling. In 'Euclidis Prota', which is an attempt to tighten Euclid's axioms, he states, 'I have diverse definitions for the straight line. The *straight line* is a curve, any part of which is similar to the whole, and it alone has this property, not only among curves but among sets.' This claim can be proved today.

MANDELBROT, supra note 17, at 419 (citations omitted).

As Mandelbrot writes:

Is it not a pity that Leibniz (1646–1716) missed these developments! Yet, actually, he came close. While a Newton could be satisfied with defining derivatives and integrals, and then iterating these operations using an integer index, for a Leibniz they are but a first step. Immediately he thinks of making the order of integer differentiation into a fraction.

Benoit Mandelbrot, *Two Heirs to the Great Chain of Being* 3 (circa 1982) (unpublished article), *available at* http://math.yale.edu/mandelbrot/web_docs/greatChain.doc.

Had Leibniz had access to computers, he might well have been able to demonstrate the viability of his own and Spinoza's vision of an interconnected, fractal cosmos, as physicists and geometers are now doing. Jan Ambjorn, Jerzy Jurkiewicz & Renate Loll, *The Self-Organizing Quantum Universe*, 299 SCI. AM. 42, 44 (2008) (describing a new theory of quantum gravity, called triangular dynamical triangulation, which supposes that spacetime takes on a fractal shape).

Causal dynamical triangulation . . . is an approach to quantum gravity that like loop quantum gravity is background independent. This means that it does not assume any pre-existing arena (dimensional space), but rather attempts to show how the spacetime fabric itself evolves. . . . At large scales, it re-creates the familiar 4-dimensional spacetime, but it shows spacetime to be 2-d near the Planck scale, and reveals a fractal structure on slices of constant time.

HAYLES, supra note 83, at 13 (emphasis omitted).

86. HAYLES, supra note 83, at 13.

87. Jerry R. Hobbs et al., *Commonsense Metaphysics and Lexical Semantics*, 13 COMPUTATIONAL LINGUISTICS 241, 241 (1987) (noting how granularity, scales, time, space, material, physical objects, shape, causality, functionality, and force "figure in virtually every domain of discourse").

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system of jurisprudence, is still very much influenced by Euclidian understandings of these constructs. We might do well then to begin to more aggressively incorporate into our political and legal philosophies some of the new understandings of these fundamental concepts as revealed by fractal geometry, topology, and quantum theory.

The Enlightenment era, broadly understood, is bookended by the Copernican revolution on one side and relativity/quantum theory on the other. 88 From beginning to end the Enlightenment era tells the tale of the decentering of the human—spatially, by the heliocentric worldview which displaced humans from the center of the physical universe; temporally, by Darwin's theory of evolution, which posited time as having begun long before human's arrival; psychically, by Freud's theory of the unconscious, which challenged the concept of the rational agent; and finally, physically, as technoscience begins to make tangible the effects of Einstein's equating of matter and energy and Bohr's revelation of the inseparability of knower and known.⁸⁹ The philosophical contributions of Spinoza and Leibniz should be viewed in this context and understood as contributing to this general thrust because they challenge the long-held notions of human agency, perhaps the last bastion of an anthropocentric metaphysics. Recently renewed interest in their seventeenth century fractal/topological cosmology suggests that this site marks an inflection point in the spatiotemporal order, a site of rupture from which a new post-humanist philosophy might depart. 90 It becomes clearer as we move away in time that, by evacuating agency and presence from the dualist, Cartesian worldview, Spinoza, and Leibniz managed to foreground the usually invisible field of relations out of which these arise.⁹¹

Today, our technogenesis, or the co-evolution of technology and the human, is pushing our Enlightenment-inflected concept of agency to the

^{88.} See Fernando L. Canale, Revelation and Inspiration: The Liberal Mode, 32 ANDREWS U. SEMINARY STUD. 169, 170–71 (1994) (discussing how philosophical trends during the Enlightenment period, including Kant's Copernican revolution, reinterpreted reason "by limiting its reach to the space-time continuum").

^{89.} See Kevin J. Vanhoozer, Theology and the Condition of Postmodernity: A Report on Knowledge (of God), in THE CAMBRIDGE COMPANION TO POSTMODERN THEOLOGY 3, 14 (Kevin J. Vanhoozer ed., 2003) (concluding that the postmodern variation of the Copernican revolution resulted in further de-centering of the human subject).

^{90.} See MATTHEW STEWART, THE COURTIER AND THE HERETIC: LEIBNIZ, SPINOZA, AND THE FATE OF GOD IN THE MODERN WORLD 240 (2006) ("The confrontation between Leibnizian and Spinoxistic conceptions of divinity . . . continue[] to characterize discussions to the present, notably in the field of cosmology.").

^{91.} *Id.* at 166–67 (describing the approaches taken by Spinoza and Leibniz to solving the Cartesian mind-body problem).

breaking point.⁹² As technologies make the mutability of the quantum level more accessible, the boundaries of atoms, genes, organs, bodies, and organizations become more fluid, making agency increasingly difficult to locate. 93 Advances in mathematical modeling and computer simulation made possible by quantum theory and topology reveal dynamic patterns common to both physical and social systems, undermining the notion that agency is solely about the potential for individual human action.⁹⁴ While these models confirm that we are each more than the sum of our parts because we interact creatively with our environment, they also indicate that this does not distinguish us from systems existing at other scales of organization, both larger and smaller than our own. 95 They suggest that to operate thoughtfully and ethically in the world, we have to discard the atomistic, Newtonian model of interaction, which likens individuals to billiard balls bouncing off one another, and embrace the topological model anticipated by Spinoza and Leibniz, which provides us with a way to visualize how we are connected to each other through our intra-actions within what theoretical physicist Karen Barad describes as a self-enfolding, "spacetimematter manifold."96

The topological model also provides us with a way to think about matter "as substance in its intra-active becoming—not a thing but a doing, a congealing of agency," and about the fact that its dual expression as particle and wave is a reflection of our own, as determined by Bohr. Being expressions of matter ourselves we exhibit both wavelike qualities, which point in the direction of relationality, as well as particle or corpuscular qualities, as personified in the construct of the liberal human subject so central to Western culture. Of course, other cultures emphasize the wavelike or relational aspect of existence and downplay the corpuscular, often at the expense of individual

^{92.} See David Lewin, Freedom and Destiny in the Philosophy of Technology, 87 NEW BLACKFRIARS 515, 521 (2006) ("[H]uman agency must be protected from the anti-democratic tendencies of modern technology.").

^{93.} See id. at 519 ("Despite recent attempts to formalise the discipline of the philosophy of technology and to clarify precisely where agency lies, a persistent ambiguity remains.").

^{94.} See Robert Costanza et al., Modeling Complex Ecological Economic Systems, 43 BIOSCIENCE 545, 546 (1993) ("[C]omputer and machine learning advances have spawned 'artificial adaptive agents,' computer programs that can simulate evolution and acquire sophisticated behavioral patterns."); Douglas T. Kenrick et al., Dynamical Evolutionary Psychology: Individual Decision Rules and Emergent Social Norms, 110 PSYCHOL. REV. 3, 3 (2003) (applying dynamical systems theory to evolutionary psychology); Linda B. Smith & Esther Thelen, Development as a Dynamic System, 7 TRENDS IN COGNITIVE SCI. 343, 343 (2003) (applying dynamical systems theory to the self-organization of human development).

^{95.} Lewin, supra note 92, at 519.

^{96.} See BARAD, supra note 10, at 245 (describing the spacetimematter manifold as a process of connectedness involving the agential enfolding of different scales through one another).

^{97.} Id. at 183-84.

^{98.} Id. at 105-06.

agency.⁹⁹ But argument about which is preferable is pointless, as the idea is to allow matter to express its dual particle/wave nature at whatever level of organization it happens to manifest, our own included. We are both individual and collective, and systems which accommodate and facilitate the expression of this dual nature are to be desired while those which impede it are not. Allowed to oscillate quickly enough between expressing these dual qualities, we begin to lose the need to distinguish between whether it is we who are agentive or the world, effectively collapsing the Cartesian boundary between absolute interiority and absolute exteriority. As intuited by Spinoza, we allow its agency to enact us by effectively evacuating our own agency from the world. "Our" agency becomes splayed out over a full range of systems both within us and without and we discover that we no longer need to "re-present" the world to ourselves because we enact it and ourselves simultaneously. Perhaps our goal then should be to create a system of jurisprudence which furthers this expression, the very activity in which Spinoza and Leibniz were engaged.

Certainly one thing is becoming increasingly clear—to save what we think of as the human and the related concept of the individual, we have to accept that neither of these can continue to serve as the gravitational center of our philosophy. Other entities existing at other scales of organization, be they molecules or moons, organelles or organizations, no more rotate around the human than does the sun around the earth. Agency is not ours alone but is the default condition of matter (or the term we use to describe the effects of the spacetimematter manifold coming into contact with itself). We are all in this together, and the "we" is a far more inclusive category than we had ever imagined.

In some respects, these ideas are already making their way into our legal philosophy. In his latest book, *Justice*, Harvard Professor of Government Michael Sandel examines the moral and political philosophy that undergirds the American system of jurisprudence. Among the numerous complex legal decisions he mines for insights into this philosophy is an alleged case of reverse discrimination at the University of Texas Law School. Ronald Dworkin argues in support of the Law School's affirmative action policy and stresses that the plaintiff's rights were not violated because institutions have a right to define their missions as they see fit as long as they do not single out and treat with contempt a given individual or group. According to Sandel,

^{99.} Asaf Federman, *What Kind of Free Will Did the Buddha Teach?*, 60 PHIL. EAST & WEST 1, 1 (2010) (explaining how a non-western culture views matter and relationships among matter that limits agency).

^{100.} MICHAEL J. SANDEL, JUSTICE: WHAT'S THE RIGHT THING TO DO? 30 (2009).

^{101.} Id. at 167-69.

^{102.} Id. at 174.

Dworkin's argument seeks to sever the link between justice and moral desert so as to allow the law to remain neutral with respect to the fraught issues of honor and virtue that cases of this nature inevitably entail. Political philosopher John Rawls took a similar approach in his book, *A Theory of Justice*, by arguing that "[n]o one deserves his greater natural capacity nor merits a more favorable starting place in society." Rather than ascribe superior merit or virtue to the *individual* for having achieved her or his success, Rawls suggests we should recognize that it is, in fact, the *fit* between society's goals and the individual's talents and qualities that determines who reaps the so-called "moral desert." There is, then, nothing "moral" about one's rewards as *all* of what we might think of as merit, according to Sandel's interpretation of his argument, is attributable to the good or bad fortune of a given individual.

This claim runs counter to a central tenet of American jurisprudence which holds persons, artificial or otherwise, to be rational, autonomous agents with all the rights and responsibilities that attach to such entities as determined by law. Fate or chance is antithetical to this, as it undermines our understanding of causality or that which grounds rational thought and thus the law itself. So why would Rawls want to invoke fortune, good or bad, as a concept to help us think through some of the thornier legal issues of our day? This might be because, like Sandel, he feels that "the more we regard our success as our own doing, the less responsibility we feel for those who fall behind," a perspective which Sandel believes leads to the "hollowing out of the public realm" and thus to an "undermin[ing of] the solidarity that democratic citizenship requires."

But Sandel is skeptical of Rawls' and Dworkin's attempts to remedy this and similar situations by having the law remain neutral on issues of value and meaning, honor and virtue, because the inseparability of these from the "objects" of debate is becoming increasingly apparent. By Dworkin's logic, he argues, universities should be free to sell a percentage of their admission

^{103.} *Id*.

^{104.} JOHN RAWLS, A THEORY OF JUSTICE 87 (rev. ed. 1999).

^{105.} See id. at 62–63 (stating that the system of distribution is strongly influenced by natural and social contingencies including natural abilities and talents).

^{106.} See SANDEL, supra note 100, at 153–55 (explaining Rawls's argument that the distribution of shares is based on morally arbitrary factors).

^{107.} See RONALD DWORKIN, TAKING RIGHTS SERIOUSLY 272–73 (1978) (stating that a postulate of political morality is that human beings are capable of forming their own conceptions of how their lives should be lived).

^{108.} SANDEL, supra note 100, at 179.

^{109.} Id. at 267.

^{110.} Id. at 266.

^{111.} Id. at 183.

slots to the highest bidders, a position which ignores that "justice in allocating access to a university has something to do with the goods that universities properly pursue," that is, "to serve the common good through teaching and research." To arrive at a just decision in this case thus requires a debate about what function the university and similar institutions serve in society as a whole. While this debate would most likely be contentious, he argues, it would reinvigorate civic life and thus enhance the common good.

As demonstrated earlier, Sandel might be attempting to articulate a Spinozist/Leibnizian form of jurisprudence. In his view, achieving a just society requires we move beyond the Objectivist concept of "liberal neutrality," which imagines there to be a position outside of the system (original text, discursive logics) from which the Truth might be leveraged, and embrace instead a "politics of moral engagement," one which encourages us to acknowledge and debate our moral disagreements rather than try to have the law make these decisions for us. But he thus also rejects the Relativist argument because, in his formulation, truth *does* exist, though not in a form either Objectivists or Relativists would recognize; truth does not take a static Form, in the Platonic sense, but rather reveals itself as the *potential* for an open-ended, dynamic, *process* of debate.



The Self-Reflexive Spiral

The ultimate ground of truth(s), then, is located in the relationships which foster this potential for debate(s), relationships which, in turn, require that truth(s), in the form of the law, protect and sustain their viability. The dynamic between the two is, of course, a reciprocal one as is the dynamic between individual concerns and the common good. The space of agency encloses these two scales of organization and extends even further. Adjusting our system of jurisprudence to accommodate this new reality may take some time, but such adjustment is a goal well worth pursuing, and one which Leibniz and Spinoza would no doubt applaud.

^{112.} Id.

^{113.} SANDEL, supra note 100, at 268.

^{114.} Id. at 268.

^{115.} See id. (arguing for more public debate, which would have the potential to bring about the truth).

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