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Is "Man" Still the Subject of Administration?

Antihumanism, Transhumanism, and the Challenge of Entangled Governance

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ABSTRACT

Scientific advances are radically changing the relationship between government, knowledge, and citizens, thereby putting into question the content of the central subject/object of public administration—"humans." This article analyzes three interrelated problematizations in order to illuminate important aspects of this issue. The first, antihumanism, calls into question the plausibility of a universal, shared essence of humanity and "Man," Foucault's empirico-transcendental doublet. The second, transhumanism, concerns the question of whether new biotechnologies enable humans to overcome the determinism of their biological inheritance and actively participate in its expression. The third problematization revives Redford's formulation of "Man as the subject of administration." This is justaposed with antihumanism to describe anthropocentric administration, which historically presumed a passive relationship with objects of knowledge and, by extension, a certain mode of relating with citizens. The insights of transhumanism frame the main question: Is Man still the subject of administration? The question is elaborated by describing "entangled government," which is marked by a dynamic, interactive relationship between subjects and objects that complicates familiar modes of governing, knowledge creation, and human-object relationships. The implications of citizen participation in an entangled public administration receive particular attention.

Over the past century, public administration has made significant efforts to determine its "subject" in two senses of the word. First, considerable time has been devoted to defining its academic *subject matter*, its disciplinary

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boundaries, identity, or a single integrating intellectual paradigm. There is a long tradition of this kind of inquiry in the field. A second, more recent strand of inquiry has interrogated the subject in the philosophical sense of the term. These have been inquiries into the assumptions about the *human subject* made in and by the field—rational, self-interested, expressive of a fundamental good or bad nature, and so forth. Studies seek to show how models of the human subject structure inquiry into the first kind of subject and inform the roles and practices engaged in by practitioners. These two strands, furthermore, are linked inextricably insofar as the human subject is both the inquirer and an object of inquiry. Of course, this itself has constituted a now familiar, though still pivotal, axis of epistemological and political dispute about the nature of the relationship between the human subject and its objects and appropriate logics of inquiry. In this article, we argue that the contemporary world is marked by changes that put into question the content of the term "human" in ways that radically challenge the ways in which public administration has thought about its various subjects and objects. In the spirit of Foucault, we call these dilemmas and questions problematizations—"the development of a domain of acts, practices, and thoughts that . . . pose problems for politics" (1998, p. 114).

We engage this terrain by elaborating and analyzing three interconnected problematizations. The first, *post-structural antihumanism*, calls into question the plausibility of a universal, shared essence of humanity. It is familiar to critical, heterodox public administration but receives renewed engagement and inflection here. We focus, in particular, on Foucault's (1966/1970) analysis of "Man" as the coordinates within which a particular form of knowledge is produced. The second, *transhumanism*, centrally concerns the question of whether new and emerging biotechnologies can enable humans to overcome the limits of our biological inheritance. Transhumanism is a new topic for public administration and allows us to pose new questions to the antihumanist critique of "Man" and extend its analysis. The third problematization revives an older, forgotten formulation of the subject/object of public administration. Specifically, we consider Emmette Redford's statement in his classic *Democracy in the Administrative State* that declares "Man as the subject of administration" (1969, p. 132).

We juxtapose antihumanism with Redford's statement to describe anthropocentric public administration, a mode of government that, historically,
depended upon a passive relationship between the object of knowledge and,
by extension, a certain mode of relating with citizens. We next leverage the
insights of transhumanism to frame the main question of the article: Is Man
still the subject of administration? We answer: No, Man may not be the subject of administration any longer. We then analyze the significance of this for
public administration and elaborate on what we call entangled government.
Entangled government is marked by a dynamic, interactive relationship
between subjects and objects that complicates familiar modes of governing
and knowledge creation by raising questions about (1) who is involved in

creating the *conditions* that create and sustain human subjects and the objects of knowledge, and (2) the active role of *objects* in generating and sustaining human subjectivities.

THE ANTIHUMANIST PROBLEMATIZATION

The problematization of antihumanism is a familiar one to public administration theory. Although the dismantling of the hubris of Man has obvious precursors in Darwin, Nietzsche, Marx, and Freud (see Davies, 1997; Soper, 1986), it consumed considerable energy during the postmodern and (post) structural debates held over the last decade and a half in public administration as the critique or "decentering" of the human subject. (Post)structural antihumanism "calls into question the notion of an autonomous, coherent, and substantial self. . . . the self becomes an effect of power (e.g., Foucault) or discourse. The self is exploded into a multiplicity of partial identifications or intensities without a fixed center for reflection, critique, or action" (Catlaw & Stout, 2008, p. 1525). Furthermore, antihumanism rejects essentialism, or the idea that there is a fundamental characteristic, essence, or trait shared by "Humanity"; and, by implication, rejects the idea of a fixed human nature or condition that remains untouched by the exigencies of history (see Barthes, 1972/2000, p. 12). As elaborated below, the transhumanist problematic prompts an opportunity to reflect anew on (post)structural antihumanism. In this section, we take a somewhat narrow approach to the topic by rehearsing Foucault's archaeological analysis of the conditions of possibility for the appearance of Man as an object/subject of knowledge in discourse in order to refine the proposition that Man is the subject of administration. Given the proposition that there is no fixed human nature, it becomes imperative to specify the historicity that this "nature" assumes (see Braver, 2007). This is what Foucault aims to do, in particular with regard to the conditions for the possibility of knowledge.

In Les mots et les choses (The Order of Things), Foucault (1966/1970) argues that Man should be seen as an effect of a particular arrangement or mode of being within which knowledge is organized and legitimated in a certain way. He infamously concludes the book by suggesting that "Man is a recent invention" whose time may be "drawing to a close" (p. 386). And further: "If those arrangements were to disappear as they appeared . . . at the end of the eighteenth century, then one can certainly wager that man would be erased, like a face drawn in sand at the edge of the sea" (p. 387). What were these "arrangements"? What kind of "problem" did Man pose for knowledge (see also Catlaw, 2006, pp. 105–108; 2007, pp. 63–72)?

Classical Episteme: The Visible Classification

Foucault charts a discontinuity from the "classical" conditions of knowledge or *episteme*, which did not put the "representer in the representation," and

the modern *episteme*, which seeks to *represent Man in its representations*. In brief, knowledge in the classical period proceeds, Foucault argues, according to the arrangement of a continuous, universal series of visible identities and differences into a grid of knowledge.

Consider the account Foucault offers of classification in natural history (i.e., taxonomy) as an illustration of this general logic or "mode of being" (1966/1970, pp. 125–165). Classifying is predicated upon a straightforward relationship between the eye, the object (e.g., mineral, plant, or animal), and language. The eye is the ultimate instrument for observation—"it is the possibility of seeing what one will be able to say" (p. 130). The visibility of the object permits the drawing of relations based on the structural similarity and difference among organisms and then naming them within a taxonomic classification schema and placing them in the "table." In this way, "natural history is nothing more than the nomination of the visible" (p. 132). In principle, everything within the realm of the visible may be classified and named, and it is by classifying and naming that nature itself is revealed. In turn, to know these names is to possess knowledge of nature. This mode of being, Foucault maintains—no doubt overreaching—was shared by all forms of thought during the classical age, like general grammar and the analysis of wealth (a claim he backs away from in the introduction to the English edition of the book).

Modern Episteme: Man as the Empirico-Transcendental Doublet

In the classical *episteme* there was, in principle, nothing outside the table; there was nothing that could *not* be classified. Moreover, the empirical reality of the world was offered up to the eye and representation "without interruption" (Foucault, 1966/1970, p. 206). There is continuity between language and the world. At the start of the eighteenth century, the modern episteme disrupts this continuity in two ways. First, it begins from a principle that is alien to classicalism—organic structure. The difference here from the structures that informed classification is subtle but important. The character of organic structure does not rest upon a relationship of visibility but rather one of functions that are deemed essential to the living being. In other words, it is no longer the surface markers of similarity or difference that matter, but rather what those visible elements tell us about some underlying process or function in relation to the organism as a whole. Classification moves differently—it moves from the visible to the invisible, "to a deeper cause . . . then to rise upwards once more from that hidden architecture towards the more obvious signs displayed on surface bodies" (p. 229). Naming (language) and the world would now operate on different axes; the ground of representation lies beyond representation itself, in an "immense expanse of shade"; in fact, "a bottomless sea" (p. 211).

Second, there had been one major absence from the classical table: There was no inquiry into the mode of being of the human observer, the *cogito* itself

(p. 312). In the classical order of things, the representer was not himself [sic] represented in the table (p. 308). This changes with the advent of modernity, in which the "special" or human and social sciences take up human beings in their finite social, political, and economic life as objects of knowledge and ordering.

The modern themes of an individual who lives, speaks, and works in accordance with the laws of an economics, a philology, and biology, but who also, by a sort of torsion and overlapping, has acquired the right to know them and subject them to total clarification—all these themes so familiar to us today and linked to the existence of the "human sciences" are excluded by classical thought (p. 310).

The Representation of Static Man as the Empirico-Transcendental Doublet

Yet these two displacements—organic transcendental structure and the positing of the human as an empirical object of knowledge—generate what Foucault takes to be the primary problem posed by the historical mode of being and knowledge formation called Man. (To be clear, Foucault maintains that "Man did not exist" [p. 72] before the eighteenth century.) He describes Man in terms of the empirico-transcendental doublet. What he means is this: On the one hand, as a natural, organic entity, Man's essence or nature is localized in the invisibility of organic universal structure; this is the transcendental realm and subject to formalist and philosophical specification and the invention of models rooted in biology, economics, or the study of language. On the other hand, empirical inquiry aspires to give finite content to the ever-displaced origin that gives rise to visible functions. It is this dynamic play of the transcendental and the empirical that characterizes the problem of knowledge for philosophy and human, social, and physical sciences. Man, then, "appears in the ambiguous position as an object of knowledge and as a subject that knows" (p. 312; emphasis added). He is the discoverer of biological, politicaleconomic, and linguistic law and regularity and at the same time enslaved to them; he is the condition for the possibility of representation but also the limits of the representation. The problematic of Man is this folding-in of the subjective conditions of knowledge onto its object; a "finitude . . . conceived in interminable cross-reference with itself" (p. 318).

The Erosion of Man as the Structuring Center of Representation

It is this condition for knowledge, and with it the object of that knowledge, that is "reaching its end." But why and how is this happening? At least in *The Order of Things*, Foucault does not offer such an account, though it is possible to turn to other work, such as that on governmentality (Deleuze, 1995; Foucault, 2008) or the practices of the self, to formulate such an account.

Furthermore, there is surely no shortage of theories of postmodernization, globalization, and so on, that seeks to describe the threshold Foucault suggests humans are crossing.

But to confine ourselves to the register of *The Order of Things*, we focus on the plausibility of universal transcendental conditions that define the doublet of Man. It is these conditions that were the primary target of the "postmodern," post-Kantian critique (Braver, 2007): the conditions of a universal, transtemporal subject; of *general* knowledge production; and so on. So, when Foucault contends that the conditions for Man are eroding, it is Man as structuring-center (and the form it takes) that is giving way and, in particular, the plausibility of a universal, transhistorical human nature. As we will show next, where the (post)structuralists offered theoretical and historical evidence to erode the plausibility of those conditions, transhumanism provides a startling technological and political complement by bringing the very biological substance of Man (i.e., the *biological* as the universal transcendental) into question and, in doing so, supporting a highly individualized, personalized experience of self and generative production of knowledge.

THE TRANSHUMANIST PROBLEMATIZATION

Transhumanism is a body of thought that is essentially unknown in public administration. Whereas (post)structural thinking raised philosophical and historical questions about the universality of human experience and related forms of knowledge and power, new emerging technologies and their analysis within the discourse of transhumanism directly challenge the plausibility of the biological as a fixed, transcendental domain upon which to ground Man. Those invisible, organic structures themselves become objects for manipulation and politicization.

Overcoming the Biological Limits of Life Itself, and Dynamic Human "Nature"

Broadly speaking, transhumanism is concerned with the implications of new technologies for human life.² This is true for both its enthusiasts and its critics. Simon Young, to take one prominent example, is an enthusiast. In *Designer Evolution: A Transhumanist Manifesto*, he describes transhumanism as "the belief in overcoming human limitations through reason, science, and technology" (2009, p. 15). This is only novel enough, of course, to inspire a lazy yawn. Young believes, however, that we are entering a new phase in human existence and possibility for individual freedom and experience. He writes,

Man [*sic*] is not born free, but everywhere in biological chains. People of the world unite. You have nothing to lose but your biological chains!

We stand at a turning point in human evolution. We have cracked the genetic code; translated the Book of Life. We will soon be able to become designers of our own evolution. . . .

As humanism freed us from the chains of superstition, let transhumanism free us from our biological chains. (p. 32)

Young sees in new technology the ability to rationally overcome the human condition, its genetic "self-destruct" programming, and "biological slavery" (p. 44), which has, at its ends, the inevitability of disease and, ultimately, *death*. He writes, "Death is a disease waiting to be cured" (p. 42). It is the "enemy of life" and an "obscenity" (p. 43). New technologies offer the promise of overcoming these conditions—these limitations on life, freedom, and experience—by allowing us to become conscious directors of our evolution.

Similarly, in an influential article Max More contrasts transhumanism with religion and writes,

Transhumanism differs from humanism in recognizing and anticipating the radical alterations in the nature and possibilities of our lives resulting from various sciences and technologies such as neuroscience and neuropharmacology, life extension, nanotechnology, artificial ultraintelligence, and space habitation, combined with a rational philosophy and value system. (1990/1996, para. 4)

With Young, More's text also looks forward to the overcoming of biological limits and death, which, he contends, contra all existential and Heideggerian-inspired thinking of finitude, "undercuts meaning" because they "limit the ways of and extent to which you can connect your life to other values." He concludes that it is "time for [us as human beings] to consciously take charge of ourselves and to accelerate our progress."

Although self-labeled transhumanists often exhibit a marked rightlibertarian political bent, this is not exclusively the case. In one of the more subtle political tracts in this literature, James Hughes (2004) sees significant potential in emerging technologies to enhance both social and individual wellbeing. He calls for a "democratic transhumanism" that "combines [the] old strain of progressive optimism about reason, science, and technology with a strong defense of individual liberty" (p. 195). New technologies, he insists, can advance the cause of equality by addressing the biological foundations of some forms of inequality, such as intelligence or the consequences of reproductive differences in men and women. He draws on Dworkin's case for "liberal, egalitarian eugenics" and contends, sounding not unlike a behavioral economist (e.g., see Mullainathan & Thaler, 2001), "There is no contradiction between thoroughly attacking our classist stigmatizing of fat people and at the same time giving them the technologies they need to achieve whatever body image they prefer" (Hughes, 2004, p. 197). However, robust government regulation is required in order for the benefits of the technology to be widely distributed and to avoid the danger that they be used to simply reinforce or deepen existing inequalities or fall into the hands of those who would use them to do mass harm. He writes, for instance, that the "manufacturers of cognitive enhancement software could be obliged to include empathy and more decision-making supports as a feature just as we require warning and child-proof caps on medicine and air bags" (p. 256).

While people like Young, More, and Hughes are upbeat about the prospects of new technologies to expand the scope of human experience and possible modes of being by challenging the limits imposed by biology, others are less optimistic. Jürgen Habermas (2003) and Francis Fukuyama (2002), to consider two unexpected bedfellows, see in these technologies a threat to the future of the human species. Habermas contends that new biotechnological interventions pose ethical questions that are not merely challenging but "are of an *altogether different kind*" (p. 14) because they raise questions about the very identity of the species. Habermas sees these new technologies not as enhancing human freedom but as compromising that freedom, which is at the core of what is means to "be human." He sees it as the further extension of instrumentalism into the Lifeworld by the "biotechnological mode of action." New technologies like genetic manipulation dangerously collapse or "de-differentiate" the distinction between the objective and subjective (p. 42), the grown and the made (p. 43).

Habermas is, then, critical of the ability, to take an example, to create genetically manipulated offspring because such ability undermines the "somatic bases of another person's spontaneous relation-to-self and ethical freedom" (p. 13). Children produced in this manner could not see themselves as the "authors of [their] own life histories" and as "autonomous persons" (p. 25). While genetic inheritance certainly limits children in some way, genetic engineering proceeds by the conscious intent of a designer. This erodes the possibility of human freedom because, Habermas argues, human freedom is enabled, paradoxically, from the ground of something that is unchosen namely, birth. Akin to Heidegger's notion of thrownness, he says that birth is the condition humans have never controlled; it defines human finitude (p. 58) and marks the boundary between the natural and the cultural, given and made. Drawing on Arendt's idea of *natality*, Habermas says that birth brings the new into the world, and to manipulate this would be to erode the conditions that permit autonomous, moral human beings to be the "undivided authors of their life" (p. 67).

Fukuyama's position here is close to Habermas's. Indeed the setting of the two side by side gives an interesting glimpse into how these issues can blur traditional political boundaries. Fukuyama, too, sees in contemporary biotechnology the "possibility that it will alter human nature" (2002, p. 7). (We will say more later about how he treats the term "human nature.") This matters insofar as "human nature exists, is a meaningful concept, and has provided

stable continuity to our experience as a species. It is, conjointly with religion, what defines our most basic values" (p. 7). Together, this has profound social and political implications: "Human nature shapes and constrains the possible kinds of political regimes, so a technology powerful enough to reshape what we are will have possibly malign consequences for liberal democracy and the nature of politics itself" (p. 7).

The assertion held across all these positions is that something *radically new* is promised or portended by these technologies. As suggested previously, what arguably distinguishes transhumanism from long-standing religious and humanistic faith in humanity and reason is the view that advances in the contemporary bio- and other sciences *could* make it reasonable to think that humans will be able to *overcome* the "limitations" inhering in their organic materiality by technologically modifying or redesigning fundamental genetic and biological processes.

Thus, just as "identity" and knowledge have been exposed to be artifacts of human invention, so, too, may our very biological condition come to be recognized as a cultural artifact. As Sarah Franklin (2003) compellingly argues in her discussion of Ian Wilmut, one of the creators of Dolly the cloned sheep, the implication is that we are forging an age of "biological control." This "means we can no longer assume that the biological 'itself' will impose limits on human ambitions. As a result, humans must accept much greater responsibility toward the realm of the biological, which has, in a sense, become a wholly contingent condition" (p. 100; emphasis added). It is, then, the idea that humanity has transcended—or could or should (or should not)—a limit that constitutes the transhumanist problematic. In this space, it can no longer be assumed that the best that human beings can do is regulate, discipline, or ameliorate the effects of underlying natural, biological processes. Rather these processes can (and should or should not) be reengineered or redesigned intentionally. This, in turn, inaugurates a basic reconfiguration in the meaning of "being human."

Transhumanist Governance: Molecular Intervention and Social Optimization

We can see in the sentiments of transhumanist enthusiasts a similar desire for control and mastery that many in public administration and elsewhere argue characterize modernist technicism (e.g., White & McSwain, 1990). Nick Bostrom (2005, p. 1) echoes this sentiment, observing that "the human desire to desire new capacities" and "transcend our natural confines" is woven throughout the fabric of human history.³ The obvious question is whether transhumanism indeed poses a historically and conceptually distinct problem for human beings and political life and so breaks the discursive space outlined by Foucault and the transhumanist critics and enthusiasts. To answer this question, we need to move beyond the poles of the politico-philosophical

debate and give greater precision to the forms of empirical experience that transhumanism may be enabling via technology and the knowledge brought to bear on and produced by those experiences.

It is not impossible here to consider the full range of technologies and domains within which these matters are potentially germane. As such, we explore them by examining the shift (a) from "molar" or species-level biomedical practice, an important one to transhumanists, especially those who imagine the overcoming of death (de Grey & Rae, 2008), to a molecular one; and (b) from the problem of Man outlined by Foucault to consider the ways in which the problematization of transhumanism does or does not enable the death of Man and the way in which human nature and contingency are confronted and rearticulated.

Molecularization

By way of contrast to these social-theoretic and philosophical arguments, we will rely on Nikolas Rose's (2007) *Politics of Life Itself*, which examines in a sociological and anthropological fashion the "transhumanist" problematization—though he does not use this term. Rose's treatment of this array of issues is an admirably sober, empirically driven examination of these emerging technologies, yet he, too, concludes that something distinctive is happening that marks a break from the past. He provides five useful categories within which to assess the novelty of this complex terrain and how it poses problems for experience and knowledge.

First, *molecularization* speaks to a contemporary "style of thought" that considers life primarily at the molecular level. This marks a shift from the body being the primary target or object of intervention. As Rose says, it is now *life itself* that is the target; the project is to "generate and capture [biological] production itself, in all its emergent possibilities" (Cooper, 2008, p. 24). As a consequence, and to repeat Sarah Franklin's statement, the biological itself is coming to be considered as a contingent condition rather than a general transcendental condition for Man.

Second, *social optimization* refers to a compromising of the conventional poles of thought between which human well-being has been considered—health and illness. To appreciate the nature of optimization, contrast it with the regulatory, molding processes of discipline, which characterized administrative and management action during the twentieth century. Discipline effectively sought to bring individual modes of thought and action in line with some norm (Foucault, 1995). The posited norm was linked to a presumptive justification or rationalization rooted in bionormative claims (see Catlaw, 2007, chap. 5, for a discussion), which, in turn, enabled the identification of anomalies and pathologies, and so justified the imposition of the norms or the command to re-present them in one's own behavior. Optimization, combined with molecularization, changes this by reconfiguring the scope

and scale at which the "individual" can be worked on in a singular, highly focused manner. The project is not re-presenting or replicating the norm, but *intervening* (Rheinberger, 2000) to enable *personalized* generation, production, and creation.

There are two striking dimensions to this. On the one hand, and as thoroughly celebrated by transhumanist enthusiasts, molecularization takes the Maslowian project of "self-actualization" to a whole different level (see also Beck & Beck-Gernsheim, 2001). "Responsible" individuals can aspire to optimize themselves through a dynamic, intentional reflexing with their bodies; armed with an understanding of how diet, habit, and environment influence, for example, the plasticity of the brain, the expression of the genome, or the capacity for focused attention, and can adjust themselves or their children accordingly (for a popular example, see Wolf, 2010). Taken to an extreme, every human being holds the potential to be its own life form through concerned attention to one's biological and somatic processes (see Catlaw & Sandberg, 2014).

On the other hand, of course, it opens the possibility of highly invasive forms of design and control aimed at the very biological and somatic processes in the unique human organism that could limit freedom and "discriminate against those who are considered biologically inferior, and will coerce, restrict, and even eliminate those whose biological propensities are believed—by doctors, parents, or perhaps even by political authorities—to be defective" (Rose, 2007, p. 50). Some worry that this constitutes a "back door eugenics" (Rose, 2007) and continues modernity's sovereign-managed *thanatopolitics*, or politics of death (see Agamben, 1998; Esposito, 2004/2008), that characterized the darkest episodes of the twentieth century.

Third, somatic expertise is related to these new modes of subject formation and the new forms of governing and expertise that are emerging around them. Completely new fields of scientific inquiry and expertise are emerging, and so, too, are new ethical directives regarding how to conduct ourselves in light of this new knowledge. New practices for the care of the self are also emerging. Consider, as an example, the spate of popular-scientific, self-help books on "brain training" (Buzan, 2009; Doidge, 2007; Restak, 2010). These are how-to guides that promise to help readers to become reflexive participants in the design of their neural architecture and, thus, transform how they come to experience and know. While neoliberal government has emphasized individual responsibility, optimization suggests a profound intensification of this as one's biological inheritance itself comes into question and is posed as problem for possible intervention. As Rose intimates, this will be true, to some degree, even if the promises of the technologies do not materialize or are slow to develop. He writes that even if no revolutionary advances in treatment are produced, "once diagnosed with susceptibilities [to disease] the responsible asymptomatic individual is enrolled for a life sentence in the world of medicine" (p. 94). In the domain of biomedicine, preemption speaks to the variety of ways in which individuals may (and may be compelled to) monitor their somatic state and any potential conditions. At the same time, the imperative to *enhance* the self will be palpable. That is, to not only monitor and act preemptively regarding potential disease or limitations, but also to act on the body-self in such a way as to maximize and refine (see Sandel, 2007) one's capacities, happiness, and psycho-physical well-being, and so realize one's true or "authentic" self (see Rose, 2007, p. 100). Both of what Rose identifies as attention to susceptibilities and enhancement, of course, will be practiced within specific social, political, and economic contexts that give form and content to authenticity.

Fourth, *subjectivation* speaks to the ways in which people are coming to view themselves as human subjects and the things that they consider it necessary to do or to perform. Elements of this have already been outlined. Increasingly people, especially *wealthy* people, in advanced liberal countries will confront the promises and frustrations of optimization—the ways in which individuals may become responsible for the management of their bodies at the biological level. A closely allied issue concerns the way in which the biological is being incorporated into the contemporary "portfolio" of the *active citizen*, the *biological citizen* who will be expected to manage risk and "the implications of their own genome" (Rose, 2007, p. 134) and their own somatic experience; medicine will become increasingly personalized. At the same time, the "natural" domains of the biological organism become objects of government and self-government, and biological citizenship "requires those with investments in their biology to become political" (p. 149).

In other words, much as the twentieth century saw the proliferation of politics attached to state-defined categories, such as race, ethnicity, and ablebodiedness (Stone, 1986; Yanow, 2003), twenty-first-century political life anticipates mobilizations and forms of resistance organized around biological and somatic conditions and problems. This speaks directly to James Hughes's (2004) account of the ways in which the (bio)politics of human enhancement injects a third axis into politics that complicates the traditional axes of economic and cultural progressivism/conservativism. This axis is sometimes defined, clumsily, in terms of the poles of "transhumanism" and "bioLuddism," that is, between those who embrace new technologies (like Young, More, and Hughes) and those who reject them (like Habermas and Fukuyama; there is, of course, a range of positions in between).

Finally, *economic vitality* speaks to the relationship between the bioeconomy and the logic of capital accumulation. As there is social, cultural, and human capital, there is now *biocapital* at both the individual and group levels. The technological and scientific capacity is now present to allow for the practical pursuit of manipulating the fundamental processes of life itself for profit and commodification. This is no longer the realm of fantasy and fic-

tion, and it constitutes something different from modernist efforts to regulate, discipline, and normalize. Furthermore, this is no longer the stuff of isolated scientists or dreamers; rather, the *bioeconomy* constitutes a massive slice of the global political economy whose most intelligent and highly trained and ambitious scientists, entrepreneurs, policymakers, and ethicists are focused on the advancement, deployment, and analysis of these technologies. This concern has grown exponentially since the 1980s and will accelerate: Great hopes for the U.S. economy in particular are pinned to all aspects of the emerging technologies. As Cooper (2008) details, the bioeconomy, moreover, is central to the broader capitalist aspiration of overcoming the limits to economic growth.

It seems clear enough that transhumanism is fixed to the *question* of human nature—what it is, and what the technologies mean for it. From one side, the problem of the doublet seems reasserted with new intensification. Man is at the center, especially his hidden biological processes. But there is something else going on insofar as the biological conditions no longer constitute the fixed and given foundations for human existence but are now materials for human innovation, enhancement, and transformation. That is, there is a profound difference between, say, governing according to the biopolitical dispositions of a population and seeking to manipulate and alter the molecular materialities of its constituent elements. Yet, of course, the instrument of governing has shifted, too. In the world of the molecular, the move is *not* to regulate or manipulate a population but rather to displace the work of governing onto forms of power enacted by the self on the self. Discursively, biological inheritance may become as open to reimagination as one's religious, political, or other social identity, and the *management* of that biological identity becomes a dimension of "the responsible citizen." The regime of "choice" is evident enough—the state will not compel anyone to change their genome, but the demands of a competitive world will surely force a "choice" on the matter.

Even if the biological is not quite a "wholly contingent condition," the biological domain as a "design space" marks a departure from an era and mode of being concerned with "representing organisms and their processes—an age concerned with discovery—into a technological age, one concerned with intervention, whose telos is that of rewriting and transforming life (Rheinberger, 2000)" (Rose, 2001, p. 83). In this context, the biological can no longer be posited as a general transcendental condition for humanity. These changes are also certainly bound up with the profound mutations in the capitalist political economy, but at the same time they are not reducible to them (Castells, 2000; Cooper, 2008). Our biological self is increasingly a terrain for governing and self-governing in a manner meaningfully different—if not entirely dissociated—from the modern practices of eugenics and biopower. The body of Man is being disaggregated and broken down in centrifuges and laboratories across the globe and then distributed back

to biological citizens to use and refine to the ends of somatic expertise and social optimization (see Catlaw & Sandberg, 2014).

FROM ANTHROPOCENTRIC ADMINISTRATION TO "ENTANGLED" GOVERNMENT

We turn now to the orienting question of this article—Is "Man" *still* the subject of administration? In *Democracy in the Administrative State*, Emmette Redford asserted "Man as the subject of administration" (1969, p. 132). Redford's statement affords us a way to think about public administration in light of the problem of the doublet posed by antihumanists and the possibilities of biological self-determination offered by transhumanists and the particular inflection these discourses give to the subject/object of "Man" amidst contemporary "entangled" government.

Anthropocentric Administration: Man as the Subject of Administration

We can reinterpret Redford's statement in this way: Man is *subject* in that he is subjected to the authority of the administrative state, just as one might be a subject of a monarch. This sense is clearly conveyed by Redford when he writes: "the subject of administration" means that "Man stands on the receiving end line where he is *more subject than participant* with respect to the services [of the state]" (p. 132; emphasis added) and that the "administrative state is there and he must come to terms with it" (p. 133). In the same chapter, Redford goes on to explore "some of the problems presented by this subjection of Man to power" (p. 133). However, in being subjected and at the receiving end, Man is also an *object* of administrative action in that he is that which administrative authority operates on or through; Man is a terrain or problem-space for government.

Of course, a second understanding of the word "subject" is available to us, one that more directly surfaces the question of knowledge. This is the question of the academic subject, as, for example, when one says, "Mathematics is my favorite subject" (it happens). To say "Man is the subject of administration" is to provide a general answer to the question "What does public administration study?" It studies *Man* in the sense that we have outlined here; that is, it makes its inquiries within specific historical conditions for the possibility of knowledge and forms of experience. At least as hatched in the late nineteenth century, public administration thus takes Man in this sense as its object/subject both as matter of academic study and terrain of governmental practice.

We call particular attention to the manifold passivity regarding the subject/ object public administration. First, the citizen-object is passive, on the *receiving end*, of the administrative state. Second, academic public administrative science is passive before the displaced objects (including human subject-

objects) of knowledge rather than recursively constituted with and by them. To this, we add a third, critically important mode of passivity: political representation. In that mode of political engagement, political institutions are passive in the face (rather than constitutive) of the popular will or the "multitudinous monarch," the People (Catlaw, 2007; Wilson, 1887). Yet in each instance there is an opting out, or exception, to the moment of representational passivity: The public administrator, the scholar, the politician who is imagined to stand quietly in receipt of transmissions from the objects of scientific and political knowledge, while the citizen-subject, too, merely waits to get its message back (Fox & Miller, 1995).

The question is whether this constellation of *anthropocentric government* remains stable. Earlier, we outlined the contours of transhumanism and antihumanism to raise doubts about the plausibility, in general terms, of a stable transcendental point upon which it fixes the regime of Man. In what follows, we consider this question within more familiar public administrative themes and elaborate on how the destabilization of the doublet and attitude of passivity before the object gives shape to governance today.

Entanglement: Man as the Object of Administration and the Structure of Participation

Redford's statement can be rephrased in his own terms: "Is Man still at the receiving end, more subject/object than participant?" Has this passive representational subject-object relation shifted? We argue that it has and consider this through the lens of citizen-subject participation in government today.

On the one hand, it is hard not to concede the existence today both of a discourse and a widely consolidating, penetrating practice of *participation* that seems to raise doubts regarding the durability of a one-directional, objectifying, *receiving* relationship between government and its citizensubjects. Indeed there was a vital element of "coproduction" already in Great Society programs that required "targets" of intervention to operate on themselves (or, in the official jargon, to be "empowered") in order for policies to be executed (Cruikshank, 1999). Today, however, participation is now a near-ubiquitous practice, necessity, and expectation in contemporary governance and management (Nalbandian, 2005) that encompasses a broad range of passive (e.g., citizen surveys) and active (e.g., participatory budgeting) technologies.

The rise of participation is a deeply *ambiguous* enterprise (Bevir, 2006; Catlaw & Sandberg, 2014). This ambiguity, though, characterizes not only the logistical practicalities but its overall ambitions, too. To this point, Bevir has shown how the participatory turn exhibits tendencies that instrumentalize participation to the information-gathering ends of state and systems legitimation, and others that seek to repeat the social-transformative impulse that drove the demands for participation in the 1960s (Pateman, 1970) and so seek

a fundamental reorganization of power relations between citizen and state. Along similar lines, Bang observes the contours of "culture governance," a *top-down steering strategy* in which "effective rule becomes ever more dependent on the ability of leaders and managers to incorporate and involve ever more people, communities, institutions and organizations in the systematic articulation, organizing, programming and implementing of collective decisions and actions" (2004, p. 159). Government comes to *depend* on the risky, uncertain strategy of cultivating freedom.

The ambiguity between systems and radical perspectives on participation, furthermore, can be coupled with the well-observed desocialization of risk and an emphasis on creating conditions for the active, entrepreneurial (O'Malley, 1996), now self-*optimizing* individual. The ambiguity of this dimension was illustrated above in the discussion of medical technologies, but it is equally evident in, to Bang's argument, contemporary management discourse. There, knowledge workers are enjoined to be active and engaged and to view the dynamic, unpredictable conditions of contemporary work as a means for constant self-reinvention and -optimization (Boltanski & Chiapello, 1999/2005). But, like the ambiguities of instrumental and transformational perspectives of participation, self-optimization in management typically extends only so far as the managerially defined organizational ends.

However, within participation's ambiguity it seems equally clear that this participatory self-optimization is accompanied by violent forms of objectification and commodification—the total absence of participation and choice. For example, as the sociologist Loïc Wacquant (2002) has detailed, the normalizing discipline of welfarist penal practices has largely been displaced by the "warehousing" of those convicted of crimes. The criminologist Aaron Kupchik (2010) and others have documented the expanded use of punitive school disciplinary policies that hardly view youth as "coproducers" in their educational experiences and environments, but rather cultivate deference to authority and intensively regulate students' lives.

Although, quite certainly, the contemporary image of the "active" participatory citizen cuts in ambiguous, dangerous directions, the notion that the human is merely at the "receiving end" of the administrative state is, at the very least, now certainly in question. The contemporary impulse toward participation, with its embedded logic and design of choice-theoretic and nudging architectures (Thaler & Sunstein, 2008), works the terrain of individual- and social-system optimization. In our view, the core issue here concerns the extent to and mode through which the instrumentality of participation is deployed in the design of these architectures themselves. This question is crucial in light of the emerging awareness regarding the recursive and constitutive effects of social structures, institutions, objects, and practices of the self on the self. In other words, when one understands that, more simply, the social and built environment materially impacts or "makes up" (Hacking, 1986/1999) the kinds

of selves we will develop, the kinds of bodies we will cultivate, and even the kinds of genomes that will be expressed, the issue of design (of institutions, choice architectures, and environmental affordances generally) becomes an explicit question of the *kinds of selves*, *bodies*, *biologies*, *and worlds that we aspire to have and might produce*. Our instruments, objects, and selves are *entangled* within one another, and this presses in renewed, urgent terms the question as to where our "free choices" come from in the first place. In other words, the primacy afforded to *choice* preempts the prior question regarding the original *conditions* through which that freedom was constituted, and in today's governmental space, *access* is either denied or gained.

This complex problem is what we call *entanglement*. In the context of entanglement, a critical question for governing authorities to answer and act on concerns: (a) the extent to which *design itself* will incorporate robust participatory processes, or (b) whether authorities will continue to see the imperatives of design as their exclusive purview and deploy participatory engagement strategies in a narrowly instrumental fashion. In light of the mounting legitimacy crises that authoritative institutions already face and the dynamics of these metapolitical shifts, the latter seems to be a perilous course (Catlaw & Sandberg, 2014), although much relied upon in contemporary practice. Perhaps more to the point, though, the dynamics of entanglement radically compromise any easy, naive acceptance of managerial, top-down control, since designs work on designers as much as they do on those whose behavior they seek to modulate (see Harmon, 2006, chap. 4).

On the "citizen" side, Redford challenges that the "administrative state is there and [we] must come to terms with it" (1969, p. 133). What does "come to terms" mean? Consider this in light of the pervasive anxiety in the United States about "big government." From the perspective advanced here, this anxiety can be interpreted as somewhat understandable, viz., the "intrusive" ways in which governments seek to design and make us up. But at the same time, we might see this anxiety as resting on a basic misrecognition insofar as those identities are *already* made up by prior forms of "big" governing. Without straining the analogy too far, coming to terms with the administrative state (as *metapolitical*) is somewhat akin to coming to grips with our parents and the manifold ways in which they consciously and unconsciously shape and constitute our bodies and identities. "Coming to terms" with the administrative state, then, entails abandoning the attachment to blaming government and recognizing our inextricable entanglement with it. It means moving from a passive to an *active* stance. But surely this would be encouraged by a deinstrumentalization of participation by authority and an opening of the uncertain processes of design. If authorities resist such opening, there appears little for those unattached to or disinterested in the melodrama of conventional political and organizational life to do except walk away and begin building a world parallel to yet still entangled with them.

The Public Administrative Academic Subject

What of our academic "subject," public administration? There are at least two approaches to this question—one speaks to the theoretical "foundations" of the field, and the other to its particular topical orientations.

The End of the Biological Transcendental

First, and advancing in a more theoretical fashion from the observations presented above, *entanglement* points to a complex recognition of the mutually generative, recursive entanglement of subjects and objects in general. As suggested in the preceding discussion, the epistemological terrain of Man established knowledge production essentially in a relation of re-presentation. Knowledge represented the displaced (political or scientific) object, and the human observer stood passively before the object. Institutions, social structures, and authorities, to the extent that they put knowledge to work (as in the regulatory activities of Keynesian national welfare states), largely served to express (or reinforce) these "naturally occurring" political, economic, or moral foundations. Indeed the paradox of the epistemological terrain of the doublet for an *activist* administrative state was its original stance of *passivity* before its objects in the three ways outlined above.

Entanglement, by contrast, undermines any straightforward representational logic by eroding the traditional distinction between the subject and object upon which it was maintained. Similarly, the terms of the doublet itself are compromised by virtue of the recognition that Man now substantively and situationally produces itself as subject in the very processes through which it appears as an object of scientific inquiry.

To put a finer point on it: The advent of transhumanism and new technologies puts the final signature on human nature's death certificate, if by the term something like a general, universal, transcendental condition or mode of being of the species is implied. If the biological has become contingent, there can no longer be, as an *a priori* limit, a "species-being" for the human animal, but only local historical conditions within which specific humans and the multitude of animate and inanimate entities appear to and with one another. In this connection, we would resist viewing our argument in terms of the "dissolution" of the subject-object dualism or fusion of the two in social process (Harmon, 2006) or interconnection. There is a difference between seeing humans as entangled with active "objects" (Catlaw & Holland, 2013; Latour, 1999) and seeing objects as constructed by language or consciousness and reducing either the subject or the object to a third term. We do not argue that objects (or human subjects) are made up entirely by the situational, local relationships into which they enter. Rather, they are entangled with one another in ways that are mutually constitutive but not reductive.

To be clear, this not to say, naively, that everything is now simply "con-

structed" by the mechanisms of human consciousness or linguistic-symbolic signification. The emergence of the biological as a contingent condition does not mean that material bodies and genes are "merely" social constructions or that the human encounter with those entities is *mediated* by language or consciousness. Rather, the dilemma of entanglement prompts us to think about the relationship among things in the world in a different way: recognizing the nonreductive mutual constitution among situated heterogeneous entities and paying close heed to the metapolitical questions of design and boundary that precede creative production.

This is an ambiguous moment. On the one hand, this radical contingency of human conditions displaces any kind of onto-naturalistic or onto-theological justification for governing forms of life (such that each human animal—and other animals as well—might come to create its own form of life). On the other hand, it raises the question of whether humans are up to the task of governing their worlds without reference to a general transcendental condition, to joining with the nonhuman worlds, and to living with the new life forms that politics, science, and future entanglements will create.

New Topical Foci

The growing interface of human and nonhuman entities (illustrated in the discussion of optimization in biomedicine) and the destabilization of the doublet require an *expansion of entities and objects* into the domain of public administrative thought. To some extent, this battle has been waged already in terms of epistemological and methodological pluralism and inclusivity in participatory processes. But here we have in mind, more particularly, the expansion of nonhuman entities as a consideration in all these domains along the lines of the transhumanist problematization. There are precursors of this kind of openness—Schmidt's (1993) analysis of grout, and Catlaw and Holland's (2012) discussions of animal-others in public administration—which indicate how conscious humans are intimately entangled with language, desire, and nonhuman material entities.

These types of inquiries expand the domain of objects/subjects with which government is entangled and illustrate how public administrative thought could be open to the mutually constitutive relationships among entities beyond language and human actors. Notably, transhumanism interjects an additional, profound dimension into the contemporary interest in the *active* citizen, namely the constructed quality of the biological. As such, we can assume that biological and somatic reflexivity will be a form of thought and problem-space within which *both* citizens *and* administrators will increasingly consider themselves and their relationship to the apparatuses of traditional government. It will, in other words, inflect the ways in which people think about governing themselves and others as people come to see themselves as involved in and responsible for the constitution of their biological selves.

That is, although science appears to enable more active generative participation in human somatic experience, the constructive possibilities of this engagement are contingent upon humans acting as mindful participants in the empirical discourse of their entangled condition. To this end, the emerging field of contemplative science, which grounds the Eastern theory and practice of mindfulness in Western scientific developments in neurobiology and psychology (Wallace, 2007), offers a promising intellectual discourse and somatic practice by and of human animals. In particular, *mindfulness* is the self-governing practice that affords humans the capacity to (re)train their neurobiology and, thus, their habitual orientation to perceiving, knowing, choosing, acting, and being through the first-person reflexive meta-cognitive present awareness of the actively mediating subject of the somatic experience and the constituted and constituting subject/object of its discourse (Baer, 2003; Cozolino, 2002; Langer & Moldoveanu, 2000; Lutz, Dunne, & Davidson, 2007; Siegel, 2007; Van Overschelde, 2008). As such, the study and cultivation of mindfulness offer a discourse and practice of being, knowing, and governing that can help humans to make sense of and navigate in an entangled world.

CONCLUSION

While Foucault's provocative sloganeering about his death may garner more attention than his fine-grained analysis of the conditions for the possibility of "Man," it is not implausible to conclude that the humanistic problematization called Man is being eclipsed, and with it, the grounds and conditions for what has been called public administration are indeed being washed away. This article has tried to bring some precision to the how and why of these changes in terms of the conditions for the possibility of knowledge, experience, and the practices of government.

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NOTES

- 1. *Episteme* is also described in *The Order of Things* as a "historical *a priori*." For good, critical examinations of the historical *a priori*, see Braver (2007), Dreyfus and Rabinow (1983), and Han (1998/2002).
- 2. See, for a general overview, the "Transhumanist Declaration," available as an appendix in Bostrom (2005). Much material related to transhumanism is available online. For starters, see especially: www.nickbostrom.com, http://humanityplus.org, and the Metanexus Institute at www.metanexus.net, which

hosts its journal, *The Global Spiral*. Bostrom's site and that of Metanexus will disabuse the skeptic that this is an ignorant fringe movement. We note, too, that we will not wade into the related debate about emerging technology and human enhancement (see Savulescu & Bostrom, 2009a) but, rather, will seek to describe the coordinates that frame the discussion about how new technologies affect who we can be and how we might experience ourselves. Also, not everyone engaged in the debates about transhumanism would embrace the label. We use the term here to designate, again, a particular problematization or constellation of questions around which many different positions orient themselves rather than to name a specific philosophy, ideology, or normative commitment.

- 3. Interestingly, though, some strong advocates of human enhancement use a similar kind of logic and so downplay or dismiss the significance of new technology and emphasize the continuity between, say, education and neuro-network programming (Savulescu & Bostrom, 2009b, pp. 2–3).
- 4. The term "entanglement" evokes quantum mechanics. We intend no substantive or metaphorical relation to that body of scientific literature.

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