The Power to Kill Life Itself: Michel Foucault, Biopolitics, and the Political Challenge of Human Extinction

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The past two decades have seen many social, political, and international relations (IR) theorists make extensive use of Michel Foucault's theory of biopolitics—or how political power interacts with biological life. What has so far passed unnoticed, however, is that Foucault formulated his highly influential theory about how living populations became political objects in the context of an overarching concern with what he termed "the power to kill life itself." This essay reassesses Foucault's biopolitics in light of his broader discussion of the potentially existential threats posed by nuclear weapons and gene editing technology. In doing so, it invites readers to reassess Foucault's famous critiques of both sovereignty and political universalism, while also providing a succinct introduction to his theories of power and the general history of anthropogenic existential threats. The article concludes by raising fundamental questions for political and IR theory concerning what happens when the biological survival of the human species ceases to be a necessary prerequisite *for* politics and instead becomes a contingent outcome *of* politics.

Keywords: Biopolitics, existential risks, sovereignty, nuclear weapons, genetic engineering, universalism

Four decades after his untimely death, Michel Foucault remains one of the most influential figures in contemporary social and political science. However, as the grand tomes that first won Foucault fame in life fade further into the history of French structuralism, a growing portion of the philosopher's contemporary relevance has come to rest on a few stray remarks he made concerning the relationship between political power and biological life. Remarkably, these observations about what Foucault termed "biopolitics" languished in obscurity for nearly two decades before finally being brought to light in the 1990s (Agamben 2000, 137–38; Gilroy 1994; Stoler 1995). Following the influential 1998 translation of Giorgio Agamben's *Homo Sacer* (2017), the 2000s saw scholars from across the humanities and social sciences seize on the explanatory power of Foucault's theory of biopolitics. International relations (IR) scholars proved to be particularly early adopters, finding in biopolitics "a powerful tool for analysing contemporary modes of war and practices of security" to build what by the early 2010s had become a distinct branch of "biopolitical IR [or] the 'biopolitics of security' school" (Kiersey, Stokes, and Weidner 2011, xiv). These years saw the birth of both a slew of new "bio-" research fields (such as bioculture, biomedia, and biolegitimacy) and hyphenate "-politics" (such as geontopolitics, necropolitics, and infopolitics) (Koopman 2019; Mbembe 2019; Povinelli 2016). By the mid-2010s researchers could reasonably point to this "proliferation of studies, claiming Foucault as their inspiration, on the relations between 'life' and 'politics'" to identify a "biopolitical turn" in the social sciences (Campbell and Sitze 2013, 4)—a "turn" that has since spawned thousands of articles, hundreds of books, and even entire journals. Given all this attention, it may surprise some readers to learn that Foucault only ever published 10 pages on the

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subject in life (Foucault 1990, 135–45) (and a total of around 40 if you include posthumous lecture transcripts [Foucault 2003a, 239–63]). The glaring disparity between Foucault's fleeting discussion of biopolitics and its rapturous reception decades later raises the question: why did Foucault not devote more attention to developing a theory that would later prove so impactful?

This article contends that Foucault's work on biopolitics quickly became complicated by the realization that he could not explain the contemporary functioning of power over life without addressing the threats posed by thermonuclear weapons, recombinant gene editing, and what he came to call "the power to kill life itself" (Foucault 2003a, 253). For, on closer inspection, it turns out to be no coincidence that the same scant handful of pages that saw Foucault introduce his theory of biopolitics also mark the only time in his three-decade career that he attempted to come to grips with the political implications of nuclear weapons. Although a range of commentators have rightly noted that "the power of nuclear war" appears to have been "one of the crises that spurred [Foucault] to problematize the notion of biopolitics to begin with" (Sitze 2012, 218; see also Esposito 2008, 41–42; Hamilton 2018, 49; Karppi, Böhlen, and Granata 2018, 118–19; Masco 2010, 141; Mendieta 2014, 47; Ville 2011, 219), what follows represents the first sustained attempt to reconstruct Foucault's claims concerning the nuclear power to kill life itself and the implications these carry for both his theory of biopolitics and the foundations of Western political thought more generally.[1]

The article that follows comprises several parts. The first section begins by offering a brief introduction to Foucault's biopolitics before showing how the power to kill life itself emerges from within it. The second section then illustrates the compatibility between Foucault's biopolitics and the genocidal political logic of the first half of the twentieth century, while the third section turns to show how the advent of massed thermonuclear weapons invalidated the theory of sovereignty on which Foucault had built his approach to biopolitics. The fourth section then turns to Foucault's engagement with the recombinant genetics revolution of the 1970s to explain why he became concerned with the power to kill life itself when he did. The fifth section introduces readers to a few of the theoretical innovations that Foucault developed to tackle this daunting new topic, highlighting how this confrontation caused him to nuance his position on political universalism. The sixth section assesses the implications that the power to kill life itself carries for Foucault's theory of biopolitics and the foundations of Western political thought, while the conclusion offers several suggestions for how these findings could be used to enrich contemporary political science.

The Birth of Biopolitics

Foucault first introduced his theory of biopolitics in 1976. Already a household name for many, the philosopher had recently made fresh waves with the publication of his 1975 study *Discipline and Punish.* This book had boldly suggested that the disappearance of violent punishments from public life did not automatically imply that society had become more humane, but only that it had begun to exercise power in a different way. Formerly, he claimed, there had been the power associated with the sovereign. This was subtractive and ancient, dating back to however long ago rulers first began to use the threat of force to command obedience and arrogated the right to subtract the lives and goods of their subjects through taxes, executions, and war. On the other side stood a new mode of what Foucault called "disciplinary" power. This was, by contrast, additive and relatively historically recent. Disciplinary power had taken shape near the end of the eighteenth century as new techniques for accumulating and organizing knowledge made it increasingly possible to track, invest, and normalize individuals by establishing an archipelago of analogous disciplinary institutions such as schools, clinics, barracks, factories, and prisons (Foucault 1977, 210–28).

Foucault opened his annual series of lectures at the Collège de France in January 1976 by stressing to his audience that "sovereignty and discipline … are two absolutely constitutive components of the general mechanisms of power in our society."[2] At the same time, he remained acutely aware that he had published *Discipline and Punish* without clearly resolving the core question of how such seemingly immiscible modes of power could cooperate in the same society. "This nonsovereign power, which is foreign to the form of sovereignty, is 'disciplinary' power," he told his listeners. "This power cannot be described or justified in terms of the theory of sovereignty. … It seems to me that this type of power is the exact, point-for-point opposite of the mechanics of power that the theory of sovereignty described" (Foucault 2003a, 36). But where then to search for the "arbitrating discourse … taking place on the front where the heterogeneous layers of discipline and sovereignty meet" (39)? Foucault reasonably surmised that the disciplined violence of the military represented one obvious interface to explore, informing his lecture audience: "Until now, or for roughly the last five years, it has been disciplines; for the next five years, it will be war, struggle, the army" (23). As promised, Foucault devoted the remainder of that year's course to exploring how it had become possible for military theorists "to analyze politics, talk about politics, and demonstrate that politics is the continuation of war by other means" (165).

And then Foucault did something surprising. Rather than wrap up what came before, he used that year's final lecture on March 17 to dart off in a new direction. His earlier misstep, he declared, had been to mis-pose the *problématique* by overlooking the way that sovereignty and discipline participate in a more general tension. On

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the one side there remained the negative power of the sovereign to take life. The other side of the equation, however, came populated by a variety of positive powers oriented toward making, growing, and investing life. Until now, he had been focusing exclusively on the disciplinary effects that this newer positive power exercised on individuals while missing the ways that it had also come to operate as a mass phenomenon. "Unlike discipline, which is addressed to bodies," he now explained, "the new nondisciplinary power is applied not to man-as-body but to the living man, to man-as-living-being; ultimately, if you like, to man-as-species" (Foucault 2003a, 242). Accordingly, Foucault now proposed that the last two hundred years had witnessed two distinct but complementary trends in nonsovereign power, where "one is a technology in which the body is individualized as an organism endowed with capacities, while the other is a technology in which bodies are replaced by general biological processes" that thereby "brings together the mass effects characteristic of a population" (249). Foucault (1990, 135–45) proceeded to distill this flash of insight into a 10-page précis on biopolitics that he included as a self-contained section of the first volume of *The History of Sexuality*, published six months later (see also Elden 2016, 59). In these passages Foucault (1976, 188; 1990, 143) proposed adopting the term "*bio-politics* to designate what brought life and its mechanisms into the domain of explicit calculations and made knowledge-power an agent of transformation of human life."[3] Ultimately, Foucault used *biopolitics* to capture the fraught balance that contemporary politics strikes between the sovereign power to kill, the disciplinary power to normalize individuals, and the biopower to oversee the life processes of populations.

Foucault structured his March 1976 lecture on biopolitics in two parts: the first elaborating the historical development of biopolitics and the structure of the theory, and the second applying these dynamics to explain the rise of biological racism and the Nazi infatuation with population health. He used the pivot between these two parts to briefly touch on the topic of how his new theory might be applied to the contemporary present. In a remarkable passage that rewards being read at length, he explained,

> We are, then, in a power that has taken control of both the body and life or that has, if you like, taken control of life in general—with the body as one pole and the population as the other. We can therefore immediately identify the paradoxes that appear at the points where the exercise of this biopower reaches its limits. The paradoxes become apparent if we look on the one hand at atomic power, which is not simply the power to kill, in accordance with the rights that are granted to any sovereign, millions and hundreds of millions of people (after all, that is traditional). The workings of contemporary political power are such that atomic power represents a paradox that is difficult, if not impossible, to get around. The power to manufacture and use the atom bomb represents the deployment of a sovereign power that kills, but it is also the power to kill life itself. So the power that is being exercised in this atomic power is exercised in such a way that it is capable of suppressing life itself. And, therefore, to suppress itself insofar as it is the power that guarantees life. Either it is sovereign and uses the atom bomb, and therefore cannot be power, biopower, or the power to guarantee life, as it has been ever since the nineteenth century. Or, at the opposite extreme, you no longer have a sovereign right that is in excess of biopower, but a biopower that is in excess of sovereign right. This excess of biopower appears when it becomes technologically and politically possible for man not only to manage life but to make it proliferate, to create living matter, to build the monster, and, ultimately, to build viruses that cannot be controlled and that are universally destructive (Foucault 1997, 207; 2003a, 253).

Foucault concluded these remarks by asking his audience to "excuse this long digression" before proceeding to complete the pivot to his historical examples and posit "Nazism" as the "paroxysmal development of the new power mechanisms that had been established since the eighteenth century." (254, 259). This was an awkward recovery, however, for Foucault had just stated in no uncertain terms that the theory of biopolitics that he had just spent the better part of an hour elaborating—with its defining tension between the sovereign power to take life and the biopower to foster it—faces potentially insuperable paradoxes when confronted by recent developments in nuclear and gene editing technology.

It has been noted that, when it comes to his public lectures, Foucault seldom pursued "a preestablished plan, but tended, rather, to begin with a problem or certain problems, [so that] the lecture developed 'on the spot' through a sort of spontaneous generation" (Fontana and Bertani 2003, 287). This improvisational approach leaves open the intriguing possibility that the ideas expressed above may capture Foucault's first attempt to think through the political implications of the power to kill life itself out loud and on the fly. Following this thought process, why might an "atomic power … capable of suppressing life itself" and an "excess of biopower" able to "build viruses … that are universally destructive" challenge the foundations of Foucault's freshly minted theory of biopolitics? Let us take a look at both of these developments in turn, beginning with the atom bomb.

The Right to Kill Millions and Hundreds of Millions

As far as I am aware, Foucault only ever addressed the existence of nuclear weapons *three times* in his three-decade career; first during his March 1976 lecture on biopolitics, once more during an interview that June, and then again in volume one of *The History of Sexuality*, published that November. Each instance is revealing. When assessing the relationship between "atomic power" and biopolitics, however, the first thing to note is that the mere existence of atomic weapons does not in itself automatically pose a problem for Foucault's framework. In fact, the logics of biopolitics and atomic weapons mesh disturbingly well.

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When propounding his new theory, Foucault was careful to foreground the double-edged nature of adopting the vital statistics of populations as political objects. The resulting biopolitics could engender both public health campaigns to reduce infant mortality or eradicate cholera *and* drives to exterminate "degenerate" or "parasitic" populations perceived to be sapping the strength of the national body (as epitomized by the Nazi state). Accordingly, Foucault (1988, 160) noted, "Since the population is nothing more than what the state takes care of for its own sake, of course, the state is entitled to slaughter it, if necessary. So the reverse of biopolitics is thanatopolitics." For those engaged in thanatopolitical projects of exterminating entire populations, the first atomic bombs offered an appealing expedient. To better see how, let us begin by taking a look at the remarks that Foucault made on the subject in *The History of Sexuality.* After initially positing "Nazi society" to be the "paroxysmal" apex of biopolitics during his March 1976 lecture, he revised this picture slightly when drafting the précis that appeared in *The History of Sexuality.* Here, Foucault (1990, 137) instead proposed,

> Wars are no longer waged in the name of a sovereign who must be defended; they are waged on behalf of the existence of everyone; entire populations are mobilized for the purpose of wholesale slaughter in the name of life necessity: massacres have become vital. It is as managers of life and survival, of bodies and the race, that so many regimes have been able to wage so many wars, causing so many men to be killed. And through a turn that closes the circle, as the technology of wars has caused them to tend increasingly toward all-out destruction, the decision that initiates them and the one that terminates them are in fact increasingly informed by the naked question of survival. The atomic situation is now at the end point of this process: the power to expose a whole population to death is the underside of the power to guarantee an individual's continued existence. … If genocide is indeed the dream of modern powers, this is not because of a recent return of the ancient right to kill; it is because power is situated and exercised at the level of life, the species, the race, and the large-scale phenomenon of population.

In other words, while the sovereign right to kill "millions and hundreds of millions of people" was quite "traditional," the notion of deliberately targeting the vital processes of an enemy population remained comparatively new, with the advent of atomic weapons arriving at the end of a protracted period of intensification. European imperial powers had first honed forms of biopolitical warfare in their conflicts with Indigenous peoples (Ghosh 2021, 163–72), before the British broke the taboo of using these techniques against fellow European peoples during the Second Boer War (rounding up the noncombatant portion of the enemy population to die by the thousands of disease and starvation in concentration camps). Hunger subsequently reappeared as a potent weapon for degrading population dynamics during the early twentieth century, deployed effectively by the British through their blockade of Germany during World War I, by the Soviet Union against the Ukrainian people during the Holodomor, by the Nazis in their death camps, and by the United States against Japan after mining the import-reliant nation's harbors and sinking its merchant fleet as part of "Operation Starvation" (Sallagar 1974).

In the immediate aftermath of World War II, while the Nazi leadership had worked to liquidate entire populations on a mass scale, the young mathematician Freeman Dyson (1984, 120) could not help but notice that he and his fellow functionaries at Britain's Bomber Command had likewise spent the war "carefully calculating how to murder most economically another hundred thousand people" with the aim of "killing the civilian population" of Germany from the air. In the Pacific theater, over half the urban population centers of Japan were leveled before the Enola Gay even took off—with upward of two hundred thousand people dying in the firebombing of Tokyo alone.[4] The point of these grim recitations is not to attempt to draw any sort of moral equivalence between what have been called the Nazi "bloodlands" and the preferred Anglo-American technique of mass extermination from the air (Snyder 2010), but rather to highlight the extent to which a pervasive biopolitical rationale suggested to all sides that populations and their living dynamics were a primary military target. As biologically attuned total war intensified, the initial arrival of the atomic bomb merely marked a massive quantitative increase in the efficiency with which population centers could be erased. Although one bomb could now do the work of thousands, the scale of destruction remained well within the scope of what could otherwise be accomplished by conventional means.[5] Perhaps the purest expression of the exterminationist logic of biopolitical warfare came in October 1947 when the US Joint Chiefs of Staff declared that "a military requirement exists for approximately 400 atomic bombs of destructive power equivalent to the Nagasaki bomb" in order to confer on them the capacity for "killing a nation" (quoted in Ellsberg 2017, 267).

The Hypertrophy of Sovereignty

Ultimately, it was not the first fission bombs of the 1940s that interrupted the worsening slaughters of biopolitical total war, but the advent of the hydrogen ("H-" or "super") bomb several years later. Detonating with many hundreds of times the yield of the fission weapon that leveled Hiroshima, the first successful hydrogen fusion test of November 1952 initiated a new scale of destruction that has aptly been termed "a thermonuclear revolution on top of the atomic revolution" (van Munster and Sylvest 2016, 39). However, it was the Castle Bravo test of March 1954 that first convinced contemporary onlookers that "now, mankind as a whole can be wiped out by men" (Jaspers 1961, 3). A disastrous success, Castle Bravo not only

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marked the test of the first potentially deliverable hydrogen bomb, but also detonated with almost three times the expected force for an estimated yield of 15 megatons.[6] The test created a regional rain of irradiated coral sand that caused acute radiation sickness in the crew of a Japanese tuna trawler well outside the preplanned "danger zone" (Matashichi 2011, 18–48). Meanwhile, material injected into the stratosphere by the new scale of the explosion started to turn up in cow's milk and baby teeth on the other side of the planet as a blanket of global fallout began to settle (Gerl 2014). With the prevailing medical wisdom of the day being that "all man-made radiation must be regarded as harmful to man from the genetic point of view" (WHO 1957, 11), Albert Einstein and the logician Bertrand Russell could credibly claim in their joint manifesto of July 1955: "No one knows how widely such lethal radio-active particles might be diffused, but the best authorities are unanimous in saying that a war with H-bombs might possibly put an end to the human race. It is feared that if many H-bombs are used there will be universal death, sudden only for a minority, but for the majority a slow torture of disease and disintegration" (Russell 2003, 319). By the time Foucault first broached the subject of an "atomic power … to kill life itself" at the Collège de France two decades later, global nuclear stockpiles had reached fifty thousand weapons (and counting),[7] making the prospect of imminent universal death a generally accepted (if seldom discussed) fact of life by the 1970s (Weart 2012, 154–57). It was this popular wisdom that permitted Foucault to offhandedly remark, without feeling the need to further explain himself, that "the power to manufacture and use the atom bomb" brings into play "the power to kill life itself."

If the hypertrophic increase in killing power ushered in by the hydrogen bomb convinced contemporaries that humankind itself could be killed, what implications did this new scale of atomic power carry for biopolitics? As we saw above, Foucault (2003a, 253) had interrupted his March 1976 lecture on the subject by remarking how the atomic "power to kill life itself" had confronted "the workings of contemporary political power" with "a paradox that is difficult, if not impossible, to get around." He further noted how nuclear-armed sovereign power acquires the capacity "to suppress itself insofar as it is the power that guarantees life," meaning that "either it is sovereign and uses the atom bomb, and therefore cannot be power, biopower, or the power to guarantee life, as it has been ever since the nineteenth century. Or, at the opposite extreme, you no longer have a sovereign right that is in excess of biopower, but a biopower that is in excess of sovereign right."[8] As readers may already have noticed, Foucault's "either/or" is conspicuously out of joint: the "or" in question does not finish the thought, but shifts the topic from sovereign to biopower. This disconnect would not stand out so sharply if Foucault were not usually so seamless in his oratory. What passes unsaid in this slippage?

At the beginning of his March 1976 lecture on biopolitics, Foucault (2003a, 240) had explained that sovereign power differs from biopower in that "sovereign power's effect on life is exercised only when the sovereign can kill. The very essence of the right of life and death is actually the right to kill: it is at the moment when the sovereign can kill that he exercises his right over life." If we take this to be the case, then the task of finishing Foucault's unspoken thought seems fairly straightforward. To put it another way, if the workings of contemporary political power are such that atomic power represents "a paradox that is difficult, if not impossible, to get around," then the dilemma in question takes the following form: *either* a sovereign entity proves its sovereignty by exercising its right to use all of the violence at its disposal without outside restraint and thereby abolishes itself along with all life, *or* it declines the right to the unfettered expression of violence and in doing so foregoes the prerogative that has traditionally defined sovereignty in Western political and IR theory. When massed thermonuclear weapons metamorphosed the ancient right to kill "millions and hundreds of millions of people" into the new power to kill life itself, the sovereign found itself paralyzed by a paradoxical choice between either killing no one or knowingly risking killing everyone. Although violence is by no means abolished under these new circumstances, the *ultima ratio regis* must be articulated much more carefully when the resort to sovereign violence risks precipitating a process whose ultimately unforeseeable outcome may yield the end of all earthly human life. For those who possess them in sufficient number, hydrogen weapons mark the self-canceling outer limit of sovereign power.

Could Foucault's confrontation with the implications of atomic weapons have prompted him to rethink the place of sovereignty in contemporary political thought? This intriguing possibility becomes more likely when we take into account the fact that, as one observer has noted, Foucault's approach to sovereignty was "theoretically very rudimentary" (Oksala 2010, 41; see also Bargu 2014, 456). In contrast to the metaphysical subtleties of someone like Agamben, Foucault's treatment of sovereignty corresponds closely to Max Weber's (1994, 310) classic definition of the sovereign state as "that human community which (successfully) lays claim to *the monopoly of legitimate physical violence* within a certain territory" (emphasis in original). While some may find Weber's definition lacking, not everything that is simple has been oversimplified. Since at least the time that centrally organized states emerged out of the European feudal order, *sovereignty* has come to be synonymous with the ability of a monarch, parliament, or people to impose its political will by all means at its disposal up to and including violence. It is this capacity to settle otherwise insuperable political

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disputes by "appealing to heaven" and engaging in war as the final arbiter that distinguishes sovereign polities from merely administrative units (the kind that might possess significant autonomy but be unable to go to war as the final guarantor that their will be done). Considered in these terms, it becomes clear that no entity can successfully lay claim to a monopoly of physical violence within a certain territory when the existence of the power to kill life itself exposes all human beings everywhere on the planet to the possibility of lethal violence descending at any moment for any or no reason.

If Foucault did indeed conclude that atomic weapons posed a potentially insuperable paradox for sovereign power, then he would have found himself in good company. For it turns out that the notion that thermonuclear weapons abolish traditional claims to sovereignty was hardly a hot take on Foucault's part, but one of the first thoughts to strike political thinkers during the thermonuclear revolution of the 1950s. Having taken the planet-scale threat of nuclear weapons deadly seriously, observers such as Hannah Arendt (1961, 205), Karl Jaspers (1961, 22), Hans Morgenthau (1962), Lewis Mumford (1954), and Bertrand Russell (2003, 10), all came to accept as given that "the greatest obsolescence of all in the Atomic Age is national sovereignty" (Cousins 1945, 20). Such political thinkers remained in the minority, however. The overwhelming majority of their contemporaries proved content to ignore the implications of the thermonuclear revolution and continue *as if* sovereign claims to a monopoly on violence still had meaning in a world where someone somewhere could now kill everyone everywhere—a young Foucault among them.[9] However, when Foucault *did* eventually broach the subject of nuclear weapons in 1976, his own views on the place of sovereignty in contemporary politics appear to have shifted no less drastically.

As we have already seen, Foucault (1994b, 189) opened 1976 by roundly reaffirming that sovereignty forms one of the "two absolutely constitutive components of the general mechanisms of power in our society," before proceeding to build his theory of biopolitics on the tension between sovereign power and biopower. Three months after his public encounter with the power to kill life itself that March, Foucault sat down for an interview in June that came to be widely republished under the title "Truth and Power." In stark contrast to his claims from a mere six months prior, Foucault (2001, 122) now loudly and famously complained: "Political theory has never ceased to be obsessed with the person of the sovereign. Such theories still continue today to busy themselves with the problem of sovereignty. What we need, however, is a political philosophy that isn't erected around the problem of sovereignty. … We need to cut off the king's head. In political theory that has still to be done." This is a striking declaration. As political theorist Banu Bargu (2014, 457) rightly notes of this remark, "Since such a programmatic pronunciation is a rare occurrence in Foucault's voluminous discourse, especially in light of his general aversion to overarching normative, political, and theoretical projects, it is not to be taken lightly." What could have inspired Foucault to make such a programmatic pronouncement so starkly at odds with his assertions from earlier that same year? In between his January claim concerning the "absolutely constitutive" centrality of sovereignty in contemporary society and his June repudiation of "the problem of sovereignty" sits his March encounter with the power to kill life itself. After remaining conspicuously silent on the subject, when Foucault did finally try to address the political implications of thermonuclear weapons, he appears to have promptly arrived at the same conclusion that the children's author E. B. White (1956, 206) reached two decades prior: that "the H-bomb … has given a new twist to the meaning of power," for "in a paradox of unbelievable jocundity, the shield of national sovereignty has suddenly become the challenge of national sovereignty."

Lest anyone doubt that Foucault still had the power to kill life itself in mind when calling for the head of the king, this same "Truth and Power" interview concludes by returning to the topic of atomic weapons and speculating about the kind of postsovereign figure who might wield such a power. We will turn to examine these claims in more detail below. First, however, there remains the question of why Foucault would decide to finally broach the subject of the power to kill life itself a full two decades after the thermonuclear revolution. In this case, the answer may be surprisingly straightforward. Pursuing it leads us back to the question of what Foucault (2003a, 254) may have meant in March 1976 when raising the prospect of an "excess of biopower" that "appears when it becomes technologically and politically possible for man not only to manage life but to make it proliferate … and, ultimately, to build viruses that cannot be controlled and that are universally destructive."

The Biological Threshold of Modernity

In his 1961 address to the United Nations General Assembly, John F. Kennedy (1961) declared that "every man, woman and child lives under a nuclear sword of Damocles" and proposed that "the weapons of war must be abolished before they abolish us." While nuclear technology had by then become widely seen as placing human survival in jeopardy, the same could not be said of microbiology. Summing up the state of the field in 1964, one thoughtful observer reflected how

> [w]e now seem to be at the point in biology which we reached in regard to nuclear energy about 1900. In 1900 we knew that nuclear energy existed, but we could not conceive of any way of liberating it. At the present moment we know that life is transmitted and organized through a "code" contained in a

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> molecular structure of genes, but we know only the rudiments of the language of this code and we do not know how to "speak" it ourselves. That is, we cannot except in the most rudimentary way manipulate the genetic structure to create new forms of life (Boulding 1964, 151).

Up until this point, those who had aimed to improve population health at the genetic level could choose to either embark on the long, slow road of maximizing the reproduction of those carrying desirable natural mutations or, for those with less patience, actively cull the carriers of undesirable traits.[10] By the end of the 1960s, however, a rapid series of discoveries began to reveal a range of potential pathways for deliberately altering life's code, catalyzing what would become a landmark 1972 convention outlawing the creation of biological weapons on the grounds that, once released, "no one could predict how enduring the effects would be and how they would affect the structure of society and the environment in which we live" (United Nations Secretary General 1969, 88). As if on cue, the first successful implementation of recombinant DNA technology in a living organism brought these fears to fruition the following year (Cohen et al. 1973).

Where genetic research had formerly been defined by the willingness to work with random chance, the recombinant genetics revolution of 1973 made it newly possible to, if not exactly write life's code, then to at least begin to cut and paste it to combine genetic material separated by millions (or even billions) of years of evolution to produce novel organisms with inherently unforeseeable consequences. Where the thermonuclear revolution of the 1950s had witnessed a thousandfold increase in explosive yield, the recombinant genetics revolution of the 1970s confronted contemporaries with a commensurate leap in the scope of human power to intervene at life's most intimate levels (G. Dyson 2012, 3–10). In 1975, over a hundred leading geneticists and lawyers convened at the Asilomar Conference on Recombinant DNA to draft a series of safety guidelines for dealing with this sudden excess of biopower. They cautioned that "the new techniques, which permit recombination of genetic information from very different organisms place us in an area of biology with many unknowns," posing "novel risks to workers in laboratories, to the public at large, and to the animal and plant species sharing our ecosystems" (Berg et al. 1975, 1981). Foucault followed these developments with acute interest.

In 1974, Foucault traveled to Rio de Janeiro to deliver a series of lectures on "social medicine." With an eye to recent developments, he informed his audience, "Today, with the techniques available to medicine, the ability to alter the genetic structure of cells does not only affect the individual or his offspring, but the entire human species; it is the whole phenomenon of life which now finds itself within the scope of medical intervention" (1994b, 47–48). In light of this unprecedented expansion in the power to manipulate life, he warned, "Ultimately, we do not know what the genetic manipulations carried out on the genetic potential of living cells, on bacilli, or on viruses will lead to. It is becoming technically possible to develop aggressive agents against which the human organism has no means of defense. It is possible that an absolute biological weapon can be forged against man and the human species without simultaneously developing a means of defense. It is because of all this that the American laboratories have requested banning the genetic manipulations currently underway" (46). As Foucault saw it, these remarkable breakthroughs brought with them a new magnitude of "medical risk" that inspired corresponding "fears of an apocalypse of the human species" (48). Later in this same lecture series, he further remarked how "for capitalist society it is the biopolitical that is important before everything else; the biological, the somatic, the corporeal. The body is a biopolitical reality; medicine is a biopolitical strategy."[11] As philosopher Roberto Esposito (2008, 27) has noted, although delivered in passing, these claims appear to mark Foucault's first public mention of biopolitics and the beginnings of a "biopolitical semantics" that culminated in the fully fledged theory he later introduced at the Collège de France. At the same time, these early remarks in Rio also reveal that Foucault's first mention of biopolitics took place against the background of his own alarm about the possibility of crafting an "absolute biological weapon" and "fears of an apocalypse of the human species." Although the power to kill life itself may have seemed to interrupt Foucault's March 1976 lecture on biopolitics, his thinking on these subjects had been developing in tandem for at least two years.

Given Foucault's alarm about the existential implications of recombinant DNA technology, it comes as little surprise to see references to an "excess of biopower" that may prove to be "universally destructive" reappear in his March 1976 lecture on biopolitics. More interesting, perhaps, is the way Foucault reformulates these anxieties when drafting his précis on biopolitics in *The History of Sexuality*. Here, in one of his most often-quoted passages on the subject, he proposed,

> If one can apply the term *bio-history* to the pressures through which the movements of life and processes of history interfere with one another, one would have to speak of a *bio-politics* to designate what brought life and its mechanisms into the realm of explicit calculations and made knowledge-power an agent of transformation in human life. It is not that life has been totally integrated into techniques that govern and administer it; it constantly escapes them. Outside the Western world famine exists on a greater scale than ever; and the biological risks confronting the species are perhaps greater, and certainly more serious, than before the birth of microbiology. But what might be called a society's "biological threshold of modernity" has been reached when the life of the species is wagered on its own political strategies. For millennia, man remained what he was for Aristotle: a living animal with the additional capacity for a political existence; modern man is an animal whose politics places his

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existence as a living being in question (Foucault 1990, 143; emphasis in original).[12]

It is these last two sentences concerning a "biological threshold of modernity" and "modern man" being "an animal whose politics places his existence as a living being in question" that lodged in the mind of Giorgio Agamben (2000, 137) and have since come to be called "perhaps Foucault's most celebrated formulation" (Esposito 2008, 33). These claims are grand but opaque and have prompted no end of interpretation (with some even going so far as to read here an oblique reference to "casino capitalism and other assorted forms of neoliberalism" [Campbell and Sitze 2013, 17]). However, while most have interpreted Foucault's "biological threshold of modernity" to correspond to the birth of biopower near the end of the eighteenth century, the evidence presented above suggests reading these remarks quite literally. Foucault's "fears of an apocalypse of the human species" unleashed by "universally destructive" viruses makes clear why he believes that "the biological risks confronting the species are perhaps greater, and certainly more serious, than before the birth of microbiology." Accordingly, there is every reason to accept Foucault's claim that "the life of the species" has come to be "wagered on its own political strategies" at face value. This is to say: following the thermonuclear revolution of the 1950s and the recombinant DNA revolution of the 1970s, the continued biological life of the human species truly *has* come to be wagered on its own political strategies. Having crossed the "biological threshold of modernity," the modern human *has* indeed become an "animal whose politics places his existence as a living being in question." This is neither allusion nor hyperbole, but a new dimension of the human condition that has reshaped how power functions on a planet where "the political wisdom of a few might ultimately come to be the end of all human life on earth" (Arendt 1957, 540). Reconsidered in these terms, Foucault's biological threshold of modernity marks the fateful rupture in political logic that begins when the biological survival of the human species ceases to be a necessary prerequisite *for* politics and instead becomes a contingent outcome *of* politics.

A New Discourse of the Universal

Beyond its relationship to biopolitics, there remains one more area where Foucault's engagement with the power to kill life itself carries important contemporary implications. While the nineteenth century had seen the life processes of populations become new objects of political intervention, the thermonuclear revolution of the 1950s introduced the whole of humankind as a newly empirical object that human beings could finally affect in its entirety—albeit only via its total erasure. As Arendt ([1958] 2004, 378) observed during this period, now that "the destruction of all organic life on earth with manmade instruments has become conceivable and technically possible … humanity, which for the eighteenth century, in Kantian terminology, was no more than a regulative idea, has today become an inescapable fact." Foucault appears to have reached a similar conclusion. This may at first seem surprising, for few have done more in the last half-century to discredit political discussion of humankind as a whole or pierce the pretention that *anyone* could ever speak for *everyone*. However, examining the relationship that Foucault posits between the power to kill life itself and the ability to address humankind as a whole reveals him to be far more nuanced on the subject than many later interpreters have assumed.

To avoid confusion, it is worth pausing at the outset to acknowledge that Foucault fully earned his status as an arch antiuniversalist. Having helped to lead the revolt against universalizing Enlightenment humanism that became "an almost official face of French thought" during the 1960s (Geroulanos 2010, 2), Foucault (1994a, 516) claimed that his work aimed to "not only erase the traditional image of Man," but also "the very idea of Man. … Our task now is to free ourselves from humanism once and for all, and in this sense our work is political work." In fact, one of Foucault's most strident denunciations of universalist humanism appears near the end of the same "Truth and Power" interview that saw him call for the head of the king in political theory. However, a closer look at these influential claims suggests that his recent encounter with the power to kill life itself may have caused him to reassess his position.

For their final question, Foucault's June 1976 interviewers asked what he thought the contemporary role of the intellectual should be. Foucault (2001, 126) began his answer (delivered later in writing) by distinguishing between two different genres of intellectual. On the one side there stood the tradition of "the 'left' intellectual" who "spoke, and was acknowledged the right of speaking, in the capacity of master of truth and justice," borrowing "an idea transposed from Marxism, from a faded Marxism indeed," that he was the elaborator of the universal. Over and against this Enlightenment relic of the "universal intellectual," Foucault contrasted a new set of intellectuals who "have become used to working not in the modality of the 'universal,' the 'exemplary,' the 'just-and-true-for-all,' but within specific sectors, at the precise points where their own conditions of life or work situate them," permitting them to develop "a much more immediate and concrete awareness of struggles." In contrast to the epistemically unfounded pretensions of the universal intellectual, Foucault strongly endorsed the work of what he termed the "specific intellectual" and modeled this vocation through his work with the Groupe d'information sur les prisons (Macey 2004, 94–104).

Although Foucault himself championed the concrete causes of the specific intellectual over the passé pretensions

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of the universal intellectual, this partisanship did not preclude him from recognizing that some attempts to discuss matters of universal human import might be more valid than others. In between the "universal" and the "specific" sat an odd transitional category that combined elements of both. "Perhaps it was the atomic scientist (in a word or, rather, a name: Oppenheimer) who acted as the point of transition between the universal and the specific intellectual," he reflected, noting of this hybrid position: "It's because he had a direct and localized relation to scientific knowledge and institutions that the atomic scientist could make his intervention; but, since the nuclear threat affected the whole of humankind and the fate of the world [*le genre humain tout entier et le destin du monde*], his discourse could at the same time be the discourse of the universal. Under the rubric of protest, which concerned the entire world, the atomic expert brought into play his specific position in the order of knowledge" (Foucault 1994b, 110; 2001, 127–28;). Where universal intellectuals pontificate on the just-and-true-for-all based on their knowledge of the essential nature of Man and the specific intellectuals ground local recommendations on their concrete awareness of particular struggles, this third type of intellectual draws on the expertise provided by their "specific position in the order of knowledge" to offer pronouncements of genuinely universal import to all human beings.

For Foucault ([1970] 2002, 422), the mid-twentieth century had witnessed what he elsewhere termed a "change in the fundamental arrangements of knowledge" that had punctured the pretense of the universal intellectual to speak as "the bearer of [proletarian] universality in its conscious, elaborated form" (2001, 126). At the same time, these rearrangements had resulted from the same "extension of technico-scientific structures" (128) that had conferred on a new class of intellectual the ability to not just discuss "the whole of humankind and the fate of the world" in the abstract, *but to actually directly affect it through their specific grasp of emerging technologies with planet-spanning implications*—whether that be at the macroscale of a thousand megaton thermonuclear war or an equally devastating catastrophe unleashed at the genetic level. Foucault dubbed this new class of intellectual the "absolute savant." While nominally working on behalf of a sovereign, the absolute savants wield forces that operate on a scale that eclipses all previous forms of killing power. They dissolve dreams of sovereign mastery by making planetary omnicide a live possibility. Lineally descended from the atomic scientists who first built "the Bomb" then raised the alarm, the absolute savants represent a new kind of figure "who, along with a handful of others, has at his disposal—whether in the service of the state or against it—powers that can either benefit or irrevocably destroy life," rendering them "no longer the rhapsodist of the eternal but the strategist of life and death" (129). In Foucault's day, the absolute savant was the nuclear weaponeer and the recombinant geneticist. More recently, she has also become the CRISPR-equipped synthetic biologist, the solar geoengineer, and the artificial intelligence researcher—many of whom are currently hard at work designing systems with the potential to either benefit or irrevocably destroy human life on a planetary scale.

The case of the absolute savant makes clear that not all universalisms are created equal. Foucault deserves all due credit for the role that he has played in helping to redirect Western scholarship away from the imperious one-size-fits-all solutions of the universal intellectuals of yore and toward the specific intellectuals' sensitivity "to subjugated knowledges," Indigenous wisdom, subaltern practices, and the "discontinuous field" of local struggles (Foucault 2003a, 7–8). At the same time, it is equally important to recognize that Foucault's legacy is not universally antiuniversal. Although he worked tirelessly to demolish the epistemological underpinnings of Enlightenment Man, this in no way precluded him from recognizing that mid-twentieth century technological developments had introduced a new form of human universality that did not derive its plausibility from the crumbling premises of Western humanist metaphysics. At issue is what philosopher Colin Koopman (2019, 10) lucidly identifies as "a crucial distinction" in Foucault's work "between universality and universalizability, or what might be described as a distinction between eternal universals and historical universals, or in yet another way as necessary universality and contingent universalizability." Although Foucault was an inveterate foe to those seeking to identify timeless universals in human affairs, he in no way ignored the fact that the historical developments of the last century have seen human beings transform phenomena with local, particular, and contingent beginnings into matters of universalized import capable of affecting "the whole of humankind and the fate of the world." In sum: The prospect of universal death by human hands did not exist when Foucault was born in 1926. It became *contingently universalized* when thermonuclear and recombinant DNA technology created the power to kill life itself and, with it, a new way of approaching humankind as a whole: not as yet another spurious, self-serving image of Enlightenment Man, but as the all-too-concrete totality of a species poised on the cusp of extinction.

The Death of Biopolitics

Having explored several dimensions of Foucault's engagement with the power to kill life itself, let us now return to reconsider the question of why he may have opted not to develop his theory of biopolitics further. As noted earlier, Foucault (2003a, 23) began 1976 by informing his lecture audience that "until now, or for roughly the last five years, it has been disciplines; for the next five years, it will be war, struggle, the army." Instead, he chose to take the following

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year off, making his 1976–77 sabbatical the only gap in an otherwise unbroken decade-and-a-half series of public lectures. By the time he returned to the Collège de France, Foucault appears to have lost all interest in using "war" as a "grid of intelligibility" for politics (163; see also Protevi 2014, 544). Instead, he opted to use his opening 1977–78 lecture to announce, "I would like to begin studying something that I have called, somewhat vaguely, biopower" (Foucault 2009, 1). Unfortunately, Foucault promptly became sidetracked studying the prehistory of biopower for the remainder of the year and—despite going so far as to title his 1978–79 lectures *The Birth of Biopolitics*—soon dropped all mention of the subject (Foucault 2008, 21–22).

Why did Foucault forego developing his theory of biopolitics further? Many rationales have been put forward to explain why an approach that proved so fruitful for later scholars would have been so unceremoniously abandoned. However, in light of the evidence assembled in the preceding sections, it becomes possible to offer a surprisingly simple answer: because *biopolitics could not do what Foucault wanted*; namely, explain "the workings of contemporary political power" (Foucault 2003a, 253). If the analysis in the preceding sections proves plausible, then Foucault's theory of biopolitics appears to have been born historically moribund—able to explain the recent past, but not the postsovereign world of contemporary politics refashioned by the power to kill life itself. As we saw in the first section, Foucault (2003a, 247) had predicated his approach to biopolitics on the defining tension between what he called "the dramatic and somber absolute power that was the power of sovereignty, which consisted in the power to take life" and the "technology of biopower … over the population as such, over men insofar as they are living beings." We then saw in the second section how well Foucault's formulation of biopolitics performed when used to explain the increasingly exterminationist trends that defined Western politics from the first public health campaigns to early Atomic Age dreams of "killing a nation." However, the third and fourth sections proceeded to show how the political logic that Foucault had captured under the heading "biopolitics" broke down when confronted by the unprecedented threats that thermonuclear arsenals and gene editing posed to not merely the life processes of populations, but to all living beings on the planet. Because Foucault had made sovereignty an "absolutely constitutive" component of his theory of biopolitics, realizing that sovereignty had been the first casualty of thermonuclear weapons would have required fundamentally revising his account of how contemporary biopolitics functions.

There is no reason in principle that Foucault could not have returned biopolitics to the drawing board. Indeed, he had already proved to be adept at analyzing how the advent of new modes of power do not erase what came before, but instead alter how each mode is expressed (Bargu 2013, 45–48; Foucault 1977, 3–7; 1990, 137). From his vantage point in the 1970s, it would have already been clear that the power to kill life itself had not ended sovereign power, disciplinary power, or biopower, but instead modified how each operates on a planet where, even if wars are still fought and genocides recur, recourse to violence now falls along a continuum that culminates in universal death. Foucault's proposal for marking a "biological threshold of modernity," his discussion of a new "discourse of the universal," and his formalization of the figure of the "absolute savant" all point to the possibility that he had indeed begun to craft precisely the kind of intellectual tools needed to expand the scope of biopolitics to encompass the power to kill life itself. But if so, then why did Foucault ultimately opt to abandon his theory of biopolitics rather than revise it? Although any answer to this question must necessarily be speculative, one notable quirk of his biography may shed light on the issue.

Foucault's confrontation with the power to kill life itself coincides with a particularly turbulent point in his intellectual trajectory. Late 1976 not only saw Foucault abandon his aforementioned plans to spend five years studying politics through the lens of war, but also scrap the outline he had prepared for the next five volumes of *The History of Sexuality* (Dean and Zamora 2021, 120), declaring in January 1977 that he now planned to use the subsequent books to embark on a "reworking of the theory of power" (Foucault 1996, 209). This "reworking" does not appear to have gone well. One of his closest colleagues at the Collège de France later recalled the "very difficult period" that engulfed Foucault when he returned from his sabbatical and began preparing to deliver his next round of public lectures in December 1977:

> It was the Christmas holidays, and I spoke with Foucault about his upcoming lectures. They were to be about issues from the last chapter of *The Will to Knowledge* [the first volume of *The History of Sexuality* that contains both his précis on biopolitics and remarks concerning the "biological threshold of modernity"]. But Foucault told me it was too difficult; and he did not know what he could speak about. Foucault was secretive, so we can't know his feelings. But it is clear that it was a time of crisis for him. When the series of lectures began nobody could have foreseen that the subject would be absolutely different. … When you heard each lecture, you heard the suffering, the *pain.* It was absolutely clear. … He stopped. He could not go on. And it was clear that this problematic, of bio-politics, was over for him—it was *finished* (quoted in Miller 1993, 299; emphasis in original).

Why did discussing biopower, which Foucault had first introduced with such enthusiasm less than two years prior, now cause him almost audible pain? Philosopher Gilles Deleuze (1995, 105) casts further light on this moment by recalling how his longtime friend appeared to be facing not merely run-of-the-mill intellectual dissatisfaction, but "another, very different, crisis—more internal, perhaps more depressive, more secret, the feeling of an impasse?

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… It wasn't all just theory, you see. … It was to do with vital problems. To do with *life itself.* It was Foucault's way of coming through this new crisis: he was tracing the line that would take him through and into new relations with knowledge and power" (emphasis added). Given Foucault's notorious secrecy, it will likely never be clear why the prospect of recommencing his lectures on biopolitics could have caused such an acute sense of crisis. However, if Deleuze was right in his surmise, then it may well be that Foucault's impasse arose from vital problems to do with the power to kill life itself.

The notion that Foucault, who summoned so much intellectual courage in other areas, could have been paralyzed by this topic may seem strange at first, but recall: here was someone who had spent the first two decades of his public life content to operate as though nuclear weapons did not exist. When he finally turned to the topic of nuclear power—in passing and almost by accident—Foucault did so amid a saturating atmosphere of "nuclear fear" and a studious ignorance that most of his 1970s contemporaries maintained concerning the nuclear sword of Damocles glinting over their heads (Anders 1983, 106–26; Boyer 1984, 826; Weart 2012, 152). Given the conspicuous quiet concerning nuclear issues that prevailed during these years of Cold War détente, Foucault's decision to drop the topic may ultimately be less surprising than the fact that he chose to broach it in the first place. That being said, it nevertheless remains fruitful to consider what private political insights Foucault could have reached while wrestling with the power to kill life itself. Here, the best way to circumvent Foucault's notorious opacity may be to consider the conclusions reached by another political thinker of similar caliber who proved far more willing to share her private thoughts with posterity.

Two decades before Foucault's first public mention of nuclear weapons, Hannah Arendt (1998, 6) concluded the prologue to her 1958 study *The Human Condition* by cryptically claiming that although "politically, the modern world, in which we live today, was born with the first atomic explosions … I do not discuss this modern world, against whose background this book was written." Hindsight has revealed that, if Arendt felt she could sidestep a topic of such gravity, it was because she was by then already hard at work on a project that would reduce *The Human Condition*—a study that many consider to be her magnum opus—to the status of "a kind of prolegomena [sic] to the book which I now intend to write" (1993, 200). The manuscript pages that survive reveal that Arendt planned to use her sequel to *The Human Condition* as an opportunity to directly confront "the monstrous development of modern means of destruction over which states have a monopoly" that creates conditions where "the issue is not just freedom but life itself, the continuing existence of humankind [*Menschheit*] and perhaps all organic life on Earth." Here she pulled no punches, frankly acknowledging how, given these developments, "[t]he question that arises here makes all politics problematic; it makes it appear doubtful whether politics and the preservation of life are even compatible under modern conditions, and its secret hope is that people may prove insightful enough to somehow dispense with politics before politics destroys us all" (1993, 29; 2005, 109). Why?

For Arendt (1994, 420), one of the defining features of the Western understanding of politics had always been an irreducible kernel of freedom that differentiates political processes from rote administration on the grounds that their outcomes cannot be fully determined in advance. Here genuine politics carries inherent uncertainty and, with it, the perennial possibility of catastrophe. But with this threat comes the promise that no matter what mishaps might befall a particular political community, it is only ever the lives of its own members that are at stake. No matter what happened, the life of the species would flow on untroubled to guarantee that there would always be others to learn from their disaster. The advent of the power to kill life itself dashed this certainty by introducing the unprecedented possibility that the next political catastrophe could well leave no earthly human survivors. If the Western political tradition had always taken for granted the inevitability of mistakes and the necessity of course correction, then Arendt (1993, 71; 2005, 145) found herself grimly prepared to conclude that "when measured against the possibility of putting an end to both humankind and to all organic life, there is in fact hardly a single political category or a single political concept that has been passed down to us that does not prove to be theoretically obsolete and practically inapplicable, precisely because in a certain sense what is now at issue for the first time in foreign policy is life itself, the survival of humankind." When you consider the depth of this rupture in the continuity of political logic, Arendt's post-atomic "politically modern world" functions analogously to Foucault's "biological threshold of modernity" in marking a development that—although it does not automatically invalidate what has come before—demands that everything be fundamentally reassessed when it is no longer merely the health of populations but the survival of the human species that has come to be wagered on the outcome of politics.[13] Ultimately, Arendt (2005, 109–10) proved willing to entertain the possibility that the capacity to jeopardize the "existence of humankind and perhaps all organic life on Earth" represents one of "the fundamental experiences of our age," one that so "ignites the question about the meaning of politics in our time" that "if we ignore [it], it is as if we never lived in the world that is our world." When judged by this standard, how many contemporary political thinkers can be said to fully inhabit the world that is our world? And what, moreover, are we to make of the fact that the very person who made this bold claim ultimately chose to keep these thoughts to herself?

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Arendt's reasons for shelving her nuclear sequel to *The Human Condition* are likely to remain as much a mystery as the audible pain Foucault suffered when returning to biopower—even if both cases suggest the depths of despair that a political thinker can reach when plumbing this topic. When it comes to reconsidering the secrecy surrounding Foucault's "time of crisis," what we *do* know is that 1976 has long been seen to mark a "fundamental shift" in his focus (Dean and Zamora 2021, 88), so much so that it has become standard to identify "a late stage in Foucault's authorship lasting from 1976 to 1984 oriented toward ethics and subjectivity, which replaces a prior stage from 1971 to 1976 centered on social analysis and power theory" (Raffnsøe, Gudmand-Høyer, and Thaning 2016, 56; see also Deleuze 1988, 94–96; Nilsson and Wallenstein 2013, 9). Scholars traditionally speak of the "political Foucault" before 1976, concerned with contemporary problems of power and sovereignty, and the "ethical Foucault" after 1976, who shifted his attention toward classical antiquity and the socially transformative potential of self-formation (Doran 2017, 36–43). However, a glance at the grim conclusions that Arendt entertained raises the alarming possibility that Foucault's (1988, 16–49) post-1976 work on "techniques of the self" may have represented not merely an "ethical turn" away from politics, but his own quiet embrace of the "secret hope that people may prove insightful enough to somehow dispense with politics before politics destroys us all."

Conclusion

What conclusions can be drawn from Foucault's encounter with the power to kill life itself? Here I believe it may be possible to end on a surprisingly hopeful note. To do so, however, I must begin by acknowledging a major potential objection to the preceding section. Some Foucault experts are sure to have already balked at my account of "why Foucault abandoned biopolitics" on the grounds that he *never abandoned biopolitics at all.* They have a point. Over the course of the 2000s, scholars began to notice that, although Foucault never explicitly made good on his promise to return to the topic of biopolitics (Foucault 2008, 21–22), he later introduced the neologism "governmentality" to refer to what he called "the ensemble formed by institutions, procedures, analyses and reflections, calculations, and tactics that allow the exercise of [a] very specific, albeit very complex, power that has the population as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument" (2009, 108). The central importance that Foucault afforded a "power that has the population as its target" in his theory of governmentality has led many to conclude that his research into biopolitics never vanished, but instead continued under a new heading (Cisney and Morar 2016, 9–14). While this is clearly at least partially the case, it remains equally revealing to register the changes that occur between the biopolitics of 1976 and the governmentality that emerges on the far side of Foucault's "time of crisis" two years later. Here what most stands out is that, where Foucault (2003a, 247) had built his theory of biopolitics on the constitutive tension between "the dramatic and somber absolute power that was the power of sovereignty" and a "biopower … over the population," his subsequent theory of governmentality sidelines sovereignty, downgrading what he had previously declared to be the "absolutely constitutive" (1994b, 189) place of sovereign violence to a more peripheral role played by "apparatuses of security" (2009, 108). This shift permitted Foucault to preserve what was most theoretically generative about biopower while abandoning what was most historically moribund about biopolitics. The result proved to be a more flexible theory of governmentality better equipped to study how *contemporary* political power navigates between the promise of neoliberalism and the menace of nuclear death.

When considered closely, Foucault's post-1976 efforts to rethink power suggest that he never ceased grappling with the political implications of the power to kill life itself. These years saw him develop what political theorist Johanna Oksala (2014, 529) has aptly termed a "categorical distinction between power and violence" that proves to be "in many ways perplexing" for making it seem "as if there had been an almost complete reversal in his views." This sense of reversal was no illusion. Rather, the final years of his life saw Foucault attempt to separate all that is most positive, generative, and capacitating about power from the politically sterile effects of a sovereign violence with which he—and most political thinkers in the Western tradition—had long conflated it. Although it exceeds the scope of this essay, there is a case to be made that much of Foucault's (2003b, 141) post-1976 work can be understood as an attempt to delve beneath the politically paralyzing paradoxes of planet-scale killing power to explore the revolutionary possibilities of mutual reliance and resistance that come with recognizing that "power relations are rooted in the whole network of the social." This surmise comes reinforced by another perplexing point Oksala (2014, 528) raises: that in his attempt to differentiate what is positive and constructive in power from what is negative and subtractive in violence, Foucault posed "essentially the same question as Hannah Arendt did in her definitive study of violence, *On Violence*" and arrived at the same answer. This further convergence in their thinking suggests that, although Arendt and Foucault both ultimately dropped their attempts to address the power to kill life itself directly, they never stopped trying to make sense of "the world that is our world." For although Arendt's *On Violence* remains the locus classicus for the famous distinction she draws between political

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power and violence, this represented merely the public disclosure of a conclusion she had reached while working on her atomic sequel to *The Human Condition* a decade earlier: that "in terms of their origins and intrinsic meaning, power and violence [*Gewalt*] are not identical, but in a certain sense opposites" (1993, 73; 2005, 147). The prospect that, like Arendt, Foucault (1990, 143) never stopped trying to make sense of what becomes of political power when "the life of the species is wagered on its own political strategies" invites contemporaries to reconsider his later work in a very different light. At the same time, it also suggests that, if 1976 still seems to mark the beginning of Foucault's "ethical turn" away from politics, then this may only go to show how wedded many remain to "the real possibility of physical killing" and to a sovereign who decides on "the existential negation of the enemy" (Schmitt 2007, 33)—a concept of the political that has long since become theoretically obsolete, practically inapplicable, and increasingly omnicidal.

Charting Foucault's fraught engagement with the power to kill life itself has led me to conclude that some of the most disquieting trends that have defined Western political thought in recent decades—a tendency toward purely negative critique among critical theorists, ever-smaller and more neatly defined puzzles for normative thinkers, and a diminishing sense of contemporary relevance for the findings of the historians—bear traces of a now decades-old, discipline-wide unwillingness to fully fathom what may follow from the fact that some people somewhere can now kill everyone everywhere. As those alive today turn to face the growing human threats to species survival, they have the chance to both overcome Foucault's reticence and build on his accomplishments, developing contingently universal visions for new forms of politics that recognize the ultimate weakness of violence and forge ties strong enough to bind the power to kill life itself, fanning the spark of hope in politics as they step fully into the world that is our world.

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Notes

1 Although I borrow Foucault's term "the power to kill life itself" for rhetorical purposes, it remains important to note that the capacities conferred by nuclear weapons and gene editing addressed in what follows do not threaten to literally sterilize the planet (an almost impossibly tall order given the hardiness of some extremophiles). Instead, this term serves as a shorthand for the far more feasible prospect of merely killing all human beings and wrecking the planetary symbioses that maintain most multicellular life.

2 My translation. The original text is as follows: "En fait, souveraineté et discipline, législation, droit de la souveraineté et mécaniques disciplinaires sont deux pièces absolument constitutives des mécanismes généraux de pouvoir dans notre société" (Foucault 1994b, 189).

3 My translation. The original text is as follows: "… il faudrait parler de 'bio-politique' pour désigner ce qui fait entrer la vie et ses mécanismes dans le domaine des calculs explicites et fait du pouvoir-savoir un agent de transformation de la vie humaine" (Foucault, 1976, 188). Confusingly, the English translator of *The History of Sexuality* renders "*bio-politique*" as "bio-power" in this important passage, muddying the distinction between "biopolitics" and "biopower" for two generations of Anglophone scholars (Foucault 1990, 143).

4 "We scorched and boiled and baked to death more people in Tokyo on that night of March 9–10 than went up in vapor at Hiroshima and Nagasaki combined," US Air Force general Curtis LeMay boasted, grotesquely but truly (quoted in Ellsberg 2017, 262).

5 In their survey of the aftermath, American military strategists "estimated that the damage and casualties caused at Hiroshima by the one atomic bomb dropped from a single plane would have required 220 B-29s carrying 1,200 tons of incendiary bombs, 400 tons of high-explosive bombs, and 500 tons of anti-personnel fragmentation bombs, if conventional weapons, rather than an atomic bomb, had been used" (US Secretary of War 1987, 102).

6 Estimated, because this surprise surfeit in energy—based on a miscalculation of how different isotopes of lithium might contribute to the fusion stage—destroyed much of the equipment meant to measure it (Schlosser 2013, 137–40).

7 Heading for an all-time peak of around 65,000 a decade later (Kristensen and Norris 2013, 78).

8 My translation. The original text: "Ou il est souverain, et il utilise la bombe atomique, mais du coup il ne peut être pouvoir, bio-pouvoir, pouvoir d'assurer la vie comme il l'est depuis le XIXe siècle. Ou à l'autre limite, vous avez l'excès, au contraire, non plus du droit souverain sur le bio-pouvoir, mais l'excès du bio-pouvoir sur le droit souverain" (Foucault 1997, 207).

9 The first entries in the three-part compendium of Foucault's published work, *Dits et Écrits*, begin the

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same year as Castle Bravo in 1954, making his entire public career coextensive with the shadow of "universal death."

10 A program endorsed with chilling precision by a young Adolf Hitler (1939, 39).

11 My translation. The original text: "Pour la société capitaliste, c'est le bio-politique qui importait avant tout, la biologique, le somatique, le corporel. Le corps est une réalité bio-politique; la médecine est une stratégie bio-politique" (Foucault 1994b, 210).

12 The English translation of *The History of Sexuality* renders "*seuil de modernité biologique*" (Foucault 1976, 188) as "threshold of modernity" (Foucault 1990, 143), dropping the crucial qualifier "biological."

13 Arendt has rightly been identified by many as representing the premier "theorist of biopolitics *avant la lèttre*" (Braun 2007, 7; see also Agamben 2017, 6; Campbell and Sitze 2013, 23–25). What has passed remarkably unnoticed, however, is that Arendt and Foucault traversed parallel but opposite paths in their exploration of the subject: Arendt beginning by confronting the implications of universal death by hydrogen bomb and discovering the importance of the politicization of the human life process along the way; Foucault beginning by studying the biopolitics of populations only to find himself confronted with the nuclear power to kill life itself (Zimmer 2022, 128–238).

References

Agamben, Giorgio. 2017. *Homo Sacer: Sovereign Power and Bare Life*, trans. Daniel Heller-Roazen. In *The Omnibus Homo Sacer*, trans. Daniel Heller-Roazen, Nicholas Heron, Adam Kotsko, Lorenzo Chiesa, and Matteo Mandarini, 1–160. Redwood City, CA: Stanford University Press. DOI: 10.1515/9781503603158-001.

———. 2000. *Means without End: Notes on Politics*, new edition, trans. Vincenzo Binetti and Cesare Casarino. Minneapolis: University of Minnesota Press. https://www.jstor.org/stable/10.5749/j.cttttww.

Anders, Günther. 1983. *Die Atomare Drohung: Radikale Überlegungen zum atomaren Zeitalter*. Munich: C. H. Beck.

Arendt, Hannah. 1961. "Freedom and Politics." In *Freedom and Serfdom: An Anthology of Western Thought*, ed. Albert Hunold, 191–217. Dordrecht: D. Reidel. DOI: 10.1007/978-94-010-3665-8_11.

———. (1957). "Karl Jaspers: Citizen of the World." *In The Philosophy of Karl Jaspers*, ed. Paul Arthur Schilpp, 539–549. New York: Tudor Publishing Company.

———. 1993. *Was ist Politik?*, ed. Ursula Ludz. Munich: Piper.

———. 1994. *Essays in Understanding: 1930–1954*, ed. Jerome Kohn. New York: Schocken.

———. 1998. *The Human Condition*, 2nd edition. Chicago: University of Chicago Press. DOI: 10.7208/chicago/9780226924571.001.0001.

———. (1958) 2004. *The Origins of Totalitarianism*, 2nd edition. New York: Schocken.

———. 2005. *The Promise of Politics*. New York: Schocken.

Bargu, Banu. 2013. *Starve and Immolate: The Politics of Human Weapons*. New York: Columbia University Press. DOI: 10.7312/columbia/9780231163408.001.0001.

———. 2014. "Sovereignty." In *The Cambridge Foucault Lexicon*, eds. Leonard Lawlor and John Nale, 456–65. Cambridge: Cambridge University Press. DOI: 10.1017/cbo9781139022309.080.

Berg, Paul, David Baltimore, Sydney Brenner, Richard O. Roblin III, and Maxine F. Singer. 1975. "Summary Statement of the Asilomar Conference on Recombinant DNA Molecules." *Proceedings of the National Academy of Sciences* 72 (6): 1981–84. DOI: 10.1073/pnas.72.6.1981.

Boulding, Kenneth. 1964. *The Meaning of the Twentieth Century: The Great Transition*. New York: Harper & Row.

Boyer, Paul. 1984. "From Activism to Apathy: The American People and Nuclear Weapons, 1963–1980." *Journal of American History* 70 (4): 821–44. DOI: 10.2307/1899750.

Braun, Kathrin. 2007. "Biopolitics and Temporality in Arendt and Foucault." *Time & Society* 16 (1): 5–23. DOI: 10.1177/0961463X07074099.

Campbell, Timothy, and Adam Sitze, 2013. "Introduction. Biopolitics: An Encounter." In *Biopolitics: A Reader*, eds. Timothy Campbell and Adam Sitze, 1–40. Durham, NC: Duke University Press.

Cisney, Vernon W., and Nicolae Morar, eds. 2016. *Biopower: Foucault and Beyond*. Chicago: University of Chicago Press. DOI: 10.7208/chicago/9780226226767.001.0001.

Cohen, Stanley N., Annie C. Y. Chang, Herbert W. Boyer, and Robert B. Helling. 1973. "Construction of Biologically Functional Bacterial Plasmids in Vitro." *Proceedings of the National Academy of Sciences* 11 (70): 3240–44. DOI: 10.1073/pnas.70.11.3240.

Cousins, Norman. 1945. *Modern Man Is Obsolete*. New York: Viking.

Dean, Mitchell, and Daniel Zamora. 2021. *The Last Man Takes LSD: Foucault and the End of Revolution*. New York: Verso.

Deleuze, Gilles. 1988. *Foucault*, trans. Seán Hand. Minneapolis: University of Minnesota Press.

———. 1995. *Negotiations: 1972–1990*, trans. Martin Joughin. New York: Columbia University Press.

Doran, Robert. 2017. *The Ethics of Theory: Philosophy, History, Literature*. New York: Bloomsbury.
Dyson, Freeman. 1984. *Weapons and Hope*. New York: Harper & Row.
Dyson, George. 2012. *Turing's Cathedral: The Origins of the Digital Universe*. New York: Random House.
Elden, Stuart. 2016. *Foucault's Last Decade*. Malden, MA: Polity.
Ellsberg, Daniel. 2017. *The Doomsday Machine: Confessions of a Nuclear War Planner*. New York: Bloomsbury.
Esposito, Roberto. 2008. *Bios: Biopolitics and Philosophy*, trans. Timothy Campbell. Minneapolis: University of Minnesota Press.
Fontana, Alessandro, and Mauro Bertani. 2003. "Situating the Lectures." In *Society Must Be Defended: Lectures at the Collège de France, 1975–76* by Michel Foucault, eds. Mauro Bertani and Alessandro Fontana, trans. David Macey, 273–89. New York: Picador.
Foucault, Michel. 1976. *La volonté de savoir*, Vol. 1 of *L'Histoire de la sexualité.* Paris: Gallimard.
———. 1977. *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan. New York: Vintage.
———. 1988. *Technologies of the Self: A Seminar with Michel Foucault*, eds. Luther H. Martin, Huck Gutman, and Patrick H. Hutton. Amherst: University of Massachusetts Press.
———. 1990. *An Introduction*, Vol. 1 of *The History of Sexuality*, trans. Robert Hurley. New York: Vintage.
———. 1994a. *1954–1975*, Vol. 1 of *Dits et Écrits*. Paris: Gallimard.
———. 1994b. *1976–1979*, Vol. 3 of *Dits et Écrits*. Paris: Gallimard.
———. 1996. *Foucault Live: Interviews, 1961–1984*, ed. Sylvère Lotringer, trans. Lysa Hochroth and John Johnston. New York: Semiotext(e).
———. 1997. *Il Faut Défendre la Société: Cours au Collège de France (1975–1976)*, eds. Mauro Bertani and Alessandro Fontana. Paris: Gallimard.
———. 2001. *Power*, Vol. 3 of *Essential Works of Foucault, 1954–1984*, ed. James D. Faubion, trans. Robert Hurley. New York: New Press.
———. (1970) 2002. *The Order of Things: An Archaeology of the Human Sciences*. New York: Routledge. DOI: 10.4324/9780203996645.
———. 2003a. *Society Must Be Defended: Lectures at the Collège de France, 1975–76*, eds. Mauro Bertani and Alessandro Fontana, trans. David Macey. New York: Picador.
———. 2003b. *The Essential Foucault*, eds. Paul Rabinow and Nikolas Rose, trans. Robert Hurley et al. New York: New Press.
———. 2008. *The Birth of Biopolitics: Lectures at the Collège de France, 1978–1979*, ed. Michel Senellart, trans. Graham Burchell. New York: Palgrave Macmillan. DOI: 10.1057/9780230594180.
———. 2009. *Security, Territory, Population: Lectures at the Collège de France, 1977–1978*, ed. Michel Senellart, trans. Graham Burchell. New York: Palgrave Macmillan. DOI: 10.1057/9780230245075.
Gerl, Ellen. 2014. "Scientist-Citizen Advocacy in the Atomic Age: A Case Study of the Baby Tooth Survey, 1958–1963." *Prism* 11 (1): 1–14. https://www.prismjournal.org/uploads/1/2/5/6/125661607/v11-no1-a1.pdf.
Geroulanos, Stefanos. 2010. *An Atheism that Is Not Humanist Emerges in French Thought*. Redwood City, CA: Stanford University Press. DOI: 10.1515/9780804774246.
Ghosh, Amitav. 2021. *The Nutmeg's Curse: Parables for a Planet in Crisis*. Chicago: University of Chicago Press. DOI: 10.7208/chicago/9780226815466.001.0001.
Gilroy, Paul. 1994. "'After the Love Has Gone': Bio-Politics and Etho-Poetics in the Black Public Sphere." *Public Culture* 7 (1): 49–76. DOI: 10.1215/08992363-7-1-49.
Hamilton, Scott. 2018. "The Measure of All Things? The Anthropocene as a Global Biopolitics of Carbon." *European Journal of International Relations* 24 (1): 33–57. DOI: 10.1177/1354066116683831.
Hitler, Adolf. 1939. *Mein Kampf*, trans. James Murphey. London: Hurst and Blackett.
Jaspers, Karl. 1961. *The Atom Bomb and the Future of Man*, trans. E. B. Ashton. Chicago: University of Chicago Press.
Karppi, Tero, Marc Böhlen, and Yvette Granata. 2018. "Killer Robots as Cultural Techniques." *International Journal of Cultural Studies* 21 (2): 107–23. DOI: 10.1177/1367877916671425.
Kennedy, John F. 1961. "Address before the General Assembly of the United Nations, September 25, 1961." *Transcript and audio*, 41:01. Boston: John F. Kennedy Presidential Library. https://www.jfklibrary.org/archives/other-resources/john-f-kennedy-speeches/united-nations-19610925. Accessed March 10, 2024.
Kiersey, Nicholas, Doug Stokes, and Jason Weidner. 2011. "Introduction." In *Foucault and International Relations: New Critical Engagements*, eds. Nicholas Kiersey and Doug Stokes, xiii–xxi. New York: Routledge.
Koopman, Colin. 2019. *How We Became Our Data: A Genealogy of the Informational Person*. Chicago: University of Chicago Press. DOI: 10.7208/chicago/9780226626611.001.0001.
Kristensen, Hans M., and Robert S. Norris. 2013. "Global Nuclear Weapons Inventories, 1945–2013." *Bulletin of the Atomic Scientists* 69 (5): 75–81. DOI: 10.1177/0096340213501363.
Macey, David. 2004. *Michel Foucault*. London: Reaktion.

Masco, Joseph. 2010. "Atomic Health, or How the Bomb Altered American Notions of Death." In *Against Health: How Health Became the New Morality*, eds. Jonathan M. Metzl and Anna Kirkland, 133–153. New York: NYU Press. DOI: 10.18574/nyu/9780814759639.003.0014.

Matashichi, Oishi. 2011. *The Day the Sun Rose in the West: Bikini, the Lucky Dragon, and I*, trans. Richard H. Minear. Honolulu: University of Hawai'i Press. DOI: 10.1515/9780824860202.

Mbembe, Achille. 2019. *Necropolitics*. Durham, NC: Duke University Press. DOI: 10.1215/9781478007227.

Mendieta, Eduardo. 2014. "Biopower." In *The Cambridge Foucault Lexicon*, eds. Leonard Lawlor and John Nale, 44–50. Cambridge: Cambridge University Press. DOI: 10.1017/cbo9781139022309.010.

Miller, James. 1993. *The Passion of Michel Foucault*. New York: Simon & Schuster.

Morgenthau, Hans. 1962. "Death in the Nuclear Age." In *The Restoration of American Politics*, 19–25, Vol. 3 of *Politics in the Twentieth Century*. Chicago: University of Chicago Press.

Mumford, Lewis. 1954. *In the Name of Sanity*. New York: Harcourt, Brace.

Nilsson, Jakob, and Sven-Olov Wallenstein, eds. 2013. *Foucault, Biopolitics, and Governmentality*. Huddinge: Södertörn University.

Oksala, Johanna. 2010. "Violence and the Biopower of Modernity." *Foucault Studies* 10: 23–43.

——. 2014. "Violence." In *The Cambridge Foucault Lexicon*, eds. Leonard Lawlor and John Nale, 528–33. Cambridge: Cambridge University Press. DOI: 10.1017/cbo9781139022309.091.

Povinelli, Elizabeth A. 2016. *Geontologies: A Requiem to Late Liberalism*. Durham, NC: Duke University Press. DOI: 10.1515/9780822373810.

Protevi, John. 2014. "War." In *The Cambridge Foucault Lexicon*, eds. Leonard Lawlor and John Nale, 540–46. Cambridge: Cambridge University Press. DOI: 10.1017/cbo9781139022309.093.

Raffnsøe, Sverre, Marius Gudmand-Høyer, and Morten S. Thaning. 2016. *Michel Foucault: A Research Companion*. New York: Palgrave Macmillan. DOI: 10.1057/9781137351029.

Russell, Bertrand. 2003. *Man's Peril, 1954–55*, Vol. 28 of *The Collected Papers of Bertrand Russell*, ed. Andrew G. Bone. New York: Routledge. DOI: 10.4324/9780203009185.

Sallagar, Frederick M. 1974. "*Lessons from an Aerial Mining Campaign (Operation Starvation)*." Report R-1322-PR, April. Santa Monica, CA: RAND Corporation. https://www.rand.org/content/dam/rand/pubs/reports/2006/R1322.pdf.

Schlosser, Eric. 2013. *Command and Control: Nuclear Weapons, The Damascus Accident, and the Illusion of Safety*. New York: Penguin.

Schmitt, Carl. 2007. *The Concept of the Political*, expanded edition, trans. George Schwab. Chicago: University of Chicago Press.

Sitze, Adam. 2012. "Biopolitics and Political Space." *Communication and Critical/Cultural Studies* 9 (2): 217–24. DOI: 10.1080/14791420.2012.659471.

Snyder, Timothy. 2010. *Bloodlands: Europe between Hitler and Stalin*. New York: Basic Books.

Stoler, Ann Laura. 1995. *Race and the Education of Desire: Foucault's History of Sexuality and the Colonial Order of Things*. Durham, NC: Duke University Press. DOI: 10.1215/9780822377719.

United Nations Secretary General. 1969. "*Chemical and Bacteriological (Biological) Weapons and the Effects of Their Possible Use*." Report A/7575/Rev.1, August. New York: UN Department of Political and Security Council Affairs.

US Secretary of War. 1987. *The United States Strategic Bombing Surveys*. Maxwell Air Force Base, AL: Air University Press. https://www.airuniversity.af.edu/Portals/10/AUPress/Books/B_0020_SPANGRUD_STRATEGIC_BOMBING_SURVEYS.pdf.

van Munster, Rens, and Casper Sylvest. 2016. *Nuclear Realism: Global Political Thought during the Thermonuclear Revolution*. New York: Routledge. DOI: 10.4324/9781315796734.

Ville, Jacques de. 2011. "Rethinking Power and Law: Foucault's *Society Must Be Defended*." *International Journal for the Semiotics of Law/Revue internationale de Sémiotique juridique* 24: 211–26. DOI: 10.1007/s11196-010-9203-8.

Weart, Spencer R. 2012. *The Rise of Nuclear Fear*. Cambridge, MA: Harvard University Press. DOI: 10.4159/harvard.9780674065062.

Weber, Max. 1994. *Max Weber: Political Writings*, ed. Peter Lassman, trans. Ronald Speirs. Cambridge: Cambridge University Press. DOI: 10.1017/cbo9780511841095.

White, E. B. (1956). "Letter from the East." *The New Yorker*, November 3: 198–207.

WHO (World Health Organization). 1957. "Effect of Radiation on Human Heredity." *Study Group report*. Geneva: WHO. https://iris.who.int/bitstream/handle/10665/40094/9241560231_(part1).pdf.

Zimmer, Daniel. 2022. "*The Immanent Apocalypse: Humanity and the Ends of the World*." PhD Diss. Cornell University. https://ecommons.cornell.edu/items/b2416454-4d5f-4c5f-978f-92722595131a.