

Biopolitics After COVID: Notes from the Crisis

Maurizio Meloni and Miguel Vatter

Abstract

In this essay we take stock of the shortcomings, successes, and promises of 'biopolitics' to understand and frame global health crises such as COVID-19. We claim that rather than thinking in terms of a special relationship between Western modernity and biopolitics, it is better to look at a longer and more global history of populations' politics of life and health to situate present and future responses to ecological crises. Normatively, we argue for an affirmative biopolitics, that at once de-securitizes our approach to our biosocial condition and expands the politics of the human estate to other molar and molecular dimensions.

Introduction

As with many pandemics throughout human history, societal crises of the magnitude unleashed by COVID-19 are rare moments for reconsidering our own intellectual foundations practices, and values. This is why, between the different metaphors used to convey the traumatic impact of COVID-19 on our societies, we prefer the image of a “stress test” or a “crash test,” terms respectively used by historian of medicine Charles Rosenberg and STS scholar Bruno Latour.¹ By referring to the notion of a *test*, we emphasize the importance of establishing a *productive and generative tension* between the singularity of the present crisis, and the conceptual frameworks we use to illuminate its foundations and diffract the complexity of its angles.

Crises are meaningful if they produce movements, change and dynamism. Otherwise, theories and ways of thinking constructed in specific socio-cultural contexts are mechanically reproduced with no qualifications, turning into *sclerotized repetitions*. In this article, we would like to “test” the discourse on biopolitics that has been widely referred to in the public debates in the wake of the COVID-19 pandemic, most evidently in the wake of Giorgio Agamben’s pointed rejection of the Italian government’s approach to the pandemic in its early days.² We are aware that as the pandemic continues to unfold at different levels, with the impacts of new variants in different geographical contexts, ours can be considered only *notes from the field*; like everyone at this time (April 2022) we do not have the privilege of observing this crisis as a fully completed historical object, thus we remain skeptical of any major theoretical synthesis. Moreover, it is important to de-emphasize the uniqueness of this crisis in light of the skepticism of many postcolonial and indigenous scholars who highlight the permanency of crises in their everyday experiences of environmental destruction and settler colonialism.³ It is also important to problematize the concept of crisis as a “natural category of experience” rather than a very specific strategy of privileging certain interventions and lines of inquiry over others.⁴

In recognizing the specific situatedness of this pandemic, as have scholars who work on biopolitics from different perspectives, COVID-19 and the disruption it created offer us invaluable material for reflecting on our different orientations. Rather than present a systematic overview, we aim to challenge disciplinary compartmentalization, offering ideas to help shape the debate on the post-pandemic scenario, and widening the horizon of the “ontology of the present.”

Crisis and critique are deeply associated.⁵ Moving reflectively across a clash of opinions over biopolitics, this article has two main goals. In the first part, we reflect on the limitations and confusions of the label “biopolitics” as applied to governmental management of the pandemic, both in terms of its periodization and to critique the legitimacy of governmental policies (or lack thereof) in tackling the pandemic. We question how the concept of biopolitics has developed and is used today to frame the existing crisis as revealing the deeply biopolitical nature of contemporary power and forms of governmentality, and their “exceptional” tendency to care for and control bodies and populations. Are biopolitics and its attempt to medically regulate populations a modern Western invention, as Foucauldian social theory has often assumed?⁶ Does the mobilization in response to the virus, with its curtailing of individual freedom, reflect some uniquely modern (and “demonic”) combination of city-state and pastoral power games?⁷ Or is it a uniquely modern “reduction” of politics to managing life processes that were once supposedly excluded by the public realm?⁸ Is the management of the pandemic just another step in the genocidal character of modern biopolitics⁹? Is the political “imperative of health” ultimately a unique feature of Western modernity?¹⁰ As we argue here, the *longue durée* of human responses to pandemics illuminates a more subtle and continuous history of governing public health across history.

In problematizing taken-for-granted chronologies and genealogies, our concern is not merely philological or academic. We also wish to raise the question of whether law and governmental *dispositifs* can only address living beings by dominating them; whether documentary power and other forms of making legible individual behaviours need to be seen always as inherently coercive;¹¹ and whether we need to rethink the close relationship between embodiment and equal legal status to reasonably discuss the legitimacy of governmental measures intended to protect individuals from the viral disease, and more generally the legitimacy of biological citizenship?

In the second part, we suggest how answers to these questions may contribute to the rich emerging debate on an “affirmative” use of biopolitics. The COVID-19 pandemic (like previous ecological crises) has exposed the inanity of thinking politics as only a matter of force and power between humans. Whatever distrust of biology is harbored in certain social theory traditions, human history and its global economic system makes no sense without recognizing that it occurs in “the web of life,” a wider assemblage of human and non-human actors and interspecies dependencies.¹²

Human bodies and indeed cells, as we know from metagenomic studies, are always more than human: we live in persistent partnership with hundreds different species of bacteria, fungi, viruses; something between a third or half of the human genome is of viral admixture.¹³ Epidemics, moreover “are not an esoteric subfield for the interested specialist but instead are a major part of the ‘big picture’ of historical change and development.”¹⁴ The deep, global and planetary history of human societies requires that we consider the immense impact of infectious diseases as well as the agency of bacteria, eukaryotes, and viruses on institutional and legal processes as well as major ecological shifts.¹⁵ *Annales* historian Emmanuel Le Roy Ladurie was the first to speak of a “microbial unification of the world” as a result of the black plague.¹⁶ If—as we argue—we have never managed human politics without intense concern for the biological traits of the individual and collective body, then this enlarged perspective may shed light on a longer history of political ecology and environmental biopower¹⁷ helpful to problematizing modernistic exceptionalism, and its ideas of a “state of nature” as a state of war with nature or viruses.¹⁸ In the effort to de-securitize biopolitical perspectives and build on the increasingly ecological and planetary approach to politics, we ask: Is it possible to imagine

forms of control and adjustment that avoid the panoptical fantasies of a totalizing discipline while also keeping libertarian illusions at a distance? Is it possible to imagine a less grandiose and more fine-grained biopolitical framework that does not erase the important distinctions between surveillance and access to health rights for everyone—especially the more vulnerable?

A Triumph of Biopolitics?

Salus populi suprema lex esto: the fortune of this ancient Roman formula (Cicero, *De Legibus*) describing the particularly close relationship between politics and emergencies is due to the irreducible polysemy of the term *salus*. ‘*Salus*,’ in Roman writings and numismatic iconography—often qualified with terms such as *Salus Publica*, *Salus Generi Humani*—originally denoted physical welfare, health, self-preservation, and recovery including from pestilence.¹⁹ The welfare of the entire human race was often associated to *Salus Augusti* (or *Augustorum*), the emperor’s own wellbeing (see Pliny, NH 24.3), although it is only the pre-existing *salus* of the city that enables the full *salus* of its rulers.²⁰

In the imperial age, the term *salus* was integrated into a richer phenomenology of political lemmas, which includes *Securitas*, *Pax*, *Concordia*, and *Tutela* (particularly in the Augustan age), shaping a complex landscape which highlights a pressing public demand to the principate and Imperial power for stability by Roman citizens.²¹ In medieval times, although the terms are often inflected with religious connotation, *salus* and *securitas* maintain a strong secular meaning of governmental protection of a *res publica* and its citizens (*salus et exaltatio reipublice, regni et imperii tam nobilium populorum*, in scholastic politics), particularly at the urban level.²² During the English Civil War (1642–1651), Cicero’s formula organized the debate between Hobbes and his republican antagonists as to who was the best “doctor” to cure the political crisis that had overtaken the commonwealth.²³ Before Hobbes, Machiavelli had already taught that the “health of the fatherland” [*salute della patria*] had to be prioritized over any moral consideration, and any course of action taken had to “[save] its life and maintains its freedom” [“posposto ogni altro rispetto, seguire al tutto quel partito che le salvi la vita e mantenghile la libertà.”] (*Discourses on Livy* III, 41). Salvation, security, welfare, health: separately or altogether, these are the supreme ends of government, and hence they pose the “ultimate law” for politics. For this reason, no formula better highlights the problem of how to connect health emergencies and political measures of necessity framing the ongoing debates on the politics of viral containment and its instruments, epidemiological, medical, social and legal.

When in the early 1970s Foucault coined the terms “biopolitics” and “biopower,” it was in the context of the connection between governmental action and the *salus* of individuals and groups something that certainly has been occurring—not just in political thought but also in practices of health intervention and community protection, particularly at the urban scale—well before modern politics. However, Foucault thought he discerned a shift in the meaning of *salus* in Europe’s eighteenth century, from the “safety” of the people to the “security” of the population: it is specifically this latter governmental objective that he referred to as “biopolitics.”²⁴ We contend that this Foucauldian discourse on biopolitics was both “galvanized”²⁵ and shaken by the advent of COVID-19. On the one hand, many of its advocates see Foucault’s conception of biopower as *validated* by the governmental measures adopted to contain the pandemic.²⁶ Foucault’s view of modern biopower’s special nature, and in general references to Foucault’s work, have flooded the internet since the COVID-19 outbreak, and the crisis has been defined as “an enlarged image of ‘the power over life’” as Foucault developed in relation to modern societies.²⁷ According to this body of scholarship, Foucault’s key insight,

vindicated by the present crisis, is not only that power is now disguised as the decisions of experts, but that the biological has *now* become “the apogee of the modern conception of politics.”²⁸

On the other hand, historians note that, for all claims of the present crisis’s biopolitical exception, our societies, while waiting for a pharmaceutical solution (and in several cases alongside it), have relied on social technologies and material artefacts that, *mutatis mutandis*, are well documented in both the premodern city and early modern world.²⁹ There one finds the use of quarantine, social distancing, checkpoints to stop people and goods, restriction on public gatherings, border closure, health passports for persons and goods, sanitation of objects and environments (historically, primarily through burning special woods; wearing flowers, incense and other perfumes on the body, or soaking goods in vinegars).³⁰ Reporting and punishment of individual health violations were also well documented in the premodern and early modern world. From the fifteenth century, for instance, the Venetian government established complaint boxes (shaped like lions’ mouths) where people could secretly register accusations of suspicious behavior among the citizenry.³¹ While they were originally created with the goal of preventing social unrest, after the plague such mechanisms were increasingly used to report health crimes—a category which in the miasmatic view of disease included smells from dirty streets (rotten food, animal carcasses) and the activities of workers such as carpenters, dyers, butchers, laundresses, barber-surgeons, etc., who might contaminate waters or increase miasmas in the air.³² State power was similarly expanded in the Ottoman Empire to document and control subjects’ lives and promote collective health and preventative measures to fight the plague from the sixteenth century,³³ well before the threshold of modernity in the European eighteenth century highlighted by Foucault.³⁴ Even in certain periods of Roman history, dealing with extended epidemics (a rather common experience in Roman life) required intense and coordinated efforts by political powers, and supportive bottom-up responses from the population: in some cases, the Senate, following advice from their own experts (religious or civic like the *decemvirii*), requested that all Romans, both rich and poor, report to temples to perform expiatory rituals to bring the epidemics to an end (Livy 3.7)³⁵

Increased hostility toward non-Roman deities was part of this politically-driven effort to offer state response to the crisis. The *aediles*, a form of local police and building/roads supervisors in Rome (of which more below) were in some cases instructed by the Senate “to ensure that only Roman gods were worshipped, and only in the established way” (Livy 4.30.9–11).³⁶ Many other examples could be offered in medieval cities, which goes beyond the stereotyped idea that government of health in the premodern world was, in Foucauldian terms, merely subtractive and exclusionary rather than actively shaping conduct.³⁷ Recent scholarship on the global Middle Ages has shown how intense urbanization, commercial dynamism, and rapid advances in administration and governmental technologies in the twelfth century found important theoretical support in flourishing medical knowledge across Eurasia (particularly through Ibn Sina’s magisterial synthesis), applying it to the ecological *salus* of the city.³⁸ This included concern for the location of its buildings; the regulation of its food markets; the vitality of its armies, miners and sailors; and the control of risky occupations (carpenters, dyers, butchers, laundresses, barber-surgeons who all might contaminate waters or increase miasmas in the air, a key channel for disease or epidemic transmission). The emerging medico-political vocabulary about the common good or welfare (*communi saluti*) of Hippocratic-Galenic inspiration led to capillary forms of governmental and health regulation schemes for environmental improvement in medieval times.³⁹ Importantly, medical knowledge was further strengthened by Aristotelian translations—particularly the seventh book of the *Politics*, ripe with eugenic themes (available in Latin since 1260 and then in vernacular). This pushed

theologians and natural philosophers to discuss Aristotle's original view of population,⁴⁰ and biopolitical notions such as differences in vitality, aging, and generative lifespan of populations in relation to their different environments; optimal ages for marriage and reproduction (and polygamy for Islam), and the right demographic size of a republic or city.⁴¹

We could easily continue with late medieval and early modern examples of biopolitical intervention as well political interest in lifespans, aging, and the ecology of furniture and houses, based on premodern medicine in both Europe and the colonies.⁴² However, the point we wish to make is that the notion of a unique modern interest in the politics of health—"the 'well-being' of society being one of the essential objectives of political power" after the (Northern) European eighteenth century⁴³—does not do justice to the complex and rich medical, social and political responses to health crises prior to the eighteenth-century threshold Foucault highlighted.⁴⁴ Rather than seeing the events of 2020–2022 as the apogee of a certain peculiar nature of modern (bio)power, we suggest thinking of this crisis perhaps provocatively as the silent resurfacing of those "regularities of social life whose change is almost imperceptible," *immobile structures* regulating the ecohistorical relations of humans and the non-human environment (including viruses and bacteria).⁴⁵ Rather than reading modern biopower only through the lenses of a sinister juxtaposition of pastoral and state powers ca. 1700, we should reconsider the longer genealogical role of less demonic but more essential civic figures that oversaw the social conduct of citizens, public spaces and buildings, from the Greek and medieval Islamic market inspectors (respectively *Agoranomos* and *Muhtasib*), to the Roman *plethora of figures of care for the city*, to the medieval roads and mud inspectors, to the magistrate for health in Venice.⁴⁶

Failure of Biopolitics?

The historical objection to COVID-19 as apogee of biopolitics is not the only one animating the debate on the political nature of the pandemic. Skeptical of vindicating biopolitics, some people identify in its unqualified use a failure to cope with the "reality" of the virus and the radical entanglement of our lives with biology, exposed by the pandemic, at a level perhaps never envisaged by Foucault or his interpreters.⁴⁷ Especially in indigenous and postcolonial contexts, it is *the lack of biopolitics* or *biopolitical failure* that presents the major risk of this crisis for many people, especially the vulnerable: lack of health leadership and the rise of *uncaring* leaders (Trump, Bolsonaro, Modi, Johnson, and various far-right denialists all over the world, as the true "abdication from modern biopolitics" in the name of various superstitions); failure of governments to protect lives from imminent danger and provide care for the vulnerable; failure of public institutions to avoid COVID-19's highly gendered, classed, and racialized impacts; public distrust of biostatistics with negative implications for addressing vulnerability to disease; and the data invisibility of marginalized groups ("data poor").⁴⁸ More generally still, one could say that COVID-19 tested the inherent tensions within liberal governmentality and its use of public reason to determine the legitimacy of laws and policies, risking at times to rip it at the seams between a libertarian pull and an authoritarian push (see here defenses of the Chinese approach to pandemic control).

These criticisms, paradoxically, reveal a number of blind spots when using of the discourse of biopolitics to understand real global health crises and their "real-time biopolitics."⁴⁹ Analogously to Bruno Latour's rethinking of the concept of "critique," it may be that automatically resorting to the Foucauldian conception of biopolitics, and its triad of "power, society, discourse," may have outlived its "usefulness and deteriorated to the point of now feeding the most gullible sort of critique."⁵⁰ Reading provisional texts written in the 1970s in

a decontextualized way as if they were prescient anticipation of this crisis, and without a critical lens for judging their accuracy and capacity to stand up to subsequent criticism, is an exercise that can prove dangerous at many levels and turn into an intellectual boomerang.⁵¹

This is not to say, however, that the whole discourse of biopolitics as such has run out of steam. There is an obvious sense in which biopolitics is better positioned than other theoretical frameworks to address the embodied and inter-embodied nature of social life and its governance, which appears so dramatically during a pandemic. At times of contagion and sickness, the individual and collective bodies reveal an openness, porosity and entanglement not just with the unseen world of biological micro-organisms but with political and institutional decisions that confute any abstract separation between life and law. Moreover, there is no doubt that Foucault's biopolitics, whether in its different "soft" or "algorithmic" iterations, continues to inspire important contemporary work on surveillance capitalism, how governments and states performatively "produce" and "see" populations in new ways..⁵²

These technopolitical developments show the Foucauldian repertoire's⁵³ vitality as well as the need to overcome or expand it, but that is not what we aim to discuss in this second part. Building on contemporary reflections on global ecological crises, we believe that moving only in a sociocentric or human/technological medium, where Foucauldian ideas were first applied, is no longer adequate to capture the depth of events radically decentering the human estate, from the Anthropocene to COVID-19.⁵⁴ Although recent interpretations of Foucault's biopolitics as a function of a more-than-human "government of things" has tackled the most egregious critiques of biopolitics as merely an "anthropocentric" discourse,⁵⁵ we still find ourselves only beginning to think about biopolitics from a planetary perspective that takes seriously the "inhuman nature" of contemporary crises, from "the irruption of a viral epidemic" to the "tipping of climate into a new regime."⁵⁶ In particular, the two problems of periodization and of legitimacy in the earlier reception of Foucauldian biopolitical discourse have yet to be satisfactorily addressed even in the latest efforts to "align" the perspectives of science and technology studies with those of post-Foucauldian "analytics of government."⁵⁷

Legitimate Power and the COVID-19 Crisis

If periods of acute social crisis show how difficult it is to abstractly separate life from law, and health from politics, then it is understandable that mechanically applying certain axioms of post-Foucauldian provenance to the current crisis could generate strong negative reactions. If Foucault's biopower refers to a form of power divorced from legal norms, and Agamben's *homo sacer* hypothesis is reduced to the claim that life enters into the sphere of law only as something to be dominated and exterminated—i.e., with only thanatopolitical results—then biopolitics only exacerbates the 'normative confusion' of judgments and decision-making in critical situations where real lives and deaths are at stake. Unqualified notions like *resistance*—the mere failure to consent to the imperatives of power—are also disconcerting in a context where they can be applied to literally everything, from anti-vax protesters to bottom-up attempts to implement social distancing to protecting the lives of citizens in the absence of health leadership. In COVID times, it may be interesting to note that one of the few examples of 'resistance' Foucault gave in his 1974 Brazilian conference on medicalization, is the Lourdes pilgrimage, which he described as a form "of vague resistance to the authoritarian medicalization of their bodies and diseases."⁵⁸ If, in Foucauldian parlance, "everything is not bad, but dangerous," the posture seems either self-indulgent, or merely rhetorical as it does not distinguishing between different level of dangers as well as legitimate and illegitimate coercion

during an acute crisis, which is particularly salient when it comes to topics like speeding up vaccination programs during a global pandemic.

But other tendencies in biopolitical scholarship bridge the Foucaultian analytic of governmentality and liberal conceptions of normativity,⁵⁹ pointing towards Foucault's novel employment of the discourse of rights,⁶⁰ and recovering the old Roman idea of *vitam instituere* where life and institutions are inseparable.⁶¹ These tendencies speak for the need to bring together biopolitics with the rule of law in an effort to develop a critical yet affirmative take on "bioconstitutionalism,"⁶² or a republican biopolitics.⁶³ One cannot avoid the impression that even Agamben's most radical denunciations of governmental pandemic measures are themselves premised on (arguably) anti-constitutional and anti-republican content.

The capacity to distinguish between legitimate and illegitimate uses of power in times of crisis can strengthen critical checks on the means proposed by the holders of political power. What Nietzsche once pointed out about the advantage of a genealogical method remains valid: namely, that the meaning of a thing or a discourse change often and quite radically depending on how it is used. In this particular case, it is imperative to question whether some or all of the proposed instruments for countering the COVID-19 pandemic, and protecting the health of citizens from the ravages of the virus, are legitimate within a liberal-democratic society. Indeed, the ongoing debate in the democratic public sphere between the upholders of the "right to health" and those who worry about the limitations to the "right to movement," the "right to privacy," the right to consent to medical treatment, etc., can also be reconceived through Foucault's proposed connection between counter-conducts and the emergence of new rights-claims. As Patton argues, the "general principle informing this [Foucault's] understanding of counter-conduct is that resistance on the part of citizens to the ways in which they are presently governed invariably draws upon the very conceptions of government that inform those ways of governing. Extending this principle to particular rights in modern democratic societies, we can say that their existence will depend on their being justifiable via available forms of public political reason, including conceptions of the nature and functions of government."⁶⁴ If this is true, then it becomes all the more important to ask how biopolitics forces us to reconceive of public reason as the crucial discourse of legitimacy in liberal democratic societies.

Foucault discusses in *The Birth of Biopolitics* how utilitarianism extended the range of government from the juridical subject under sovereign power to the *homo oeconomicus*, conceived as a subject of "interests" (as opposed to "natural" rights) visible via its preferences and what it is willing to exchange for their satisfaction.⁶⁵ In addition, by submitting itself to the strictures of "doux commerce" (rather than the commands of the sovereign), it was believed that the subject also became more "polished" and "moral."⁶⁶ For Foucault the subject of interests was inherently bio-social and had to be governed as a part of a "population" characterized at the same time by its "sociability" as by its biological features as a specimen of a living species, subject to evolutionary pressures and endowed with "vital powers."⁶⁷ The bio-social constitution of the subject of interests in Foucault's hypothesis requires a form of government that acts on the "milieu" or environment of the target populations, such that governmentality becomes a function of "action on the environment. Modifying the terms of the game, not the players' mentality... You must consider everyone as a player and only intervene on an environment in which he is able to play."⁶⁸ Foucault himself never developed this notion of environmentality much further. But significantly the notion itself is internally related to being guided by rules, and in another context Foucault speaks of it being part of an "economic rule of law" [*État de droit économique*].⁶⁹

If the subject of interests is a bio-social and bio-political subject, its pursuit of interests is itself rule-bound and thus normative. This is what connects the biopolitical discourse to the discourse of legitimacy which, as Patton correctly points out with regard to Rawls, is not simply based on the subject of interests but considers the subject as a “citizen” endowed with two “normative powers” (which Rawls calls the rational capacity to develop a conception of one’s own “good,” coupled with a “reasonable” capacity to consider what is “right” in relation to others). The development of the public debate during the pandemic showed quite clearly the shift from the utilitarian subject of interests to a post-Rawlsian concern for biological citizenship. If at the pandemic's start more than one commentator was tempted to invoke the classically utilitarian “trolley car” example when envisaging the feasibility of “group immunity” at the expense of the lives of elderly or at-risk people, there was soon a noticeable shift of public discourse to consider the kind of principles citizens consider reasonable given the biological realities of the viral pandemic. Thus, the applications of the “harm principle” and of the “precautionary principle” in relation to epidemiological and medical policies and procedures adopted by governments globally—generally in light of a discourse on “global public health” worked out in the preceding decades⁷⁰—were debated and contested in the public sphere. This has occurred in relation to a discourse of equal rights and the countervailing obligation to “protect society,” most starkly in the case where unvaccinated citizens stood to lose considerable amounts of rights because their very existence and free movement were deemed an “intolerable” risk for the rest of society. Thus, even though in some of these debates the discourse of biopolitics was undeniably hijacked for anti-liberal political agendas, one can equally see in the theoretical effervescence of the public sphere a symptom of the need for public reason to address the advent of “biological citizenship,”⁷¹ where considerations of the “vital powers” of populations are indissociable from the “noumenal power” of subjects.⁷²

In particular, the ongoing debates on the tension between health rights and mobility rights must be situated in the context of a biopolitical governmentality that modifies the milieu or environment in which human and non-human things circulate, exchange, and mutually determine each other. A biopolitical milieu entails the imbrication of biosphere and technosphere, such that our living environment becomes an “artifact of design.”⁷³ Media theorists speak of a transition towards a “sensory society,”⁷⁴ where sensors turn these designed environments into “calculated and calculating environments,” where “as populations move through those spaces using mobile media or other devices, they simultaneously generate knowledge and represent object of knowledge.”⁷⁵ In this context, the legitimacy claims of certain instruments governments employ to protect society will have to be balanced against a consideration for emergent rights of bio-sociality—much as the advances of AI algorithms with their uncanny capacity to “map” the thought-patterns, wishes and desires of individuals from their online preferences, lead more people to consider introducing rights to our mental states (“neurorights”).

Ultimately, without slipping into coarse comparisons between post-COVID measures and totalitarian science, it is important to keep attention on the erosion of rights and the establishment of pockets of rightlessness not only for certain groups of individuals, but also in certain parts of our lives and lived experience. The pressing question is how the COVID crisis might accelerate the dynamics of the biological citizenship phenomenon, big data, and surveillance capitalism, calling for renewed attention to the relation between rights and embodiment. With the COVID pandemic, particular attention will have to be paid to the question of “social distancing” and the related idea of control and surveillance that comes with digital vaccine passports—for instance, in the concept of precision medicine and how datafication is transforming the politics of care and notions of accountability.⁷⁶ Precisely

because biology and law are not impermeable to each other, and our rights are inherently connected to our understanding and lived experience of our embodiment, it becomes extremely important to see what instruments may threaten the connection between our rights and embodiment that has existed at least since “habeas corpus.” Debates on the political control of “digital objects” and the making of digital subjects and data sovereignty play an essential role here which cannot be covered in the limited scope of our article.⁷⁷

How to Recover from the Crisis: The Planetary Future of Affirmative Biopolitics

At the time of writing, it has still not been conclusively determined whether SARS-CoV-2 virus responsible for COVID-19 effected a classic “species jump” and from being endemic to certain animals became pandemic for the human animal, or whether it is an “emerging infectious disease” with probable animal sources, or whether some prior human modifications of existing coronaviruses produced it.⁷⁸ Regardless of final answers to this debate, COVID-19 has certainly brought once again global attention to the threats posed by zoonotic diseases, whose persisting influence has marked the *longue durée* history of the animal-human interface.⁷⁹ The inescapable phenomenon of zoonosis focuses our discussion on the senses in which human societies have always been not only bio-political but also bio-social: biological citizenship calls for renewed attention to democratic societies' legitimation discourses and the need to bring into consideration non-human forms of agency—the wider microbial web of life that makes human societies possible and, at the same time, in some cases, at risk. From many different quarters, it has been pointed out that the COVID pandemic has ushered to global attention what used to be the rather niche perspective of planetary health, or One World, One Health, based on recognizing the continuity between human, animal, plant and environmental health.⁸⁰ For at least a decade, international organizations including the WHO and FAO have introduced a “global early warning system” to alert nations' health systems to the appearances of zoonoses. One of its key documents is the so-called “Manhattan Principles of One Health” (2004) which soon after its appearance, was mentioned in an article of *Foreign Affairs*.⁸¹ In hindsight, especially with the continuing investigation of the origins of the virus in China (or elsewhere), it makes perfect sense why an international relations journal would draw attention to certain principles of commonalities between veterinary health and human public health given the phenomenon of zoonosis.

For our purposes what is significant about these “Manhattan Principles” is how they draw from securitization theory in order to conceptualize what Rosi Braidotti refers to as the posthuman “technologically mediated emphasis on life as zoe-centered system of species egalitarianism.”⁸² Thus, the fifth Manhattan principle calls for “devising adaptive, holistic and forward-looking approaches to the prevention, surveillance, monitoring, control and mitigation of emerging and resurging diseases that fully account for the complex interconnections among species.” This is interesting because the management of zoonosis is clearly oriented here towards leveraging the “complex interconnections among species” as a means of avoiding adopting principles of separation not only between species, but also between individuals of the same species. We associate this with quarantines and social distancing once diseases have become unmanageable. This logic seems to admit that the future of bio-security must develop in conjunction with an affirmative biopolitics which, among other things, will have to recognize claims to multispecies justice⁸³ and “egalitarianism” at the species level, granting rights and legal status to other species, if not directly recognizing and factoring in the possibility of political agency in non-human life. This suggests that a future affirmative biopolitics will have to come to grips with the reality that we must find ways to live together with viruses, and de-securitize our pandemic approaches in view of reaching forms of symbiosis with other living

and non-living beings. We may also have to re-learn forms of symbiosis from ancestral cultures who, to return to our initial point, were misleadingly thought to live in pre-biopolitical times.⁸⁴

The shift in historical perspective relating to biopolitics' periodization brings forward the question of the "agency" of non-human life and of inorganic matter. The subtle management of the Hippocratic triad of *Airs, Waters and Places* (to which we can add the power of astrological influences) in the ancient and medieval city, for instance, speaks volumes not just about the zeal to manage the porosity and vitality of both individual and civic bodies, but also of the agential power that Western medicine itself attributed to natural elements. With an obvious biopolitical metaphor, for instance, Hippocrates in *De Flatibus* defined winds as a "powerful king," a "souverain" whose power we need to respect and contemplate (3.1). References to the agency of nature and the manipulation of milieu as a form of distant government of space and populations are also key in urban architecture or the military from ancient times to the Renaissance.⁸⁵ Arguably, this agency was recognized and valorized across cultures and societies for ages, but it seems to have undergone a partial eclipse in the West with the rise of mechanistic models of nature in early European modernity.⁸⁶ However, informed by post-classical developments in the natural sciences in the twentieth century, sociological discourses like "new materialisms," "actor network theory," and "systems theory" have recently brought the agency of the non-human back into the mainstream.⁸⁷ In this they were greatly helped by the consolidation of earth system sciences as well as by the "ontological turn" by anthropological interpretations of Indigenous knowledges, which together understand the Anthropocene as evidence for the "agency" of earthly (Gaia), planetary, and other geological formations.⁸⁸ According to some interpreters, one of the corollaries of these discourses puts biopolitics on a defensive footing,⁸⁹ casting it more as part of the problem than the solution, since biopolitics would fundamentally divide the living and the non-living, assigning to the living both agency and status, while depriving them from what is inorganic. Biopolitics would remain complicit with the extractivism of the Industrial Age and of modern capitalism (and correlated forms of colonialism, slavery, and genocide, etc.) that is responsible for the on-going climate crisis or catastrophe. By so doing, the claim goes, biopolitics also goes against the grain of Indigenous ontologies where the personality of inorganic matter is not scandalous (although this terrain is contested, since these "ontologies" can also be tied to forms of animism and personalism that may equally fall within the horizon of life).⁹⁰ Yet the jury is still very much out on these "new materialist" critiques of biopolitics.

Thomas Lemke for instance has recently pointed out the lack of a convincing ethics or politics coming out of New Materialisms.⁹¹ Lemke argues that Foucault's theory of governmentality—which after all provided the matrix for developing the idea of biopolitics and biopower—remains the most pertinent discourse for understanding the disposition of things (both natural and artificial, both human and non-human) that govern us by determining the milieu or environment within which humans and non-humans live and act. In this context, Lemke speaks of the power of "environmentality." Indeed, from our brief discussion of the kind of governmentality that One Health proposes for coping with the challenges of zoonosis, this would seem to fit better with the power of environmentality than with the sort of artificial or instrumentalist personalization of the inorganic found in the new materialist and ANT conceptions of non-human agency. Could a genealogical work disconnecting biopolitics from its modern European birthdate in the eighteenth century⁹² disentangle it from the mechanistic view of nature and bodies of post-enlightenment developments, and perhaps *further relax some of the tensions* highlighted in this debate? In particular, the Foucauldian conceptions of governmentality and biopolitics turning on security dispositifs and even "environmentality" seem insufficient to address the demand for a new "politics of nature" or political ecology

(Latour): the demand *to expand the republic of the living* both to non-humans and to non-living beings,⁹³ while maintaining the rich legal and political institutions characterizing the long experience with communal liberties and related biopolitics in the premodern urban space. This demand meets biological citizenship's potentiality halfway, designating not only the new rights and obligations that citizens incur in governing their own "biology," but also citizenship's potential to extend beyond the confines of human biology.

Indicative of this demand for a new "politics of nature," Chakrabarty's latest book sets out to address the new planetary dimension that emerges from the Anthropocene (which stands in tension with the dimension of the "global," tied to late modern capitalism) by starting from two thinkers of the political, Arendt and Schmitt.⁹⁴ Schmitt is the political and juridical thinker whose categories, which Agamben and others have developed and radicalized, articulate biopolitics through an oppositional relationship between life and law based on a logic of exclusionary inclusion, and the production of life destined to be killed with impunity. This variant of biopolitics both denounces and plays into the securitization of life and health visible in the global management of the pandemic. What is missing, in contrast, is a convincing discourse on the legal medium (through which politics has always been articulated) that recognizes the agency of non-human living and non-living beings as a matter of equal legal and political status. Perhaps, in this sense, it is more promising to begin from the Arendtian categories of natality and plurality grounding the right to have rights, and making possible all political relationality. These new categories, which Janus-faced look towards both life/nature and politics/law, make it possible to develop new accounts of juris genesis from the common and republican politics of life.⁹⁵ The goal is to work on de-securitizing our entanglements with non-human life and non-life by re-politicizing our relations with what constitutes us as one living species among others on this planet.

Conclusion: A Biosocial Crisis, a Biosocial Recovery

From its socio-natural causes to its disproportionately gendered and racialized effects, COVID-19 is not merely a total social fact but *a biosocial crisis* through and through. In historian Frank Snowden's recent diagnosis,⁹⁶ epidemic diseases are not to be considered "random events that afflict societies capriciously and without warning. On the contrary, every society produces its own specific vulnerabilities." A magnifier, a call for listening, action or a crash test, COVID-19 for us intensifies what scholars have highlighted over the last two decades: i.e., that the modernistic separation of nature and society, biology and history is a fiction and a luxury we can no longer afford at a time when viral, social, and geological history are deeply entangled. Alongside a sacrosanct call to change capitalism and rediscover the importance of public welfare,⁹⁷ as well as bottom-up experiences of solidarity and mutual aid,⁹⁸ we wish to point to the importance of building a multiscalar way of thinking that brings together viral and cellular processes, the meso-level of urban or polity intervention, and the macro-structure of global capitalism and its system of exploitation and inequality.⁹⁹ Ours is not a call to start from scratch. Quite the opposite.

The deep history of the politics of life briefly overviewed in section 1 is just one example of the hidden repositories we can excavate to enrich our biosocial knowledge and forge agile tools for addressing the biosocial causes and effects of this and future crises. Genuine cross-disciplinary attempts to bridge scales and disciplines in social and biomedical sciences as well history and posthumanities, will be required to fashion an affirmative biopolitics up to the task of addressing the challenges posed by biosocial assemblages of viruses and global structures in an age of climate change and mass extinction.

Notes

- ¹ Deborah Lupton and Karen Willis, *The COVID-19 crisis: Social Perspectives* (London: Routledge, 2021).
- ² Giorgio Agamben. *Where Are We Now?: The Epidemic as Politics* ([Lanham MD]: Rowman & Littlefield, 2021)
- ³ Bhiamie Williamson, Katerina Teaiwa, and Mark Rose, “‘This is not our first pandemic’: Indigenous perspectives on crisis and repair.”, ADI Conference, Recovery Reconfiguration and Repair, Mobilising the Social Sciences for a postPost-pandemic world World (Melbourne, AU: September, 2021). <https://www.youtube.com/watch?v=OmtzuHvCo7A>
- ⁴ Janet Roitman, *Anti-Crisis* (Durham, NC: Duke University Press, 2013); Janet Roitman, “Framing the crisis: Covid-19,” *Arena* (12 Nov., 2021) <https://arena.org.au/framing-the-crisis-covid-19/>.
- ⁵ Reinhart Koselleck, *Critique and crisis: Enlightenment and the pathogenesis of modern society* (Cambridge, MA: MIT Press, 2000).
- ⁶ Michel Foucault, “The politics of health in the eighteenth century,” *Foucault Studies* (2014): 113-127; Nikolas Rose, “The politics of life itself,” *Theory, culture & society* 18, no. 6 (2001): 1–30; Nikolas Rose, “Medicine, history and the present,” in *Reassessing Foucault* (London: Routledge, 1994), 58–82; Robin Bunton and Alan Petersen, *Foucault, health and medicine* (London: Routledge, 2002); Paul Rabinow and Nikolas Rose, “Biopower today,” *BioSocieties* 1 (2006), (2): 195–217; Richard Boulton, “Social medicine and sociology: the productiveness of antagonisms arising from maintaining disciplinary boundaries,” *Social Theory & Health* 15, no. 3 (2017): 241–260.
- ⁷ Michel Foucault, *Omnes et singulatim: Towards a criticism of 'political reason'* Salt Lake City, UT: University of Utah Press, 1979).
- ⁸ Hannah Arendt, *The human condition* (Chicago: University of Chicago Press, 2013).
- ⁹ Agamben, *Where Are We Now?* See a wider debate in Fernando Castrillón and Thomas Marchevsky, eds., *Coronavirus, Psychoanalysis, and Philosophy: Conversations on Pandemics, Politics and Society* New York: Routledge, 2021).
- ¹⁰ Deborah Lupton, *The imperative of health: Public health and the regulated body* (Thousand Oaks: Sage, 1995).
- ¹¹ For a more complex and dialectical view of identification and legibility practices in the longue durée, see Simon Szreter and Keith Beckenridge, *Registration and Recognition. Documenting the Person in World History* Oxford, UK: Oxford University Press, 2012).
- ¹² James Moore, *Capitalism in the Web of Life: Ecology and the Accumulation of Capital*. London: Verso Books 2015); Eben Kirksey, “The emergence of COVID-19: A multispecies story,” *Anthropology Now* 12, no. 1 (2020): 11-16.
- ¹³ Ed Yong, *I contain multitudes: The microbes within us and a grander view of life* (New York. Random House, 2016). See also Vanessa Lemm and Miguel Vatter, eds., *The Viral Politics of Covid-19: Nature, Home and Planetary Health* (Singapore : Palgrave, 2022).
- ¹⁴ Frank M. Snowden, *Epidemics and society: From the Black Death to the Present* (New Haven, CT: Yale University Press, 2019).
- ¹⁵ Dipesh Chakrabarty, “An Era of Pandemics? What is Global and What is Planetary About COVID-19,” *Critical Inquiry*, October 16, 2020, <https://critinq.wordpress.com/2020/10/16/an-era-of-pandemics-what-is-global-and-what-is-planetary-about-covid-19/>.
- ¹⁶ Emmanuel Le Roy Ladurie, ‘Un concept: l’unification microbienne du monde (XIVe –XVIIe Siècles’, *Revue Suisse d'Histoire*, 23, 1973, n. 4, pp. 627-696.).
- ¹⁷ Maurizio Meloni "The politics of environments before the environment: Biopolitics in the longue durée." *studies in History and Philosophy of Science* 88 (2021): 334-344; Maurizio Meloni "Porous bodies: Environmental biopower and the politics of life in Ancient Rome." *Theory, Culture & Society* 38, no. 3 (2021): 91-115.
- ¹⁸ See also Federico Luisetti, “Geopower. On the states of nature of late capitalism,” *European Journal of Social Theory* 22, no. 3 (2019): 343–362.
- ¹⁹ John Hamilton, *Security: Politics, humanity, and the philology of care* (Princeton, NJ: Princeton University Press, 2016); Carlos F. Norena, *Imperial Ideals in the Roman West: Representation, Circulation, Power* (2011); Caroline Wazer, “Salus patriae: Public health and the Roman State,” PhD diss., Columbia University, 2017.
- ²⁰ Augusto Frascchetti, *Roma e il principe* (Bari: Gius, Laterza & Figli Spa, 2018); Hélène Ménard, *Maintenir l'ordre à Rome (Ile-IVe siècles ap. J.-C.)* (Paris: Editions Champ Vallon, 2017).

-
- ²¹ Cecilia Ricci, *Security in Roman times: Rome, Italy and the emperors* (New York: Routledge, 2018). For *Salus* in Rome see more widely: Martin A. Marwood, *The Roman Cult of Salus*. Oxford UK, BAR Publishing, 1988. Lorenz Winkler, *Salus-vom Staatskult zur politischen Idee: eine archäologische Untersuchung*. Vol. 4. Verlag Archäologie u. Geschichte, 1995. For a later period. Jason Moralee. *For Salvation's Sake: Provincial Loyalty, Personal Religion, and Epigraphic Production in the Roman and Late Antique Near East*. New York, Routledge, 2004. For the Greek cult of *soteria* (deliverance, preservation and safety) particularly after the Greco-Persian Wars, see Jim, Theodora Suk Fong. *Saviour gods and soteria in ancient Greece*. Oxford, UK: Oxford University Press, 2022.
- ²² Andreas Osiander, "Before sovereignty: society and politics in ancien régime Europe." *Review of International Studies* 27, no. 5 (2001): 119–145; Elisabeth Crouzet-Pavan, "Pour le bien commun...": à propos des politiques urbaines dans l'Italie communale, éditions École Française de Rome. Rome, 2003 ; Chiara Frugoni, "Paradiso Vista Inferno," *Buon Governo e Tirannide Nel Medioevo Di Ambrogio Lorenzetti* (Bologna: Società editrice il Mulino, 2019).
- ²³ Kathryn Murphy, "The Physician's Religion and 'salus populi': The Manuscript Circulation and Print Publication of 'Religio Medici,'" *Studies in Philology* (2014): 845–874; Martin Loughlin, *Political Jurisprudence* (Oxford, UK: Oxford University Press, 2017).
- ²⁴ In early modern political thinking, *salus* is best translated as "safety": Thomas Hobbes, *Leviathan*, edit. (Cambridge, UK: Cambridge University Press, [1661] 1996): Chapter 30; the highest aim of the sovereign is the "procuration of the safety of the people"; John Locke, *Second treatise of government: An essay concerning the true original, extent and end of civil government* (New York, : John Wiley & Sons, 2014): ii, sects. 149, 240: "the power devolves into the hands of those that gave it, who may place it anew where they shall think best for their safety and security." Foucault distinguishes between *sureté* (safety) and *sécurité* (security). A state that privileges security "has populations as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument" Michel Foucault, *Security, Territory, Population* (New York: Palgrave Macmillan, 2007).
- ²⁵ Warwick Anderson, "Epidemic philosophy," 2020. Available at: <http://somatosphere.net/2020/epidemic-philosophy.html/>
- ²⁶ Giorgio Agamben, *Where Are We Now? The Epidemic as Politics* (Lanham, MD: Rowman & Littlefield, 2021); Roberto Esposito, "I partiti e il virus: la biopolitica al potere." *La Repubblica*, (Feb 28, 2020) https://rep.repubblica.it/pwa/commento/2020/02/28/news/i_partiti_e_il_virus_la_biopolitica_al_potere-249847971/; Annie Cot, "Quand Michel Foucault décrivait "l'étatisation du biologique"," *Le Monde* (20 April, 2020) https://www.lemonde.fr/idees/article/2020/04/20/quand-michel-foucault-decrivait-l-etatisation-du-biologique_6037195_3232.html.
- ²⁷ Enguerran Maci and Priscilla Duboz, "Epidémie de Covid-19 en France: Logiques biopolitiques d'un confinement," *Recherches & éducations HS* (2020): 1-6
- ²⁸ Michael A Peters and Tina Besley, *Pandemic education and viral politics* (London and New York: Routledge, 2021); Philipp Sarasin "Mit Foucault die Pandemie verstehen?" *Geschichte der Gegenwart* (2020) online: <https://geschichtedergegenwart.ch/mit-foucault-die-pandemie-verstehen/> (last accessed 30–03–20).
- ²⁹ Guy Geltner, *Roads to Health: Infrastructure and Urban Wellbeing in Later Medieval Italy* (Philadelphia, University of Pennsylvania Press, 2019).
- ³⁰ Eugenia Tognotti, "Lessons from the history of quarantine, from plague to influenza A." *Emerging infectious diseases* 19, no. 2 (2013): 254. See also Paul Cassar, "Slitting of letters for disinfection in the Eighteenth Century in Malta," *British medical journal* 1, no. 5532 (1967). For wider cultural aspects and possible comparison with the present: Martin Marafioti, *Storytelling as Plague Prevention in Medieval and Early Modern Italy: The Decameron Tradition* (New York: Routledge, 2017).
- ³¹ A long-standing public concern in the relationship between the quality and quantity of water and health (including effects on plagues or fevers) in medieval and early modern Venice is documented in Piero Bevilacqua, *Venezia e le acque. Una metafora Planetaria* (Donzelli: Roma 1998). It is worth noting that already in 1282 Venezia had a special law for the protection of its pine forests, again with an obvious connection between trees, water, and effects on public health (81).
- ³² Carole Rawcliffe, *Urban Bodies: communal health in late medieval English towns and cities* (Woodbridge, Suffolk Boydell & Brewer Ltd., 2013); Geltner, *Roads to Health*; Guy Geltner, "The Path to Pistoia: Urban Hygiene Before the Black Death" *Past & Present* 246, no. 1 (2020): 3–33; Abigail Agresta *Many Waters: An Environmental History of Valencia, 1300–1500* (New Haven, CT: Yale University Press, 2016); Taylor Zeneri and Guy Geltner, "The dynamics of healthscaping: mapping communal hygiene in Bologna, 1287–1383," in *Urban History* 49, no. 1 (2022): 2–27.

- ³³ Nukhet Varlik, *Plague and empire in the early modern Mediterranean world* (Cambridge, UK: Cambridge University Press, 2015).
- ³⁴ Michel Foucault, *History of Sexuality: An Introduction* (London: Allen Lane, 1978 [1976]).
- ³⁵ Wazer, “Salus patriae.”
- ³⁶ Wazer, “Salus patriae.”
- ³⁷ Peregrine Horden, “Ritual and Public Health in the Early Medieval City,” in *Body and City: Histories of Urban Public Health*, Sally Sheard and Helen Power, eds. (London: Routledge, 2017), 17–40.
- ³⁸ For the Global Middle Ages see Catherine Holmes and Naomi Standen, “Introduction: towards a global middle ages,” *Past & Present* 238, no. suppl_13 (2018): 1–44. For urbanization and commercial revolution see Robert Sabatino Lopez, *The commercial revolution of the Middle Ages, 950–1350* (Cambridge, UK: Cambridge University Press, 1976); Carlo Maria Cipolla, *Before the industrial revolution: European society and economy 1000–1700* (London: Routledge, 2004).
- ³⁹ Rawcliffe, *Urban Bodies*; Geltner, *Roads to Health*; Carole Rawcliffe and Claire Weeda, eds. *Policing the urban environment in premodern Europe* (Amsterdam: Amsterdam University Press, 2019). See also Emanuele Lugli, *The Making of Measure and the Promise of Sameness* (Chicago: University of Chicago Press, 2019).
- ⁴⁰ Philip Kreager, “Aristotle and open population thinking,” *Population and Development Review* 34, no. 4 (2008): 599–629.
- ⁴¹ Peter Biller, *The measure of multitude: population in medieval thought* (Oxford, UK]: Oxford University Press, 2000). Joel Kaye, *A history of balance, 1250–1375: The emergence of a new model of equilibrium and its impact on thought* (Cambridge, UK: Cambridge University Press, 2014).
- ⁴² Leona. J. Skelton, *Sanitation in Urban Britain, 1560–1700* (London: Routledge, 2015); Dolly Jørgensen, “‘All Good Rule of the Citee’: Sanitation and Civic Government in England, 1400–1600,” in Sandra Cavallo and Tessa Storey, eds., *Healthy living in late Renaissance Italy* (Oxford: Oxford University, 2017); For pre-eighteenth century Foucauldian threshold in the colonies: Corcoran-Tadd, N., and G. Pezzarossi. 2018. Between the South Sea and the mountainous ridges: Biopolitical assemblages in the Spanish colonial Americas. *Post-Medieval Archaeology* 52 (1): 84–101.
- ⁴³ Michel Foucault, “The politics of health in the eighteenth century,” *Foucault Studies* (2014): 166.
- ⁴⁴ Foucault, “The Birth of Biopolitics,” 74. See Foucault, “The politics of health”; Maurizio Meloni. “An unproblematized truth: Foucault, biopolitics, and the making of a sociological canon.” *Social Theory & Health* (2022): 1-20, for an analysis of Foucault’s sources and palimpsest.
- ⁴⁵ Fernand Braudel, “History and the social sciences: The *longue durée*,” trans. Immanuel Wallerstein, *Review (Fernand Braudel Center)* 32, no. 2 (2009): 171–203; Emmanuel Le Roy Ladurie, “L’histoire immobile,” in *Annales. Histoire, Sciences Sociales* 29, no. 3: 673–692.
- ⁴⁶ See for instance: Laurent Capdetrey and Claire Hasenohr, *Agoranomes et édiles. Institutions de marches antiques* (Boccard: Bordeaux, 2012); Benjamin Foster, “Agoranomos and muhtasib.” *Journal of the Economic and Social History of the Orient/Journal de l’histoire économique et sociale de l’Orient* (1970): 128–144. Ronald Paul Buckley, “The muhtasib,” *Arabica* (1992): 59–117; Geltner, “Roads to Health” for mud and road inspectors in the Middle Ages.
- ⁴⁷ Benjamin Bratton, *The Revenge of the Real. Politics for a Post-Pandemic World* (London: Verso, 2021).
- ⁴⁸ Francisco Ortega and Michael Orsini, “Governing COVID-19 without government in Brazil: Ignorance, neoliberal authoritarianism, and the collapse of public health leadership.” *Global public health* 15, no. 9 (2020): 1257–1277. Mary T. Bassett, Jarvis T. Chen and Nancy Krieger, “Variation in racial/ethnic disparities in COVID-19 mortality by age in the United States: A cross-sectional study,” *PLoS medicine* 17, no. 10 (2020): e1003402; Dominique Béhague and Francisco Ortega, “Mutual aid, pandemic politics, and global social medicine in Brazil.” *Lancet* (2021); Stefania Milan and Emiliano Treré, “The Rise of the Data Poor: The COVID-19 Pandemic Seen from the Margins,” *Social Media+ Society* 6, no. 3 (2020): 1-8; Kate Power, “The COVID-19 pandemic has increased the care burden of women and families,” *Sustainability: Science, Practice and Policy* 16, no. 1 (2020): 67–73; Irma Mooi-Reci and Barbara J. Risman, “The gendered impacts of COVID-19: Lessons and reflections,” in *Gender & Society* 35, no. 2 (2021): 161–167; Don Bambino Geno Tai, Aditya Shah, Chyke A. Doubeni, Irene G. Sia, and Mark L. Wieland, “The disproportionate impact of COVID-19 on racial and ethnic minorities in the United States,” *Clinical Infectious Diseases* 72, no. 4 (2021): 703–706; Mathieu Arminjon and Régis Marion-Veyron, “Coronavirus biopolitics: the paradox of France’s Foucauldian heritage,” *History and Philosophy of the Life Sciences* 43, no. 1 (2021): 1–5; Lenore Manderson, Nancy J. Burke, and Ayo Wahlberg, *Viral Loads: Anthropologies of urgency in the time of COVID-19* (London: UCL Press, 2021).
- ⁴⁹ Andrew Lakoff, *Unprepared. Global Health in a Time of Emergency* (Berkeley, CA: University of California Press, 2017).

- ⁵⁰ Bruno Latour, “Why has critique run out of steam? From matters of fact to matters of concern,” *Critical inquiry* 30, no. 2 (2004): 229–230.
- ⁵¹ Foucault’s biopolitics, as many of his other ideas (retreat of the penitentiary, fascination for liberalism, fear of an extended welfarism), were undoubtedly the product of a very specific intellectual epoch. We highlight here that the mid 1970s are not just the culmination of post WWII economic boom in Europe, what the French calls *les trente glorieuses* (1945–1975) with relative expansion of welfare demands, but also the climax of an illusory golden age in epidemiology where infectious diseases seemed finally on the verge of being eradicated. There is no obvious connection between the linear 1970s view that infectious diseases were about to disappear, and Foucault’s analysis of urban quarantine in *Discipline and Punish*. However, his sporadic references to the “circulation of the disease itself” or “the disease that brought death” (1977a: 207), the plague, situated at the very beginning of the celebrated chapter on panopticism, appears less a reference to a threatening historical agent than for a step in the development of “disciplinary projects,” another chapter in the longer history of social control and disciplinarization. It is the purely aesthetic representation of the spatial politics of surveillance generated by the plague crisis that looks problematic today as we shall argue below. For shifts in the culture of epidemiology and infectious diseases in the 1970s and now, see Jon Arrizabalaga, “The global threat of (re)emerging diseases: contesting the adequacy of biomedical discourse and practice,” in JE Davis and AM Gonzalez eds., *To Fix or to Heal: Patient Care, Public Health, and the Limits of Biomedicine* (New York: New York University Press, 2016), 177–207. See the work of Mitchell Dean for a similar problematization of Foucault’s framework and contexts and the limit of projecting mechanically his axioms on today’s conflicts: Mitchell Dean and Kaspar Villadsen. *State phobia and civil society: the political legacy of Michel Foucault*. Stanford CA: Stanford University Press, 2016.
- ⁵² John Cheney-Lippold, “A new algorithmic identity: Soft biopolitics and the modulation of control,” *Theory, Culture & Society* 28, no. 6 (2011): 164–181; Rob Kitchin, “Civil liberties or public health, or civil liberties and public health? Using surveillance technologies to tackle the spread of COVID-19,” *Space and Polity* 24, no. 3 (2020): 362–381; Shoshana Zuboff, “Big other: surveillance capitalism and the prospects of an information civilization,” *Journal of information technology* 30, no. 1 (2015): 75–89.
- ⁵³ Byung-Chul Han, *In the swarm: Digital prospects*, Vol. 3. ([City?]: MIT Press, 2017).
- ⁵⁴ William E. Connolly, *Facing the Planetary* ([City?]: Duke University Press, 2017); Dipesh Chakrabarty, *The Climate of History in a Planetary Age* (Chicago: University of Chicago Press, 2021); Donna Haraway, “Anthropocene, capitalocene, plantationocene, chthulucene: Making kin,” *Environmental humanities* 6, no. 1 (2015): 159–165; Elizabeth A. Povinelli, Mathew Coleman and Kathryn Yusoff, “An interview with Elizabeth Povinelli: Geontopower, biopolitics and the Anthropocene,” *Theory, Culture & Society* 34, no. 2–3 (2017): 169–185.
- ⁵⁵ Thomas Lemke, *The Government of Things* (New York: New York University Press, 2021).
- ⁵⁶ Nigel Clark, *Inhuman nature: Sociable life on a dynamic planet* (London: SAGE, 2011), 215.
- ⁵⁷ Lemke, *The Government of Things*, 145–167.
- ⁵⁸ Michel Foucault, “Historia de la medicalización,” *Educación médica y salud*, 11(1), 22, our translation.
- ⁵⁹ Paul Patton, “Government, rights and legitimacy: Foucault and liberal political normativity,” *European Journal of Political Theory* 15, no. 2 (2016): 223–239.
- ⁶⁰ Ben Golder, *Foucault and the Politics of Rights* (Stanford, CA: Stanford University Press, 2015).
- ⁶¹ Roberto Esposito, *Istituzione* (Bologna: il Mulino, 2021); Alain Supiot, “Foucault’s Mistake. Biopolitics, Scientism, and the Rule of Law,” *New Left Review* 132 (2021): 125–139.
- ⁶² Sheila Jasanoff, *Can Science Make Sense of Life* (Cambridge: Polity Press, 2019); Sherryl Vint, *Biopolitical Futures in Twenty-First Century Speculative Fiction* (Cambridge, UK: Cambridge University Press, 2021).
- ⁶³ Miguel Vatter, *Republic of the Living* (New York : Fordham University Press, 2014).
- ⁶⁴ Paul Patton, “Foucault and Rawls: Government and Public Reason” in Vanessa Lemm and Miguel Vatter eds. *The Government of Life* (New York : Fordham University Press, 2014), 230.
- ⁶⁵ Wendy Brown, *Undoing the Demos: Neoliberalism’s Stealth Revolution* (New York: Zone Books, 2015).
- ⁶⁶ Jessica Whyte, *The Morals of the Market. Human Rights and the Rise of Neoliberalism* (London: Verso, 2019).
- ⁶⁷ Lemke, *The Government of Things*, 133–135.
- ⁶⁸ Foucault, *The Birth of Biopolitics*, 260–1.
- ⁶⁹ Foucault, *The Birth of Biopolitics*, 170–176. Miguel Vatter, “Foucault and Becker: A Biopolitical Approach to Human Capital and the Stability of Preferences,” In *The Politics of Legality in a Neoliberal Age*, edited by Daniel McLoughlin and Ben Golder (London: Routledge, 2018), 64–82.
- ⁷⁰ Lakoff, *Unprepared*; Lyle Fearnley, *Virulent Zones. Animal Disease and Global Health at China’s Pandemic Epicenter* (Durham, NC : Duke University Press 2020).

-
- ⁷¹ Nikolas Rose, “The politics of life itself,” *Theory, Culture & Society* 18, no. 6 (2001): 1–30; Didier Fassin, “La biopolitique n’est pas une politique de la vie,” *Sociologie et sociétés* 38, no. 2 (2006): 35–48; Didier Fassin, “Another politics of life is possible,” *Theory, culture & society* 26, no. 5 (2009): 44–60; Didier Fassin, *Life: a critical user's manual* (New York : John Wiley & Sons, 2018); Matthew Sparke, “Austerity and the embodiment of neoliberalism as ill-health: Towards a theory of biological sub-citizenship,” *Social Science & Medicine* 187 (2017): 287–295.
- ⁷² Rainer Forst, “Noumenal Power” *Journal of Political Philosophy* 23, no. 2 (2015): 111–127.
- ⁷³ Florian Sprenger, “Environments of Experimentation and Epistemologies of Surroundings. John Scott Haldane's Physiology and Biopolitics of the Living,” *Grey Room* 75 (2019): 26.
- ⁷⁴ Mark Andrejevic and Mark Burdon, “Defining the Sensory Society,” *Television and New Media* 16, no. 1 (2015): 19–36.
- ⁷⁵ Sprenger, “Environments of Experimentation,” 27.
- ⁷⁶ Minna Ruckenstein and Natasha Dow Schüll, “The datafication of health,” *Annual Review of Anthropology* 46 (2017): 261–278; Mira W. Vegter, Laurens Landeweerd and Hub AE Zwart, “N= many me’s: self-surveillance for Precision Public Health,” *BioSocieties* (2020): 1–21.
- ⁷⁷ Engin Isin and Evelyn Ruppert, “The birth of sensory power: How a pandemic made it visible?,” in *Big Data & Society* 7, no. 2 (2020): 1-15; David Chandler and Christian Fuchs, *Digital objects, digital subjects: Interdisciplinary perspectives on capitalism, labour and politics in the age of big data* (London: University of Westminster Press, 2019); Kitchin, “Civil liberties.”
- ⁷⁸ Najmul Haider, Peregrine Rothman-Ostrow, Abdinasir Yusuf Osman, Liã Bárbara Arruda, Laura Macfarlane-Berry, Linzy Elton, Margaret J. Thomason et al., “COVID-19—Zoonosis or emerging infectious disease?,” *Frontiers in Public Health* (2020): 763.
- ⁷⁹ William B. Karesh, Andy Dobson, James O. Lloyd-Smith, Juan Lubroth, Matthew A. Dixon, Malcolm Bennett, Stephen Aldrich et al., “Ecology of zoonoses: natural and unnatural histories,” *The Lancet* 380, no. 9857 (2012): 1936–1945; Bryony A. Jones, Delia Grace, Richard Kock, Silvia Alonso, Jonathan Rushton, Mohammed Y. Said, Declan McKeever et al. “Zoonosis emergence linked to agricultural intensification and environmental change,” *Proceedings of the National Academy of Sciences* 110, no. 21 (2013): 8399–8404.
- ⁸⁰ Jakob Zinsstag, Esther Schelling, Lisa Crump, Maxine Whittaker, Marcel Tanner, and Craig Stephen, *One Health. The Theory and Practice of Integrated Health Approaches* (Boston: CAB International, 2021); Steve Hinchliffe, “More than one world, more than one health: re-configuring interspecies health,” in *Social Science and Medicine* 129: 28–35.
- ⁸¹ William B. Karesh and Robert A. Cook, “The human-animal link,” *Foreign Affairs* 84 (2005): 38.
- ⁸² Rosi Braidotti, “Posthuman Humanities: Life Beyond Theory,” in Rosi Braidotti, *The Posthuman* (Cambridge, UK: Polity Press, 2013): 143–185; Rosi Braidotti, “A theoretical framework for the critical posthumanities,” *Theory, Culture & Society* 36, no. 6 (2019): 31–61.
- ⁸³ Danielle Celermajer, David Schlosberg, Lauren Rickards, Makere Stewart-Harawira, Mathias Thaler, Petra Tschakert, Blanche Verlie, and Christine Winter, “Multispecies justice: theories, challenges, and a research agenda for environmental politics,” *Environmental Politics* 30, no. 1–2 (2021): 119–140.
- ⁸⁴ Rawcliffe, *Urban Bodies*; Sally Sheard and Helen Power, *Body and city: histories of urban public health* (Taylor & Francis, 2017); Peregrine Horden, *Cultures of Healing: Medieval and After* (New York : Routledge, 2019).
- ⁸⁵ Geltner, Guy, “In the camp and on the march: Military manuals as sources for studying Premodern Public Health,” *Medical History* 63, no. 1 (2019): 44–60. Meloni, “Porous bodies”
- ⁸⁶ Although the transition was far from being linear, Stephen Gaukroger, *The collapse of mechanism and the rise of sensibility: science and the shaping of modernity, 1680–1760* (Oxford, UK : Oxford University Press, 2010).
- ⁸⁷ Bruno Latour, *Politics of nature: How to bring the sciences into democracy* (Cambridge, Mass: Harvard University Press, 2004); Karen Barad, *Meeting the universe halfway* (Duke University Press, 2007); Diana Coole and Samantha Frost, *New materialisms: ontology, agency, and politics* (Durham, NC: Duke University Press, 2010); Samantha Frost, *Biocultural Creatures* (Durham, NC: Duke University Press, 2016).
- ⁸⁸ Elizabeth A. Povinelli, *Geontologies* (Durham, NC: Duke University Press, 2016); Bruno Latour, *Facing Gaia: Eight lectures on the new climatic regime* ([NYC, NY]: John Wiley & Sons, 2017); Kathryn. A. Yusoff, *Billion black Anthropocenes or none* (Minneapolis, MN : University of Minnesota Press, 2018); Chakrabarty, *The Climate of History*.
- ⁸⁹ Especially Povinelli, *Geontologies*.
- ⁹⁰ Philippe Descola, *Beyond nature and culture* (Chicago: University of Chicago Press, 2013).
- ⁹¹ Lemke, *The Government of Things*.

⁹² See more widely Maurizio Meloni, *Impressionable biologies: From the archaeology of plasticity to the sociology of epigenetics*. New York. Routledge, 2019. Geltner, *Roads to Health*; Meloni "Porous bodies", Meloni "The politics of environments"

⁹³ Sue Donaldson and Will Kymlicka, *Zoopolis: A political theory of animal rights* (Oxford, UK: Oxford University Press, 2011).

⁹⁴ Chakrabarty, *The Climate of History*.

⁹⁵ And non-life: Vatter, *Republic of the Living* ; Margaret Davies, *Law unlimited: Materialism, pluralism, and legal theory* (New York, : Routledge, 2017).

⁹⁶ Snowden, *Epidemics and Society*.

⁹⁷ Mariana Mazzucato, *Mission economy: A moonshot guide to changing capitalism* (Penguin UK, 2021); Joseph Stiglitz, "A call to arms to change capitalism," *The Lancet* 397, no. 10287 (2021): 1797–1799.

⁹⁸ Barbara Prainsack, "Solidarity in times of pandemics," *Democratic theory* 7, no. 2 (2020): 124–133; Behague and Ortega, "Mutual aid."

⁹⁹ Maurizio, Meloni, Rachael Wakefield-Rann, and Becky Mansfield. "Bodies of the Anthropocene: On the interactive plasticity of earth systems and biological organisms." *The Anthropocene Review* 9, no. 3 (2022): 473–493; See on scalability and non-scalability: Erik Swyngedouw, "Scaled geographies: Nature, place, and the politics of scale," *Scale and geographic inquiry: Nature, society, and method* (2004): 129–153; Becky Mansfield, "Beyond rescaling: reintegrating thenational'as a dimension of scalar relations," *Progress in Human Geography* 29, no. 4 (2005): 458–473; Anna Lowenhaupt Tsing, "On Nonscalability: The Living World Is Not Amenable to Precision-Nested Scales," *Common knowledge* 18, no. 3 (2012): 505–524.