

Political Epistemology of Pandemic Management

Flavio D'Abramo, Giulia Gandolfi, Gerardo Ienna, Pietro Daniel Omodeo, and Charles Wolfe

Abstract (150 words)

Today, claims about the contiguity of health management and societal organization bring biopolitical concerns to the forefront. This essay offers historical-political insights on the covid-19 pandemic, which are particularly urgent, as both the temporal and the cultural-political dimensions have been insufficiently considered in current debates. After introducing our specific political-epistemological approach, we delve into the entanglements of medical expertise, economic interests, surveillance politics, and diplomatic relations in the past in order to shed light on the present. Additionally, we address the limitations of Italian theory's *biopolitica*, namely its idle radicalization of critical views on medical politics inspired by French *épistémologie historique*. We conclude with a call to scientists' responsibility in consideration of the societal embedment of their activity. Yet, the task of an emancipated science is not only in their hands but depends on our collective capacity to organically connect their work to the renewal of the body politics at large.

Keywords (3/4): pandemics, biopolitics, political epistemology, history of epidemics

Short bios

1. **Flavio D'Abramo** is postdoctoral researcher at the Max Planck Institute for the History of Science. His research focuses on the history of biomedicine, the history of health diplomacy, and medical ethics. flavio.dabramo@gmail.com

2. **Giulia Gandolfi** is a PHD student at Cà Foscari University of Venice. Her research focuses on historical epistemology and in particular she works on Georges Canguilhem's epistemology and philosophy of medicine.

giulia.gandolfi31@gmail.com

3. **Gerardo Ienna** is a postdoctoral researcher at Ca' Foscari University of Venice. His research focuses on Marxist historiography of science, French historical epistemology, historical sociology of science and Science and technology studies.

gerardo.ienna@unive.it; gerardo.ienna@gmail.com

4. **Pietro Daniel Omodeo** teaches historical epistemology at Ca' Foscari University of Venice, where he works on political epistemology, the cultural politics of early modern cosmology (as PI of the ERC CoG *EarlyModernCosmology*, Horizon 2020, Grant 725883), hydrogeological history (as PI of the FARE project *EarlyGeoPraxis*, Italian Ministry of University and Research) and Anthropocene philosophy (as Head of the Max Planck Partner Group *The Water City*). He is the author of *Political Epistemology: The Problem of Ideology in Science Studies* (2019).

pietrodaniel.omodeo@unive.it

5. **Charles Wolfe** is Professor of Philosophy, Université de Toulouse 2 Jean-Jaurès, and works primarily in history and philosophy of the life sciences, focusing on early modern materialism and vitalism, and Continental biophilosophy. He is the author most recently of *Lire le matérialisme* (2020). Email:

ctwolfe1@gmail.com

Political Epistemology of Pandemic Management

“History is always contemporary history” – the Italian neo-idealist philosopher Benedetto Croce once wrote¹ – because the concerns of the present determine the agendas of the historians’ inquiry into the past and constantly re-actualize it as relevant for the current predicament. In this sense – Antonio Gramsci glossed in his *Prison Notebooks*² – history-writing is a political act, as we look at the past not only to understand our present but also to change it. In times of global pandemics, medical history takes on an unprecedented relevance, while Foucauldian claims about the contiguity of health management and modern societal organization bring biopolitical concerns to the forefront³. In this essay, we offer historical-political insights on the covid-19 pandemics, which we see as particular urgent, as both the temporal and the cultural-political dimensions have been neglected or addressed with unapt instruments in current debates on medical science, technical expertise and society⁴. We first introduce our group’s political-epistemological approach; we then discuss the entanglements of medical expertise, economic interests and surveillance politics in the past in order to shed light on the present conjuncture; third, we address the limitations entailed in the idle radicalization of critical approaches to medical politics inspired by French *épistémologie historique* in the direction of Italian theory’s *biopolitica*. We conclude with a reappraisal of the view (which was once generally accepted but today less and less reflected upon) that science is not neutral and scientists carry a responsibility for the societal consequences of their activity⁵. However, the task of emancipating science (imagining and

¹ Benedetto Croce, *Teoria e storia della storiografia*, Adelphi Edizioni, Milan 2001.

² Antonio Gramsci, *Quaderni del carcere*, Einaudi, Turin 2007.

³ See also Pietro Daniel Omodeo, *Review-Interview with Roger Cooter. e Critical Intellectual in the Age of Neoliberal Hegemony*, “Journal for the Interdisciplinary History of Ideas”, IV, 7, 2015, pp. 5:1-5:20.

⁴ Arguably, STS studies have come to mostly embrace group sociology at the expenses of a broader political comprehension and macro-economic analysis, and obliterate history, while a historical-epistemological approach would help this growing scientific field to deal with its object of inquiry and reflect on its own methodology, origin and goals. Cfr. Gerardo Ienna’s PhD thesis Gerardo Ienna, *Science and Technology Studies. Socio-Epistemologia Storica Delle Negoziazioni Disciplinari* (Dottorato di ricerca in Philosophy, science, cognition, and semiotics (pscs), 31 Ciclo, Bologna, Alma Mater Studiorum Università di Bologna, 2019).

⁵ The non-neutrality of science has been a shared view in science studies and the history of science from the Seventies to recent times: Jean-Marc Lévy-Leblond and Alain Jaubert, *(Auto)Critique de La Science*, Éditions du Seuil, Paris 1973; Giovanni Ciccotti et al., *L’Ape e l’Architetto. Paradigmi Scientifici e Materialismo Storico*, Franco Angeli, Milano 2011; Hilary Rose and Steven Rose, *The Radicalisation of Science: Ideology of / in the Natural Sciences* Macmillan, London 1976; Sandra Harding, *The Science Question in Feminism* Cornell University Press, Ithaca-London 1986; Barry Barnes, *Scientific Knowledge and*

realizing a science for an emancipated society) is not only in their hands but depends on our collective capacity to organically connect our work to the renewal of the body politic at large.

Methodological overture: political epistemology

Science is the social activity par excellence.⁶ As the pioneer of historical epistemology, Ludwig Fleck stressed in *Genesis and Development of a Scientific Fact* (1935), knowledge is inherently collective.⁷ He stressed the shared character of scientific and medical knowledge, which is always determined by historically transmitted styles of thought (*Denkstille*).⁸ They reflect the societal conditions out of which the sciences and their facts emerge. Prescriptive elements, ethical and even mythical ones, are part of the development of science in all of its stages, including the present, and they guide future research as an ineliminable ideological factor. Fleck regarded the case of syphilis as paradigmatic. Throughout the centuries, Europeans looked at this venereal disease with great concern, owing to its sexual connotation and the perception as a divine scourge for sexual sins. Thus, its importance was social in the first place. Fleck compares syphilis with other contagious diseases that received lesser attention by public health administrators, scientists and the population in general. For instance, tuberculosis received a different ethical connotation, as a sort of ‘Romantic disease’ and as such was a lesser motivation for state-funded medical research although it caused more casualties than syphilis. “No head of public health search would be able to arouse enthusiasm in the nation’s best research workers, because it is a socially unimportant disease.”⁹

Drawing on Fleck’s insights that science is a collective, ethically connotated and politically driven activity, we direct our political-epistemological approach to the critical inquiry of the political entanglements of science and medicine, including at the meta-level of disciplinary discourses on

Sociological Theory Routledge & Kegan Paul, London 1974; David Bloor, *Knowledge and Social Imagery* University of Chicago Press, Chicago 1976; Barry Barnes, David Bloor and John Henry, *Scientific Knowledge. A Sociological Analysis* Athlone, London 1996;. Cfr. Omodeo, *Political Epistemology: The Problem of Ideology in Science Studies* Springer, Dordrecht 2019.

⁶ Ludwig Fleck, *Genesis and Development of a Scientific Fact*, Chicago 1979, p. 42.

⁷ The interpretation of Fleck as a historical epistemologist is well established. See, among others, Hans-Jörg Rheinberger, Hans-Jörg Rheinberger, *Historische Epistemologie zur Einführung*. Hamburg 2007, and Fynn Ole Engler and Jürgen Renn, *Gespaltene Vernunft: Vom Ende eines Dialogs zwischen Wissenschaft und Philosophie*, Berlin 2018, esp. Chap. 8 and 9.

⁸ Fleck, *Genesis and Development of a Scientific Fact.*, Chap. 4.5, pp. 125-145.

⁹ *Ibid.*, p. 77.

science, especially the academically established meta-sciences (the history and philosophy of science, the sociology of science, and the anthropology of science) in a time in which debates about facts and their assessment have become of paramount relevance in public debates and political decision making (from climate change to health management). In our view, the 'political' concerns the three main questions of historical epistemology, of the roots of science (or the 'genesis'), its validity and functions (i.e., the implicit and explicit goals and the connected praxis). We should consider these three questions one after the other.

Concerning the roots of science, the question relates to both the cognitive and the historical origin of science. They do not have to be thought separately, as the social processes of abstraction that took place under concrete historical circumstances and in connection with specific needs (medical theories from healing practices, geometry from measurement, arithmetic from computation, more abstract mathematical practices from symbolic systems, formalization from reflection on mental practices, etc.) have to be constantly interiorized by learning individuals through experiences of cognitive appropriation and reactivation of mental structures, as has been argued by Peter Damerow in his historical-materialist reworking of historical-philosophical, pedagogical and political insights stemming from Hegel, Piaget and, most importantly, Marx¹⁰. The political meaning of a social reconstruction of the history of science was clear to the pioneers of the sociology of science in the twentieth century, for instance Boris Hessen, Henryk Grossmann, Edgar Zilsel and, of course, Ludwig Fleck, who reaffirmed the collectivist character of knowledge as an important measure against elitist attitudes that were widely accepted by scientists, as was reflected in the widespread cult of 'pure science', the scientific genius and the merely intellectual ('internalist') comprehension of the history of scientific ideas¹¹. Fleck specifically attacked the 'dogmatism' of speculative epistemology (*epistemologia imaginabilis*) that 'analytically' reduces cognition to a relation between knowing subject and the known object without taking into account the necessary mediation of culture.¹² Today's studies on 'practical knowledge' are the heirs of those perspectives although the political awareness has often been diluted, perhaps owing

¹⁰ Peter Damerow, *Abstraction and Representation: Essays on the Cultural Evolution of Thinking* Springer, Dordrecht 1995.

¹¹ Boris Hessen and Henryk Grossmann, *The Social and Economic Roots of the Scientific Revolution*, (eds.) Gideon Freudenthal and Peter McLaughlin, Springer, Dordrecht 2009; Edgar Zilsel, *The Social Origins of Modern Science*, (eds.) Dick Willem Raven, Wolfgang Krohn and Robert S. Cohen, Kluwer, Dordrecht 2003.

¹² Fleck, *Genesis and Development*, p. 50.

to a sense of more widespread tolerance towards bottom-up politics and forms of knowledge¹³.

The second historical-epistemological question concerns validity, the problem of method and, more abstractly, the determination of truth criteria¹⁴. The political implications of such a problematic were not always clear to the champions of modern science, such as Galileo, those who integrated it with a philosophical reflection on method – prototypically, Descartes – and those who investigated the rational constituents of science – most importantly, Immanuel Kant’s subjective *a priori* of knowledge. Yet, neither the practice, nor the methods nor the structuring factors of scientific knowledge have ever been given in absolute terms but evolve historically and are tightly connected with values and interests of various origin. At moments, the political emerged in the philosophical conceptions of the ‘epistemological century’ of the first reception of Descartes, for instance in Hobbes’ “political epistemology” (to use Shapin and Schaffer’s phrase)¹⁵. The latter materialist thinker expressed not only the knowledge-power entwinement but also sensed the political meaning of the usage of reason and the theory of knowledge in his various polemical fronts – against the pluralist empiricism of the Royal Society just as against the theo-politics of ‘conventionalism’ à la Bellarmine¹⁶. The awareness of the historicity of the *a priori* of science (its *dynamic a priori*) and the stronger objectivity that positioned knowledge can ensure to our knowledge have emerged in the wake of the Marxist critique of political economy, neo-Kantian philosophies of science and radical science movements in the twentieth century¹⁷. The question of the (epistemic) values and interests that are embedded in science and its truth criteria is still of impelling actuality in an age that is marked by the uncritical (re)emergence of neo-positivist attitudes, novel forms of social Darwinism, scientist reductionism (even scientist superstition), and technocracy. The fundamental enlightenment question arises: how can we secure a *rational use of scientific rationality*? This is the political crux of the *question de la méthode*.

Thirdly, as far as the functions of science are concerned, they relate both to the materiality of science

¹³ Pamela Smith, *The body of the artisan: Art and experience in the Scientific Revolution*, The University of Chicago Press, Chicago 2004; Pamela O. Long, *Artisan/practitioners and the rise of the new sciences, 1400–1600*, Oregon State University Press, Corvallis 2011; Matteo Valleriani (ed.), *The structures of practical knowledge*, Springer, Cham 2017.

¹⁴ Bloor, *Knowledge and Social Imagery*; Joseph Rouse, *Knowledge and Power. Toward a Political Philosophy of Science*, Cornell University Press, Ithaca-London 1987.

¹⁵ Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*, Princeton University Press, Princeton, 2011 (1985), p. 99.

¹⁶ Gideon Freudenthal, *Atom and Individual in the Age of Newton On the Genesis of the Mechanistic World View*, D. Reidel Publishing Company, Dordrecht 1986.

¹⁷ For a general overview see P.D. Omodeo, *Political Epistemology. The Problem of Ideology in Science Studies*, cit.; G. Ienna, *Science and Technology Studies. Socio-Epistemologia Storica Delle Negoziations Disciplinari*, cit.

as a force of societal production and reproduction, as well as to its cultural function. Bacon's vision of science as a means to master nature has become an indisputable reality in the industrial age of science as a productive force. In his classic studies on the function of science, John Bernal, in spite of his fundamental scientific and socialist optimism, pointed to the two-sidedness of science, as its goals and uses can serve progressive politics of emancipation as well as destruction, the capitalist exploitation of nature and humanity, even fascism¹⁸. The latter connections motivated the Frankfurt denunciation of the Enlightenment dialectics that transformed science and reason from a means of human mastery of nature into a means of control and dominion of humans. "The mastery over the mastery of nature" (according to Alfred Schmidt's expression¹⁹) can be turned into an instrument of despotism instead of freedom. Hence, the necessity of a political not only technical assessment of science, its results and goals.

This is particularly urgent in view of the cultural function of science as an instrument of ideology, that is, as a means of construction of consensus over the status quo and justification of the societal reality. Such reactionary and depersonalizing function occurs whenever (too often) technocratic solutions are advanced, which transform political problems into technical ones²⁰. Hence, a science-democracy dilemma emerges often in connection with the most urgent problems of the present such as health and the environment: Who is in charge of decisions? The experts or the people? And, connected to this, the problem of scientific education, not to be confused with popularization²¹. The emergence of such problems is also intrinsically related to the social division of labor and the establishment of a form of bureaucratization characteristic of the modern state and capitalist private economy²².

The evolution of the spirit of capitalism had at least three phases: the first corresponding to its phase of emergence, the second to Taylorism (1930-1960) and the third, more recent, with the post-'68

¹⁸ John Desmond Bernal, *Social Function of Science*, Routledge, London 1946 (1939), pp. 1–11, pp. 155–159, pp. 210–231.

¹⁹ Alfred Schmidt, *The Concept of Nature in Marx*, Verso, London 1962, pp. 12-13.

²⁰ Jürgen Habermas, *Toward a Rational Society, Student Protest, Science, and Politics*, Beacon Press, Boston 1989 (1969), pp.102-103.

²¹ Harry Collins and Robert Evans, *The Third Wave of Science Studies: Studies of Expertise and Experience*, "Social Studies of Science" XXXII, 2, 2002, pp. 235–296; Alvin I. Goldman, *Experts: Which Ones Should You Trust?*, "Philosophy and Phenomenological Research" 63, no. 1, 2001, 85–110.

²² Max Weber, *Economy and Society. An Outline of Interpretive Sociology*, University of California Press, Berkeley 1978, pp. 956–1005.

phase²³. In all three phases, technology has always been at the center of material and political reflections on science. In fact, technology constitutes a juncture between the intellectual realm of the universalizing abstraction of science, on the one hand, and the material realm of practice, production, economy and, of course, politics²⁴. Social historians of science and materialist epistemologists have long pointed to the relevance of technology as the basis for modern science: according to the so-called Hessen-Grossmann thesis, modern mechanics resulted from the codification of machine technology and know-how, which, in turn, was fueled by the material and economic interests of expanding profit economy (briefly, the expansion of capitalist logic)²⁵.

Moreover, technology has been thematized – perhaps more metaphorically – in connection with the study of organization techniques and governmental problems. As Boltanski and Chiapello have shown, an essential element of the establishment of the second and third phase of the spirit of capitalism is manifested through the emergence of management as a mixed form of technical organization of the social division of labor and moral prescriptions²⁶. The birth of Taylor’s scientific management immediately raised educational and moral concerns about the psycho-physical amount of repression that was necessary to create the ‘factory gorilla’, the worker of the assembly line realized by Ford in the first decades of the twentieth century. Antonio Gramsci’s reflections on “Americanism and Fordism” in his *Prison Notebook* n. 22 are exemplary of early cultural-political critiques of scientific management (which are consonant with Marx’s position on the workers’ alienation in the Paris manuscripts and later discussions on ‘reification’ by Lukács to the Frankfurt school)²⁷. The third phase was instead characterized by a total reabsorption of the social criticisms that emerged during '68 in the mesh of capitalist ideology (for example, replacing the values of stability and security typical of Fordism with those of mobility, autonomy and personal self-realization). The ideological and social function of management is to generate a form of knowledge capable of producing ethical-technical prescriptions in the social organization of labor capable of preserving capitalism through a constant neutralization of

²³ Luc Boltanski, Ève Chiapello, *The New Spirit of Capitalism*, Verso, London 2007, pp. 16–20.

²⁴ “Socio-Political Coordinates of Early-Modern Mechanics: A Preliminary Discussion,” in Rivka Feldhay, Jürgen Renn, Matthias Schemmel, Matteo Valleriani (eds.), *Emergence and Expansion of Preclassical Mechanics*, Springer, Cham 2018, pp. 55-78.

²⁵ Boris Hessen, Henryk Grossmann, *The Social and Economic Roots of the Scientific Revolution*, (cit.), pp. 1–40.

²⁶ L. Boltanski, È. Chiapello, *The New Spirit of Capitalism*, (cit.), p. 58.

²⁷ A. Gramsci, *Quaderni Dal Carcere*, Einaudi, Turin 1975 (1948), pp. 2139–2181; Andrew Feenberg, *The Philosophy of Praxis: Marx, Lukács, and the Frankfurt School*, Verso, London, 2014.

forms of criticism²⁸.

With the spread of forms of technocratic management of politics, it seems to us, therefore, that in contemporary societies the science of business management is also spreading to the organizational structure of the policies of the nation states. From this point of view, in the context of the advanced capitalist society, science and technology assume the role of a concrete productive force²⁹. All this has effects on the forms of governmentality and the processes of subjectification that it implies. Foucault has brought to our attention to what he calls the “technologies of the self”, the social techniques of sexual education and repression which are at the basis of the construction of subjectivities, as well as techniques of bodily manipulation and biological regulation of society³⁰. The latter problem, the problem of biopolitics, is closely connected, in Foucault’s view, to the modern forms of societal control³¹.

The problems of health in the medical politics of today’s society are intimately connected with two other heated topics of political-epistemological investigation today: information technologies and the environment. In fact, the relationships that exist between human action to modify the equilibrium of the natural world - with the corresponding climate crisis - and the emergence of pandemics, autoimmune diseases, cancer, etc. are now evident. This correlation that generates a problem of governance is a central theme for political epistemology.

Being able to rely on the use of large masses of data, the most advanced information technologies allow such problems to be analyzed today with greater effectiveness. Big data can provide decision-makers with an important tool to make predictions and decisions in the environmental, medical, social, financial, security, etc. fields³². At the same time, however, the use of big data in the scientific field has opened up a dense epistemological debate about the difficulty of storage and aging of data, its partiality and availability for dishonest manipulation³³. All of these problems, however, are not only comprised

²⁸ L. Boltanski, È. Chiapello, *The New Spirit of Capitalism*, (cit.), pp. 57–102.

²⁹ G. Ciccotti et al., *L’Ape e l’Architetto. Paradigmi Scientifici e Materialismo Storico*, (cit.) pp. 92–93.

³⁰ Michel Foucault, *La technique de soi*, in Michel Foucault, *Dits et Écrits 1980-1988*, IV, Gallimard, Paris 1994; and Foucault, *La Technologie politique des individus*, in *Dits et Écrits*, IV, (cit.), pp. 783–813.

³¹ Michel Foucault, *La Naissance de la Médecine Sociale*, in M. Foucault, *Dits et Écrits 1976-1979*, III, Gallimard, Paris 1994, pp. 207–28; and Michel Foucault, *Society Must Be Defended. Lectures at the College de France, 1975-76*, Picador, London 2005; Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-79*, Palgrave Macmillan, New York 2008.

³² Alex Pentland, *Social Physics. How Good Ideas Spread*, Penguin, London 2014.

³³ Sabina Leonelli, *La Ricerca scientifica nell’era dei big data*, Meltemi, Milan 2018.

in an epistemic horizon but are also intrinsically political problems. Who owns the data, how are they used, how are they extracted, how do they become a commodity, how do the new forms of capitalism constantly produce added value through data?³⁴

For this reason, we deem it to be necessary to enlarge our view further. The entanglement of the three themes of the environment, health and information is further linked to two less thematized issues: the problem of surveillance³⁵ and labor³⁶. The study of the interconnected prism of health, environment, IT, surveillance, and work calls for an integrated understanding of their historical societal (ultimately political) integration. It is our conviction that this question can ultimately be answered only through a mature analysis and critique of global capitalist economy³⁷. In the present essay we limit ourselves to the current case of health management which we first address from a historical perspective and then from a political-philosophical one.

A historical-critical perspective: entanglements of medicine, technical expertise and society

The quarantine, maybe one of the oldest administrative measures to counter the plague and other infectious diseases that humans has always experienced, was ideated between 1384 and 1465, when the sanitary council of Venice, the most important commercial port that exchanged cargos with the Levant, and the nearby Republic of Ragusa (today Dubrovnik) established the isolation of infected ships for forty days³⁸. In the management of epidemics quarantine, was a means to counter outbreaks by isolate individuals and communities. The Lazzaretto of Venice was created about six hundred years ago,

³⁴ Human tracing and surveillance have been at the center of debates about the threat to democracy of the implementation of technologies for the mapping of people's movement and their sanitary conditions. Indian debates on this are exemplary. See, among others, Ranabir Samaddar (ed.), *Borders of an Epidemic: Covid-19 and Migrant Workers*, Calcutta Research Group, Kolkata 2020 and the statements published on the website <https://politicallymath.in>, in particular V. Geetha, "Germs, Stains and Our Pure Society", as well as Arul and Tathagata, "What Modeling the Pandemic Reveals about Our Mathematics" (accessed on 8 December 2020).

³⁵ Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, PublicAffairs, New York 2019.

³⁶ Evgeny Morozov, *Digital Socialism?*, "New Left Review" 116–117, 2019, pp. 33–67.

³⁷ Andreas Malm has drawn attention to such a connection of economy, environmental crisis and health in his recent book, *Corona, War Communism in the Twenty-First Century Climate, Chronic Emergency* London-New York, Verso 2020. See also Matteo Pasquinelli, *The Automaton of the Anthropocene: On Carbosilicon Machines and Cyberfossil Capital*, "South Atlantic Quarterly" 116/2, 2017, pp. 311-326.

³⁸ William Hardy McNeill, *Plagues and Peoples*, Anchor Books, New York 1976.

in 1423, as an island-hospital for the confinement of all those who contracted plague. The close-by island of S. Lazzaro was the place in which individuals with leprosy had been long detained in a sort of ghost city of deformed and sick people ruled by clerks. Within a few decades, in 1468, a third island, today known as Lazzaretto Nuovo, was deputed to serve as a place of hope for those who luckily recovered and could be transferred to this next station for their convalescence³⁹. The new Lazzaretto was deputed to quarantine those 'suspected' to be infected or who had been in contact with sick people, as well. Moreover, it became a place for the quarantine of vessels, goods and people who entered the lagoon from countries allegedly affected by plague and other contagious ills. A *magistrato alla sanità* (health magistrate) was instituted after the plague of 1485 and its extensive and dramatic spread, which kept track of the movements of people, watched over the poor and prostitutes, as it was assumed that people circulation, misery and sexuality favoured the spreading of disease⁴⁰. Moreover, this institution developed an intelligence network in order to collect information about diseases in other countries, and which could be also used for commercial battles and international politics. For instance, when, in the fifteenth century, the Republic of Ragusa quarantined ships from Venice, as plague was taking over the city, Venice later responded by blocking ships from Ragusa in retaliation. Quarantine was therefore the main means to address epidemics as well as a means of war that went along the making of European nation states.

The commerce managed by the Dutch with the East and West Indies caused, in 1663, the appearance of the plague in the Netherlands. By 1664 the plague killed over 35,000 people in Amsterdam. England, Sweden and Denmark, which competed with the Netherlands for the access to Levant and Asia markets, imposed extremely long and sometimes unjustified quarantine on Dutch vessels⁴¹. By analysing the plague epidemic that took place in Marseille in 1720, French historian Jean-Pierre Papon highlighted the role of the merchants who decided when to end the administrative measures of lockdown and sanitation⁴², to eventually suggest that since the functioning of health boards is challenged by particular interests, it would be advisable to avoid a committee entirely composed by merchants⁴³.

³⁹ Nelli Elena Vanzan Marchini, *Rotte mediterranee e baluardi di salute*, Skira, Geneva-Milan 2004, pp. 17-45.

⁴⁰ Ibid.

⁴¹ Mark Harrison, *Contagion: How Commerce Has Spread Disease*, Yale University Press, New Haven 2005, p. 25.

⁴² Jean-Pierre Papon, *De la Peste, ou Epoques Mémorables de ce Fléau, et Les Moyens de s'en Préserver*, vol. I, Lavilette et Compagnie, Paris 1800, p. 340.

⁴³ J.P. Papon, *De la Peste*, vol II, (cit.), p. 142.

During the fifteenth and nineteenth centuries, trade began to play such a key role that the most important commercial ports of the Mediterranean Sea, by following the Venice model equipped themselves with health boards and sanitary institutions to quarantine ships, goods and crews in lazarettos. Quarantine was born and extensively used as an administrative measure to save the trade of European powers, and their wealthiest population from the contagion spread across maritime trade routes. The cholera pandemic of 1817 was the first of six cholera outbreaks between 1817 and 1917⁴⁴. It exploded in British India and spread through Russia, China, and the Middle East, across to West Africa. In India alone, it is estimated that one to two million people died. The disease created and aggravated social issues.

In Russia, the poor protested quarantine restrictions that hindered their ability to work and survive. In 1831, for example, the popular revolt which took place in the Russian Tambov administrative area against the quarantine caused 2,300 deaths, and it required troops, which until 1833 militarised the area to quash the uprisings⁴⁵. By 1832, during the second cholera pandemic of the nineteenth century, the disease had travelled across Russia to Western Europe and England, and had reached the Americas causing a significant impact on political systems and economies⁴⁶.

Gradually, scientific advancements offered a better understanding of cholera. In 1849, physician John Snow hypothesized that the cholera outbreak had microbial origins. He also inferred that microbes spread via the sewage system – by leaking into the aqueducts' clean drinking water. In 1854, Italian microscopist Filippo Pacini identified the microscopic *Vibrio* responsible for what was then called Asiatic cholera⁴⁷. He realized that the contagion needed an “organic living substance” in order to be able to cause, reproduce, and spread the disease⁴⁸. As highlighted by historians of medicine Erwin Ackerknecht and Roger Cooter, during the second half of nineteenth century contagion, the idea that a disease spread through contact or proximity among individuals, was countered at least by two subjects: Namely

⁴⁴ David P. Fidler, *The globalization of public health: the first 100 years of international health diplomacy*, “Bulletin of the World Health Organization”, 79, 2001, pp. 842-849; Norman Howard-Jones, *The Scientific Background of the International Sanitary Conferences, 1851-1938, History of International Public Health*, 1, 1975; Valeska Huber, *The unification of the globe by disease? The international sanitary conferences on cholera, 1851-1894*, “The Historical Journal”, 49/2, 2006, pp. 453-476.

⁴⁵ Roderick E. McGrew, *The First Cholera Epidemic and Social History*, “Bulletin of the History of Medicine”, 34/1, 1960, pp. 61-73.

⁴⁶ Flavio D'Abramo, Sybille Neumeyer, *A historical and political epistemology of microbes*, “Centaurus”, 62/2, 2020, pp. 321-330.

⁴⁷ Filippo Pacini, *Osservazioni microscopiche e deduzioni patologiche sul cholera asiatico*, Tipografia Federico Bencini, Florence 1854.

⁴⁸ *Ibidem*, p. 27.

liberal politicians, who despite the dramatic effects of the cholera pandemics wanted to keep international trade going on, as well as by all those who wanted to counter the symbolic, oppressive power of quarantine, often used by officials and governments to segregate the minorities⁴⁹. Before the scientific discoveries of Pacini, Snow, Pasteur and Koch, the physicians and medical institutions of Europe countering the theory of contagion and the related practices such as the quarantine, represented the majority among all the scientific communities. After the scientific observations that confirmed the presence of living, transmissible entities causing the spread of disease, the anticontagionists suddenly declined, and in a few decades sanitary institutions started to develop their interventions based new kinds of diagnostics and therapeutics tested on the African peoples of European colonies⁵⁰.

Between 1851 and 1938, a series of fourteen conferences known as the International Sanitary Conferences took place across Europe, and the United States. Each country was represented by a diplomat and a physician. The goal was to standardize international quarantine regulations and negotiate preventive measures which eventually affected not only health policies, but reformed national economies and destabilized political systems⁵¹. Moreover, the misuse of quarantine undertaken during the previous centuries as a means of “foreign policy” and “weapon of war” was recognized, in the nineteenth century, as an issue to solve through so-called health diplomacy⁵². Therefore, the emergence of international sanitary coordination lies, in part, in the misuse of maritime quarantine with the deliberate and consequent disruption of commerce and the anger of merchants and their political allies⁵³. When the problems caused by epidemics, and the improper use of quarantine added to the 1831 Egyptian invasion of the Ottoman province of Syria, which posed a direct threat to British and French commerce, the European powers played the new diplomatic card⁵⁴.

⁴⁹ Erwin Heinz Ackerknecht, *Anticontagionism between 1821 and 1867*, “Bulletin of the History of Medicine”, 22/5, 1948, pp. 562-593; Roger Cooter, Claudia Stein, *Writing History in the Age of Biomedicine*, Yale Press, New Haven & London 2013, pp. 41-63.

⁵⁰ For a critical history of biomedicine conceived as outcome of economic and political needs of colonial, European powers, see Margaret Lock, Vinh-Kim Nguyen (2018). *An Anthropology of Biomedicine*, Hoboken, New Jersey 2018, pp. 79-102.

⁵¹ Sheldon J. Watts, *Epidemics and History: Disease, Power, and Imperialism*, Yale University Press, New Haven 1999; Mark Harrison, *Contagion: How Commerce Has Spread Disease*, Yale University Press, New Haven 2013.

⁵² M. Harrison, *Contagion: How Commerce Has Spread Disease*, (cit.) p. 277.

⁵³ Ibid.

⁵⁴ The convenors of the 1815 congress of Vienna established an international rank with ambassadors at its top and considered as representatives of their sovereign. Since then, diplomacy played a new and increasing role in foreign policy.

Interestingly, the convenors of the first sanitary conferences refuted the theory of contagion and indicated the quarantine as a waste of time⁵⁵. The anticontagionist stance prevented both national and colonial administrators of Great Britain from recognizing vibrio cholera leaking from the sewers in aqueducts and irrigation canals as the main cause of epidemics, to instead attributing the main cause of the cholera epidemics to the unhygienic habits of the Indian people and in so doing avoided tackling the material and logistic aspects of a structural reform of aqueducts and irrigation canals⁵⁶. A similar procrastination of infrastructural reforms needed to halt the cholera outbreak regarded also London, where the fragmentation and antagonism of administrative and economic powers managing the city waters, delayed the implementation of the theories of Pacini and Snow⁵⁷.

Thus, the health diplomacy of the nineteenth century often considered health issues caused by epidemics as a function of the most influential powers' commercial interests. This power relation translated in a discrimination concerning alleged European exceptionalism versus the social, political and medical conditions of Asian and Muslim countries⁵⁸. At the 1874 Vienna conference, the travelers departing from India, the epicentre of the cholera epidemic, were obliged to undertake quarantine in Asia. Similarly, Muslim and Arab pilgrims were indicated as more susceptible to contagion than European peoples, and therefore in need of being quarantined in their home countries, while European powers liberalized the use of quarantine across European states. These sanitary, administrative buffer zones, to prevent an alleged passage of disease from the Orient, have been implemented through an international telegraph-based reporting system of contagion disease⁵⁹, which was considered jointly by the delegates of the 1893 Dresden conference, and applied in Europe after the 1894 Paris conference⁶⁰.

Several international health organizations were established before the First World War but only after the end of the war, in 1922, the League of Nations was formed as the world's first intergovernmental

⁵⁵ Norman Howard-Jones, *The Scientific Background of the International Sanitary Conferences, 1851-1938*, World Health Organization, Geneva, 1975.

⁵⁶ S.J. Watts, *Epidemics and History: Disease, Power, and Imperialism* (cit.), pp. 167-212.

⁵⁷ Christopher Hamlin, *Politics and germ theories in Victorian Britain: The Metropolitan Water Commissions of 1867-9 and 1892-3*, in Roy MacLeod (ed.), *Government and Expertise: Specialists, Administrators and Professionals, 1860-1919*, Cambridge University Press, Cambridge 2003, pp. 110-127.

⁵⁸ Valeska Huber, *The unification of the globe by disease? The international sanitary conferences on cholera, 1851-1894*, "The Historical Journal", 49/2, 2006, pp. 453-476.

⁵⁹ The reporting system of contagious diseases ideated within the nineteenth-century international sanitary conferences was the forerunner of the global epidemiological surveillance system used by the World Health Organization.

⁶⁰ Howard-Harrison, *The Scientific Background of the International Sanitary Conferences*.

organization with its own Health Committee and Health Section⁶¹. In 1948, the WHO was established as one of the earliest specialized agencies of the United Nations. The WHO presents itself as technical and apolitical: an organization that welcomes membership universally. Accordingly, staff members are considered, “international civil servants”, with no national responsibilities, and no national attachments, and a special focus of the organization is on epidemic diseases⁶².

During the Cold War, the WHO suffered from tensions between the United States and the socialist countries. For instance, during the first years of the WHO, countries of Eastern Europe such as Poland, Yugoslavia and Czechoslovakia were blocked by the Americans from developing their own production of penicillin. When in 1949 Josef Plojhar, Czechoslovak health minister and Roman Catholic priest asked at the World Health Assembly why the Americans did not deliver the remaining machines bought by the Czechoslovak government to start their penicillin production, and referring explicitly to the contract signed by both the parties, the American delegate answered: “Contract, no contract, you turned socialist, you get nothing!”⁶³. As shown by historian Dora Vargha, the American delegate Leonard Andrew Scheele referred to the diplomatic clash and dismissed the claim by stating that the equipment in question was not necessary for the production of penicillin⁶⁴. After about two years from the inception of the WHO in 1948, one by one, Albania, Bulgaria, Romania, Hungary, Czechoslovakia, and Poland left the international agency. And mainly because of the lack of access to scientific discoveries.

Given that the WHO is the result of strong diplomatic negotiations, it is far from being just an apolitical and technical organization⁶⁵. Instead, the WHO has been a product of the global political, social, and economic context throughout its history. The most influential member states push for their own interests and mobilize their diplomatic channels within the organization to achieve their goals⁶⁶. To address the lack of public trust lamented by health institutions it is strongly recommended to reject

⁶¹ Iris Borowy, *Coming to Terms with World Health: The League of Nations Health Organisation 1921-1946*, Peter Lang, Bern 2009.

⁶² John Farley, *Brock Chisholm, the World Health Organization, and the Cold War*, UBC Press, Vancouver 2009.

⁶³ Dora Vargha, *Technical Assistance and Socialist International Health: Hungary, the WHO and the Korean War*, “History and Technology”, (2020-forthcoming).

⁶⁴ Ibid.

⁶⁵ Maria Rentetzi, Flavio D’Abramo, Roberto Lalli, *Diplomacy in Times of Cholera*, “Sociologia Nauki i Tehnologij – Sociology of Science & Technology”, (2021- forthcoming).

⁶⁶ Marco Cueto, Theodore M. Brown, Elizabeth Fee, *The World Health Organization. A History*, Cambridge University Press, Cambridge 2019.

the allegedly technical and apolitical nature of institutions such as the WHO by looking at their history⁶⁷. As shown by historian Soraya de Chadarevian and anthropologist Roberta Raffaetà, history also shows that the biological and the social are intimately connected⁶⁸. There is an undeniable, historical imperial and colonial load of international health institutions such as the WHO. Indeed, medical and sanitary issues are, since always, main foci of concern, and politics and diplomacy are the two spheres that during the last two centuries have had a major role to either prioritize, or overlook and hinder programs of sanitary intervention.

Politics of life, the dead-end of ‘biopolitica’

The politics of life has gathered momentum in recent years, after Michel Foucault proposed looking at the quarantine methods developed in modernity as a path towards modern forms of government. The sciences, in particular biomedicine play a central role⁶⁹. Foucault uses the plague pandemic to demonstrate how modern forms of government have developed. Before the plague in the modern era (specifically the eighteenth century) sick persons simply had to be separated from the healthy, and the plague was faced through the activation of a complex control system on sick individuals (like the Venetian one). If the leper was simply excluded and recognized as sick from the neighborhood without any real public interference, the plague that spread rapidly had to be controlled in a centralized manner. Hence, the development of the ideal of an omniscient power, symbolized by the panopticon. It was a circular prison, developed in modernity, in which a single guard was able to watch over all the prisoners who, conversely, could not see him. This acted as a surveillance model that shows well what Foucault understands as the transition from disciplinary power to biopolitical power. The symbolizes the potential of the power to perpetually control without this being manifest. In the modern age, to keep

⁶⁷ Lothar H. Wieler, head of the Robert Koch Institute Berlin, asks how to realize a system of governance in which the public trusts health and research institutions and where the country that encountered the SARS-COV-2 pathogen for the first time might give information on it without being penalised with travel restrictions. Cfr. World Health Summit (2020). PD 04 - *Multilateral Public Health Partnerships during the COVID-19 Crisis*, Berlin, <https://youtu.be/a4YVCaQgTxA>

⁶⁸ Soraya de Chadarevian, Roberta Raffaetà, COVID-19: Rethinking the nature of viruses, “History and Philosophy of Life Science” 43/2, 2021.

⁶⁹ Michel Foucault, *La naissance de la médecine sociale*, in *Dits et écrits*, III, Gallimard, Paris 1974, (1994). English translation, *Birth of Social Medicine*, in James Faubion (ed.), *Power: Essential Works of Foucault*, III, New Press, New York 1984, pp. 134-156.

the plague under control, power constitutes an organization of social surveillance, implemented through spatial partitioning, family control, inspections and registration systems. This is a “branching out of power” that sections every moment of life to be controlled⁷⁰. While leprosy could be managed by a bi-dimensional regime (healthy vs. sick and exiled, inside vs. outside the community), the plague required a multiplicity of application points of power and therefore a new organization that was not binary but developed on countless fronts. The crucial part of the new biopolitical power is positivity: power no longer denies through rules and prohibitions, but it seeks to invest the entire vital area by potentiating and managing it⁷¹. Firstly, power does not consider the single individual but the collectivity (a new concept of population emerges) and, secondly, the individual is no longer considered juridically but biologically: life must be organized and guaranteed through a process of medicalisation that involves as many aspects of the subject's life as possible. Thus, power creates as it were “a regime of truth”: it sets up a system of meaning in which concepts (e.g., race, sex, illness) take on a new value and guarantee a political, economic and moral connection. Eventually, power is structured through application to the subject: power works only if it leverages a subject that amplifies it and makes it emerge from its practices⁷². The new concepts that were extraneous just before are thus assimilated, produced and reproduced ‘from below’ and become part of life permeating a certain social order making the subject dependent on this new sense⁷³.

Moving now to the theoretical dimension of these notions – not pandemics per se but the reflection on the ‘management of life’ itself, we turn to the problematic notion of biopolitics, which has returned to the fore in recent times due to ... the current pandemic. Biopolitics is a slippery and contested term, first coined by Foucault in lectures at the Collège de France in the 1970s⁷⁴ and given new ‘life’ in a more irrationalist (and public) usage by Italian philosopher Giorgio Agamben and other thinkers in his circle⁷⁵, in recent years. Foucault’s vision’s peculiarity lies in its consideration of the basic biological

⁷⁰ Today this control is moved to a digital domain, through Apps, data tracking, positioning, drones, satellite images.

⁷¹ Michel Foucault, *La Volonté de savoir*, Gallimard, Paris 1976, pp. 120-125.

⁷² Michel Foucault, *Naissance de la biopolitique*, Gallimard, Paris 2004, pp. 40-47.

⁷³ An example is the practice of social distancing today.

⁷⁴ There is a difference, as we briefly discuss, between ‘biopower’ and ‘biopolitics’; the terms first appear in Foucault’s *Histoire de la sexualité*, I (*La volonté de savoir*), Gallimard, Paris 1976. The topic of power in Foucault was the object of a scholarly and theoretical industry all by itself. In the context of reflecting on biopolitics in 2020/2021, suffice it to say that Foucault doesn’t either hypostatize the concept of power or create a negative theology of it (as Agamben does). See Foucault’s 1982 lecture, *Les mailles du pouvoir in Dits et écrits*, IV, Gallimard, Paris 1994, p. 182 and the work on this topic by Maurizio Lazzarato.

⁷⁵ E.g., Roberto Esposito, *Immunitas. The Protection and Negation of Life*, Polity, Cambridge 2011, (2002).

characteristics of life as a site of resistance. There is no simple reduction to a totally biological ‘naked life’ incapable of subjectification, in which the only possible resistance is negation and estrangement. On the contrary, biopower applies to a subject and it is only in and through that subject that it works, hence a total nullification of subjectivity is never possible. There is always a point of resistance, the living being, that can positively oppose biopower. This concept of resistance is the point where the different interpretations given by ‘Italian biopolitics’ and by Foucault diverge⁷⁶.

Part of the difficulty with the term ‘biopolitics’ is that it is both descriptive and prescriptive, or empirical and normative: that is, it describes a state of affairs – in fact, different possible states of affairs – in which governments ‘rule over life’. The existence of public health bureaucracies, but also the management of various medical conditions, and the emergence of biotech, as a research and investment area but also, again, a top-down, government-mandated area, are all cases of ‘biopolitics’ in the simpler, descriptive sense. Less immediately relevant in the current situation, but also crucial in the contemporary biopolitical arena, is the idea of ‘biocapital’⁷⁷. For instance, someone with a rare genetic disorder can be useful to drug companies; the human body can now be viewed in profit-making terms⁷⁸.

The more prescriptive or normative sense of biopolitics comes in when a thinker denounces the State for ‘disciplinary power over the body’, something that has come into sad and vivid focus with the current pandemic, but which is by no means new. This can range from the ‘management’ of refugees to the confinement of populations viewed as literally contagious (a sad and vivid example of which was Castro’s confining of HIV-positive individuals in concentration camps in Cuba in the 1980s).

Foucault and Agamben have two different approaches to biopower. For Foucault, it is a way that a particular sovereign power develops in modernity⁷⁹, while for Agamben it is a constant in the civilized world (from the ancient Greeks onwards)⁸⁰: “Western politics is a biopolitics from the very beginning”⁸¹.

⁷⁶ Dario Gentili, *Italian Theory. Dall’operaismo alla biopolitica*, Il Mulino, Bologna 2012.

⁷⁷ See Kaushik Sunder Rajan, *Biocapital. The Constitution of Postgenomic Life* (Durham: Duke University Press, 2006), which presents an ethnographic and economic analysis of genomics (in the U.S. and India).

⁷⁸ For example, the much-studied case of the tragic life of Henrietta Lacks, an African-American woman whose cancer cells were the source of the HeLa cell line, the first immortalized human cell line (and a source of a fortune for the company that produced them): she died poor, in an unmarked grave, and her family never even was told about the use of her ‘body’. See Rebecca Skloot, *The Immortal Life of Henrietta Lacks*, Random House, New York 2010.

⁷⁹ Paul Rabinow, Nikolas Rose, *Biopower Today*, “BioSocieties”, 1, 2006, pp. 195-217.

⁸⁰ Giorgio Agamben, *Homo Sacer: Sovereign Power and Bare Life*, Stanford University Press, Stanford 1998, pp. 2-4; see also Katia Genel, *The Question of Biopower: Foucault and Agamben*, “Rethinking Marxism”, 18, 2006, pp. 44-48.

⁸¹ G. Agamben, *Homo Sacer: Sovereign Power and Bare Life* (cit.) p. 181

The concept of life must not be read, according to Italian biopolitics, in the light of history -finding in the subject a point of discontinuity where we can find resistance and production like in Foucault - but on the contrary, life must be conceived as 'naked' and resistance gives way to negation. According to Agamben and Esposito, life can resist power only if it is de-historicized and de-subjectivized⁸² and they conceive the *dispositif* and the struggle in transcendental terms that cannot be found either in *operaismo* or in Foucault.

In this shift towards prescriptive biopolitics, all of society becomes defined in terms of inner and outer:

The decisive fact is that, together with the process by which the exception everywhere becomes the rule, the realm of bare life-which is originally situated at the margins of the political order-gradually begins to coincide with the political realm, and exclusion and inclusion, outside and inside, bios and zoe, de jure and de facto, enter into a zone of irreducible indistinction⁸³.

Throughout his work and public editorials at least since the 1990s, Agamben has used the camp (*Lager*) concept in a generalized, ahistorical way, in his Auschwitz book, with the 'ontology' provided in *Homo sacer*⁸⁴. Back in 2002, he wrote a widely translated editorial in newspapers arguing that the projected Constitution for the EU was like Auschwitz (total control over life); fast forward to early March 2020 and he says the same thing about confinement in a time of covid-19⁸⁵.

⁸² D. Gentili, *Italian Theory. Dall'operaismo alla biopolitica*, (cit.), pp. 10-15.

⁸³ G. Agamben, *Homo Sacer: Sovereign Power and Bare Life*, (cit.) p. 9 (translation modified by the authors).

⁸⁴ See the brief summary in Nikolas Rose, *The Politics of Life Itself*, "Theory Culture & Society", 18/1, 2001, p. 3. And Nikolas Rose, *The Politics of Life Itself. Biomedicine, Power and Subjectivity in the Twenty-First Century*, Princeton University Press, Princeton, 2007. For an excellent critique of the category of 'camp' in Agamben, see Bernard Aspe, Muriel Combes, *Retour sur le camp comme paradigme biopolitique*, "Multitudes", 1/1, 2000, pp. 29-44. <https://doi.org/10.3917/mult.001.0029>

⁸⁵ We note that aside from historical or theoretical disagreements with Agamben, one can also say, as Negri did and as Foucault probably would have if he had been alive, that the 'bare life' rhetoric deprives agents of agency. Luca Paltrinieri uses the example of refugees in refugee centers: if we treat them as 'bare life' we deprive them of their own capacities for resistance, human interaction, creation of forms of life, etc. See Luca Paltrinieri, *Between (Bio)Ethics and (Bio)Politics: What Life?* in G. Bianco, M. de Beistegui & M. Gracieuse (eds.), *The Care of Life: Transdisciplinary Perspectives in Bioethics and Biopolitics*, Rowman & Littlefield International, Lanham 2014.

It is clear that ever since Homo sapiens first appeared, there have been apparatuses; but we could say that today there is not even a single instant in which the life of individuals is not modeled, contaminated, or controlled by some apparatus⁸⁶.

One can comment, to borrow a phrase from Catherine Mills, that the supposed politics of life in Agamben is in fact a politics of death – not *biopolitics*, but *thanatopolitics*⁸⁷.

Foucault's reflections on biopower and biopolitics are also closely connected to reflections on the emergence of modern liberalism. In that context, he makes a point which is a good antidote against the Agambenian focus on a kind of Kafkaesque or fascistic State figure: that bio- forms of power are not just about the 'sovereign' or the head of state; the boss of a big biotech firm also has biopower, as we are experiencing right now again of course (vaccines), and countries like the U.S. are perpetually trapped in discussions of health insurance and the price of remedies⁸⁸.

Similarly, Nikolas Rose pointed out, contra Agamben, but back in 2007, that our form of control now is not social or collective but individual (sculpting ourselves into the desired individual – 'from normalization to customization', as Rose cites)⁸⁹. In a much more subtle way than Agamben, closer to Foucault's historically and socially precise analyses, Rose speaks of the "democratization of biopolitics"⁹⁰. Rather than the dark figure of eugenics, Rose emphasizes the ways in which "genetics was to transform itself into a liberal discipline"⁹¹ – although of course in 2020 the interplay between genetic therapies and State interventions returns in a time of pandemic. Indeed, recent events move our individual biotechnological self-transformation a bit into the background (unless we imagine a cyborg immune to viruses that the super-rich could turn themselves into), and indeed social control, object of Agamben's obsession, into the foreground.

⁸⁶ Giorgio Agamben, *What is an apparatus?*, Stanford University Press, Stanford 2009, p. 15.

⁸⁷ Catherine Mills, *Biopolitics*, Routledge, London 2018, p. 44. See also Achille Mbembe, *Necropolitics*, "Public Culture", 15/1, 2003, pp. 11-40.

⁸⁸ The management of the COVID-19 emergency in northern Italy, and in particular in Lombardy, demonstrated how private health care had taken the place of public health care and how regional decisions on prevention were assigned to the managers of nursing homes and private hospitals. The result of this was, at the beginning of the 2020s, a complete disintegration of the network of regional healthcare that led to the inability of public healthcare to respond to the demands of citizens, who were instead redirected towards private healthcare.

⁸⁹ Rose, *The Politics of Life Itself. Biomedicine, Power and Subjectivity in the Twenty-First Century* (cit.), p. 20. Rose also reflects on the idea of 'biological citizenship' (p. 223).

⁹⁰ Rose, *The Politics of Life Itself* (cit.), p. 17.

⁹¹ *Ibid.*, p. 12.

With respect to the background of biopolitical thinking in the tradition of ‘historical epistemology’, it is worth noting that not just Foucault, but his mentor Georges Canguilhem, had provided instruments for analyzing the interplay between the biological and social that are more subtle than Agamben et al.’s messianic ones. In a paper on the notion of “regulations” in the organism and in society⁹², Canguilhem tries to demonstrate how the biological characterization of the living being doesn’t mean that the living being’s subjectivity must be considered from the biological point of view. In that sense, he does not flatten life into a biological form. To be clear, it is not that Agamben or his school reduce human life to a kind of reductionist biology (or sociobiology), something they would view in the utmost hostile terms. Rather, they reduce the human faced with the biopolitical violence of the State to a kind of victimized, humiliated, tortured body, the paradigm of which is, again, the dehumanized individual of the camps. Agamben and thinkers close to him like Roberto Esposito are perfect instances for our time of what Theodor Adorno called, referring to Heidegger, the “jargon of authenticity”⁹³ – a kind of disempowering mystical language of unmediated experience that eliminates agency or critique. Once this kind of discourse seizes on the pandemic, it either produces transcendentalized discourses of the State as a kind of biopolitical monster, or symmetrically complementary portrayals of victimhood without agency. That these biopolitical critiques present themselves as *political* is an irony nicely visually captured in the singular piece of bad taste, the cover of the collective volume *Sopa de Wuhan*, that appeared in Argentina in the early Spring of 2020 (at the height of the first wave of the pandemic), with the names of Agamben, Žižek and other luminaries on the cover) (figure 1)⁹⁴.

We conclude this brief analysis of the aporias of biopolitics with Walter Benjamin’s words, in his essay *Critique of Violence*, which have ironically been quoted by Agamben and others in his circle:

⁹² Georges Canguilhem, *Le problème des régulations dans l'organisme et dans la société*, in “Cahiers de l'Alliance Israélite universelle”, 92, 1955, reprinted in Canguilhem, *Œuvres Complètes: Résistance, philosophie biologique et histoire des sciences 1940-1965*, IV, Vrin, Paris 2015, pp. 643-672. Canguilhem wrote several other papers on the topic in later years.

⁹³ Theodor Adorno, *The Jargon of Authenticity*, Routledge, London and New York 1973. Worse, sometimes there is a kind of fascination with violence in these writings (Agamben was a great reader of Benjamin’s essay “Critique of Violence”, and of course of Carl Schmitt who was in the background for Benjamin): the deliberate lack of argument at times ‘naturalizes’ violence, as one feels when reading Esposito’s *Immunitas* (perhaps not incidentally related to René Girard).

⁹⁴ For a more sympathetic, and interesting discussion of Esposito (and Rose) see Roger Cooter and Claudia Stein, *Cracking Biopower*, “History of the Human Sciences”, 23/2, 2010, pp. 109–128. See also Charles Wolfe, *Review of Davide Tarizzo, “Life: A Modern Invention,”* in “Notre Dame Philosophical Reviews” (<https://ndpr.nd.edu/news/life-a-modern-invention/>) (accessed on 12 December 2020).

It might be well worthwhile to track down the origin of the dogma of the sacredness of life. Perhaps, indeed probably, it is relatively recent, the last mistaken attempt of the weakened Western tradition to seek the saint it has lost in cosmological impenetrability⁹⁵.

Benjamin's words are not unambiguous, and can indeed be taken in a more 'Enlightenment' direction – as stating a kind of blunt reality of secularization, that different myths are gradually emptied out of their meaning, 'life' being perhaps the last one – or a more 'counter-Enlightenment' direction – turning back, as Agamben would, to a kind of *Abgrund* of ineffable experience. On our part, we find support for a de-transcendentalized, historicized, Enlightenment understanding of biopolitics in Benjamin's words.

Concluding remarks: political economy of disease and the science of tomorrow

We would like to conclude along three different lines of thought. The first one relates to the problem of the politics of life or, as it is better known, as the problem of biopolitics. The second one relates more generally to the problems of emancipation, science and technology and the final one, more specifically, to the history of pandemics.

As far as biopolitics are concerned, we see the political dimension of the politics of life and vice versa the biologization of politics as crucial problems. We need to address both for a correct understanding of the link between today's science, technology and society, a link that is by necessity historical, economic, and political. Pandemic management is an exemplary case to inquiry into political epistemology, which we understand as a sustained reflection on science that brings together the history of science (including the sociology of science), the philosophy of science and political theory. As much as we acknowledge the relevance of biopolitics as a debate that has opened up fundamental questions, we are critical of its transformation into a *doctrine*, a set of answers and theories, especially political ones. Such a trend is specifically evidenced by in the so-called 'Italian theory' of the main proponent of this label, Roberto Esposito, in whose perspective the political (at times even metaphysical) interests have obliterated the crucial relevance of medical and technological issues although these were at the

⁹⁵ Walter Benjamin, *Critique of Violence*, in Walter Benjamin, *Selected Writings: 1913-1926*, Harvard University Press, Cambridge 1996, p. 251.

roots of Foucault's inquiries⁹⁶. This loss of contact with the historical and biomedical reality is creating a gulf between biopolitical political theory and the historical-philosophical reflection of medicine. In our view, this constitutes a fundamental mistake as it misleadingly hypostasizes scientific practices and theories and makes any understanding of the connection of science and society impossible. Abstract biopolitics can eventually lead to forms of self-referentiality by philosophers, who consider political uses and abuses of biomedicine to be the main tools for the development of political theory. In this manner, they revive forms of biologist politics. The worst of them are revived forms of social Darwinism that posits survival as a biological-political necessity and an ethical imperative, without reflecting on the question of 'good life' and the possible tragic conflict between clashing values and ideals (e.g., life and dignity, life and freedom, and fear versus solidarity and courage as political values). A further consequence of the biopolitics that dispenses with medical history or an apt historical epistemology is the obliteration of the problem of ideology through the flattening of discourse and reality. This illusion amounts to the equation of medical discourses (or *any* discourses) and the medical practices (*any* practices) but discourse and reality do not coincide, although the lack of apprehension of difference is precisely the goal of the ideology that was once condensed in the Thatcherian phrase "there is no alternative"⁹⁷.

Emancipation and the question of an emancipated science and technology can only emerge from a criticism of scientist ideology and the anti-libertarian (exploitative and political) uses of science and technology as forces of world transformation and cultural hegemony. In order not to make the critique of science into a generalized and idle critique of science *tout court* (a sort of a-critically hypercritical anti-science), it is important to maintain the distinction between alienated science, technology and labor as they appear in specific societal and economic settings and the potential for non-alienated forms of knowledge and labor⁹⁸. In connection with this, the question of the scientists' and technologists' political responsibility for the function they have in society and the question about the relation and

⁹⁶ See also the debate that recently appeared in the journal "Studi Culturali": AA.VV., *Contro la Theory? Dalla provocazione al dibattito*, "Studi Culturali", XV, 1, 2018, pp. 67-106

⁹⁷ Mark Fisher, *Capitalist Realism: Is There No Alternative?* Zero Books, Winchester 2009.

⁹⁸ Jürgen Habermas, *Technology and Science as "Ideology"*, in *Toward a Rational Society: Student Protest, Science, and Politics* Beacon Press, Boston 1970, pp. 81–122; Herbert Marcuse, "Industrialisierung und Kapitalismus," in Otto Stammer (ed.), *Max Weber und die Soziologie heute: Verhandlungen des 15. Deutschen Soziologentages in Heidelberg 1964*, Mohr Siebeck, Tübingen 1965, pp. 161-180.

tension between expertise and democracy are of burning actuality⁹⁹.

That science and politics cannot be separated is evidenced by the case of pandemic management in history. We would like to stress that pandemic management has been connected with issues of internal surveillance as well as conflicts among European states as well as between European and extra-European states at least from the late Middle Ages on. Today's implementation of human tracing for sanitary reasons rises fundamental questions related to the future of mass democracies. Concerning the politics of health management, we argue with biopolitical theorists that there is an intimate connection between modern forms of politics and biomedical techniques but, against their flattening of the relation between theory and practice, we look at societal surveillance and geopolitics as *revealing of* not as *coincident with* modern political economy. Quarantine and health systems are the necessary flipside of trade and the enlargement of economy from the Mediterranean basin to the Atlantic and the entire globe. International conflicts have always materialized through commercial and military battles by means of use and misuse of the quarantine, till nowadays, when the commercial battles among (blocs of) countries is played, for instance, through production, stock exchange listing, and approval of vaccines. The global commercialization of health (or global health) besides leading towards the exacerbation of health care systems versus trade interests, it also contributes to avoid considering any serious analyses on the structural, economic, environmental and sanitary causes of the pandemic. As an effect of these trajectories, focusing mainly on contagion, leads to an undue neglect of its economic, sanitary, cultural and geopolitical factors. By contrast, we have argued that it is precisely the consideration of these 'external factors' that leads to a correct understanding of what a pandemic is and open up a critical and emancipatory perspective on a science-technology freed from the hegemony of the economic and political dimension of global capitalism.

Acknowledgements

We are thankful to the political epistemology group of which we are part and supported us through

⁹⁹ G. Ciccotti et al, *L'ape e l'architetto: paradigmi scientifici e materialismo storico* (cit.); Giovanni Ciccotti, Marcello Cini, Michelangelo De Maria, *The Production of Science in Advanced Capitalist Society*, in Hilary Rose, Steven Peter Russell Rose (eds.), *Ideology of / in the Natural Sciences*, I, Macmillan, London, pp. 32-58.

constant exchanges, especially on problems of biopolitics, in times of covid-19 pandemics, especially Senthil Babu, Sascha Freyberg, Ida Malfatti, Lukas Meisner, and Margherita Tess.

We would like to thank the Italian Institute of Technology, especially Sylvia Mondinelli and Arianna Traviglia, for inviting us to a public talk on the history and philosophy of pandemics that gave us the occasion to write this essay and give an online presentation of our main theses (9 December 2020).

We acknowledge the ERC Project *EarlyModernCosmology* (Horizon 2020, GA 725883) and the FARE project *EarlyGeoPraxis* (Italian Ministry of Education and University: ID R184WNSTWH), for financial support, as well as the Max Planck Partner Group “The Water City” (Venice-Berlin) for intellectual support.

We would also like to thank Maria Rentetzi, Roberto Lalli, Lidy Divarci, Verena Braun, Urte Brauckmann, Ellen Garske, and Matthias Schwerdt for the scholarly, bibliographical and linguistic support at the Max Planck Institute for the History of Science.

Authors' contributions

We collectively worked on this essay, which was the fruit of long-lasting conversations, scholarly exchanges as part of a larger network of political epistemologists.

Concerning labor organization, PO: initial conception and coordination; PO and GI: writing of introductory and concluding sections, as well as the methodological overture; FD: writing of the historical-critical section; CW and GG: writing on politics of life.

Figure 1: Sopa de Wuhan, Book Cover



SOPA DE WUHAN

PENSAMIENTO CONTEMPORANEO EN TIEMPOS DE PANDEMIAS

- Giorgio Agamben
- Slavoj Žižek
- Jean-Luc Nancy
- Franco "Bifo" Berardi
- Santiago López Petit
- Judith Butler
- Alain Badiou
- David Harvey
- Byung-Chul Han
- Raúl Zibechi
- María Galindo
- Markus Gabriel
- Gustavo Yañez González
- Patricia Manrique
- Paul B. Preciado