

Carmela Morabito, *Il motore della mente. Il movimento nella storia delle scienze cognitive*, Laterza, Bari-Roma 2020, 168 pp.

Il titolo suggestivo del saggio gioca sul doppio valore del genitivo che unisce “motore” a “mente”: tanto come genitivo soggettivo, quanto come genitivo oggettivo, “il motore della mente” esprime il programma dell’intero libro. Infatti ciò che plasma la mente risulta essere il movimento stesso del corpo mosso dalla mente. D’altra parte il sottotitolo dà profondità al programma, a indicare che l’intento del libro non è soltanto la presentazione di una nuova descrizione della mente quanto la ricognizione, nella storia della filosofia, della psicologia e delle neuroscienze, di un paradigma motorio affermatosi ultimamente ma riaffiorante da tempo nella cultura occidentale.

La rassegna storica descrive il lento superamento di un modello metafisico impostato nella sua versione moderna da Cartesio, ma risalente almeno sino a Platone: si tratta della mente intesa come *res cogitans* ontologicamente separata dalla *res extensa*, a sua volta superamento e perfezionamento della mente intesa come nocchiero del corpo. In altre parole questo saggio rappresenta un ulteriore tassello dello smantellamento della metafisica occidentale. Le neuroscienze confermano la necessità di adottare un diverso paradigma descrittivo della mente, nel quale la mente risulta radicata nel corpo e fondata sulle capacità motorie di questo stesso corpo. Il nucleo della mente non è la coscienza che riceve informazioni dall’esterno, le rielabora e infine comanda al corpo una reazione. Il suo nucleo è invece più profondo e più antico, radicalmente ancorato alla cinestesia piuttosto che alla percezione: l’operazione tipica della mente non è concepire un piano ma anticipare un movimento. Il nuovo paradigma della mente in quanto sistema motorio rivendica la matrice biologica del mentale: la mente smette di contrapporsi al mondo, il mentale al corporeo, il soggetto all’oggetto. Insomma decade l’antica dicotomia metafisica idea-

cosa o mente-corpo. Il nuovo paradigma, e questo è sicuramente più interessante ai fini dell'attuale filosofia della mente, mette in discussione anche la classica analogia cervello-computer: la mente non è solo il cervello, che a sua volta non è semplicemente un computer. Semmai la mente è un sistema motorio, il computer una macchina di calcolo.

Il cervello, in quanto elemento non esclusivo della mente, figura nel nuovo paradigma come macchina biologica non data una volta per tutte ma frutto dell'evoluzione, tanto biologica quanto storico-culturale. Questa prospettiva implica al contempo un'analisi fenomenologica dell'organismo nel proprio ambiente e un'analisi neurologica dei meccanismi del sistema nervoso. Una volta chiarita la "nuova" visione della mente in contrapposizione a una visione più "antica" e consolidata, l'Autrice ripercorre l'emergere del fattore chiave per il nuovo paradigma in una retrospettiva storico-filosofica, dedicando a questo sforzo la parte centrale e più ponderosa del libro (capp. 3-18), grossomodo da Cartesio alla scoperta dei "neuroni specchio".

L'idea che l'ambiente esterno si presenti al soggetto attraverso uno stimolo sensoriale e che in risposta il soggetto reagisca segue una descrizione epistemologicamente obsoleta. Al contrario mondo e mente si compenetrano, biologico ed epistemico si sovrappongono. Tuttavia nel corso della storia della filosofia l'analisi delle facoltà cognitive della mente ha a lungo puntato a mantenere aperto il fossato metafisico che nel XVII secolo Cartesio tracciò tra *res cogitans* e *res extensa*. A ben vedere, Cartesio non aveva solo dato una risposta sbagliata all'annoso problema mente-corpo, aveva piuttosto indirizzato il dibattito su un problema sbagliato. Cartesio riduce infatti il corpo a una macchina e la mente al *cogito*, cioè il primo a qualcosa che si muove e la seconda a qualcosa che produce rappresentazioni. Di conseguenza la mente appare solo come cosciente e attiva, tutto l'opposto del corpo. Gli studi più recenti invece mostrano che *la* mente e *il* corpo non esistono come entità separate.

L'Autrice indaga una storia della mente alternativa i cui protagonisti riconobbero l'insufficienza del modello cartesiano. Notoriamente questa alternativa è rappresentata dall'empirismo di Hobbes, Locke e Hume. Ma non furono questi i filosofi della mente che gettarono le basi per l'emergere del paradigma alternativo: essi vanno cercati piuttosto in autori come David Hartley (prima metà del Settecento), Erasmus Darwin (seconda metà del Settecento) e Alexander Bain (Ottocento), quest'ultimo propugnatore di un innovativo associazionismo sensomotorio (cap. 5), primo a suggerire che il motore della mente non sia la sensazione bensì il movimento. Tuttavia il superamento del dualismo ontologico, cioè la decostruzione del

modello metafisico per via sperimentale, attraversò l'Ottocento in parallelo alla conquista di spazi sempre maggiori da parte del paradigma sensomotorio. Poiché permaneva il pregiudizio ideologico di un sistema cerebrale inferiore motorio e un sistema cerebrale superiore cognitivo, dicotomia ancora espressione del più antico dualismo, intervenne uno spostamento della soglia verso l'alto fino alla caduta della distinzione ontologica tra movimento volontario e involontario e tra cognitivo e motorio.

La compenetrazione di psicologia e fisiologia avvenne grazie allo studio del riflesso, alla concezione del cervello come organo della mente, al superamento dell'illusione intellettualistica e in definitiva dell'antropocentrismo. All'inizio del Novecento si parlava ormai di intelligenza sensomotoria, di senso cinestetico, del cervello come macchina proattiva, di prospettiva ecologica ove mondo e mente si compenetrano. Nelle scienze cognitive post-classiche s'imponesse il paradigma dell'*embodiment*, cioè della mente incarnata, della mente estesa completamente naturalizzata, in un intreccio assai fecondo con la fenomenologia di Husserl e soprattutto di Merleau-Ponty. La mente incarnata implica il rifiuto del cognitivismo classico, della dualità mente-corpo, della sequenza input sensoriale output cognitivo, della metafora del cervello come elaboratore centrale, della separazione tra azione e percezione. In definitiva la mente non è solo incarnata ma anche estesa al corpo e al mondo: viene superata così la tradizionale dicotomia tra soggetto e oggetto.

Gli studi più recenti suggeriscono anche una plasticità peculiare della mente (cap. 17), incarnata cioè in un contesto corporeo interno e relazionale esterno, e in grado di autoorganizzarsi. Questo porta al compiuto superamento della metafisica del cervello, il quale si mostra ormai come organo in continua riconfigurazione e autoplasmazione. Il cervello è qualcosa in divenire di cui noi siamo soggetti-autori e prodotti, è un organo "aperto" che percepisce-agisce-conosce. La plasticità della mente e la centralità del movimento per la cognizione trovano conferma nella scoperta relativamente recente (fine anni Ottanta del Novecento) dei neuroni specchio (cap. 18), i quali si attivano quando compiamo una certa azione o quando vediamo altri compierla. Insomma, come scrive l'Autrice: "Aveva [...] ragione Darwin, quando teorizzava di ribaltare l'approccio tradizionale alla mente: per conquistare la cittadella della mente occorreva entrarvi dal basso, non partire dall'indagine dei processi cognitivi più evoluti ma dalle loro componenti più arcaiche dal punto di vista dell'evoluzione: viscerali, affettive, basilari" (p. 105). Il cervello non si è evoluto per pensare ma per agire e per anticipare le azioni degli altri. Il linguaggio rappresenta allora qualcosa di secondario o di superficiale rispetto al motorio

nella formazione della mente: i concetti riferiti ad azioni attivano nel cervello percorsi sensomotori legati al corpo e alle capacità di movimento. In tal caso cultura e biologia s'intrecciano nei meccanismi mentali.

La *summa* dell'intera analisi del rapporto mente-corpo conduce a una sorta di storia naturale della mente in una prospettiva evolutiva: la mente è emersa come prodotto naturale nel corso dell'evoluzione e la coscienza come prodotto sociale e culturale. In conclusione, dopo una lunga disamina storica ed epistemologica del riconoscimento della motricità come principio fondante la mente, i confini corpo-mente si sgretolano e così anche quelli corpo-protesi: ciò è possibile perché la struttura della mente è aperta, e dunque se il pensiero è cinetica, lo strumento è pensiero.

Tommaso Scappini

Christian W. McMillen, *Pandemics: A very short introduction*, Oxford University Press, Oxford 2016, 176 pp.

The current COVID-19 pandemic has swept the world at an unprecedented speed, closing societies, overburdening health infrastructures, and raising fear and anxiety around the world in just a few months' span. What separates COVID-19 from its predecessors might be the speed and the scope of its rapid contagion. But in many other ways it is a manifestation of history repeating itself. "Pandemic: A Very Short Introduction" (2016), by Christian W. McMillen, provides a comprehensive and concise description of the most important historical pandemic and epidemic diseases: plague, smallpox, malaria, tuberculosis, influenza, and HIV/AIDS. It also discusses several of the more recent epidemics, like Ebola, Zika-virus, and avian flu. Even if the book was published pre-COVID-19 pandemic, in 2016, it remains highly accurate and informational for today's readers.

The book's aim is to introduce readers to the rich history of pandemic and epidemic disease and suggest that much of the ways we confront such things now have been shaped by the past. Throughout human history, especially the last millennia, pandemic and epidemic diseases have been our regular visitors. Their severity and scope have varied, and so has their identity and ability to induce fear. What unites each pandemic is that they all depend on a dense, mobile, and susceptible population of hosts. The central argument of the book is that pandemics can have a great impact on humanity's history, and in return, our social behaviour can influence pandemics. For instance, one can hardly overestimate the impact of the Black

Death on European populations and societies in the 14th century, or the impact of smallpox on the American Indians in the 16th century. On the other side, biomedical breakthroughs, like vaccines and antibiotics, improvements in social conditions, and deployment of public health measures, like quarantine and restrictions to travel, have on many occasions successfully restrained the spread of diseases or even eradicated them from the planet, like in the case of smallpox in the 1980s. History is full of cautionary tales, success stories and lessons to be learned. It is our task, according to McMillen, to retain this knowledge and learn from the past.

The book presents the histories of each major pandemic disease from their first known occurrence up to this day. In each chapter McMillen provides the basic information of the disease and its treatment. The book is highly interesting from the medical and epidemiological standpoint, but the most intriguing feature in the book, however, is the way in which McMillen analyses the broader social, political, and cultural aspects of each pandemic.

Christian McMillen is a Professor of History at the University of Virginia, where he serves as the Associate Dean of social sciences and teaches courses on American Indian history and the history of epidemic disease. His expertise in history of diseases and social sciences offers a great asset in describing the evolving relationship between pandemic disease and societal change. In each chapter he asks questions about the important social, political, cultural, economic, religious, and demographic aspects of the pandemic at hand. How did the pandemic disease influence the society and how was it perceived and explained by its contemporaries? What kind of measures were taken, and how did they work? As a result of asking and answering these questions, recurring patterns, tendencies, and geographies of pandemics begin to emerge. One of the most certain, and tragic, tendency regarding pandemic diseases is that they tend to hit harder minorities, the poor and the weak. Poverty creates favourable terrain for infectious diseases, because of weakened immunity of the population and lack of resources, medication, and access to clean water. Even the most effective biomedical solutions cannot bring sustainable health and security, if the general living conditions remain poor. The reason why many old pandemic diseases, like malaria, TB, and HIV/AIDS still linger and occasionally grow into epidemics in the Global South is most often due to the lack of resources.

In the book McMillen provides insight into the cultural and social aspect of historical pandemics by drawing material from historical sources, including old medical records, ecclesiastic texts, journals, diaries, literary pieces, and political writings. Illustrations and numerous references to historical texts make the text rich, polyphonic, and very interesting to fol-

low. The book is written in an academic but reader-friendly manner – clear, but without losing too much of its specificity. The book includes an index and a broad list of references and recommendations for further reading in the back. This provides all the more reason why the book makes an excellent primer.

The strength of the book is in its way of describing cultural and societal change relating to the pandemic outbreaks. While providing clear and thorough scientific explanations of the diseases, the book's primary focus is, in the end, strongly related to humanity's responses to pandemics. It illustrates in great detail humanity's changing attitudes towards pandemic threats: for example, the explanations concerning the origin of the plague varied from God's wrath to miasma and contagious seeds, until the bacteria *Yersinia pestis* was discovered in 1894. Throughout the centuries many scapegoats, often Jews or other minorities, were wrongly accused of bringing the plague and persecuted and even killed for it. The book illustrates that to understand the history of pandemic disease, one needs first to understand the social behaviour of human communities and societies.

The main weakness of the book is that it does not have a chapter about COVID-19. This was not the fault of the writer, however, since the book was published well before the pandemic. In fact, in his epilogue McMillen managed quite accurately to predict the current pandemic. If there were to be a second edition of the book – with preferably an extra chapter for COVID-19 – one thing that could be improved would be to broaden the epidemiological angle of the book. Especially towards the end of the book McMillen's tone changes somewhat, as he commences to criticize the WHO and the other leaders in the world of global health. Even if I find his criticism well-founded, it sometimes disturbingly overshadows the medical and epidemiological explanations given to the diseases.

On the whole, the book succeeds in fulfilling its task, which is to offer a very short but comprehensive introduction to the history of pandemic and epidemic diseases. The book excels in its ability to provide such a rich historical and socio-cultural narrative to pandemic diseases and humanity's responses to them. Despite the fact that it was written before COVID-19, the book succeeds to remain accurate and topical. This book is the perfect choice for any reader, who is looking for an easy, informative and enjoyable primer for pandemic and epidemic diseases.

Sini Tiibonen

Barbara Stiegler, *De la démocratie en pandémie. Santé recherche éducation*, Gallimard, Paris 2021, 64 pp.

The philosophical pamphlet written by Barbara Stiegler represents a courageous and praiseworthy attempt to sketch a critical but reasonable philosophical perspective about the impact of the COVID-19 pandemic on democratic politics, public health, and education in Western countries. In this review, I will focus on the aspects that I found valuable and meaningful for a rigorous analysis but conclude that her work partly fails in reaching the proposed aims.

Describing the events that characterized the actuation of the lockdown in France during the first wave, Stiegler highlights rather well at least two problems that affected pandemic management and are still negatively influencing the realization of effective public health policies. The first issue concerns the lack of trust between citizens and their political representatives. This complication did not rise with the pandemic for the first time. On the contrary, the progressive deterioration of reciprocal trust between the political leaders and citizens is a problem that has been afflicting many European democracies and the United States over the last ten years. However, with the beginning of the pandemic, as Stiegler rightly notices, such deteriorated institutional relationship has been reinforced by the French government in several ways. The tendency to hide any political accountability behind the veil of the idea that every public policy was purely science-oriented was misleading and counterproductive. Besides, to opt for communicative strategies that were mainly based on nudging technics instead of public consultation reinforced in citizens the feeling of being treated like children instead of responsible adults.

This last point is strictly connected to the second relevant problem that, in this case, clearly emerged in social democratic and liberal democratic countries as the pandemic started: the failure of the public and scientific communication in explaining properly the known and, especially, the unknown about the nature of COVID-19. The lack of clear communication concerning the information available about the biological features of the virus went hand in hand with the incapacity of the political elites, the scientific community, and media to effectively explain the ratio in support of the implementation of non-pharmaceutical measures. These were perceived (and still, they are) as arbitrary and disproportionate by most of the population, which was not used to massive health policies that are common and accepted in other parts of the globe.

Stiegler's critique against the policies that, in the last years, have weakened the public health system and the public educative structures, is valuable too. These are two institutional organizations that will be fundamental in facing the challenges posed by climate change, overpopulation, globalization of free market and commodities exchange, and, consequently, possible future pandemics. To dismantle them, or subordinate totally their functioning and ratio, which are not productive, to a system of allocation of the resources based on demand and supply risk to damage the safeguard of the collective rights to education and health. Their realization cannot be dependent only on decision procedures that mediate between different particular interests.

Nevertheless, some conceptual points seem to be problematic in Stiegler's approach. The first one concerns the idea of democracy that constitutes the background of Stiegler's analysis. Her conception appears excessively inclined to identify the essential core of democratic life with the political agonism and critique. There is no doubt that, nowadays, there is a growing and positive emergence of new forms of indirect and informal political power. Through the exercise of veto by social movements, for instance, citizens can express their civic activism positively and productively. However, from a historical point of view, democratic institutions have also embodied public procedures and practices that have aimed at neutralizing the influence of small groups of power in public decision-making. The legitimacy of such institutions, which has been mainly governed by the public administrations, scientists, experts, and public officials, has been grounded mainly not on the idea of direct participation, but on the impartiality of their procedures and the scientific approach to the problems that regard the collectivity. This does not mean that a democratic and more inclusive reform of such institutions would be meaningless or useless. Simply, not every wrong, excessive, or arbitrary measure that has been realized in the first phase of the epidemic in the Western world was the outcome of the anti-popular prejudice of the political elites of democratic countries. Nor any failure was solely the result of elites' lack of preparedness or their will to take advantage of the crisis circumstances for imposing structural reforms that point at privatizing the public sector or weakening the democratic participation of citizens.

In her polemic attitude toward Macron's government, Stiegler seems to forget that public policies are usually enacted by decision makers observing a criterion of progressive balance between precautionary and proportionality principles. During non-emergency scenarios, democratic governments have time to gather scientific evidence before enacting and enforce-

ing laws. In such circumstances, it is possible to reconcile the conflict between civil liberties, democratic life, and public health in a non-traumatic way. However, in a fast-moving pandemic, characterized by the lack of sound scientific knowledge of the phenomenon, governments are forced to make urgent policy maneuvers that can partially impact civil liberties. It can be the case that, for quite an extended lapse of time, prolonged deliberation and legislative debate are not possible, and that actions are taken based on executive orders, pursuant to emergency legislation.

In the light of these considerations, the worries expressed by Stiegler, concerning a structural disempowerment of democratic customs and institutions by means of the normalization of the emergency legislation have been denied by the following events. First, even during the pandemic, many strikes and public rallies have been organized by riders, the BLM movement, environmental activists, anti-lockdown protesters, waged workers who were asking to work in a safe and healthy environment. Regardless of any moral and political evaluations about the claims of these collective subjects, it can be stated that emergency laws have not annihilated the space created by democratic institutions for social conflicts and agonistic politics. On the contrary, a huge portion of citizens has not given up the idea of bottom-up political participation. In this regard, Stiegler's concern about the pervasive influence of nudge technics and economy on public policies and democratic politics is clearly disproportionate.

Second, starting from the second wave, it is a matter of fact that, apart from the UK, under the pressure of civil society, most democratic governments have opted not for rigid lockdown policies, but mitigation strategies based on the focused and regional actuation of non-pharmaceutical measures. Besides, even those countries that, at the beginning of the pandemic, have enacted martial measures or invasive test and trace strategies (like New Zealand, Australia, South Korea, Vietnam) have not fallen into a dystopic nightmare of restrictions and oppression.

Finally, it is necessary to underline the serious logical contradiction in which Stiegler runs into since the beginning of her pamphlet. She rightly defines the COVID-19 pandemic in terms of a syndemic. At the same time, Stiegler identifies the Chinese Republic as the main causal, moral, and political agent that is responsible for the beginning of the pandemic and the subsequent advent of emergency laws. However, to talk about a syndemic means to underline the social origins of a biological phenomenon. It means not only to highlight the fact that COVID-19 is hitting harder those individuals and groups that already suffer from health inequalities, economic injustices, social marginalization. To take into account

the epidemiological concept of syndemic implies also the idea that, for a better understanding of the whole situation, we must focus on the analysis of the demographic reasons and socio-economic structures that have favored the spread of COVID-19 on a global scale.

If it is so, to accuse a single political and institutional entity of being the main responsible of the present global health emergency can lead to an unjustified racialization of the phenomenon. On the contrary, instead of looking for an external enemy or agent that has corrupted our democratic society, we should critically discuss the role that the global market, the present mode of production, and our technological infrastructures have had in triggering and aggravate the current syndemic. Charging the Chinese people, or depicting COVID-19 as an Asian virus, is as unfair as considering only individual behaviours and mistakes as the main cause of the millions of deaths we are going to count due to COVID-19.

Corrado Piroddi