

When Bodies Think: Panpsychism, Pluralism, Biopolitics

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Abstract

Cultivating a speculative orientation to the medical humanities, the aim of this essay is to explore some dimensions of the recent calls for more participatory forms of medicine and healthcare under the sign of what, after Michel Foucault, I call the “biopolitical problematic”. That is, the divergent encounter between techniques of biopower that seek to take hold of life and the body, and a plurality of living bodies that persistently respond, challenge, and escape its grasp. If critics of “participatory medicine” have warned that the turn to “participation” in healthcare functions as a form of biopower that seeks to gain access to bodies, and in so doing take a better hold of life, in this essay I propose we experiment with the question of what kinds of conceptual tools may be required to make perceptible the ways in which a plurality of participating bodies may become capable of responding, challenging and escaping “participation’s” grasp. After problematising the ontology of participation involved in contemporary debates around participatory medicine, I draw on the work of William James and Alfred North Whitehead, among others, to argue for the need to reclaim a *pluralistic panpsychism* –in short, the proposition that all things think– as a pragmatic tool to envisage the possibility of a plurality of thinking bodies capable of unruly forms of participation that respond, challenge and escape biopower’s grasp.

Introduction: A Biopolitical Problematic

“[I]t was the taking charge of life, more than the threat of death, that gave power its access even to the body.” (1). The introduction, towards the very end of the first volume of *The History of Sexuality*, of the notion of *biopower*, is one of those distinctive moments in Michel Foucault’s oeuvre when a patient and careful historical exploration of marginal processes that the modern discipline of historiography might consider non-events (2), suddenly, without anticipation, gives way to a frighteningly perspicuous diagnosis of our present– like a dark precursor to its lightning strike. Once it strikes, the lightning permeates and changes everything, making things visible under a new and disturbing luminescence– a light that does not enlighten without simultaneously constituting a veritable test on the present it discloses. Foucault’s concepts of biopower and biopolitics constitute such lightning strikes, disclosing in a shattering moment the process by which life itself has become a political problem, at once the object and instrument of politics, thereby situating the politics of medicine and healthcare at the very heart of its matters of concern (3). With them, Foucault addressed the emergence, since the seventeenth century, of a new political problematic concerned with life and the living. At the same time, he made perceptible a new political arrangement orchestrated through multiple, capillary, and more dispersed technologies of power: on the one hand, a liberal technology

of *discipline* that incites individuals to take responsibility for their own lives, and therefore, to govern themselves (4, 5); and on the other, a *regulatory* technology concerned with a new kind of political entity –the population– and aimed at placing the biological itself “under State control” (6). It is through this “bipolar technology” –as Foucault referred to it (1)– that the governing of our present becomes largely characterised by the exercise of “the power to ‘make’ live and ‘let’ die.” (6)

At stake in the concept of biopower, then, is the progressive transformation, since the seventeenth century, of the arts of governing the present. Whereas the power of the sovereign was born of an alliance with death, with the right to seize and interrupt life –in other words, to kill or let live– now “it is over life, throughout its unfolding, that power establishes its dominion” (1), turning the task of governing into an art of investing, fostering, managing and administering life. To speak of a new art of governing should not, however, be confused with a gesture that reduces the concept of biopower to a new modality of state control through the medical sciences and professions. Rather, as Monica Greco has rightly remarked, if the concept of biopower sheds a disturbing light on our present “it is because it defines the horizon of our thinking, when it comes to articulating values and freedoms” (3). And it does so in such a way that, “in the wake of the rise of patient movements, of a sizeable health industry and market, and indeed of health promotion”, one might say that today “‘there is nothing outside health’: there is nothing that cannot be assessed in terms of whether or not it facilitates health; and there are no values that cannot be translated into a norm of health.” (3).

Foucault’s own attention to the birth of biopolitics was rather short-lived. Nevertheless, the lightning has ignited an overwhelming deluge of critical studies in the humanities and social sciences that have extended Foucault’s diagnosis to the manifold technologies of biopolitical regulation and discipline that different technical, narrative, and methodological in (bio)medicine and healthcare appear to make possible and deploy (7– 16). In this context, recent moves in the politics of contemporary healthcare towards a revaluation of patient participation, involvement, preference, and empowerment, have themselves become the focus of critiques that denounce them as exemplary technologies of biopower (17–19). To be sure, the *idea* of a more participatory medicine might perhaps intimate a gesture towards the pluralisation of medical knowledge and practices, as well as an active interest in the relevance of the many situated knowledges of activist patient associations – and indeed, of other forms of interrogation and intervention in health, not least from the medical humanities. As critics have pointed out, however, the ways in which the notions of participation, patient involvement, choice, and so on, are currently deployed in medicine appear to make a different range of demands altogether (20). “Participation” there is often mobilised as the very means by which individuals are encouraged to take active responsibility for their own health, and in so doing, to contribute to the advance of modern medical knowledge and intervention. After all, as the stated aims of the Society for Participatory Medicine themselves read, the purpose of “participation” is no other

than contributing to “improving outcomes, reducing medical errors, increasing patient satisfaction and improving the cost of care.” (21)

That said, it is not the aim of this essay to offer yet another denunciation of participatory medicine as the latest form of biopower. Like with myriad other similar critiques, those are already available. But a lightning never strikes twice, and it seems to me that the profusion of such critiques of biopower quickly succumbs to the law of diminishing returns. At the same time, such a critique would quickly leave us wordless— surrendering the *possible* gesture involved in a notion like “participation” to its contemporary operationalisation as a neoliberal means of self-government. What is more, by focusing on the operations of biopower upon bodies and populations, such critical analyses risk discouraging a different mode of attention, one concerned with exploring the stakes of what I have referred to above as the biopolitical *problematic* (22, 23). That is, in Foucault’s words, that it “is not that life has been totally integrated into techniques that govern and administer it; it constantly escapes them.” (1) Biopolitics, as I am seeking to characterise it, does not therefore designate the moment when power effectively *takes hold* of life and gains access to the body. Instead, biopolitics belongs to the political problematic of a specific, plural, and divergent encounter— the encounter between techniques of power that seek to take hold of life and the body, and *a plurality of living bodies* that persistently respond, challenge, and escape its grasp.

Cultivating a speculative orientation to the medical humanities that develops an experimentation with questions and stories of health and illness from the perspective of what natures, cultures and bodies may become capable of (24, 25), in this essay I experiment with the possibility of *reclaiming* and enlarging the notion of “participation” in order to explore the manner in which the biopolitical problematic makes itself perceptible in the politics of participation in health. Which is to say that the aim of this essay is twofold: I hope to examine some of the means by which the turn to “participation” in healthcare functions as an attempt at gaining access to bodies and taking a better hold of life, while simultaneously experimenting with the question of what kinds of conceptual tools we may require to make perceptible the possibility of a plurality of *participating* bodies capable of responding, challenging and escaping “participation’s” grasp. At the heart of this speculative experiment lies an ontological question: how to characterise what a “participant” *is*? Who and what is capable of participation? What might become possible if, rather than simply denouncing the notion of “participation”, we were to expand and pluralise it beyond its contemporary confines, to think of bodies themselves as unruly centres and agents of participation?

In the first instance, therefore, the article will examine the “ontology of participation” involved in calls for a more participatory involvement in healthcare. In other words, it will ask what these calls take a participant to be, who or what is allowed to participate, and what, according to such calls, is imagined as an *appropriate* mode of participation in healthcare. As I hope to show below,

the move towards promoting patient participation and involvement in healthcare does more than simply reinforce a process of “*individualisation*” achieved through policy (5), a process which simultaneously presupposes and effectively realises a “participant” as a self-contained, rational individual, taking responsibility for their own health. More than this, calls for participation in healthcare express a double, bipolar ontology that intimately intertwines individualism with dualism: requiring the participant to be *one* –an individual– from the point of view of the moral and political exhortation to take responsibility for one’s own health, but also to continue to be *two* –a thinking subject, and a non-thinking body– from the point of view of a whole array of ensuing practices of data collection, monitoring, and medical intervention.

What I suggest, therefore, is that to explore the biopolitical problematic of participation in healthcare it is not enough to attend to its responsabilising and individualising effects, as one might expect from technologies of biopower under neoliberalism (26). Above all, it requires a careful attention towards the ways in which such bipolar technologies also contribute to, and reinforce, the long transformation of our very modern, mind/body dualism from a weakness of thought into a matter of practice. At the same time, this suggests that any attempt to wrest and *reclaim* the very notion of “participation” from this double ontology, any speculative experiment in extending participation to bodies themselves, must take seriously the possibility of an alternative philosophical proposition that escapes both neoliberal individualism and modern dualism. It is with this in view that, below, I draw on the work of William James and Alfred North Whitehead, among others, to argue for the need to reclaim a marginal but generative proposition, that of a *pluralistic panpsychism* –in short, the proposition that all things think– as a pragmatic tool to make perceptible the ways in which a plurality of *participating bodies* may become capable of activating a politics of participation *all the way down*.

How Many is One? The Ontology of “Participation”

What is a participant? This seemingly naive question is the one we need to contend with if we are to dramatise some of the ways in which the notion of “participation” in healthcare may function as an attempt to gain access to bodies, and in so doing take a better hold of life. And this too is the question we may have to problematise, in turn, so as to reclaim the possibility of a plurality of bodies participating all the way down, contesting and escaping its hold. In his 1978-1979 lectures at the Collège de France, where he carried out a detailed analysis of the liberal and neoliberal arts of government, Foucault suggested that, under the auspices of neoliberalism, technologies of biopower distinctly involve “an individualization of social policy and individualization through social policy” (4). As he argued, it was no longer the aim of social policy, and of society as a whole, “to guarantee individuals against risk, whether these are individual risks, like illness or accidents, or collective risks,

like damage”, but instead to endow individuals with the necessary capital, both economic and moral, to take responsibility for their own risks, to “insure” themselves “against existing risks, or the risks of life, the inevitability of old age and death, on the basis of his own private reserves.” (4).

Through this transposition of the function of social policy into a mode of fostering the self-governing of individuals, these neoliberal arts of government, Foucault proposed, operate by seeking to regulate –and in so doing, articulate an alignment between– the interests, values, actions and aspirations of citizens, and the values and ends of government. To speak of an “individualisation” implies, of course, that such an individualistic ontology is not only assumed but effectively verified– that it is both the premise and *the aim* of this new art of government. In other words, it implies that as much as neoliberalism, as a moral and political philosophy, *presupposes* a society composed of individual citizens, as an art of government it also seeks to *realise* its own assumptions: to encourage and promote, in practical terms, the self-fashioning of citizens as self-contained, entrepreneurial individuals taking responsibility for rationally managing and confronting their own risks. Insofar as recent calls for further participation in healthcare define participatory medicine as “a movement in which networked patients shift from being mere passengers to responsible drivers of their health, and in which providers encourage and value them as full partners” (27), not only does the move towards “participation” not escape the individualising ontology of participants, but reinforces it. Alas, even the notion of “networked patients”, which might insinuate resonances with the generative and transformative work often carried out by activist patients associations (28), corresponds instead to an aggregation of “patient (consumer)-activated social networks”, and is tasked with the role of “assuring that patients will be empowered to participate actively in P4 [predictive, preventive, personalised, and participatory] medicine” (29).

Thus, as Barbara Prainsack (30) has suggested, while the gesture of widening participation could conceivably lead to the possibility of redistributing power and enlarging patients’ agency “in meaningful ways”, in practice such calls rarely succeed in *disrupting* the forms and distribution of agency and expertise which contribute to the forms of knowledge-making, and to the kinds of intervention, that ensue from such participatory processes. As such, they not only serve “as an excuse to devolve responsibilities and costs to individuals” (30), but also to encourage patients to fashion themselves *as* “consumer-activated” individuals, participating with their data, narratives, and illness experiences in social networks aimed eventually at the betterment of their own individual health, but also crucially of the health of medical knowledge and intervention. In other words, if since the birth of modern medicine a profound chasm has marked the relationship between patients and medical science, where patients “tell stories about *illness*, whereas the doctors are dealing with knowledge of *disease*”(31), what from a makes these participatory moves distinctive is that participants are indirectly *responsibilised* for the quality of medical knowledge of disease. That this individualistic

ontology of participation is achieved precisely at the interface of the relationship between patients and medical forms of expertise may not be entirely surprising. For indeed, as critical scholars of biopower and neoliberal governmentality have long held, it is “by means of expertise”, which is to say, by endowing forms of expertise with an intermediary role between citizens and government, that “the freedom and subjectivity of citizens can [...] become an ally, and not a threat, to the orderly government of a polity and a society.” (32).

From the point of view of an exploration of the ontology of participation in healthcare, however, it is the persistence of this very chasm –one which configures who or what is allowed to participate, and on what terms– that discloses something interesting. This is that, despite the technologies of individualisation involved in the politics of involvement and participation in healthcare, a participant is *not* exactly one. Or rather, if it is an *individual* that is called upon to participate, participants nevertheless seem not to be *indivisible*. In another sense, then, to the question, “how many is one?”, the answer may also be “two”. For while the calls for participation involve a moral and political individualisation of the subjectivity of participants by way of an active and responsible involvement in their own health, this involvement seems to be one largely premised in accordance to the terms of engagement and production of data deemed relevant by, and integrated into, the usual methods and procedures of evidence-based medicine (EBM) (33, 34). It is for this reason that, whenever such calls for participation are concerned, the practical effect of patients’ participation appears to be not immediately on their own health, but *on the health of medical knowledge*. What is more, the persistence of this chasm at the heart of such participatory processes also makes itself present at level of the medical *response* to such participatory processes: for it is only by deploying forms of expertise capable of translating “subjective experience” into “objective evidence” that participatory medicine pursues the official aims of improving outcomes and satisfaction, reducing medical errors, and decreasing the costs of care (21).

The chasm between subjective values and scientific materialism that persists in these participatory processes does not only shape, therefore, who or what participates, and on which terms. It also makes perceptible both sides of the “bipolar” character that Foucault ascribed to technologies of biopower: on one of their poles, they perform a regulatory function, seeking to generate an alignment between the values, aims, and measures of a population and the values and ends of government. On the other, they perform operations that continue to be “centred on the body as a machine”, seeking “the optimization of its capabilities, the extortion of its forces, the parallel increase of its usefulness and its docility, its integration into systems of efficient and economic controls” (1). At the same time, this implies that, as far as these shifts in healthcare are concerned, the ontology of participation is double– a combination of individualism, on the one hand, and a reinforcement of our modern dualism, on the other. It is an intertwining of “ones” and “twos”, individualism and dualism,

where participants are conceived as individuals from the point of view of their entrepreneurial involvement and moral reform, and as dual entities from the perspective of the medical intervention.

I call this a “modern dualism” because, of course, what is at play is the *practical* materialisation of a gesture that belongs to the culture of thought that we call “modernity”. This is a practical rendering, therefore, of the very Cartesian gesture that divided mind from matter, and took them as two independent aspects of reality endowed with different ontological characteristics and capacities. According to this gesture, the mind is typically deemed an active, volitional, purposeful, wilful, thinking and perceptive: a sentient thing capable of action, and therefore also of being a cause of motion of that which is passive, extended, reactive and non-thinking– in other words, the body. Indeed, in the second of his *Meditations*, after Descartes’s quest for clear and distinct ideas had propelled him into his paranoid method of doubt, he found himself thrown “into a deep whirlpool” in which he could “neither stand on the bottom nor swim up to the top” (35). Supposing that “everything I see is spurious”, he famously decided to reduce his existence to his capacity to think, and in so doing defined himself as nothing but a “A thing that thinks. What is that? A thing that doubts, understands, affirms, denies, is willing, is unwilling, and also imagines and has sensory perceptions” (35). His body, on the other hand, not only did he declare it a *thoughtless*, extended thing, but he could not even be sure it bore any relationship to him whatsoever. Because as far as this thinking thing was concerned, “everything relating to the nature of the body could be mere dreams and chimeras” (35). At least not until the end of his meditations, when a certain justification for the affirmation that God had constituted him “as a combination of mind and body” is found. And even then, “notwithstanding the goodness of God, it may happen that my judgements are false.” Thus, he famously observed that “there is a great difference between the mind and the body” (35).

The chasm between subjective experience and scientific materialism that persists in contemporary calls for patient participation in healthcare continues to prolong the “great difference” between mind and body today. Under the guise of EBM, participatory medicine becomes an authorising operation, mobilising established forms of expertise to mediate between the subjectivity of participants and the materiality of bodies. For if these calls presuppose, and seek to produce, the existence of individuals capable of becoming purposely and actively involved in taking responsibility for their own health and well-being, it is only that which is endowed with a certain subjectivity or mind, only that which thinks, doubts, has experiences, affirms and denies, is willing and unwilling, that can be properly said to “participate”. Meanwhile, the body remains that which, separate from the mind and thus haunted by doubt and uncertainty, requires an act of scientific knowledge in order for its truth to be revealed (36). As such, an individual is called upon to participate in the production of medical data and research, but her body –permanently divisible, as Descartes had argued– remains

that to which “participation” is meant to grant *access*, that which cannot but be participated *upon*: a passive, docile, and imperfect machine that is the object of scientific knowledge and intervention.

If Foucault’s diagnosis sheds a disturbing light on our present, however, it is not because it reveals a truth that would wake us from our slumber, disclosing our willingness to participate in our own health as nothing but a ruse that we are made to perform upon ourselves– the sign of a successful alignment of our own selves with a new and pervasive form of power. Neither does it simply reveal, in a more materialist fashion, that medicine has finally succeeded in bending life itself to finally match the modern dream of holding it firm in its grasp. If it disturbs and perturbs our present, it is because his diagnosis succeeds in characterising this present in such a way that the characterisation presents it as a problem. In so doing, his diagnosis effects a transformation of the horizon of possibilities that the present itself makes perceptible (23). Which is also to say that, rather than a denunciation of what has happened to us, Foucault’s is a diagnosis of *becoming*, making visible the operations, evidences, and rejections that those new possibles must put into question before they themselves can become perceptible (37). Thus, if his attention to “biopolitics” enables us to explore some of the ways in which the turn to “participation” in healthcare may function as an attempt to gain access to bodies, and in so doing take a better hold of life, it also makes possible, at the same time, a new kind of speculative experimentation with possibles. One concerned with the question of what kinds of conceptual tools we may require to make perceptible the possibility of a plurality of *participating* bodies capable of responding, challenging and escaping “participation’s” grasp.

Thinking All the Way Down: The Panpsychist Proposition

How to reclaim *participation*? How to wrest it, that is, from the double ontology in which it has been inscribed, in order to endow it with the conceptual framework it may need to make perceptible a plurality of participating *bodies* that could counter and escape biopower’s grasp? What is at stake in these questions is the need to craft and experiment with a speculative proposition, a gesture that proposes a generative and experimental response to the biopolitical problematic, allowing us to envisage other ways of encountering and relating to bodies and their health, as well as other ways of understanding what might be at stake in the question of what means to participate, how, and in the name of what. And what becomes discernible after the above discussion, is that such a response must take seriously the possibility of an alternative that escapes both neoliberal individualism and modern dualism, so as to explore what difference it would make to expand the concept of participation to bodies themselves.

One non-dualistic and non-individualistic alternative that is often advanced in the name of “Progress” and “Reason” both by scientists and analytical philosophers alike, is a kind of thorough-

going *physicalism*, or what is also known as “eliminative materialism”. This is the response that would characterise everything under the sun, including minds and subjectivities, as nothing but bits of matter in motion (38 – 41). On this account, not even a mind could be said to genuinely *think*, to express its perspectives and “subjective experiences”, to pursue its own aims by sensing, deciding and becoming interested in specific aspects of its environment– not, that is, unless those events were to be accounted for as mere epiphenomena, ultimately explainable *by* physical causes and *as* physical processes. In this way, this alternative does reject the distinction between body and mind, and it does so by extending the principles of scientific materialism across the board, affirming that only reactive, mechanistic matter exists. What is more, it also challenges the kind of individualism that is required for the very neoliberal notion of individual responsibility to take hold. The problem with this alternative, however, is not only that it turns the medical humanities into a mere fantasy, but that it throws any meaningful notion of participation out with the epiphenomenal bathwater. From this perspective, the very possibility of thinking “participation all the way down” would be nothing if not a case of what logicians call “*reductio ad absurdum*”, a proposition that proves the illusory nature of any form of “participation” as such by revealing the implausibility of taking it to its ultimate consequences.

Thankfully, eliminative materialism is not the only alternative to the double ontology of participation in healthcare. There is at least another one, just as non-dualistic, and just as non-individualistic as the physicalist response, but which instead of disqualifying the very possibility of thinking “participation all the way down”, takes it entirely at face value and completely seriously, as a necessary requirement for thinking any kind of “participation” at all. In other words, this alternative suggests that to imagine the emergence of an organism becoming capable of purposeful participation, we must think of participation as something that *everything*, and not just human subjects or minds, are involved in all the way down. It is, in other words, to affirm the possibility that bodies may not, despite Descartes, be these passive and reactive things that we can never be quite sure of, these brute and mute bits of matter that only an act of scientific knowledge can reveal. To put it more bluntly, it is to affirm that if bodies themselves are to be regarded as “participants” in their own right, then they too must, in some way, and to some degree, be capable of thinking, of understanding, of making decisions and selections, of having aims of their own. According to this other alternative, then, entertaining the idea of “participation all the way down”, of participating bodies capable of challenging and escaping “participation’s” grasp, constitutes a proposition for coming to terms with bodies that think, and for wondering, both conceptually and empirically, about how we might begin to relate to them if they do.

More than a radically new proposition, though, to affirm that bodies think involves reclaiming, and in so doing, reinventing, an ancient form of thought, with sources both in Western and non-

Western traditions, that has enjoyed a long, continuous and complex history only to become radically marginalised, condemned, and almost forgotten as a result of the event of the modern Cartesian gesture. This is the tradition known as *panpsychism* (42–45). Like any complex and longstanding tradition, there are multiple versions of panpsychism, which reveal important differences with regards to its possible meanings, justifications, its precise philosophical propositions, as well as its practical, social and political consequences: from that proposed by Epicurus, according to whom every atom in the universe had a modicum of free will (42); through to other fascinating theories such as the one espoused by the nineteenth-century experimental psychologist Gustav Fechner, who argued that the universe was composed of varying kinds and degrees of souls, from Plant-Souls to what he would refer to as the Earth-Soul (46, 47); to more recent, sober, and limited, contemporary accounts by some analytical philosophers of mind, who are preoccupied with whether or not plants have consciousness and what it would be like to be a bat (48, 45). Vast differences notwithstanding, panpsychism, in very broad terms, expresses the view that *everything that exists must have a mind, or mind-like qualities* (42).

And yet, broad and consensual as it may be, this definition is not innocent. Indeed, it is particularly apposite for those philosophers of mind who, against the advice of their dualist and physicalist colleagues, take the risk of exploring the ubiquity of “mind” in nature. But this definition points to a number of questions which are perhaps of secondary importance to our present purposes, such as what this thing called “mind” might be, and what it may mean to “possess” it. This is why, in this essay, I propose that we experiment with a more pragmatic characterisation of panpsychism. One which allows us to attend to the difference that this proposition might make to our appreciation of the biopolitical problematic of participation, but which does not require –not immediately, anyway– that we delve into the intricacies of the ontology of “mind” as such. Drawing inspiration from a number of philosophers that have taken panpsychism seriously, such as William James and Alfred North Whitehead, I propose we understand it, more pragmatically, as a proposition that encourages us to contend with the possibility that *all things think*: that nature is infused with modes of thought through and through. To propose the all things think, therefore, is to associate “thinking” not so much with a faculty as with an event and a process. And it is to affirm, with William James, that rather than being the product of a substance call “mind”, radically different from material bodies and things, “thoughts in the concrete are made of the same stuff as things are.” (49, 50).

How might we approach the possibility of bodies that think? One of the first requirements, I suggest, is that we resist the temptation to associate “thinking” with the expression –or worse, the *possession*– of a certain “consciousness”, or with the assumption that all things think in ways that we would call “cognitive” or “rational”, even when they may well have their own “reasons”. As James once observed after having experimented with nitrous oxide intoxication:

One conclusion was forced upon my mind at that time, and my impression of its truth has ever since remained unshaken. It is that our normal waking consciousness, rational consciousness as we call it, is but one special type of consciousness, while all about it, parted from it by the filmiest of screens, there lie potential forms of consciousness entirely different. We may go through life without suspecting their existence; but apply the requisite stimulus, and at a touch they are there in all their completeness, definite types of mentality which probably somewhere have their field of application and adaptation. No account of the universe in its totality can be final which leaves these other forms of consciousness quite disregarded. How to regard them is the question— (51)

Indeed, it may be that reason, cognition, and “waking” consciousness, are rather rare forms of thought (52), and that thinking “is a far more common and widely distributed process than we are sometimes willing to recognize” (53). After all, sociologists, psychoanalysts, and neuroscientists would all agree—although for vastly different reasons—that most thinking, even in humans, takes place outside consciousness. But perhaps there is also more to thought, and other modes of thinking, than unconscious desires, computations, or ideologies (53). When all things think, thinking itself acquires a radically expanded, generous, and generative meaning that exceeds its modern, Cartesian confines. In order not to disregard other forms of thought in the universe, we need to expand “thinking” to include, rather than oppose, multiple and concrete forms of *sentience*— including varying degrees and forms of sensory awareness, purposes and aims, the discernment of relevance, problem-solving, decision-making, and feeling.

It bears stressing: as I characterise it, panpsychism is the name not for a doctrine but for a speculative proposition— its aim is that of creating possibles, ones that in turn might enable us to reclaim, conceptually and pragmatically, an understanding of participation that does not succumb to the double ontology with which it has been inscribed in contemporary healthcare policies. But it is also worth noting that such a panpsychist proposition is neither more nor less speculative than its dualist and physicalist counterparts (23). Indeed, despite the principled rejection of panpsychism by modern thought, there is a considerable amount of “evidence” —and relatively uncontroversial evidence at that— of varying degrees and forms of thinking happening all the way down, even in what are considered to be very simple organisms where no overall controlling and conscious organ or substance is present. And yet thinking happens with high degrees of complexity.

Those that have learned how to ask animals the right questions have learned, in turn, that non-human animals not only *think*, but also pursue their own purposes and preferences, have their own

perspectives and opinions, and even display some forms of what might be called “consciousness” (54): octopuses display remarkable feats of intelligence, bees form complex collective hives, and ants cooperate and divide their labour by organising in so-called colonies (55–57). Researchers from the Institute of Molecular Plant Science in Edinburgh, furthermore, have shown that green plants exhibit forms of thinking by intelligently solving problems, including sensing the soil volume as they grow, and placing and positioning leaves so as to minimise self-shading. Interestingly, these plants seem capable of anticipating their own futures by changing their phenotypes such that, as biologist Anthony Trewadas has observed, “the growth of some branches rather than others are found to be based on the speculatively expected future return of food resources rather than on an assessment of present environmental conditions.” (58). Perhaps even more strikingly, *Scientific American* have reported research that shows that slime moulds –those spongy yellow masses one may sometimes encounter in gardens– which are single-celled organisms without even a nervous system, are capable not only of efficiently navigating a maze, but also have been shown to extend and distribute themselves in ways that re-create miniature versions of Tokyo’s railway network, as well as the highways of Canada, the United Kingdom, and Spain (59).

Needless to say, these studies do not “prove” the possibility of panpsychism. They do not provide a “scientific foundation” for it, nor do they authorise panpsychism as a general doctrine. The efficacy of speculative propositions depends not on scientific authority, but on the interest of the problem that has provoked them and which they contribute to reformulate (22). Nevertheless, speculative possibilities do not simply fall out of the sky of ideas (37), and what these studies help us envisage, what they make perceptible, each in their own different ways, is not just that thinking happens beyond humans, consciousness, brains, and nervous systems. At the same time, they suggest that even strikingly simple organisms behave in ways that cannot simply be explained by a reactive, mechanistic logic of efficient causation. Rather, it would appear, they are all capable, through the specific means of their own relationships to their environments, of sensing, selecting, deciding, expecting, becoming interested, pursuing aims– in other words, *of participating*, however modestly, in the manner in which they relate to their milieu. As such, they may also help us explore some of the potentials of panpsychism as an interesting, and significantly different, starting point from which to explore the possibility of thinking, participating bodies.

When Bodies Think: Pluralising Participation

By allowing us to envisage plural forms of participation all the way down to single-cell organisms, panpsychism enables us to escape both the Cartesian gesture and the individualism of technologies of biopower– for indeed, neither slime moulds, nor a colony of ants, can be adequately

characterised as *individuals*. At the same time, this exploration of thinking all the way down poses the question as to what the implications of chasing participation all the way back up again might be. That is, it opens up the possibility of exploring the implications of the panpsychist proposition in relation to more complex organisms, even in relation to those organisms that do possess and coordinate several interconnected functional systems, organs, nerves, brains, and self-awareness, such as human bodies. If everything thinks, then the very basic elements that compose our bodies might also be thinking elements, selecting and deciding to what other elements they will react; when, how, and for what purposes two or more lipids combine to form a membrane; or in which ways the cooperative journeys of haemoglobin molecules, departing from the lungs, may decide to distribute oxygen across the body. The philosopher Michel Serres once wrote that “one hour of biochemistry quickly persuades one of the refined astuteness of proteins” (60). He may have been right. Might our body not be thinking in unison when it nervously coordinates its excitements and inhibitions, its actions and passions, in those experiences we call “fear”? Doesn’t our skin progressively discern the shifting patterns and degrees of relevance of our immediate environments, groping, flirting, and relaxing as its gets, little by little, “in touch” with them? Does one, after a while, continue to notice the chair one is sitting on?

And yet, what is striking in the philosophical literature on panpsychism is that, as soon as one starts chasing thinking and participation back up through the body, to those rare, “waking” forms of thought that agitate our own bodies, it would appear as if the manifold ways in which human bodies think become comparatively less interesting to philosophers than the question of how fungi, plants, or rats do so. Panpsychist philosophers have, save some exceptions, not all that much to say about the multiple forms of thinking that compose a human body. One of the reasons for this, no doubt, is that panpsychists have been chiefly concerned with arguments about the place of mind in nature. And to the extent that many of the relatively recent forms of panpsychism pose the question at the outset in terms of “consciousness”, they seem to assume that while exploring the mode of consciousness of a rock certainly poses challenges, human organisms are comparatively less interesting.

Another reason, perhaps, is that, while slime-moulds exhibit distributed bodily organisations, human bodies are often governed by one overarching centre. As such, they might seem especially susceptible to *individualisation*. As Alfred North Whitehead suggested, while plants operate democratically, human organisms are more akin to a feudal society, with one or two “overlords” that dominate and direct experience. For this reason, the unity of body and mind under the direction of conscious experience usually goes without saying. To borrow Whitehead’s words, “No one ever says, here am I, and I have brought my body with me.” This is a much quoted phrase from Whitehead’s *Modes of Thought* (50). Much less well-known, however, is the immediate context in which this phrase was written. And yet this context is key, because it enables us to problematise the

individualising assumptions about human bodies and their experiences. In the discussion surrounding this quote, Whitehead posed his own challenge to the modern Cartesian gesture, whose effect, he argued, had been to “poison all subsequent philosophy.” (50) Whitehead challenged Descartes by contesting the primacy of those clear and distinct experiences the latter associated with ideas. *Contra* Descartes, who made such ideas the bedrock of philosophy itself, Whitehead suggested that such clearly discriminated forms of experience are comparatively rare and superficial. As he wrote, it may be that clear, conscious discrimination “is an accident of human existence. It makes us human, but it does not make us exist.” (50) More common and primary are feelings, body-thoughts, which are fundamentally vague, indeterminate, without clear borders—experiences of worth and value. For him, our own bodily experience, manifested as a “unity of ‘body and mind’” (50), is an obvious case in point. Nobody ever says “here I am, and I have brought my body with me” because “the body is the basis of our emotional and purposive experience”. The feeling of bodily unity is thus “a primary experience” (50). And just as our primary forms of experience are not immediately susceptible to body/mind distinctions, it is often equally difficult, without some concerted effort, to determine where one’s body ends and where the “external” world begins. “Consider one definite molecule”, Whitehead writes,

It is part of nature. It has moved about for millions of years. Perhaps it started from a distant nebula. It enters the body; it may be as a factor in some edible vegetable; or it passes into the lungs as part of the air. At what exact point as it enters the mouth, or as it is absorbed through the skin, is it a part of the body? As what exact moment, later on, does it cease to be part of the body? Exactness is out of the question. It can only be obtained by some trivial convention. (50)

The body, therefore, is at once the expressive basis of *our* experience, participating with its original, thoughtful contributions, in the history of our world, and a portion of the world in which divergent forms of thought—molecular, viral, bacterial, fungal, cultural, economic, political—*participate* all the way down. In other words, this body that we would not claim to “bring with us” is perhaps best characterised as a *centre of participation*, coordinating the participating agitations and modes of thought of the environment, and affecting with its own experience the environment that agitates it.

Instead of the modern chasm between dead matter and thinking minds, then, “analogous notions of activity, and forms of transition, apply to human experience and to the human body”, and they can, in fact, be “construed in terms of each other” (50). When the divergent forms of participation

that comprise it achieve a certain coherence, our feeling of bodily unity “is an experience so habitual and so completely a matter of course that we rarely mention it.” Indeed, it is then, Whitehead suggests, that we refer to the body as “healthy”. But the crucial point is that such coordination between divergent modes of thought participating coherently in the composition of a body is itself an *achievement*, never a matter of course. Human bodies may often function like “feudal societies”, but a feudal society is not a totalitarian state. And not even totalitarian states are immune to revolts. The various forms of thought that make a human body do not, therefore, lead to permanent harmonisation, but to ongoing transformations, differentiations, and pluralisations of the body and its environment. And yet, occasionally, such transformations put the generativity of their relationship at risk. When this happens, the self-evident unity of the body is thrown into question, and the very *existence* of the body as a multiplicity becomes *felt*. As Whitehead writes, it is when the participating multiplicity of our body becomes felt that, for better or ill, “we send for a doctor”. (50).

What this implies therefore is that the panpsychist answer to the question of what a participant *is*, is that it is neither “one”, nor “two”, but *many*. More precisely, a participant is both one *and* many. It constitutes a multiplicity, at once participatory and participating: a precariously coordinated assemblage whose bounded unity is never guaranteed, and is perhaps less dependent on the anatomy of its composing elements than on the degrees of coherence, or compossibility, between the divergent modes of thought that participate in its composition, and the thoughtful differences that it itself proffers into the world. As such, not all participating modes of thought composing a human body need to be in agreement with the aims and values of its “waking consciousness”—let alone with those of modern medicine. Rather, it is often *in and through* the body itself that the biopolitical problematic is expressed, exhibiting in the body’s own composition the tensions between the specific demands of its environment, and the ways in which a body responds, challenges, and escapes their grasp. As medical humanities scholar Ed Cohen has rightly emphasised, in resonance with Whitehead’s own illustration of a molecule, it is unhelpful to conceptualise such a drama in immunological terms, as a matter of bodies defending against the attacks of a threatening environment, for this ignores the internal processes and forms of divergence of which bodies are composed. As he puts it with regards to autoimmune diseases,

what if we were to recognize that ‘the problem’ which autoimmunity reveals is not that ‘I’ can mistake my ‘self’ for an ‘other’, but rather that my embodied self already *is* other? How might we reimagine our sense of personhood if we consider we are not identical to ourselves on a cellular, molecular, or subatomic basis? What if difference is the embodied substrate of subjectivity rather than sameness or one-

ness? Could we redraw our maps of human nature? Could we learn to live otherwise? (61)

The modern medical account of autoimmune diseases as quintessentially “self-inflicted” may make this case particularly illustrative of the unruly modes of participation that can compose a human body. But as Cohen is aware, we need only remember that most of our body is composed of myriad forms of bacterial, fungal, and viral life that are not “our own” (62), in order to imagine other forms of divergent thinking, and unruly modes of participation, taking place when “infectious” diseases are at stake as well (63, 64). As Donna Haraway would put it, we are vastly outnumbered by our tiny companions (65). And if, despite the manifold ways in which it is practically reinforced, the modern distinction between mind and matter is still open to contestation, it is also in terms of divergent forms of *participation* that we might approach those type of afflictions we normally associate with the realm of the “psychosomatic”(66), for what vectorises transformations in the body’s ongoingness is the coordination of a multiplicity of participating yet divergent *values*. How might we learn to characterise the forms of thought associated with illness or disease, as they develop in environments configured precisely around exhortations to be flexible, to adapt, to know oneself, to get on, to be responsible, to participate in the name of science, and in the name of our own moral worth? How might we learn to characterise the modes of thought that thinking bodies exhibit in response to such attempts at taking a hold of their life?

Needless to say, these are open questions. Any answer must always be situated and specific, responsive to the demands that each mode of thought makes as it participates in the composition of concrete bodies, as well as to those that bodies themselves make in relay and return. What’s more, any possible answer would require a medical humanities that would not only reclaim fundamental questions and concepts concerning health, participation and ontology from the medical sciences (67), but also one that would take the risk of experimenting with panpsychist propositions in radically empirical and situated ways, actively exploring *what bodies might say if we learned to encounter them otherwise, what they might say if we trusted they’re capable of taking an interest in our questions*. Such explorations, unfortunately, exceed the scope of this essay, though one could imagine them contributing to fertile transformations in medical research, clinical practices, in the communication with patients, and so forth. My hope, nevertheless, is that these initial questions might themselves prove generative, for the panpsychist proposition encourages us to take the risk of envisaging bodies that are not only themselves capable of participation, but also capable of participating for their own reasons, in accordance to their own aims, in relation to their own problems.

And it is precisely in this sense that panpsychism, as a pragmatic tool, might help us explore “biopolitics” in all its problematic character, thereby re-activating a politics of participation *all the*

way down. For when human bodies are not composed of matter and mind, but of a relative coordination of multiple and divergent modes of thought, always precarious and risky, “participation” cannot be reduced to an activity of submitting to consensual aims, to certain social networks, to established forms evidence and intervention. When bodies think, the individual participant that participatory medicine appears to imagine can neither constitute the precondition, nor the determination, of an appropriate mode of involvement. And while the conscious experience of patients and experts may be indeed helpful in developing generative modes of participation in health, it can never hope to exhaust the *kinds* of participation that may ensue when the health of a body is itself in question. We never know how that which thinks *in us* may decide to participate.

Indeed, when bodies think, illnesses and diseases might constitute modes of thought in their own right, expressing their own values and aims. They may themselves be characterised as divergent and unruly forms of participation, original and novel responses to the demands of their environment, taking part not only in the bodies where they are occasioned, but in the very milieus in which those bodies participate in turn. To take the notion of participation seriously, in other words, to wrest it from the double ontology with which it has been inscribed by experimenting with it all the way down, is to turn it, from a normative injunction placed upon individuals, into an open and permanent form of experimentation. An experimentation concerned with the plurality of modes of thought through which bodies *render each other capable of response*: How might we reimagine the problematic of health, illness and disease as an always precarious and demanding negotiation between divergent forms of participation in the body’s ongoing insistence? Could we then redraw our modern chasms between subjectivity and objectivity, experience and evidence? Could we imagine another “participatory medicine” that, rather than encourage participation of individuals, might itself become interested in *participating* in such bodily negotiations? Can we envisage a form of medicine, “psychosomatic” all the way down, that could risk its own transformations as it approaches bodies capable of taking an interest in, and dissenting with, its questions?

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