Forthcoming in *Technology and Equality*, edited by Sven-Ove Hansson and Colleen Murphy (London: Rowan & Littlefield, 2025). Please cite published version.

# Disability and Technology? No, Disability as Technology

By

Shelley Lynn Tremain

## Situating Philosophical Analyses of Disability and Technology

The discipline and profession of Euro-American philosophy remain predominantly populated by nondisabled, cisgender, propertied white men, extending a cultural tradition in which these men, these predominantly nondisabled philosophers, have postulated their values, perspectives, beliefs, and experiences—all of which have shaped the history and dominant tradition of Western philosophy—as politically neutral, disinterested, and universal, as representing reality, truth, and goodness (see Tremain 2013; Alcoff et al. 2020). In recent decades, however, various social groups hitherto excluded from philosophy—whether on the basis of (say) gender, disability, race, class, nationality, or sexuality—have begun to identify and challenge the historical, structural, institutional, and intersubjective elements of philosophy that contribute to their marginalisation, articulating discourses and situated knowledges that run counter to the entrenched homogeneity and exclusionary nature of Euro-American philosophy and expanding the purview of philosophical investigation. The efforts of these disabled, racialized, trans, and feminist philosophers (which are by no means mutually exclusive groups) have had noticeable impacts on the demographics and subject matter of philosophy and have influenced the self-understandings of philosophers and self-representations of the profession of philosophy itself.

Philosophy of disability is an area of philosophical inquiry that has emerged relatively recently, in part as a critical response to the homogeneous and exclusionary character of philosophy, that is, insofar as the dominant tradition of Northern philosophy comprises the values, perspectives, beliefs, and experiences of nondisabled, white, European, cisgendered men almost exclusively. Feminist philosophy, philosophy of race, queer philosophy, and other insurgent philosophies increasingly identify structural inequalities and forms of oppression, discriminatory practices, and biases within philosophy with respect to (for example) gender, race, and sexuality; in addition, these philosophical discourses continue to provide alternative understandings of various social categories and identities. So, too, this new subfield—namely, philosophy of disability—exposes the oppressive character of certain taken-for-granted ideas, argumentative claims, and structural injustices with respect to philosophical (and other) research on disability; offers novel ways in which to conceive problems of inequality, inclusion, and distribution with respect to disability; critiques the medicalised and individualised solutions that philosophers have proposed to resolve these problems; and furthermore, endeavors to develop innovative approaches to the ontology and epistemology of disability.

An astute philosophical discussion about disability and technology must take account of the aforementioned metaphilosophical, material, and institutional contexts within which work in philosophy of disability is produced and against which it intervenes. Traditionally, philosophers have ignored disability or have uncritically accepted and promoted common misunderstandings of it; that is, philosophers have typically cast disability as prediscursive, as a natural entity which is logically and temporally prior to culture and language, and hence is philosophically uninteresting and politically neutral. Disability, in their view, is an inert and naturally disadvantageous characteristic of individuals that is appropriately and adequately addressed in the realms of science, medicine, and bioethics.

Indeed, this refusal to acknowledge the philosophical and political import of disability is exemplified in John Rawls's (1971) argument that concerns about disability are not relevant to questions about "the basic structure of society" and thus need not be considered in a theory of justice nor political philosophy more generally. Although Ronald Dworkin's (1981) resources-based theory of distributive justice was purportedly designed to counter Rawls's exclusion of disability from his theory of justice, Dworkin reproduced the same naturalising and individualising assumptions about disability as Rawls; that is, although Dworkin explicitly addressed distribution to disabled people in his egalitarian theory of resources, the insurance scheme with which he proposed to do so was designed to "compensate" disabled people for their "natural misfortunes" and the opportunity costs that, allegedly, would inevitably accrue to them given these "natural" disadvantages. In other words, prevalent philosophical frameworks advanced in response to disability, even if they are opposed to each other in certain ways, have relied upon shared assumptions about disability that naturalise, medicalise, individualise, and decontextualise the phenomena of social injustice that it comprises. In short, the conception of disability that prevails in philosophy construes disability as a detrimental biological property of individuals that must be administered, managed, improved, or cured, uncritically replicating widespread misconceptions of disability that circulate in mainstream Western societies.

In dominant mainstream Western discourse and culture, disability and technology are thus generally understood to be related in this way: (naturally disadvantageous) disability is remediable through technology, with scientific and medical technology regarded as the most superior means through which prediscursive, (i.e., transhistorical, transcultural, and natural) disability can be rectified, alleviated, or eliminated. When most nondisabled people think of technology vis-à-vis disability, that is, they think of the ways in which forms of technology can fix, ameliorate, or lessen the disadvantages that disability allegedly imposes naturally. On this understanding of the relation between technology and disability, disability is a politically neutral personal defect or flaw, an individual characteristic, while technology is a politically neutral artefact utilised to facilitate the ways that science and medicine addresses and administers the natural disadvantages that disability imposes. Whether it be prostheses, AI, prenatal diagnosis, voice-activated software, or electric wheelchairs, technology is in short generally believed to be a politically neutral and value neutral means through which to (paradoxically) improve the lives of disabled people.

Philosophers of disability (and disability theorists) perspicaciously point out, however, that many forms of technology—such as prenatal genetic screening, cochlear

implants, and stem-cell research—are designed and developed specifically to modify the human in ways that have detrimental effects on public perceptions of disabled people as a social group and detrimentally influence public perceptions of certain disabled individuals in particular, advancing eugenic aims to eliminate a range of non-normative forms of embodiment, modes of communication, and kinds of cognition. Although one strand of thinking about the ethics of technology holds that technology is value neutral in its emergence and purposes, most philosophers of technology believe that technological development is a "goal-oriented process;" that, by definition, technological artefacts fulfill certain functions (Franssen, Lokhorst, and van de Poel [2018] 2022;, and that these artefacts are therefore value laden in their application. For example, although development of technology to test and screen prenatally is variously claimed to be either a value-neutral or goal-oriented endeavor, philosophers and bioethicists concede that decision making about which "traits" the testing and screening technology should be developed to identify is a value-laden process.

Unquestioned assumptions according to which purportedly value neutral (yet goal driven/good) technology can alleviate or eliminate the allegedly natural disadvantages widely claimed to constitute disability condition work in a range of subfields of philosophy, including bioethics, political philosophy, cognitive science, and philosophy of technology itself. Political philosophers ask: What sum of technological resources are disabled people owed in order to satisfy the demands of justice? Cognitive scientists ask: What can simulations of the (so-called) abnormal brain teach us about the maintenance of the (so-called) normal brain? Bioethicists ask: Should prenatal testing be compulsory? Philosophers of technology ask: What is the epistemic and moral status of technological interventions into the lives of "people with disabilities"?

In this chapter, I want to undermine the prevalent understanding of disability vis-à-vis technology upon which these explanations and questions about the respective epistemological and ontological statuses of disability and technology rely. I contest the view that disability is a politically neutral, naturally disadvantageous, and inert characteristic (property, trait, or attribute) of individuals in relation to which technology–paradoxically cast as both politically neutral and goal-driven–becomes useful through its explicitly value-laden application in science, medicine, and associated administrative regimes, i.e., as means to eradicate the deleterious consequences of disability. For I understand the term *technology* to refer to a broad array of discursive practices, material devices, cultural norms, institutional policies, and infrastructural apparatuses that operate to modify the subject and constrain its possible actions. As I will demonstrate, furthermore, I maintain that the expanding production of technology directed at disabled people and the assumption on which this production relies–that is, the assumption according to which technology should be increasingly developed and employed to alleviate and eliminate the allegedly natural disabilities of individuals–are strategic mechanisms and effects of biopower, a distinctly modern form of power that operates in order to maximize the conditions conducive to "life," the life of the species and the life of the individual.

Insofar as I wish to argue in this way, I depart from the understanding of the relation between disability and technology that other philosophers of disability who write about technology share in common with their mainstream counterparts in philosophy. On this shared understanding, technology is an instrumental externality of disability,

while disability is a site for the necessary and urgent implementation of technology. My argument is, rather, that technology is a co-constituting mechanism of disability, that is, disability is a fully-fledged technology itself, a complex and complicated apparatus of power, a composite of other technologies and other artefacts rather than a natural, i.e., biological, feature of human beings that technology is conceived and introduced to dissipate, fix, or eradicate altogether.

## A Historicised Approach

Claims about the social construction of the human being are no longer cavalierly dismissed in philosophical circles, where work on the constitution of subjects by authors such as Foucault (1997a), Linda Martín Alcoff (2006), Ian Hacking (1999), and Andrea Pitts (2021) is now given its due. If the claim that the human is constructed must be taken seriously and if it makes sense to say that the phenomena that constitute the human—such as disability, race, materiality, and identity—are themselves socially constituted, then it makes sense to say the human and phenomena that constitute the human have emerged into being and have histories, that is, are artefactual. If it makes sense to say, furthermore, that the human and the phenomena constitutive of it are artefactual, that is, if it makes sense to say that the human and the phenomena constitutive of it are artefacts with histories, then it seems plausible to say that the human and the phenomena constitutive of it can be regarded as technologies whose characteristic functions are themselves products of history. Indeed, an examination of the notions of technology and disability which employed a certain kind of historical methodology—namely, genealogy, in Foucault's (1997b) sense—would trace a conceptual and material path through the vicissitudes of predecessors of our current notions of technology, disability, and the ways in which they relate to each other. This kind of "history of the present," to use Foucault's phrase, would lead to the conclusion that disability itself is a technology. Like other technologies, constructions (technologies) of the human and the phenomena constitutive of it—including disability, race, gender identity, and nationality—do things. They have effects.

Genealogy is a historicised approach to philosophical inquiry, distinct from the ahistorical conceptual analysis, deductive reasoning, and logical argumentation that characterizes mainstream analytic philosophy. Foucault adopted genealogy to critically inquire into the history of necessity on a given topic and the historical emergence of the necessary conditions for states of affairs, underscoring the importance to such an approach of contingency and questioning that which has been taken for granted as self-evident. Foucault's genealogies—which he often referred to as "historical ontologies of ourselves"—are concerned with questions about the conditions of possibility for who we are now, that is, questions about how our current ways of thinking and acting came into being (Foucault 1997). A genealogical approach is thus especially apt for an inquiry into disability as an artefactual technology rather than an immutable human property. My discussion, in what follows, of biopower and the emergence of statistics is intended to illuminate the historical ontology of the disabled subject.

Foucault's genealogical studies of the problematisation of abnormality, perversion, sexuality, and madness (among other things) were not positivistic appeals

to a form of science that more accurately represents these phenomena, nor were these studies intended to provide normative responses or solutions to these phenomena. Rather, Foucault's genealogical studies were designed to show how certain phenomena and states of affairs became thinkable, that is, emerged as problems to which solutions came to be sought. Foucault's historical method of critical inquiry requires that we ask about the values, purposes, and aims of our current practices, the circumstances of their emergence, and the historically contingent forms of power that contribute to their constitution. The genealogical discussion of this chapter—which, in certain respects, extends Foucault's own genealogical examinations of the problematisation of abnormality, madness, perversion, and other phenomena commonly associated with disability—is thus most aptly characterized as a genealogical inquiry into the problematisation of disability as a disadvantageous natural attribute that forms of technology must urgently correct or eradicate altogether.

Throughout its history, Western political philosophy has concerned itself with questions about political legitimacy and sovereignty: What are the foundations of legitimate authority and rule? What is the nature of sovereignty? What is the most just form of government? Although Foucault did not reject these questions outright, he did reject the idea of natural rights that is presupposed by the juridical conceptions of power (as he referred to them) from which they arise. For Foucault, the question that political philosophy should rather ask about power is this: How, that is, by what means is it exercised? Indeed, one of the most original features of Foucault's analysis is that power functions best when it is exercised through productive constraints, that is, when it enables subjects to act in order to constrain them. Foucault (1978) argued that the continued preoccupation in political philosophy with "juridical" conceptions of power, according to which power is repressive and possessed (in the form of an inalienable or inherent right) by a central authority, has obscured the productive capacity and subtle machinations of a form of power that began to coalesce at the end of the eighteenth century: namely, biopower (Tremain 2005).

As Foucault described it, this new technology of power that emerged in the second half of the eighteenth century has taken as its object life itself, the life of the human *qua* living being, that is, the life of the human being insofar as it is a living being. In his lecture at the Collège de France on 17 March 1976, Foucault explained that this new form of power, this biopower, has involved a set of measurements such as the ratio of births to deaths, the rate of reproduction, and the fertility of the population. Indeed, these processes, together with a whole set of political and economic problems, are biopower's first objects of power and the targets that it seeks to control. Foucault noted that it was in this eighteenth-century context that demographers initially measured these phenomena in statistical terms (Foucault 2003, 238-263).

As these phenomena began to be investigated and to shape governmental control of people, a new kind of medicine developed, the main function of which was public hygiene and the institutions of which centralised the authority of the new medicine, normalised its knowledge, and coordinated the care distributed under its auspices. Campaigns emerged to educate the public and medicalise the population (a group of living beings whose constitution *as* a population is in large part due to this form of power). Charitable institutions and economically rational mechanisms such as insurance, individual and collective savings, and safety measures came into being in

order to deal with accidents, illnesses, and various anomalies. Insofar as the phenomena with which biopower is concerned became pertinent only on a mass level, constants that pertained to the collective had to be established. In this regard, biopower has involved the introduction of mechanisms whose function includes forecasts, statistical estimates, and overall measures and whose purpose is to intervene at the level of generality of these phenomena. Regulatory mechanisms have been put into place that prescribe norms, adjust to an equilibrium, maintain an average, and adjust for variation within the population. In addition, security mechanisms partition the random element of populations from the collective at large in order to maximise the conditions conducive to life (Foucault 2003, 238-263).

Indeed, a vast network of power (namely, biopower), erected to secure the well being of the general population, has precipitated the emergence of the contemporary disabled subject into discourse and social existence. Among the items generated by the apparatus of disability that this expansive network encompasses are these: asylums, income-support programs, quality-of-life assessments, workers compensation benefits, special education programs, paratransit systems, telethons, sheltered workshops, poster child campaigns, and prenatal diagnosis. These practices, procedures, and policies (among others) have created, classified, codified, managed, and controlled social anomalies through which people have been divided from others and objectivised as (for instance) physically impaired, insane, handicapped, fat, and mentally ill. Furthermore, these "dividing practices" (as Foucault referred to them) precipitate the production of technologies of normalisation—such as rehabilitation, psychotropic drugs, psychotherapy, limb lengthening, corrective surgery, and fitness regimes—which operate to align subjects with social and corporeal norms (Tremain 2017).

As Foucault pointed out, these kinds of technologies (practices) of division, classification, and ordering around a norm have become the primary means by and through which to individualise people who come to be understood scientifically and come to understand themselves in this mode. Indeed, Foucault regarded the power of the modern state to produce an ever-expanding and increasingly totalszing web of social control as inextricably intertwined with, and dependent upon its capacity to generate an increasing specification of individuality in this way. Hence, as Foucault explained it, the central motivation for his genealogical inquiries was to identify and articulate how subjects "are gradually, progressively, really, and materially constituted through a multiplicity of organisms, forces, energies, thoughts, [and so on]" (Foucault 1980b, 97). In short, the modern subject (including the modern disabled subject) is, as Foucault recognized, an artefact, an effect of discursive practices, a technology.

## Aristotelian Roots

The assumption that technology is external to disability, that disability is a transhistorical, transcultural, and natural human characteristic for which technology is developed and to which it is subsequently applied, can be traced back to Aristotelian ideas about a fundamental distinction between natural things, on one side, and human-made artefacts, on the other, as well as to Aristotelian ideas about the relations of natural things and human-made artifacts to causation. Aristotle (*Physics* II.1) wrote that

the principles of generation and motion are internal to natural entities, whereas artefacts, insofar as they are artefacts, are generated by external causes, that is, by human aims and forms in the human soul. For Aristotle, that is, natural products—animals and their parts, plants, and the four elements of earth, air, water, and fire—move, grow, change, and reproduce themselves in accordance with inner final causes, that is, the purposes of nature motivate them. By contrast, artefacts, for Aristotle, cannot reproduce themselves but rather require human attention and intervention without which they lose their artificial forms and decompose into natural materials (Franssen, Lokhorst, and van de Poel, 2018).

The division between nature and culture that provides the scaffolding for Claude Levi-Strauss's twentieth-century structuralism arguably shares a lineage back to this Aristotelian divide between the natural and the artefactual, as does the sex-gender distinction of late twentieth-century North American feminism, where nature and sex are to the natural and prediscursive as culture and gender are to the artefactual, to the technological. American feminist Gayle Rubin explained the (structuralist) distinction between sex and gender in this way: "Every society has a sex-gender system—a set of arrangements by which the biological raw material of human sex and procreation is shaped by human. social intervention and satisfied in a conventional manner" (Rubin 1975, 165). Although the structuralist nature-culture distinction was putatively invented to facilitate cross-cultural anthropological analyses, the universalising framework of structuralism obscures the multiplicity of cultural configurations of "nature." Insofar as structuralist analyses presuppose that nature is prediscursive (that is, prior to culture and social practices), they do not and cannot interrogate what counts as "nature" within a given cultural and historical context, in accordance with what interests, whose interests, and for what purposes.

African American feminist scholar Dorothy Roberts (2016) has convincingly argued—especially with respect to the social, economic, political, and scientific constitution of race—that there is no natural human body; that the natural human body does not exist; that genes do not determine anything; and that our brains are plastic, modifiable with social experience. As Roberts explains it, human biology is not an entity distinct from the environment, interacting with it and relating to it, but rather is constituted by and through this vast array of social interactions and relations. Insofar as biology, the body, human nature, and even materiality itself are the products of these innumerable social relations and interactions, Roberts remarks, critical analyses of race, disability, gender, and other subjectifying inequalities must, therefore, consider how claims that naturalise these ostensibly "biological" phenomena emerge, in what contexts these claims are mobilised and advanced, and for what social, economic, and political purposes.

The nature-culture distinction is in fact already circumscribed within a culturally specific epistemological frame that echoes the Aristotelian natural-artefactual distinction. As Sandra Harding (1986) has remarked, the distinct way in which contemporary Western society distinguishes between nature and culture is both historically specific and culture bound. The culture-nature distinction itself is interdependent on a field of other ancient dualisms that have structured Western modes of thought, including the dualisms f reason-emotion, mind-body, objectivity-subjectivity, and male-female. In the terms of this dichotomous thinking, the former term of each

respective pair is privileged and assumed to provide the form for the latter term of the pair whose very recognition is held to depend upon—that is, require—the transparent and stable existence of this former term. In the terms of this dichotomous thinking, any thing (person, object, or state of affairs) that threatens to undermine the stable existence of the former term or to reveal its artefactual character (and hence the artefactual character of the opposition itself) must be obscured, excluded, or nullified. To be sure, some feminists were quick to criticise the nature-culture distinction and identify binary discourse as a dimension of the domination of people and things that inhabit so-called natural categories. Yet, as Donna Haraway notes, these early feminist critiques of the nature-culture distinction did not incorporate a derivative of the distinction—namely, the sex-gender distinction—which many late twentieth-century feminists regarded as too useful a tool for feminist political struggle to discard (Haraway 1991).

Nevertheless, the political and explanatory power of the technology of gender requires that the categories of sex, biology, race, body, and nature be relativised and historicised. Although each of these categories has, in its own way, been regarded as foundational to gender, each of them is a contingent artefact (i.e., a technology) of power rather than an objective entity with a transhistorical and transcultural identity. Foucault argued, for example, that “sex is the most speculative, most ideal, and most internal element in a deployment of sexuality organized by power in its grip on bodies and their materiality, their forces, energies, sensations, and pleasures" (Foucault 1978, 157). For Foucault, the materialisation and naturalisation of "sex" were integral to the operations of biopower. In the final chapter of volume one of *The History of Sexuality,* Foucault remarked that "the notion of 'sex' made it possible to group together, in an artificial unity, anatomical elements, biological functions, conducts, sensations, and pleasures, and it enabled one to make use of this fictitious unity as a causal principle, an omnipresent meaning” (Foucault 1978, 157). In other words, Foucault argued that the accepted relation of entailment between sex, gender, and sexuality should be inverted. Sex, Foucault maintained, is not the natural, or biological, cause or motivation for a natural libidinal heterosexual desire but rather an effect of hegemonic power. Indeed, sex, rather than a natural foundation for the technologies of gender and desire, is itself an artefact, a technology.

Most philosophers of disability (and disabled activists) assume a conception of disability that conforms to Aristotelianism, distinguishing between the natural and the artefactual. Against the prevalent understanding of disability as a natural disadvantage, that is, these philosophers of disability endorse a sociopolitical conception of disability such as the British social model of disability (BSM) in whose terms disability is a contingent form of social disadvantage that is imposed upon “people with impairments” by a society that excludes them from public participation; discriminates against them in employment; denies them accessible, affordable housing; withholds educational opportunities from them; and subjects them to hostility and violence. In other words, philosophers of disability who endorse the BSM distinguish between impairment—a natural and hence politically neutral personal attribute—and disability—an artefactual set of social and political arrangements. Notice, then, that the distinction between impairment and disability of the BSM replicates the structure of the nature-culture and

sex-gender distinctions and is rooted in Aristotelian metaphysics: impairment is to the natural as disability is to the artefactual.

For philosophers of disability who assume this conception of disability, technology is, therefore, understood in instrumental terms as a tangible, human-engineered thing that is external to humans rather than constitutive of them, that is, a constitutive feature of them. Technology, on this view, is usually directed at some feature or aspect of disabled people in order to change (cure, fix, eliminate) them in some way, thereby reinforcing rigid norms about (say) human function, appearance, motility, behavior, and size; or, according to this view, technology may be utilised to change social environments and their contents in ways that adapt them to the functioning of a variety of people, including disabled people. On this conception of disability, technology would increase a society's sum of disability and ableism (i.e., become more oppressive) in the former case; and, alternatively, technology would alleviate a society's sum of disability and ableism (i.e., become less oppressive and more accessible) in the latter case. Thus, philosophers of disability who assume this conception of disability and this conception of technology ask these sorts of questions with respect to the relation between disability and technology: What distinguishes curative technology from assistive technology? What kinds of technology best advance social justice for disabled people? How should disabled people justify their claims of entitlement with respect to assistive technology? My argument is designed to undermine the assumptions about both disability and technology upon which these questions rest.

## Disability as a Technology of Power

Against philosophers who argue either that (a) disability is a natural personal defect or flaw that forms of technology should be designed to ameliorate, enhance, and eliminate altogether; or that (b) disability is a naturalised form of social disadvantage imposed upon people with impairments that technology should be designed to resist and redress, I maintain that (c) disability is not a property (characteristic, attribute, or trait) of individuals nor is disability the social consequences of a property (characteristic, attribute, or trait) of individuals; rather, disability is a complex apparatus (in Foucault's sense) of force relations, a bona fide technology in which everyone is implicated and in which everyone is entangled and entwined. Foucault defined an apparatus (*dispositif* ) as an ensemble of discourses, institutions, architectural forms, regulatory decisions, laws, scientific statements, administrative measures, and philosophical, moral, and philanthropic propositions that responds to an "urgent need" in a certain historical moment (Foucault 1980a). In other words, an apparatus is a historically specific and dispersed system of power that produces and configures practices toward certain strategic and political ends. This use of Foucault's idea of apparatus moves philosophical discussion about disability away from restrictive conceptualizations of it as (for instance) a personal characteristic or attribute, a property of given individuals, an identity, a difference, or a form of social oppression. In addition, the claim that disability is an apparatus moves philosophical discussion of disability toward a more comprehensive conceptualization of it than the other conceptions of disability provide, a

conceptualization of disability that is (among other things) historicist and relativist and, hence, culturally sensitive in ways that other conceptions of it are not.

As an apparatus, disability is a historically specific technology that comprises, constitutes, and is constituted by and through a complex and complicated set of discourses, (other) technologies, subjectivities, identities, and practices which emerge from medical and scientific research, government policies and administrative decisions, academic initiatives, activism, art and literature, mainstream popular culture, and so on. Although some of the diverse elements of the apparatus of disability seem to have different and even conflicting aims, design strategies, and techniques of application, the elements of this technology, this apparatus, are nevertheless co-constitutive and mutually reinforcing. To understand disability as an apparatus is to conceive of it as a systemic matrix of power that contributes to, is inseparable from, and reinforces other apparatuses of historical force relations, including white supremacy, settler colonialism, racism, transphobia, and speciesism. On this understanding, disability is not a metaphysical substrate, a natural, biological category, or a characteristic that only certain individuals embody or possess, but rather is a historically contingent network of force relations, an artefact, in which everyone is implicated and entangled and in relation to which everyone occupies a position.

The apparatus (technology) of disability is expansive and expanding, differentially subjecting people to relatively recent forms of power on the basis of constructed perceptions and interpretations of (inter alia) bodily structure, size, appearance, style and pace of motility, mode of communication, emotional expression, mode of food intake, and cognitive character, all of which phenomena are produced and understood within a culturally and historically contingent frame and shaped by place of birth, place of residence, gender, education, religion, years lived, and so on. My (2017) analysis of the apparatus of disability treats these phenomena as the outcomes of contextually specific and performative relations of power—in a word, technologies—rather than as transcultural and transhistorical objective and determined facts about humans. As I have argued, for instance, prior to the eighteenth century and the emergence of biopower, the notion of impairment (as a personal characteristic) did not exist. As Julie Maybee (2024) has pointed out, furthermore, that some African languages do not include terms or phrases for the categories of impairment and disability. Within these cultural contexts, in other words, the concepts of impairment and disability do not exist.

The understanding of the relation between power and causation on which the conception of disability as an apparatus is premised runs counter to current and emerging work in philosophy of disability and disability studies. For the conception of disability does not rely upon some variation of the assumption that impairment and disability could be taken up as politically neutral and value-neutral objects of inquiry were it not for disabling practices and policies of exclusion that the ideological requirements of power place upon them. This assumption is fundamental to the BSM (and most other extant sociopolitical approaches to disability), which, as I have indicated, construes impairment as a politically neutral human characteristic on which disability (construed as social oppression) is imposed. With the conception of disability as an apparatus, by contrast, no domain of impairment or disability exists apart from relations of power. Impairment and disability can never be freed from power, nor, furthermore, can there be a phenomenology that articulates these supposedly

prediscursive domains. Power relations are not external to impairment and disability and their nexus in the apparatus of disability, but rather are integral to this relationship, constituting the knowledge and objects that these historical artefacts affect, as well as the artefacts themselves.

## References

Alcoff, Linda Martín. 2006. *Visible Identities: Race, Gender, and the Self*. New York: Oxford University Press.

Alcoff, Linda Martín, Charles Mills, Shelley Tremain, Matt LaVine, and Dwight Lewis, Jr. 2020. The Question on Inclusion in Philosophy: Alcoff, Mills, and Tremain, with LaVine and Lewis. Larger, Freer, More Loving series. Accessed: December 22, 2023. Available at: https://www.youtube.com/watch?v=DnOc8Gkvup4&t=2s

Dworkin, Ronald. 1981. “What is Equality? Part 2: Equality of Resources,” *Philosophy and Public Affairs*, 10: 283–345.

Foucault, Michel. 1978. *The History of Sexuality*. Vol. 1, *An Introduction*. Translated by Robert Hurley. New York: Vintage Books.

Foucault, Michel. 1980a. “The Confession of the Flesh.” In *Power/Knowledge: Selected Interviews and Other Writings, 1972–1977*, edited by Colin Gordon, 194–228. New York: Pantheon Books.

Foucault, Michel. 1980b. “Two Lectures.” In *Power/Knowledge: Selected Interviews and Other Writings, 1972–1977*, edited by Colin Gordon, 78–108. New York: Pantheon Books.

Foucault, Michel. 1997a. *The Essential Works of Michel Foucault, 1954–1984, Ethics: Subjectivity, and Truth*, edited by Paul Rabinow. New York: The New Press.

Foucault, Michel. 1997b. “What Is Enlightenment?” In *The Essential Works of Michel Foucault, 1954–1984, Ethics: Subjectivity, and Truth*, edited by Paul Rabinow, 303–19. New York: The New Press.

Foucault, Michel. 2003. *“Society Must Be Defended”: Lectures at the Collège de France, 1975–1976*. Edited by Mauro Bertani and Alessandro Fontana. Translated by David Macey. New York: Picador.

Franssen, Maarten, Gert-Jan Lokhorst, and Ibo van de Poel. [2018] 2022. "Philosophy of Technology." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta & Uri Nodelman. Accessed February 2, 2023. https://plato.stanford.edu/archives/win2022/entries/technology/.

Hacking, Ian. 1999. The Social Construction of What? Cambridge, Mass.: Harvard University Press.

Haraway, Donna J. 1991. *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge.

Harding, Sandra. 1986. *The Science Question in Feminism*. Ithaca: Cornell University Press.

Maybee, Julie E. 2024. Disability and African Philosophy. In *The Bloomsbury Guide to Philosophy of Disability*, edited by Shelley Lynn Tremain. London: Bloomsbury Academic Publishers.

Pitts, Andrea J. 2021. *Nos/Otras: Gloria E. Anzaldúa, Multiplicitous Agency, and Resistance.* Albany, NY: State University Press.

Rawls, John. 1971. *A Theory of Justice*. Clarendon: Oxford University Press.

Roberts, Dorothy E. 2016. “The Ethics of the Biosocial: The Old Biosocial and the Legacy of Unethical Science.” Tanner Lectures on Human Values, Mahindra Humanities Center, Harvard University. November 2.

Rubin, Gayle. 1975. “The Traffic in Women: Notes on the ‘Political Economy’ of Sex.” In *Toward an Anthropology of Women*, edited by Rayna R. Reiter, 157–210. New York: Basic Books.

Tremain, Shelley. 2013. “Introducing Feminist Philosophy of Disability.” *Disability Studies Quarterly* 33 (4).

Tremain, Shelley L. 2017. *Foucault and Feminist Philosophy of Disability.* Ann Arbor: University of Michigan Press.