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Disability and Prostheses

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Disability and Prostheses

by Lisa Folkmarson Käll, Associate Professor, Department of Ethnology, History of Religions and Gender Studies, Stockholm University; Jonathan Paul Mitchell, PhD Candidate, School of Philosophy, University College Dublin; Tobias Skiveren, Assistant Professor, School of Communication and Culture, Aarhus University

It seems immediately apparent that disability and prostheses are closely interrelated. Prostheses are perhaps most commonly understood as a means to remedy disability through an addition to the body aimed towards restoration of an assumed original and natural wholeness. Indeed, dictionary definitions of the word 'prosthesis', and the meaning of the term in a medical context, are of an artificial body part or device meant to replace a missing part, restore a missing function, or otherwise compensate for a bodily lack or impairment due to illness, accident or congenital disorder. In so doing, the prosthetic allows the person to reassume or adopt their place in ordinary everyday life. However, prosthetic intervention promises more than a restoration of the body and its functionality, or an enabling move from disability to ability. Prosthetic practices offer possibilities of enhancements that go beyond purportedly normal limits and, as such, demand a radical questioning of bodily boundaries.

Disability studies has often asked such questions, as part of its longstanding concern with the ontological status of disability, with its "natural" or "social" nature. Many theorists there suggest, albeit in very different ways, that disability is relational: it occurs at intersections among body and extra-somatic aspects of the world (Fritsch 2015; Thomas 2007; Tremain 2018). Indeed, it is no longer controversial to suggest that bodies as such—not just those identified as disabled—are not passive material substrates for monadic and autonomous subjects; instead, they are complex and multidimensional loci of embodied selfhood, and fundamentally open to, and co-constituted by, relations with others, and significantly, with such objects as prostheses (Shildrick 2014). Meanwhile, technologies have for some time been understood as neither outside nor opposed to a rarefied human nature, but as fundamentally bound up in the very production and maintenance of the human, as instantiated in the structures that comprise everyday social existence. Overall, embodiment is far more complex, and the composition of the human far more messy and ontologically heterogeneous, than we often realise (Haraway 1991; Latour 1999).

Taking prostheses seriously instigates a questioning of "our faith in corporeal integrity […] even as we endeavour to restore the clean and proper body" through the deployment of prosthetic parts and technologies (Shildrick 2013, 270). Prostheses shape and reshape not just functionality, but the very fabric of human lives. This is particularly evident in the context of disability. With the development of more advanced and increasingly sophisticated prosthetic technologies that can aid disabled people—for example high-tech prostheses, brain implants, exoskeletons, intense pharmaceutical interventions, etc.—the modes through which disability is represented and understood in mainstream and alternative cultures have come to change considerably. Prostheses are, as Luna Dolezal writes, becoming a site of "potent political possibilities" for destabilizing and transforming "the very category of disability" (Dolezal 2017, 65).

Perhaps one of the most telling (and spectacular) examples of how prosthetic technologies go beyond restoration to "triumphantly overcome the allegedly natural limitations of the human body" (Dolezal 2017, 65) is that of Oscar Pistorius. Before his eventual conviction for the murder of his girlfriend, Reeva Steenkamp, Pistorius was best known as a Paralympian who competed in the 2012 Summer Olympics. At the time, there was speculation about whether his below-knee prosthetic blades would give him an unfair advantage over his non-disabled competitors. Through prosthetic intervention and the incorporation of his artificial legs, Pistorius' body is transformed from 'disabled' to 'super-abled'; crucially, the meaning of disability, as well as ideas of normal human ability, are concurrently destabilized. However, such cases can also play into ideas about 'superhumans' who 'overcome' their disability to equal or even surpass established human limits, where existing ideas of human excellence—of fitness, independence, and so on—are left unquestioned (Kafer 2013; Nelson, Shew & Stevens 2019). Moreover, it bears mentioning that the achievements of Pistorius and other elite athletes involve considerable financial expense. Much of what is involved in living with prostheses, however, is not extraordinary or superhuman, but entirely ordinary.

Both prostheses and disability, then, trouble the ideas of autonomy, independence and detachment that characterize modern notions of the human subject. Both, in different ways, make manifest a fundamental relationality of bodily being and interdependence between bodies, technologies, and normative imaginaries. Both also trouble any drawing of fixed bodily boundaries demarcating the human from non-human animals and artificial tools and technologies. Margrit Shildrick for instance sees prostheses as the site where "the infinite confusion of boundaries between the human, animal and machine plays itself out most tellingly" (Shildrick 2013, 271). Prosthetic interventions demonstrate the malleability of bodily boundaries and the impossibility of confining the body to one single form. Instead, bodily boundaries constitute an open horizon of possible forms of embodiment and embodied experiences that may be radically incommensurable and thus not comparable nor measurable against a normative standard or idea of normality or perfection. At the same time, while disability may indeed be an exemplar site of the porosity and relationality of bodies, the idea of the pure, self-identical, bounded, autonomous, upright subject remains a potent normative force. This not only guides who is understood as technologically-augmented in a positive sense—such as the aforementioned 'superhumans'—but can leave out those who do not or cannot realise these ideals, or who use prosthetics in less normatively-endorsed ways (Mitchell & Snyder 2015). For them, prostheses may be seen as signs of failure, weakness, dependency. Furthermore, technologies for everyday use only infrequently take account of a range of bodily types, and can be disabling (Moser 2009). Prosthetics for disabled people can favour approximation of a putative human norm over what works best, as in technological interventions that prioritise upright posture over more comfortable and practical wheelchairs (Nelson, Shew & Stevens 2019).

Furthermore, while prostheses on the one hand confuse any clear boundaries between the human body and technology and between the organic and the artificial, there is on the other hand a sense in which these boundaries may at the same time become more pronounced, even though they cannot be fixed. As critics of certain applications of the cyborg metaphor have attested, integration of prosthetics can be far from seamless (Hamraie & Fritsch 2019; Kafer 2013). The incorporation of alien elements into one's own body can cause disruption in one's phenomenological experience and therefore to one's sense of self. On a pragmatic level, disabled people who deploy prostheses, and especially those with non-congenital disabilities, must strive to accommodate something alien to their own prior lived experience, a process thoroughly described by Vivian Sobchack in her reflections on "the metaphorical displacement of the prosthetic through a return to its premises in lived-body experience" (Sobchack 2006, 18). Living with a prosthetic leg, Sobchack is as she says, particularly "well equipped" to address the theoretical fascination and fetishism of the prosthetic metaphor (Sobchack 2006, 18). Rather than simply achieving a re-integration of the embodied self and a rehabilitation of their practices, people using prostheses often feel marked by the unfamiliar experiential input and capabilities that construct the prosthetically embodied self (Serlin 2004; Finlay and Molano-Fisher 2008). The patterns of inclusion and exclusion, and categories of normal and abnormal, and natural and artificial, that generally circulate in western societies contribute further to the tensions, ambiguities and contradictions that problematize each act of incorporation, making it perhaps to an equal extent an act of ex-corporation. The use and/or incorporation of prostheses can thus not be read as simply utilitarian and in disability is often associated with a dysphoria that indicates the difficulties of identity reformation (Shildrick 2013; Sobchack 2006). Despite a biomedical reading of prostheses as always therapeutic and often literally life-saving, recipients may tell a different story of not just enduring physical discomfort but mental distress that far exceeds the positivist claims made for biotechnological interventions.

Nonetheless, prostheses can be experienced as liberating and pleasurable—as Shew writes of moving with her very modest and technologically-simple rollator, “we are synced, choreographed, and there are few better feelings of movement” (Shew 2019, 12)—and can renegotiate and go beyond existing boundaries. Aimi Hamraie and Kelly Fritsch (2019) highlight how disabled people are continually engaged in practices and projects of world-making. These practices do not necessarily follow how “non-disabled experts” think they ought to move, or aim at inclusion with existing parameters of normality (Hamraie and Fritsch 2019, 7). Instead, they are sensitive to their own needs and desires, while also recognising that it is frequently the wider world that is disabling. Their aim, then, is not to make prosthetics that allow disabled people to disappear into the mainstream, but to “struggle for a more accessible future in which disability is anticipated, welcomed, and in which disabled people thrive” (Hamraie and Fritsch 2019, 6).

All of these aspects—the destabilisation of categories; the continued force of normalising categories; the potential for technology to be enabling and disabling—were key topics of discussion in *Interrogating Prostheses*, a workshop organized at Stockholm University in 2017 by the Nordic Network Gender, Body, Health (NNGBH), where the idea for this special issue emerged.[1] The workshop focused on the meaning and significance of prostheses read through the diverse phenomena of disability, whether physical or mental, congenital, acquired, or age-related. It took place as part of the NNGBH project *The Embodied Self, Health and Emerging Technologies: Implications for Gender and Identity*, funded by the Joint Committee for Nordic Research Councils in the Humanities and Social Sciences (NOS-HS) and hosted by the Department of Ethnology, History of Religions and Gender Studies at Stockholm University in 2017-2018. With the aim of responding to and exploring developments and impact of newly emerging technologies on the embodied self, the project inquired into questions of the materialization and disruption of bodily boundaries and agency in relation to such technologies and to the socio-cultural structures of power and privilege in which both bodies and technological developments are situated. Having witnessed the potential of these discussions, we decided to put together a special issue that further explored the relations between disability and prosthesis. *Women, Gender & Research*, an interdisciplinary journal interested in issues of corporeality and processes of marginalization, offered a suitable platform, and now, four years later, we’re happy to present four innovative research articles and a personal essay on the topic.

The first article in this special issue, ‘Living with a partly amputated face, doing facial difference’, by Gili Yaron, focuses upon the lived experiences of people with disabilities, and in particular, with the overlooked meanings produced by people living with partial facial loss. She draws upon interviews with twenty affected individuals to look at how losing part(s) of the face calls for various ways of ‘doing’ difference in everyday life. Her analysis works in three registers: first, it works on an empirical level to show how this doing of facial difference has social, embodied, and material dimensions; second, it works on a practical level, to complement prevalent approaches to 'disfigurement' that construe it as an individual problem; third, it works on a theoretical level, to elucidate the concept of doing, which is an important resource in gender studies, phenomenology, and science and technology studies.

The second article, 'Unsafe ground: Technology, habit and the enactment of disability', by Jonathan Paul Mitchell, discusses how everyday technologies contribute to the enaction of ability and disability. This enaction has two aspects. First, the article describes how technologies that afford everyday activities are distributed around bodies that are understood as normal, and neglects those bodies that fall outside this category. The former bodies are enabled to act while the latter are not. Second, it proposes that ability and disability also involve habit. Since purportedly normal bodies are centred in technological distributions, they can also develop robust habitual relationships with technologies and environments, allowing them to 'forget' about their body and the things they use. Crucially, they can acquire a sense that their engagements will generally be supported. Those bodies that are neglected, however, lack this secure ground: they cannot forget their relations with environments, and cannot simply assume that these will support their activity. This erodes bodily confidence in a world that will support the projects through which they live.

The third article, 'Embodied practices of prosthesis', by Maria Bee Christensen-Strynø & Camilla Bruun Eriksen, makes use of the ambiguity of the concept of prosthesis to consider certain healthcare-related practices that are not traditionally associated with disability. They argue for a broadened account of prosthesis that can also encapsulate embodied practices among groups of individuals. They introduce and discuss two illustrative case examples: dance therapeutic practices for people with Parkinson's disease, and group therapeutic practices in male-friendly spaces. By analysing these, their aim is to raise new questions about the ongoing cultivation of bodily and health-related interventions through the lens of the prosthetic spectrum, which they call 'embodied practices of prosthesis'.

The fourth article, 'Interrogating disability and prosthesis through the conceptual framework of neodisability', by Tine Fristrup and Christopher K. Odgaard, draws upon various approaches to disability to theorise how ableism occurs in specifically neoliberal contexts. It suggests that in such contexts, arrangements operate on the individual in ongoing processes of self-improvement. People who fail in such social arrangements come to see themselves as responsible for their own situation, and to blame themselves rather than questioning the ableism that organises neoliberal societies and produces inferiority. They put forward a conceptual framework they call 'neodisability' to describe what engenders contemporary psycho-neoliberal-ableism, in which individuals turn their aggressions against themselves: they are continually 'dis-ing' parts of themselves as 'not-fit-enough', while also being in constant need of therapeutic interventions to employ and promote the self-optimising efforts in times of neodisableism.

Finally, Jenni-Juulia Wallinheimo-Heimonen concludes the special issue with her personal essay "Your feet are not your feet". As a textile and conceptual artist, she reflects on the potentials and pitfalls of various forms of prosthesis design, their implicit paternalism or thought-provoking ingenuity. Musing on the environmental potential of edible prosthesis or the aesthesis of animal prosthesis, she widens current perceptions of what prosthesis should look like and what purpose they should serve. And yet as a third generation with a hereditary disability, her reflections also voice personal indignation about ableist forms of discrimination by exploring how prosthesis relates to questions of identity, visibility, and function. Having witnessed relatives suffer from notions of anomality and otherness, she ultimately stresses the importance of questioning those labels, to come up with more "empowering, stylish and intelligent assistive devices" and "find smarter ways to change attitudes and structures around the whole concept of well-being".

The special issue, in other words, covers both experiential and philosophical dimensions of prosthesis. It explores its possible metaphorical dimensions and scrutinizes its societal roles.

It also highlights the many connections between disability studies and feminist theory in conceptualizing the workings of power and embodiment. By bringing these perspectives together, then, we hope to provide a series of fresh takes on the ontologies and functions of prosthesis that may ultimately push current discussions within and around the field of disability studies.

Notes

[1] The workshop was organized in collaboration with the Division for Gender Studies, Stockholm University and the Center for Women's and Gender Research (SKOK), the University of Bergen.

References

Dolezal, Luna. "Representing Posthuman Embodiment: Considering Disability and the Case of Aimee Mullins." *Women's Studies* 46, no. 1 (2017): 60–75.

Finlay, Linda and Patricia Molano-Fisher. "'Transforming' Self and World: A Phenomenological Study of a Changing Lifeworld Following a Cochlear Implant." *Medicine, Health Care and Philosophy* 11, no. 3 (2008): 255–67.

Fritsch, Kelly. "Gradations of Debility and Capacity: Biocapitalism and the Neoliberalization of Disability Relations." *Canadian Journal of Disability Studies* 4, no. 2 (2015): 12–48.

Hamraie, Aimi and Kelly Fritsch. "Crip Technoscience Manifesto." *Catalyst: Feminism, Theory, Technoscience* 5, no. 1 (2019): 1–33.

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

Kafer, Alison. *Feminist, Queer, Crip*. Bloomington and Indianapolis: Indiana University Press, 2013.

Latour, Bruno. *Pandora's Hope: Essays on the Reality of Science Studies*. Cambridge, MA: Harvard University Press, 1999.

Mitchell, David T. and Sharon L. Snyder. *The Biopolitics of Disability: Neoliberalism, Ablenationalism, and Peripheral Embodiment*. Ann Arbor: University of Michigan Press, 2015.

Moser, Ingunn. "Disability and the Promises of Technology: Technology, Subjectivity and Embodiment Within an Order of the Normal." *Information, Communication & Society* 9, no. 3 (2006): 373–95.

Nelson, Mallory Kay, Ashley Shew, and Bethany Stevens. "Transmobility: Possibilities in Cyborg (Cripborg) Bodies." *Catalyst: Feminism, Theory, Technoscience* 5, no. 1 (2019): 2–20.

Serlin, David. *Replaceable You: Engineering the Body in Postwar America*. Chicago: The University of Chicago Press, 2004.

Shildrick, Margrit. "Re-Imagining Embodiment: Prostheses, Supplements and Boundaries." *Somatechnics* 3, no. 2 (2013): 270–86.

Shildrick, Margrit. "Why Should Our Bodies End At the Skin?": Embodiment, Boundaries, and Somatechnics." *Hypatia* (2014): 13–29.

Sobchack, Vivian. "A Leg to Stand on: Prosthetics, Metaphor and Materiality," In *The Prosthetic Impulse: From a Posthuman Present to a Biocultural Future*, edited by Marquard Smith and Joanna Morra, 17–41. 2006.

Thomas, Carol. *Sociologies of Disability and Illness: Contested Ideas in Disability Studies and Medical Sociology*. Basingstoke: Palgrave Macmillan, 2007.

Tremain, Shelley. *Foucault and Feminist Philosophy of Disability*. Ann Arbor: University of Michigan Press, 2018.

Living with a partly amputated face, doing facial difference

By Gili Yaron

Abstract

Disability studies as an academic field has long sought to highlight the lived experiences of people with disabilities, thereby giving voice to a population that has been the object of much discourse but rarely its subject. Despite the field's engagement with various conditions, there is limited scholarly work on the personal meanings of amputation and prosthetics usage. Experiences associated with the loss of part(s) of the face, in particular, have remained uncharted. In this article, I address this lacuna by drawing on interviews with twenty affected individuals. Situating their accounts in contemporary scholarship on bodily difference within the humanities and social sciences, I demonstrate that losing part(s) of the face calls for various ways of 'doing' difference in everyday life. This empirical-philosophical analysis serves three purposes. On an empirical level, the article unpacks the everyday doing of facial difference, showing it simultaneously involves social, embodied, and material dimensions. On a practical level, this integrative understanding of facial difference complements prevalent approaches to 'disfigurement' that construe it as an individual—biomedical or psychosocial—problem. On a theoretical level the article clarifies and advances the concept of doing, which plays a key role in gender studies, phenomenology, and science and technology studies.

KEYWORDS: facial difference, disfigurement, disability, prosthesis, enactment, embodiment.

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Introduction: Living with a partly amputated face

Disability studies as an academic field has traditionally sought to highlight the lived experiences of people with disabilities, thereby giving voice to a population that has been the object of much discourse but rarely its subject. Despite this field's engagement with various conditions, it features limited scholarly work on the personal meanings of amputation and prosthetics usage (Murray and Forshaw 2013). Thus, research in the humanities often approaches prosthesis as an analytical trope (Jain 1999), metaphor (Mitchell and Snyder 2000), or historical phenomenon (Neumann 2010). This literature also discusses prosthetic imageries (Booher 2010; Eyler 2013), or the history of prosthetics (Ott, Serlin and Mihm 2002). The small number of studies that attend to the perspective of people affected by amputation include autoethnographic accounts (Kurzman 2001; Sobchack 2006; 2010), and empirical scholarship on experiences associated with prosthesis usage and amputation (Murray 2009; Norlyk, Martinsen and Kjaer-Petersen 2013; Mathias and Harcourt 2014).

In the case of people who lost part(s) of the face and carry a facial prosthesis, this lacuna is even more marked; research into the lived experiences associated with their particular condition is virtually non-existent. There is a growing body of literature on 'disfigurement' in general, but studies investigating this topic mostly approach it through a biomedical or psychosocial lens (Aarabi, Longaker and Gurtner 2007; Trainor, Dixon and Dixon 2009; Rumsey and Harcourt, 2004; Valente 2009).[1] This focus mirrors the dualistic manner in which facial difference is commonly construed within healthcare, namely as an individual problem, that concerns either a mechanized body or a disembodied mind.

My work of the past years has sought to complement the literature on 'disfigurement' by exploring what it means to live with a partly amputated face. Analysing affected individuals' stories, my colleagues and I investigated the everyday usage of facial prosthetics (Yaron, Widdershoven and Slatman 2017), the embodiment of facial difference (Yaron et al. 2017), and the role of in/visible difference in everyday social interactions (Yaron et al. 2018). As our work reveals, individuals who lack part(s) of the face contend with physical impairments as well as a radically altered appearance. Responding to everyday challenges associated with both, they 'do' their facial difference in various ways (Yaron et al. 2017: 303-304). The precise nature of this doing, however, remains to be unpacked. What shapes does the doing of facial difference take in the everyday life of individuals who have lost facial areas? In this article, I answer this question by situating affected individuals' accounts in contemporary scholarship on the enactment of gendered and disabled bodies within the humanities and social sciences. This empirical-philosophical approach, I conclude, expands our understanding of facial difference, while supplementing prevalent healthcare approaches to 'disfigurement' and advancing the concept of doing itself.

Interrogating the everyday meaning of facial difference

The following pages present my analysis of the lived experiences associated with the loss of part(s) of the face. Examining both old and new empirical material, I show that affected individuals' stories revolve around the ongoing doing of facial difference in various everyday settings. To unpack the distinct, interwoven shapes this doing takes, I mobilize and contrast several comparative concepts, including 'interactional accomplishment', 'gender performativity', and 'enactment'. Used to investigate everyday practices—a common concern in contemporary humanities and social sciences—this set of loosely connected approaches each highlights particular aspects of the doing of bodily difference. It is by no means my intention to provide a thorough analysis of this family of concepts; instead, I use each concept to draw out distinct ways in which facial difference is done, as featured in affected individuals' accounts.

The analysis below draws on interviews I conducted with twenty individuals who lack part(s) of the face. These interviews formed part of an empirical-philosophical study into the everyday meaning of facial difference. Participants were eight women and twelve men, ranging in age from 42 to 84. Each lost a nose, eye-socket (including the eye), upper cheek, or larger segments of the face. Nineteen respondents were amputated during medical treatment for head and neck cancer; one had a fireworks accident (see table 1 for an overview of the participants). Interviewees all confront various disabilities, and their appearance has altered significantly. This is due to the atypical look of the amputated facial area, as well as their usage of several more-or-less visible medical aids. Thus, participants wear conspicuous bandages, band-aids, or patches to cover the amputation site. They also carry a less noticeable silicone prosthetic device—a so-called 'facial prosthesis'—that is tailor-made to resemble the lost facial limb(s) and is attached to the face by means of medicinal glue or implanted magnets. The study received ethical clearance from the medical-ethical review board of the Dutch hospital from which I recruited interviewees (file number NL35486.031.11).

Interview	***Name & age***	***Lost facial area***	***Cause***	***Aids used***
1	John, 65	Nose	Cancer	Nasal prosthesis (on implants), gauze dressing,
2	Timothy, 65	Part of the left cheek	Cancer	Cheek prosthesis (glued)
3	Dora, 65	Nose	Cancer	Nasal prosthesis (glued), dressing
4	Laura, 45	Eye socket	Cancer	Orbita prosthesis (on implants), Band-Aid
5	Stella, 47	Nose	Cancer	Nasal prosthesis (glued), dressing
6	Walter, 65	Eye socket	Cancer	Orbita prosthesis (locks into the amputated area)
7	Arnold, 72	Eye socket	Cancer	Orbita prosthesis (on implants), band-aid
8	Ray, 66	Right part of the nose	Cancer	Nasal prosthesis (glued), dressing, band-aid
9	Lisa, 73	Eye socket	Cancer	Orbita prosthesis (on implants), eye patch
10	Bertha, 76	Nose & eye socket	Cancer	Complex prosthesis (glued)
11	Gregory, 81	Eye socket	Accident	Orbita prosthesis (glued)
12	Oliver, 60	Eye socket	Cancer	Orbita prosthesis (glued), eye patch
13	Harry, 79	Nose & eye socket	Cancer	Complex prosthesis (glued), dressing, band-aid
14	Audrey, 84	Nose	Cancer	Nasal prosthesis (glued)
15	Leon, 52	Nose	Cancer	Nasal prosthesis (glued)
16	Gabriel, 70	Nose, eye socket & part of forehead and temple	Cancer	Complex prosthesis (glued), dressing
17	Christine, 72	Eye socket	Cancer	Orbita prosthesis (glued), dressing, band-aid
18	Ralph, 42	Eye socket	Cancer	Orbita prosthesis (on implants), band-aid
19	Winston, 63	Eye socket	Cancer	Orbita prosthesis (on implants), dressing
20	Thelma, 57	Eye socket	Cancer	Orbita prosthesis (glued), dressing

Table 1: overview of study participants

I discussed and obtained respondents' informed consent at the start of each interview.

Accomplishing difference through display and conduct

Speaking of what it means to lose part(s) of the face, the study's participants all noted that their visible facial difference is an issue in social encounters. Particularly when going out in public while wearing a visible cover, respondents' unusual face attracts much unwanted attention:

> *"I walked around wearing a patch on my eye, and that generated a lot of, yes, stares and questions and comments. I wasn't anonymous anymore, I was always the centre of attention, yes, attention I found to be negative" (Ralph)*[2]

Alluding to its power to stop others in their tracks, Stella jokingly calls the gauze dressing she sometimes wears over her missing nose an "emergency warning triangle". Interviewees dislike being the object of notice, indicating it makes them feel self-conscious, ashamed, or inferior (Yaron et al. 2018). Still, most choose to ignore covert staring, especially from children. Some actively address more offensive forms of unsolicited notice like finger pointing or giggling, for instance by pointedly staring back.

The way facial difference is handled in these social interactions resonates with what sociologists of gender Candace West, Don Zimmerman, and Sarah Fenstermaker call the 'interactional accomplishment' of difference (West and Zimmerman 1987; West and Fenstermaker 1995; 2002). Social categories like gender, race, and class, they argue, do not refer to static phenomena that precede social exchanges. Instead, members of society accomplish such categories during everyday interactions. Gender, for instance, is "a routine, methodical and recurrent accomplishment (…), an achieved property of situated conduct" (West and Zimmerman 1987: 126). Social categories are accomplished through the repetition of typical acts, displays, and speech patterns that are associated with, for example, femininity, blackness, or 'poshness'.[3] Achieving gender, race, and class lies at the very heart of human sociality; The doing of difference structures each and every social situation (e.g. sex-segregated public bathrooms, sports, dating practices). Social actors continuously evaluate whether they themselves and others establish relevant social identities appropriately. To accomplish difference, therefore, necessarily means to stand the risk of assessment. Such assessment has real consequences: individuals are held accountable for how they accomplish gender, race, or class, and penalized if they fail to do so appropriately (West and Zimmerman 1987).

The concept of interactional accomplishment underlines how visible facial difference is achieved through display and conduct in the daily life of the participants in my study. Others' unwanted attention in effect holds respondents accountable for deviating from the norm prescribing 'proper' appearance. Since they are (implicitly) expected to answer to others' curiosity, such attention casts interviewees as less entitled to the 'civil inattention' accorded to those with a typical exterior (Goffman 1967). Indeed, blatant staring, giggling, and finger pointing—forms of what disability scholar Rosemarie Garland-Thomson calls 'uncivil attention' (2006; 2009)—clearly penalize respondents for their unusual appearance. Facial difference can therefore be said to be done in interaction.

By using facial prosthetic device, participants regularly manage to avoid others' attention:

> *"Yes, I can just tell that since I have gotten my prosthesis, that less people really stare (...). I could tell instantly, immediately in that first week already. Yes, [it's different] than when you're wearing a Band-Aid. (...). People don't notice [my eye] as much" (Laura, wears an eye-socket prosthesis)*

Since it recovers facial completeness, this device may restore users' ability to 'pass as normal' (Yaron, Widdershoven and Slatman 2017). To pass, interviewees must ensure the prosthesis 'fits' their face and vice versa. Nevertheless, others regularly realize the device is in fact artificial. This mostly happens when respondents stand in close proximity to others for prolonged periods of time: "Sometimes at the cash register, because you'd be standing close to people, it happens that the 'nose' is suddenly discovered. [Their] gaze is like, 'wait a minute…'" (Stella). Participants mostly ignore such instances of discovery, although they sometimes address them. Their efforts to pass as normal, as well as their responses to being discovered, form another way of doing difference through display and conduct.

However, the accomplishment of gender, race, or class is distinct from the doing of facial difference in one significant regard. As anthropologist Marcel Mauss' concept of 'body techniques' illustrates, people signal their membership in particular groups (e.g. societies, professions, generations) by adopting sometimes subtle though very much recognizable stylistic 'signatures': particular ways of moving, positioning the body, gesturing, etcetera (Mauss 1979). In the case of disability, however, many typical ways of appearing and moving are associated with impairment and the usage of assistive devices. These are therefore not the product of a socialization process[4]. Indeed, rather than exhibiting characteristic mannerisms, many people with disabilities in fact develop body techniques aimed at suppressing or concealing their difference in favour of looking 'normal'. Likewise, respondents' attempts to pass as normal are oriented towards appearing ordinary. Their ways of doing facial difference, therefore, revolve around endeavouring to accomplish normalcy rather than difference.

Performing identity via discourse

Next to discussing display and conduct, interviewees also shared stories on how their facial difference is spoken about. Thus, others regularly ask about or comment on participants' unusual appearance. Respondents mostly view polite queries as intrusive though relatively benign. Some questions and comments, however, are not so innocent. Discussing others' reactions to the bandage she initially wore to cover her missing nose, Dora says: "[T]otal strangers (…) would say (…) 'Well you've had some rap on the nose, haven't you?' (…) and 'You have a weird noggin'". Other offensive utterances respondents mention include: 'How do you find the courage to go on?', 'If I were you, I'd just put an end to it all', or 'Can't [doctors] do something about your face?'. When others discover the prosthetic to be a fake, they may also remark upon the device ('It's such a clever solution!') or ask to touch it.

To understand the role of language in how facial difference is done, I turn to feminist philosopher Judith Butler's notion of 'performativity' (Butler 2007; 2011). Departing from an analysis of drag, Butler's work challenges common distinctions between sex and gender. The material body, in her account, exists beyond meaning-making but can never be approached outside of it: since human experience is necessarily mediated by signs, we can have no direct access to some type of 'pre-' or 'extradiscursive' bodily reality (Butler 2007: xx). Human beings, for Butler, "come into being" in language: it is only through their assimilation into the order of signification that they emerge as subjects (idem: 8). The sexed body is therefore always already gendered: immediately after birth (and often before), the new-born's body is classified as either female or male on the basis of anatomical features (e.g. genitalia) and thereby received into a signification system. In Butler's words: "medical interpellation (…) shifts an infant from an 'it' to a 'she' or a 'he,' and in that naming, the girl is 'girled,' brought into the domain of language and kinship" (Butler 2007: xvii).

With Michel Foucault, Butler argues that subjects are produced as such through the repetition of patterns of expression.[5] Individuals are neither the authors nor the origins of the statements they make, but draw these from established discourses—repositories of historically rooted linguistic forms (e.g. phrases, jargons, plotlines) that organize communication. When subjects reproduce specific types of speech, they in fact assert their and others' membership in a distinct social group. Such utterances are 'performative', for Butler, in that they establishing speakers (and addressees) as particular subjects. 'Hello, I'm Mrs. Smith, nice to meet you,' for instance, positions the speaker as a married woman. Importantly, discourses are inherently normative, constituting certain individuals as members of a devalued social category.

When others bring up participants' unusual appearance, from a Butlerian perspective, they in fact perform the visibly different person as an extraordinary, deviant spectacle. Specifically, such utterances constitute respondents as objects of ridicule, suffering victims, incapable of having a worthwhile (social) life, or in need of medical intervention. This type of everyday language reflects stereotypical meaning commonly attributed to atypical bodies. Blending into a "disfigurement imagery" (Talley 2014: 18, 28-30), representations of facial variance generally depict it as a pitiful state requiring a medical 'fix'. Using Butler, it becomes possible to understand both these representations and the everyday utterances that echo and instantiate them as part of a normative discourse on visible facial difference—a discourse that produces affected individuals as tragic (or, alternatively, heroic) victims—regardless of the fact most live rather ordinary lives.

As Butler indicates, subjects also perform their own identity through language. Indeed, next to utterances made by others, interviewees do their visible difference verbally as well. This type of talk may occur when they reprimand others for staring, pointing, or giggling:

> *"[T]here were those girls (...), teenagers, right. And they obviously noticed something and started laughing constantly, 'hahaha', you know. And then at some point I said, 'You should ask your mom to teach you some manners maybe and not gape at people'" (Dora)*

Another type of talk follows more benign types of notice. When asked politely about their facial difference, respondents may explain about their condition. Taking control of and defusing a mutually awkward situation, they assure their interlocutor that they handle everything 'just fine'. Similarly, participants may opt for anticipatory self-disclosure in situations in which others are likely to discover their face is partly prosthetic[6]:

> *"[M]y wife [and I] gave (…) a marriage course [to recently married couples from Church], and then (…) I would always just say it. And, well it's over then. You can tell that people [are] no longer as fixated on your face anymore (…). Because I'd openly laid it out to be spoken about" (Timothy)*

Finally, respondents may also joke about their artificial facial limb with others who know about it, like (grand)children, colleagues or friends. Oliver, a high school teacher, discusses a pun he sometimes uses in conversation with students:

> *"Well, if someone needs to be taken aside [for] detention, [I'd say, 'let's have] a talk under three eyes.' And then you see them, you see someone all blushing" (Oliver, carries an eye-socket prosthesis)*

Explanations and jokes, in particular, acknowledge interviewees' difference while simultaneously normalizing it. Such talk construes the person in question as being at ease with their uncommon face. It also establishes that they are a fundamentally ordinary human being, despite their uncommon appearance. Moreover: explanations and jokes indicate the facially different person deserves the same civility accorded to other members of society.

Participants responses to unwanted attention can in fact be read as forms of Butlerian resistance. Adopting a Derridean strand into her thought, Butler asserts that the repetition of established patterns of discourse is in fact a type of citation. Since every reiteration necessarily alters the meaning of the utterance it echoes, citation opens up spaces for difference. Speakers therefore do not only emulate discursive patterns, but may also improvise upon them, for instance through parody or out-of-context usage. Subversive citations, particularly, may undermine and resist oppressive categorizations. By emphasizing their fundamental normalcy and humanity, interviewees upset conventional representations of 'disfigurement' as a pitiful, exceptional, and dehumanizing state. By jokingly giving new meanings to old phrases, they 'own' their difference while resisting being reduced to it. Through these verbal forms of doing difference, participants defy being 'othered' while encouraging interlocutors to approach them as ordinary, fully human actors, worthy of equal regard.

Doing lived embodiment

The concepts of interactional accomplishment and performativity both highlight how bodies are done through various types of signification (display, conduct, language) that structure sociality. Nevertheless, it remains unclear how the experiencing body figures in these accounts. As Carrie Noland writes: "Butler has a meagre account of both embodiment and interoception. (…) [S]he neglects to theorize the performing body's proprioceptive, kinesthetic, even affective experience of moving in prescribed ways" (Noland 2009: 171). This criticism, I argue, equally applies for West and her collaborators. To be sure, the stories of the participants in my study illustrate that doing bodily difference encompasses a marked embodied dimension.

In the interviews, respondents spoke of various bodily experiences. All contend with sensory impairments, including the (partial) loss of smell, skin sensitivity, or sight. Discussing her reduced visual field after losing her eye, Lisa says: "While cycling [with friends] (…) if they ride on the left, we can't converse and I can't see them very well". Other interviewees report problems with navigating steps, pouring drinks, stacking boxes, tasting food, feeling a kiss, or smelling hazardous fumes. In addition, many also deal with unpleasant bodily sensations in and around the amputation site, such as chronic pain, phantom itching, or irritation. Others remain conscious of the prosthesis: "I'm constantly aware of that thing. I feel it, for sure, that it's loose, a bit" (Leon). Finally, anatomical changes to participants' sinuses may affect the trajectory of air and mucus. This results in either hindering dryness or leakage. As Christine, who lost her eye, says: "[L]uckily I don't often come down with the cold, but I've had it happen sometimes (…) [that mucus] would leak from underneath the prosthesis. (…) [T]hat was a disaster". Consequently, participants can no longer use their body as they did before; their formerly taken for granted capacity to pursue everyday activities has been disrupted. Gradually adjusting, interviewees develop an array of new bodily habits to anticipate, avoid, and manage disruptions (Yaron et al. 2017). By finding a more careful way of walking, a new manner of kissing, or strategies to handle unpleasant sensations, they in fact learn to do their body differently.

This bodily doing recalls phenomenologist Iris Marion Young's writing on gender in *On female body experience: 'Throwing like a girl' and other essay* (2005). As Young demonstrates, the physical im/possibilities afforded by female bodies call for distinctive ways of enacting the body.[7] Pregnancy involves adjusting to one's growing girth and may cause tiredness and nausea. Breasts may be sensitive, produce mother's milk, or hamper one's ability to engage in sports (Rodrigues 2018: 266-268). Menstruation may be accompanied by cramps and requires the management of flow. Women, in other words, live through the inevitable materiality of their bodies. Young's account therefore opens up a perspective on bodily doing that goes beyond signification to encompass lived experience. Similarly, the im/possibilities afforded by a partly amputated face mean that affected individuals need to develop new ways to perceive, sense, and move as they relearn their altered body and world.

But Young's account of female embodiment also explores women's experiences in relation to the socio-cultural meanings accorded to their bodies. Youngs analysis of feminine motility, for example, argues that the cautious inhibition characterizing many women's movements in fact reflects internalized gendered norms (Young 2005; Weiss 2015). As she writes: "The more a girl assumes her status as feminine, the more she takes herself to be fragile and immobile, and the more she actively enacts her own body inhibition" (Young 2005: 44). Young's take on gender emphasizes that such norms affect not only the way in which women present their social identity, but also how they use and experience their bodies. Gender is shaped both through the meanings inscribed upon the feminine body, and the material vicissitudes of that body. Indeed, Young's originality lies in the fact she successfully weaves together these two seemingly disparate dimensions of embodiment, while stressing the fundamental materiality of both.

The doing of facial difference, too, simultaneously encompasses both dimensions. Participants' stories about spilling tea due to a limited visual field, failing to sense a kiss on the cheek, or having mucus run down the corner of an eye, all speak to practical-functional concerns. But such incidents also testify of social ones: the embarrassments arising from bodily mishaps.

And indeed, the (possibility of) social censure respondents confront affects how they use and experience their body. Unwanted attention—as well as the work involved in anticipating, avoiding and managing it—effectively constrains their ability to inhabit public spaces:

> *"In the past (…) I would go out and grab a sandwich or a milk carton or whatever. And I would pull on my pants in a flash and run outside (…). Now I would have to wait an hour and a half [getting the prosthesis to fit just right], before I can leave the house" (Leon)*

Interviewees also restrain their facial movements to ensure others do not discover the prosthesis is a fake. Many keep the affected side of their face averted, chew or yawn carefully to prevent the device from gaping, or control their blinking to ensure their prosthetic and organic eyes 'match'.

Following the amputation, the face effectively takes on a new existential meaning. As the locus of potential physical as well as social perils, this body part has become much more 'present' in participants' consciousness. Such presence disrupts their ability to focus on everyday activities. What is more: being rendered a liability, the face has come to require ongoing monitoring and management.

Enacting artefacts, environments, and assistive devices

Young's writing on embodiment regularly alludes to the ways in which physical artefacts and environments tie in with the enactment of female bodies. After all, body, object, and world come into being simultaneously according to the phenomenological tradition in which she operates. Nevertheless, since Young focuses on bodily experience, her analyses provide little explicit attention to the materialities involved in bodily doing. Similarly, both West and her collaborators and Butler centre the meaning of things, rather than their materiality. As participants' stories demonstrate, however, the doing of facial difference has a solid material dimension.

As established, respondents use medical aids such as bandages, eye patches, and prostheses. The materiality of these aids affects the doing of facial difference. For instance, Laura's prosthetic eye-socket irritates her skin. She therefore reserves the device for outings, preferring her more comfortable bandage when staying at home. Others' comfort is also involved. Thus, the inflexibility and coldness of Stella's artificial nose prompted her to develop new ways to kiss loved ones. The fact passing as normal requires that the prosthesis look like a natural part of the face, also calls for material work (Yaron, Slatman and Widdershoven 2017). This may involve daily maintenance to ensure the device remains in good shape, but also various creative adjustments:

> *"The edges [of my nasal prosthesis] (…) start becoming wavy [after a while] and then it gets, well, less nice-looking (…), so at some point I will make a small cut-out [points to the lower corner of his 'nostril'], and then I can pinch [the two parts] neatly together, and it stays put better" (Gabriel, wears a complex prosthesis that replaces his nose, left eye, and parts of his temple)*

In addition, interviewees repeatedly reported using other types of objects to help them handle the changes imposed by the amputation. They install mirrors on their bicycle to compensate for limited visual field, use crayons to mark off distance while stacking boxes, or wear shawls when going outside in winter to protect their now-vulnerable sinuses. Respondents also use various artefacts to increase their chances of passing as normal: "To somewhat disguise that eye I choose really flashy glasses [that] block [of the edges of the prosthesis] from view" (Thelma). Others use a sunlamp or theatre make-up to ensure their skin tone and the device's hue keep matching, despite changes to their skin tone. These everyday objects, then, can also be said to do facial difference.

Environmental conditions play a role in the doing of facial difference as well. Wind and rain may blow away or drench appliances:

> *"I [keep on] my gauze dressing, if I don't have to leave the house. But not outside, no, no. (…) I mean, you can't walk in the rain with it. You can't walk in the wind. It's really for home" (Stella)*

Cold weather can cause pain in the amputated area of the face. It may also redden the skin and cause silicone to shrink—both of which make the prosthesis' artificiality more evident, thereby thwarting participants' efforts to pass as normal. The lay-out of public spaces may also affect passing. Check-outs, busses, and cafés afford prolonged encounters between strangers that invite unwanted attention. By contrast, busy streets encourage moving along quickly, which helps respondents pass. Similarly, neon lighting makes the prosthesis seem fake, while daylight and shade are more forgiving.

The concept of 'enactment' as developed by science and technology scholar Annemarie Mol in *The Body Multiple: Ontology in Medical Practice* (2002), can help account for this material doing. Mol leverages this concept to investigate how medical knowledge is mobilized in hospital settings, through various practices involving human and non-human actors alike. The term 'enactment', she maintains, captures the fundamental materiality of practices, their dynamic, emergent character, and the way they assemble disparate elements (Mol 2002: 32, 37-43).

But how do patients enact disease? 'Enacting bodies, Embodied Action: The example of Hypoglycaemia' (Mol and Law 2004) investigates how hypoglycaemia is done in the everyday life of affected individuals[8]. Some ways of enacting this condition revolve around knowing it, for instance by measuring blood glucose or learning to sense an oncoming drop in sugar levels ('hypo'). Such knowledge, Mol stresses, is geared towards anticipating and counteracting manifestations of the condition: "In the daily lives of people with diabetes, hypoglycaemia is something [patients] know about, but the point of their dealings with it is not to gather knowledge but to intervene" (Mol and Law 2004: 49). Interventions involve 'incorporating' various objects. For instance, patients use medical instruments to monitor blood glucose or inject insulin, and eat snacks to offset hypo's. Interventions may also involve 'excorporating' the body by "shifting out" or transferring some of its actions outwards (idem: 53). Thus, patients keep snacks in strategic locations to be able to deal with dropping blood glucose. Enacting disease, the body incorporates its material environment, while also excorporating into it.

Similarly, individuals who lack part(s) of the face incorporate assistive devices. They may also incorporate everyday objects such as shawls or sunglasses. And they incorporate their environment, for instance by seeking out natural light, shadow, and corners while avoiding neon lights and central locations. In addition, respondents also excorporate their facial difference, adjusting their physical surroundings (e.g. installing bicycle mirrors, marking off distance with crayons) to accommodate their altered face. These incorporations and excorporations are all part of the doing of facial limb absence, part of a newly-developed relationship between the altered, extended body and its various contexts. As Mol observes, bodies have semi-permeable boundaries: inside and outside, self and other, organism and artefact are not so easily distinguished. Moreover, participants' efforts to accomplish a good fit between their face and prosthesis illustrate that the body is an essentially unfinished, open project, requiring supplementation as well as continuous work to produce and maintain its integrity. As Mol and Law put it: "[k]eeping yourself *whole* is one of the tasks of life. It is not a given, but must be achieved, both beneath the skin and beyond, in practice" (2004: 57, emphasis in the original).

Conclusions: Doing facial difference

Zooming in on the lived experiences of individuals who lost part(s) of the face, this article has sought to expand our understanding of facial difference and thereby contribute to scholarship on amputation, prosthetics, and facial difference. The amputation of facial areas, as demonstrated above, signals a major shift in the formerly taken for granted relationship between participants' body and its social and material environment. Respondents' altered, extended face no longer quite fits their world. All the while, that world proves not-so welcoming for bodies that diverge from the norm. As Garland-Thomson argues, disability is a relational phenomenon, the function of 'misfits' between the impaired body's physical make-up and contexts that fail to accommodate bodily variance (Garland-Thomson 2011; Weiss 2015). This lack of fit, as interviewees' stories reveal, elicits various ways of doing facial difference.

To unpack the multiple dimensions involved in this doing, I interpreted my empirical findings against the background of four distinct approaches to the enactment of bodily difference. West, Zimmerman, and Fenstermaker's concept of interactional accomplishment provided insight in the role of display and conduct in social interactions between the visibly different person and others, while underscoring that these revolve around accountability and penalization. Butler's notion of performativity highlighted the role of language in these interactions. It also shed light on normative discourses informing how facial difference is done in everyday social exchanges, as well as on ways in which affected individuals resist and upend prevalent meanings attached to 'disfigurement'. Importantly, both these approaches helped establish that it is normalcy rather than deviance which is at stake in the doing of facial difference. Young's analysis of sensory-motor experience made for a deeper understanding of the embodied dimensions of the doing of facial difference. Mol's concept of enactment, finally, drew attention to the material affordances of medical aids, everyday artefacts, and environments, as these tie in with the doing of facial difference. In this sense, the sociology of gender, phenomenology, and science and technology studies provide complementary insights into this doing.

As these approaches reveal, facial difference is done in shifting arrangements in which bodies, norms, meanings, artefacts, and environments meet. The active doing of facial difference, however, is always also a passive 'being done'. While self and other both do facial difference in interaction, this doing is co-determined by interactional norms as well as common representations of 'disfigurement'. Moreover: although they actively adapt to their altered face, individuals with facial difference are nevertheless constrained by that face's im/possibilities, and those of aids, everyday objects, and settings[9]. As Lisa Käll concludes in her discussion of Butler's concept of performativity, voluntarism and determinism may go hand in hand (Käll 2015).

Understanding what it means to lose part(s) of the face, requires simultaneously addressing the social, embodied, and material dimensions of facial difference. Indeed, it is only by taking these three perspectives in concert, that it becomes possible to arrive at an integrative account of facial difference. Arguably, this point holds for bodily variance in general. Such an integrative account has much to offer healthcare. After all, adequately informing, caring for, and supporting patients, requires a firm grasp of how they experience and respond to their altered-body-in-context.

An integrative account of facial difference may thereby complement how 'disfigurement' is currently approached in healthcare, namely as an either biomedical or a psycho-social problem. This outlook is prevalent in research as well as in practice, including preoperative counselling, care and support, and rehabilitation. Here, I will restrict myself to a pertinent example I encountered in the hospital in the form of the 'disfigurement' protocol offering postoperative nursing guidelines for patient care. This protocol focuses primarily on the physical healing process after the amputation surgery, but nurses are also encouraged to monitor signs of 'psychological dissociation' following the patient's first confrontation with a mirror. 'Body image' is mentioned in this context, but this term is far removed from its original meaning, which indicates "the physical, social and imaginative aspects of bodily experience" (Rodrigues 2018: 259). In the clinic, 'body image' narrowly refers to the patient's psychic attitude ('cognitions') regarding their changed appearance.

In this way, the 'disfigurement' protocol evokes the patient as an organic machine containing a disembodied mind. As disability theorist Margrit Shildrick argues in her phenomenologically-informed study of heart transplantation, such dualism is fundamentally reductionist (Shildrick et al. 2009). By upholding it, healthcare fails to recognize and address the inherent entanglement of body and psyche, as well as the existential impact of bodily changes. As a result, patients' attempts to make sense of their radically altered bodily being are relegated to the background. All the while, the social is curiously absent in the protocol; formal care is restricted to the individual patient's body (and to a lesser extent, mind). And indeed, not only do patients' embodiment and social embeddedness disappear from view, but also their ongoing daily negotiations with the materialities of medical aids, everyday artefacts, and physical environments[10].

Shildrick calls for a critical turn in feminist bioethics (Shildrick 2008). Insights from poststructuralism and postmodernism, she argues, can help the field move beyond traditional women's issues and the ethics of care. The "postconventional canon" may thereby offer a truly critical alternative to mainstream bioethics (Shildrick 2008: 34). Like her earlier work, Shildrick's heart transplants project again demonstrates the 'leakiness' of the body: the fact that bodies—and therefore selves—are inherently vulnerable, open-ended, fragmented, and saturated with difference. Her goal is to "dispense with the notion of a core self that persists unchanged" (idem: 38). Like Mol, Shildrick contends that bodily integrity is an achievement rather than a pre-given condition.

These insights are not only vital for bioethics, but can help to counter healthcare's dualistic thrust. How they may be translated to practice, however, remains to be unpacked. Shildrick proposes adopting a phenomenologically informed framework in patient care, which will enable accepting and recognizing alterity, vulnerability, and concorporeality (Poole et al. 2009; Shildrick 2008). Her suggestions nevertheless remain somewhat vague in terms of practical applications. Moreover, as my focus on materiality illustrates, patients' accounts reveal a fuller range of experiences than those strictly associated with the body. Future work could further explore the clinical implications of focusing on the altered body-in-context.

Analysing empirical data on facial difference against the background of theories on the enactment does not only supplement current approaches to 'disfigurement'. My findings also serve to clarify and advance the notion of doing itself. By mobilizing and contrasting the concepts of interactional accomplishment, performativity and enactment, this paper has provided a clearer sense of their scope, revealing strengths, divergences, and blind spots. This empirical-philosophical approach thereby further develops a set of interrelated though distinct concepts that plays a key role in current debates within the sociology of gender, phenomenology, and science and technology studies. In this way, theory can inform practice, while empirical findings may enrichen conceptual work.

Notes

1 For one recent exception, see (Martindale and Fisher 2019) on embodied identity and narrative meaning making in facial disfigurement. As the authors note, scholarship on the ethics of facial transplants offers some theoretical explorations of facial difference and identity, but empirical studies remain scarce.

2 Respondents' names are all pseudonyms.

3 According to West, Zimmerman, and Fenstermaker, individuals accomplish gender, race, and class simultaneously: the ways in which these categories take shape together therefore result in highly specific, situated, and shifting configurations of difference.

4 To somewhat qualify this claim: One notable exception is found in people with a hearing impairment who embrace Deaf culture. Another is so-called 'expressive' prostheses. which are not designed to resemble the lost limb, but rather to openly express the prothesis' artificiality—often through a cyborg-like style (Hall and Orzada 2013).

5 Butler sees not only language but also expression and signification as performative. Since this section focuses on verbal ways of doing facial difference, I use Butler's account to highlight speech.

6 For an overview of interviewees' strategies in handling unsolicited notice, see (Yaron et al. 2018).

7 Although she repeatedly uses the term enactment to describe typically feminine motility, Young's usage of this terms seems almost incidental: she never systematically develops this notion as an analytical concept.

8 Interestingly, Mol and Law's account neglects to discuss appearance-related concerns and stigma in the enactment of hypoglycaemia. This oversight underlines the importance of the comprehensive approach presented in this paper.

9 For a similar argument with regard to women's agency in the context of 'disfiguring' breast cancer, see (De Boer and Slatman 2018).

10 Many nurses undoubtedly address these issues informally on the basis of experience and intuition. However, the setup of healthcare practices remains deeply dualistic. Moreover, professionals at present lack training, guidelines, and time to provide more integrative forms of care.

References

Aarabi, S., Longaker, M. T. and Gurtner, G. C. 2007. Hypertrophic scar formation following burns and trauma: New approaches to treatment. *PLoS Medicine.* 4(9), 1464–1470. doi: 10.1371/journal.pmed.0040234.

De Boer, M. and Slatman, J. 2018. The mediated breast: Technology, agency, and breast cancer. *Human Studies*. 41(2), 275–292. doi: 10.1007/s10746-017-9445-5.

Booher, A. K. 2010. Docile bodies, supercrips, and the plays of prosthetics. *IJFAB: International Journal of Feminist Approaches to Bioethics.* 3(2), 63–89. doi: 10.3138/ijfab.3.2.63.

Butler, J. 2007. *Gender trouble: Feminism and the subversion of identity.* London and New York: Routledge.

Butler, J. 2011. *Bodies that matter: On the discursive limits of 'sex'.* London and New York: Routledge.

Eyler, J. R. 2013. Disability and Prosthesis in L. Frank Baum's The Wonderful Wizard of Oz. *Children's Literature Association Quarterly.* 38(3), 319–334. doi: 10.1353/chq.2013.0042.

Garland-Thomson, R. 2006. Ways of staring. *Journal of Visual Culture.* 5(2), 173–192. doi: 10.1177/1470412906066907.

Garland-Thomson, R. 2009. *Staring: How we look.* New York: Oxford University Press.

Garland-Thomson, R. 2011. Misfits: A feminist materialist disability concept. *Hypatia.* 26(3), 591–609. doi: 10.1111/j.1527-2001.2011.01206.x.

Goffman, E. 1967. *Interaction ritual: Essays in face-to-face behavior.* New York: Doubleday

Hall, M. L. and Orzada, B. T. 2013, Expressive Prostheses: Meaning and Significance. *The Journal of Design, Creative Process & the Fashion Industry.* 5(1), 9-32. doi: 10.2752/175693813X13559997788682.

Jain, L. 1999. The prosthetic imagination: Enabling and disabling the prosthesis trope. *Science, Technology & Human Values.* 24(1), 31–54. doi: 10.1177/016224399902400103.

Käll, L. F. 2015. A path between voluntarism and determinism: Tracing elements of phenomenology in Judith Butler's account of performativity. *Lambda Nordica: Tidskrift om homosexualitet.* 20(2–3), 23–48.

Kurzman, S. L. 2001. Presence and prosthesis: A response to Nelson and Wright. *Cultural Anthropology.* 16(3), 374–387. doi: 10.1525/can.2001.16.3.374.

Martindale, A-M. and Fisher, P. 2019. Disrupted faces, disrupted identities? Embodiment, life stories and acuired facial 'disfigurement'. *Sociology of Health and Illness.* 41(8), 1503-1519. doi: 10.1111/1467-9566.12973.

Mathias, Z. and Harcourt, D. 2014. Dating and intimate relationships of women with below-knee amputation: an exploratory study. *Disability and Rehabilitation.* 36(5), 395–402. doi: 10.3109/09638288.2013.797509.

Mauss, M. 1979. *Sociology and Psychology: Essays.* London: Routledge and Kegan Paul.

Mitchell, D. T. and Snyder, S. L. 2000. *Narrative prosthesis: Disability and the dependencies of discourse.* Ann Arbor: University of Michigan Press.

Mol, A. 2002. *The body multiple: Ontology in medical practice.* Durham: Duke University Press.

Mol, A. and Law, J. 2004. Embodied action, enacted bodies: The example of hypoglycaemia. *Body & Society.* 10(2–3), 43–62. doi: 10.22394/0869-5377-2017-1-233-259.

Murray, C. D. 2009. Being like everybody else: The personal meanings of being a prosthesis user. *Disability and Rehabilitation.* 31(7), 573–581.

Murray, C. D. and Forshaw, M. J. 2013. The experience of amputation and prosthesis use for adults: a metasynthesis. *Disability and Rehabilitation.* 35(14), 1133–1142. doi: 10.3109/09638288.2012.723790.

Neumann, B. 2010. Being prosthetic in the First World War and Weimar Germany. *Body & Society.* 16(3), 93–126. doi: 10.1177/1357034X10373403.

Noland, C. 2009. *Agency and embodiment: Performing gestures/producing culture.* Cambride Massachutts/Londen: Harvard University Press.

Norlyk, A., Martinsen, B. and Kjaer-Petersen, K. 2013. Living with clipped wings—Patients' experience of losing a leg. *International Journal of Qualitative Studies on Health and Well-being.* 8(1). doi: 10.3402/qhw.v8i0.21891.

Ott, K., Serlin, D. and Mihm, S. 2002. *Artificial parts, practical lives: Modern histories of prosthetics.* New York: NYU Press.

Poole, J., Shildrick, M., McKeever, P., Abbey, S. and Ross, H. 2009. 'You might not feel like yourself': Heart Transplants, Identity and Ethics. In: Murray, S. and Holmes, D, eds. *Critical Interventions in the Ethics of Healthcare: Challenging the Principle of Autonomy in Bioethics.* Farnham: Ashgate, 33–45.

Rodrigues, S. 2018. To learn the world again: Examining the impact of elective breast surgery on body schema. *Human Studies.* 41(2), 255–273. doi: 10.1007/s10746-018-9462-z.

Rumsey, N. and Harcourt, D. 2004. Body image and disfigurement: Issues and interventions, *Body image.* 1(1), 83–97. doi: 10.1016/S1740-1445(03)00005-6.

Shildrick, M. 2008. The Critical Turn in Feminist Bioethics: The Case of Heart Transplantation. *International Journal of Feminist Approaches to Bioethics.* 1(1): 28–47.

Shildrick, M., McKeever, P., Abbey, S., Poole, j. and Ross, H. 2009. Troubling Dimensions of Heart Transplantation. *Medical Humanities* (BMJ Supplement). 35(1): 35–38.

Sobchack, V. 2006. A leg to stand on: Prosthetics, metaphor, and materiality. In: Smith, M. and Morra, J., eds. The prosthetic impulse: From a posthuman present to a biological future. Cambridge: MIT Press, 17–41.

Sobchack, V. 2010. Living a 'phantom limb': On the phenomenology of bodily integrity. *Body & Society.* 16(3), 51–67. doi: 10.1177/1357034X10373407.

Talley, H. L. 2014. *Saving face: Disfigurement and the politics of appearance.* New York and London: New York University Press.

Trainor, P. A., Dixon, J. and Dixon, M. J. 2009. Treacher Collins syndrome: Etiology, pathogenesis and prevention. *European Journal of Human Genetics.* 17(3), 275–283. doi: 10.1038/ejhg.2008.221.

Valente, S. M. 2009. Visual disfigurement and depression. *Plastic Surgical Nursing.* 29(1), 10–16. doi: 10.1097/01.PSN.0000347718.75285.23.

Weiss, G. 2015. The normal, the natural, and the normative: A Merleau-Pontian legacy to feminist theory, critical race theory, and disability studies. *Continental Philosophy Review.* 48(1), 77–93. doi: 10.1007/s11007-014-9316-y.

West, C. and Fenstermaker, S. 1995. Doing difference. *Gender & Society.* 9(1), 8–37. doi: 10.1177/089124395009001002.

West, C. and Fenstermaker, S. 2002. *Doing gender, doing difference: Inequality, power, and institutional change.* New York: Routledge.

West, C. and Zimmerman, D. H. 1987. Doing gender. *Gender and Society.* 1(2), 125–151.

Yaron, G., Meershoek, A., Widdershoven, G., Van den Brekenl, M and Slatman, J. 2017. Facing a disruptive face: Embodiment in the everyday experiences of "disfigured" individuals. *Human Studies.* 40(2), 285–307. doi: 10.1007/s10746-017-9426-8.

Yaron, G., Meershoek, M., Widdershoven, G. and Slatman, J. 2018. Recognizing difference: In/visibility in the everyday life of individuals with facial limb absence. *Disability and Society.* 33(5), 743–762. doi: 10.1080/09687599.2018.1454300.

Yaron, G., Widdershoven, G. and Slatman, J. 2017. Recovering a "disfigured" face: Cosmesis in the everyday use of facial prostheses. *Techne: Research in Philosophy and Technology.* 21(1), 1–23. doi: 10.5840/techne2016121659.

Young, I. M. 2005. *On female body experience: 'Throwing like a girl' and other essays.* New York: Oxford University Press.

Unsafe Ground: Technology, Habit and the Enactment of Disability

By Jonathan Paul Mitchell

Abstract

This paper discusses how everyday technologies contribute to the enaction of disability, in particular by continually frustrating the formation of a general sense of ease in the world. It suggests that bodies have a fundamental relationality, within which technology comprises a central aspect; and that the very entity called the human is constituted through relationships with technologies. Then, it considers two ways that the organisation of technology is involved in the realisation of both ability and disability. First, it describes how the distribution of technological resources for activity are centred around bodies that are attributed normality and correctness, which also de-centres bodies falling outside this category: the former are enabled to act while the latter are not. Second, it proposes that ability and disability also involve habit: activities that have not only been repeated until familiar, but in which body and technologies can be forgotten. That typical bodies are centred allows them to develop robust habitual relationships with technological environments in which body and technologies can recede from attention, and crucially, to acquire a sense that their engagements will generally be supported. Atypical bodies, as de-centred, lack this secure ground: they cannot forget their relations with environments, and cannot simply assume that these will support their activity. This erodes bodily confidence in a world that will support the projects, whether ordinary or innovative, that constitute a life.

KEYWORDS: ability, disability, technology, the human, embodiment, distributed agency, habit.

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Introduction

This paper discusses how everyday technologies and environments contribute to the enaction of disability, in particular by continually frustrating the formation of a general sense of ease in the world. Well-known work in disability studies outlines how relationships with the world can be splintered, such that the body stands out as radically objectified (Paterson and Hughes, 1999). I am proposing that a less-evident phenomenon coexists with these more dramatic occurrences: a persistent, low-level uncertainty that arises because environments are not especially habitable in the first place, and prohibit some bodies from forming stable relations. Very mundane technological dimensions of everyday environments are organised around material characteristics of bodies identified with a normal human type: this enables them to act, and, though habituation, to become generally at ease in the world. Their relations with things and environments rarely come into question. Since the bulk of such environments rarely consider the organisation of anomalous embodiments, these individuals are less able to act, and are hampered from developing robust habitual relationships. The body, and its hold on the world, remain perpetually in question. To address this, I first sketch some common ways of understanding bodies and technologies, before outlining my alternative position on these: that bodies have a fundamental relationality, within which technology is a core dimension; and that common and ubiquitous ways of relating with technologies constitute the very entity called 'the human'. Then, I consider two ways that technologies, as ordered around a certain idea of the 'normal human subject', contribute to the realisation of both ability and disability. First, typical bodies are centred by the distribution of technological resources for many ordinary activities (these bodies, while merely numerically prevalent, are attributed normality and correctness) which also de-centres atypical bodies (bodies that are attributed abnormality and error): the former are enabled to act while the latter are not. Second, it considers how ability and disability also involve habit: by habit I mean not just something repeated until familiar, but in which body and technologies can be forgotten (Ahmed, 2007). Because typical bodies are generally centred, they can develop robust habitual relationships with technological environments (that include very banal mundane technologies that support or inhibit activity while themselves going unnoticed). Crucially, they can acquire a sense that technological environments will generally support their engagements. Atypical bodies, as de-centred, lack a secure ground, and cannot simply assume that environments will support their activity. This erodes bodily confidence in a world that will support the projects, whether ordinary or innovative, that constitute a life.

Human Autonomy and Instrumental Technology

I will first outline some settled notions about humans and their relationships with technology, followed by implications for how disability is understood. These notions concern what Christopher Watkin (2017) calls 'host properties' and 'host capacities': attributes or powers deemed essential to and definitive of the human. In one story that has prevailed in the West at least since modernity, both in philosophy and more broadly, the hallmark human capacity is autonomy as "independent, rational self-determination" (Scully, 2014, 212). Here, individual humans possess an inbuilt faculty for reason. This furnishes objective and universal knowledge and precipitates self-caused action by disengaging from and transcending particularities (Solomon, 1988): from bodily exigencies and emotional attachments, to norms and conventions of concrete social contexts (Latour, 2008). Put simply, humans are autonomous because they can—in principle, if not always in fact—independently formulate goals and bring these to fruition. This modern account makes several distinctions. It differentiates humans from everything non-human. Humans are subjects: they alone have meaning, value, and freedom as possibilities. Everything else—nonhuman organisms, vegetal life, manufactured artefacts—gets thrown together as so many objects arrayed within neutral geometric space

(Latour, 1993). It conceptualises freedom as separation from or transcendence of relations and attachments. This also carves the human into an active, rationally-free subjectivity and a passive, causally-determined body. Moreover, only the former bears the hallmark of the human; nothing bodily truly defines humanness. Indeed, realisation of autonomy involves appropriation of that very body (Esposito, 2015; Esposito, 2012).

The primacy of autonomy is evident in a common understanding of technology. In 'instrumentalism' (Borgmann, 1984), technologies are mere instruments, and are "subservient to values established in other… spheres" (Feenberg, 2002, 5). That is, technologies are epistemically and morally neutral: the values determining their design, fabrication and application come from humans alone. Moreover, technologies do not contribute substantively to autonomy: they are mere vehicles that only expedite or extend freedom that resides solely in human users (Latour, 1999). Again, we see distinctions between essentially different kinds (Sharon, 2014): subjective and active humans, objective and passive technologies. Significantly, this implies a definition of the human as independent of technology. If technology depends upon a prior and preeminent human sphere, such a sphere must exist, and along with it a pre-technological human. This dovetails with the foregoing humanist account: in both the human host capacity—namely, autonomy—pre-exists, and is independent of, technology and relations more generally (Watkin, 2017). I will dispute these positions in due course.

This cluster of ideas about the autonomous human informs a common understanding of ability and disability. Here, ability is the capacity to do things voluntarily and independently; this lines up closely with the aforementioned conceptualisation of autonomy. Ingunn Moser notes how a nondisabled, 'normal subject' is said to possess "a sort of disposition or available functionality" that permits voluntary, detached action, because it is "discontinuous, bounded and detached" (2006, 383). It is free because it can transcend attachments. This capacity is always available, even when not in use. In a similar vein, Joel Michael Reynolds (2018) describes how humans are purported to enjoy an objective standard of normal ability that is largely invariant (notwithstanding normal phases of relative ability during certain life stages). Furthermore, during these long phases of ability, humans are taken as "independent, not in need of care, and effectively invulnerable" (Scully, 2014, 214).

In such an understanding, disability identifies something about a body that precludes or inhibits the autonomy available to normal humans. Disability drags someone away from transcending human freedom and towards limiting material objectivity, leaving them "trapped in and by the body" (Frost, 2016, 7). Put differently, disability implies dependency, the antithesis of autonomy. Disabled people are dependent in the same measure that they lack the pristine autonomy of normal human subjects. Indeed, disability is often identified with dependency upon others, state apparatuses, and technologies (Scully, 2014). Disabled subjects, for instance, depend upon prosthetic technologies to artificially compensate for the autonomy they lack (Moser, 2006). Here we see a further division. While disabled people may be human in principle, this status remains ambiguous: since they are diminished in a signature human capacity—with purportedly inevitable entailments for their potential to enjoy the good life—they are separated from full humanness.

Bodies and Technological Praxis: Actor-Network Theory and Postphenomenology

I will now outline an alternative approach to embodiment and technology. This begins from a phenomenological claim about bodily praxis: that in their everyday, engaged modality, bodies are not closed and static objects, but lived, pragmatic 'organs' of movement and connection, that are centrally involved in thinking and acting (Merleau-Ponty, 2012). Embodied existence is inescapably dynamic, since bodies are perpetually in dialogue with their surroundings; particular, since bodies are always "somewhere and at some time" (Sharon, 2014, 137); and perspectival, since bodies apprehend things from their relative, limited, and changing position. This local perspective involves significance. Things do not manifest as blank presences, but as imbued with meanings produced by interplay between bodily concerns and surroundings (Merleau-Ponty, 1964). When someone is hungry and tired, a restaurant appears farther away, a chair more comfortable, than when they are satiated and well-rested. This is an initial way that bodies are relational: they are "open [systems] of dynamic exchanges with the world" (Weiss, 2008, 89), where this world comprises immediately significant things and situations.

Bodies are relational in another sense. Embodied activity overflows corporeal boundaries to integrate bits and pieces of the extra-somatic world. This is illustrated by Maurice Merleau-Ponty's oft-cited description of a non-sighted man whose cane is so deeply absorbed within engaged activity that it becomes one sense organ among others (Merleau-Ponty, 2012).[1] I take these intimate, pragmatic relationships among bodies and technologies to be pervasive. I also understand technology very broadly as the outcome of any world-making and -transforming activities: from flint knapping tools to smartphones; from earthworks to cryptocurrencies; from spoken or signed, to written or machine language. I will now consider body-technology relations in terms of distributed agency (via actor-network theory), then in terms of habituation (via postphenomenology), before amalgamating these approaches in a concept I call 'ensemble'.[2]

Actor-network theory (hereafter, ANT) is partly an approach to agency that includes technologies, or 'nonhumans' (Latour, 1994; Latour, 1988). Here, agency requires only that something modifies the action of something else: anything that does so—whether a person, text, technology, habit, or concept—is a veritable actor, or 'actant' (Latour, 1999; Mol, 2010). Humans and nonhumans are symmetrical in this respect. Humans are customarily overestimated as sources of pure agency, yet nonhumans participate in most human actions (Mol, 2010). Nonhumans, meanwhile, are not passive vehicles for human agency, but full-fledged actants. This is because agency does not ultimately separate into the pure activity of subjects and pure passivity of objects. First, it is not occasioned by a single subject or object; agency is an emergent property of sets of associations among humans and nonhumans, called 'actor-networks'. These very associations are what afford actors their capacity to act. And, second, participants in such networks modify their associates (Pyyhtinen and Tamminen, 2011). Put differently, actants acquire their specific properties, capacities, and dispositions in a network from their associations: "[a]ctors are enacted, enabled, and adapted by their associates while in their turn enacting, enabling and adapting these" (Mol, 2010, 260). In Bruno Latour's well-known example (1999), neither shooter nor firearm are the total cause when a gun is fired. The agency is realised by a composite person-gun agent whose participants modify each other: the person has different capacities and proclivities when armed; the weapon has different capacities and affordances when held. There are many alternative terms to 'actor-network'. I will use 'enactment', which captures how "acting and being enacted go together" (Mol and Law, 2004, 50): something is enacted by the relations that constitute it, which concurrently enacts an agency or effect.

I will also draw upon postphenomenology for its focus on bodily praxis, including how relations with technologies become so familiar that bodies and technologies can be ignored during activity (Ihde, 1990; Ihde, 1993; Ihde, 2003; Rosenberger and Verbeek, 2015). This deep familiarity is thanks to what Don Ihde calls a "polymorphous sense of bodily extension" (1990, 74), whereby the boundaries of the lived body contract or dilate according to present associations and goals, such that technologies become 'incorporated' within lived embodiment. These no longer feel entirely separate; attention goes 'through' them towards the activity enabled by the body-technology coupling (Ihde, 1990). Incorporation is possible thanks to 'habit memory' (Bergson, 1988), which is the bodily past as habituated into comportments. This accrues as repeated activities—relations with others, things, situations—gradually give rise to sedimented bodily dispositions. Henri Bergson distinguishes habit memory from recollection. The latter represents a past event like an image, making it prior to and separate from the current recollective act, and ultimately disconnected from present action. Habit memory, by contrast, continuously informs current perception and action, by prolonging a conserved bodily past into the present, without explicit representation or reflection. It continually enlivens things and environments by imbuing these with practical meaning: it makes familiar tools immediately available for use, and traces customary situations with vectors of possible action. I follow Robert Rosenberger (2014) to use 'stabilisation' to describe habituated bodily techniques that come alive spontaneously and non-reflectively upon encountering the relevant technology. Importantly, habituation not only means that an action has become familiar (Ahmed, 2007), or even that bodies acquire immediate cues from familiar things and situations. It means actions can be performed with scant preparation, while the body, and often the technology, recede from attention during the action. Indeed, attending to these would disrupt activity. Ihde calls this condition 'transparency' (1990). The canonical example is eyeglasses: the wearer looks through these, they transform vision, but attention is squarely upon what is seen; body and glasses are marginal throughout. Ihde identifies four distinct types of technological relation. Two are salient here.[3] I have just discussed one: 'embodiment relations' wherein technologies are incorporated during habitual bodily activity. The others are 'background relations' involving the likes of shelter technology, traffic control systems, automatic household appliances, lighting, and temperature systems. These contribute to activity without being incorporated. They fall farther outside both body and awareness, to "remain in the background or become a kind of near-technological environment itself" (Ihde, 1990, 108).

Ensembles and Abilities

I will now amalgamate these approaches—especially their insights concerning distributed agency and habit memory—by outlining what I call 'ensembles'.[4] These describe associations of relatively proximal elements that are conjoined, organised, and maintained around bodies during engaged activity. Bodies enter relations to make something happen; ensembles are arrangements that make things happen. Body, hammer, nail, surface: all are elements of a (simplified) hammering ensemble. Such associations enact capacities and affordances that otherwise would be different or impossible. Ensembles are everywhere and are very prosaic: they include relations with eyeglasses, microscopes, hammers, bicycles, smartphones. As geared towards activity, they obtain just as long as the activity obtains: after hammering, a body transitions to another ensemble—albeit with some continuities of association—and acquire different capacities. Bodies vary in their powers, and are constituted differently, according to the character of their associations (Spinoza, 1996).

I take from ANT that agency is a property of a relational ensemble. Furthermore, activity seldom, if ever, involves just a body and a technology. It encompasses multiple, heterogeneous, and potentially widely distributed relations among actants that each contribute something to activity. I take from postphenomenology that habit memory stabilises and organises this relational manifold. Ensembles are particular types of enactment, that meaningfully involve habit memory. Each technological relation in the ensemble has its corresponding stabilisation: some are stabilised embodiment relations; others, stabilised background relations. The former type involves incorporation of the technology; the latter does not. Nevertheless, both types involve transparency: spontaneous activity wherein both body and technology recede from awareness. Many such relations can be at work simultaneously, organised by habit memory according to current aims. Habit memory permits bodies to negotiate complex associations with relative fluidity (though, as we will see, this involves much more than bodily powers). Bodies do not experience these relations as decomposed elements, but as opportunities or predicaments, routes or blockages, tools that are intuitive or obscure, places that are habitable or hostile.

When someone cycles to work, the ensemble includes not only relatively constant embodiment relations (body, bicycle, helmet, eyeglasses), but other changing relations (weather and air quality, and crucially, background relations with concrete roads, tree-lined avenues, traffic systems, spatial distributions).

Overall, then—in contradistinction with individualist and instrumental accounts—no division exists here between mental and bodily aspects; the body is no object, but a dynamic complex of relational comportments that produces itself through activity. It continually goes beyond itself towards incipient possibilities: it never realises a complete state. It continually goes outside itself in relation with other bodies, things, situations: its composition varies with ensembles. Consequently, we cannot define the body by an intrinsic property (Watkin, 2017). Moreover, we nowhere encounter entirely unconditioned humans using truly passive objects. Agency and capacities emerge from distributed and relational complexes. Consequently, we also cannot define humans by an essential host capacity (Watkin, 2017). Indeed, since different, transformative relations are always possible, there cannot be any final accounting of bodily powers (Deleuze, 1988). Rather than escaping attachments, freedom becomes a matter of being well-attached, making possible the question of what 'well-attached' might mean (Moser, 2006).

One of my aims when discussing autonomy and agency is to contrast different versions of ability. Understood through the autonomy account, ability is a spontaneous, ever-present capacity of bounded, individual human subjects; disability is a bodily condition that perturbs this capacity. In my preferred alternative, however, ability resembles relational and distributed agency. If the ability to do something involves technologies, these are part of that ability. Abilities are not innate, but enacted in and by ensembles: as Reynolds writes, they "neither end nor begin at the skin, but instead supervene on and extend to the world in which one lives and on which one ever depends" (2018, S34). This holds whether the enabling elements are proximal, as in a hammer, or distal, as in the agency distributed through every point of a metro system (Galis, 2011). Indeed, most situations will involve a combination of these. Put otherwise, abilities are complex, and produced in spatially and temporally expansive networks: the ability to run a five-kilometre race involves myriad factors—equipment, environmental conditions, childhood and adult interests, economic situation—that greatly surpass the body (Reynolds, 2018). Finally, abilities are dynamic, and enacted moment by moment: they hold just so long as the network holds, and vary as bodies move through ensembles.

This suggests a 'universal cyborgism' wherein all bodies are prosthetically scaffolded. If involvement with technologies is the rule and not the exception, and agency is realised with, rather than by escaping, attachments (Moser, 2006), the dichotomy between innate ability and disability evaporates. At minimum, and running counter to individualistic and medicalised models, many disabilities are not caused exclusively by individual bodies.[5] Yet the categories of ability and disability do not also dissolve. These may not be intrinsic characteristics, but they exist, as real outcomes of unequal distribution of technological resources among different bodies. Before elaborating how disability happens, I must outline how distribution happens more generally.

Technology, The Human, and Disability

Realisation of agency and sedimentation of habits occur in pre-existing technological surroundings. These surroundings have been modified, or prepared for activity. This modification has a long history, because technological development is bound up with the development of 'the human' itself. I do not mean that humans just happen to use technologies, but that technological activities constitute the human *as human* (Zylinska, 2010). Human and technology are reciprocal causes with a common history (Malafouris, 2016; Introna, 2014; Latour, 2003). Consequently, there is no question of drawing back the technological curtain to reveal an innocent human essence. The human—whatever that means—is progressively specified by its associations (Latour, 1999): were there anything characteristically human, it would be found among these associations.

The 'shape' of the human, then, is not a natural given; it coheres via the organisation of technological relations. Bodies are not immediately and simply human; they become human because various technological distributions—or, enactments—instantiate, stabilise and propagate activities that come to be called human. The entities and situations that comprise human existence, however complex and far-reaching, do not ultimately decompose into enduring brute givens and ephemeral social constructs. 'The social' is instead "materially heterogeneous: talk, bodies, texts, machines, architectures, all of these and many more are implicated in and perform the 'social'" (Law, 1993, 2). Entities are comprised of relations among heterogeneous materials, and the interactions that organise and maintain these. They are effects of 'ordering practices' (Mol, 2010; Moser, 2006; Law, 1993), that organise and distribute relations among these heterogeneous materials, to enact entities as the kinds of things they are. The stability of enactments is neither given in advance nor secured in one blow: associations "gradually come to hang together by means of small forces" (Mol, 2002, 70). Coherence is never final, and ongoing effort is necessary: maintaining associations, reducing frictions, bridging gaps, even "keeping potentially competing versions of reality… out of each other's way" (Mol, 2010, 264). While practice is central, intercorporeal interactions are insufficient to cement associations and circulate these across time and space (Latour, 2005). This brings us back to nonhumans, which are not only full-fledged actors, but also essential participants in enactments (Law, 1992): associations are more stable and durable, power can travel further, when "exercised through things that don't sleep and associations that don't break down" (Latour, 2005, 70). Nevertheless, a particular effect or power relation still requires the relevant associations: prison walls accomplish confinement only when guards are also present (Law, 1992). With enough durable connections, an enacted entity can become a quasi-universal, seemingly independent "'macro' feature of the 'whole' world" (Latour, 2005, 180).

This returns us to consideration of the pre-eminent account of the human. The various orderings that enact the human are far from systematic or exhaustive: they involve countless overlapping regimes, including many that are incompatible or even antagonistic. Furthermore, modernity ramifies the number and complexity of relations in which bodies are enfolded, making it increasingly difficult to establish definite origins or foundations. Nevertheless, the human is also intimately linked with a coincident but countervailing modern aspiration to 'purify' what exists into the discrete categories 'Society' and 'Nature' (Latour, 1993). While there exists no originary and insuperable ontological division between social and natural kinds—indeed, "it is this very division which is a complete artefact" (Latour, 2005, 76)—this bifurcation is effectually foundational because it is *done as such*. This major vector of power runs through modern ordering practices: while myriad domains that emerge within or are transformed by modernity—science, economics, medicine—assemble heterogeneous actants, they sort these into social subjects and natural objects. They attribute the powers of distributed agents to humans alone, while denying nonhuman agency and reducing these to passive objects (Watkin, 2017). This engenders the characteristic modern worldview: here, an exceptional domain of freedom, value, subjectivity, populated solely by the self-identical and self-governing human subject (Shildrick, 2012); there, an inhuman outside world of determinism, meaninglessness, and objectivity, in which exist bodies and technologies. This notion of the human may be an effect of modern ordering practices (Sharon, 2014), but this makes it no less robust or efficacious. It remains a guiding motif for distribution of technologies.

We can also understand one aspect of disability in this way: disability as a brute fact or objective bodily property. I suggest that disabilities *qua* objects are enactments: stabilised effects of associations among bodies, texts, statements, artefacts, objectives, and so on, maintained by "*masses of little overlapping and variably successful practices*" (Law and Singleton, 2013, 499).

Many different enactments coexist: disability as biological reality, oppressive social arrangements, resistant group identity. The same body can be enacted *as* disabled differently in different sites (Mol, 2002). Some enactments oppose, chafe against, or even repel one another; others are complementary, and fortify one another. No one captures the final truth of disability, which, as a relational effect, lacks objectivity and self-identity (Kafer, 2013). Despite this plurality, medical and medically-informed enactments of disability predominate. Modern disciplines tend to view bodily and cognitive anomalies as biological problems that warrant medical solutions. This produces knowledges (e.g., scientific discourses that inaugurate new diagnostic categories), practices (e.g., medical intervention, rehabilitation), and subjectivities (e.g., 'disabled people') (Tremain, 2018; Foucault, 2001b; Stiker, 1999). Such approaches involve a predilection for normalisation guided by the notion of the normal, autonomous subject: restoration, correction, or rehabilitation, even biopolitical strategies of elimination (Kafer, 2013). Crucially, while medical approaches purport merely to produce positive knowledge, and to intervene into problems that exist on a natural and value-free register, their activities precisely enact disability *as* a biological defect localised in a pathological individual body, and consequently as a brute natural given (Tremain, 2018). Here, the purifying modern logic is evident: disability is evacuated of its complex, relational status, and redistributed into the body—itself placed with a natural domain—as a problem for positive science. Medicalised approaches and normalising tendencies have spread far beyond the remit of medical professionals (Kafer, 2013): they largely inform common-sense understandings of disability, as well as bioethics, medical ethics, and theories of justice (Tremain, 2018; Boorse, 1977; Buchanan et al., 2000).

Disability and the Uneven Distribution of Agency

Disability exists in another register: as something that happens to bodies during practical activity in environments that do not support them. This aspect of disability will be the focus of what remains. In the enactments I just discussed, disability is enacted by explicit regard: medically-informed practices single out atypical bodies, to enact these as disabled via diagnosis or rehabilitative strategies. Now, I mean that another aspect of disability occurs due to disregard: atypical bodies are not accounted for in the distribution of everyday enabling relations, resulting in environments that do not permit them to live (Stiker, 1999). These aspects are closely linked. If the preeminent picture of disability is as an objective deviation from the human norm, preferred responses will aim, where possible, to 'return' someone to the sanctioned normal condition. Modifying the everyday world will be, at best, of secondary importance, especially when that world is taken as an objective background.

I will now flesh out this practical aspect of disability. I said that abilities generally involve participation from technological resources. Commonplace technological environments are products of a long history of ordering practices, organised by explicit and implicit norms about what is proper to the human (Pyyhtinen and Tamminen, 2011; Foucault, 2001a). Which orderings become stabilised, which technologies become ubiquitous, reflect what has been valued and endorsed as human (Mitchell, 2020). After all, technologies are counterparts of conduct, that "elicit from us the sort of behaviours we have come to call 'human'" (Watkin, 2017, 179). This is also seen in how technologies are fine-tuned or 'tailored' to readily allow incorporation and stabilisation. Put differently, technologies anticipate how they will be used, are orientated towards the bodies that will use them (Ahmed, 2006; Rosenberger, 2014).

Ordering and tailoring practices have been partial and uneven: they have overwhelming assembled technologies around the material properties of typical bodies. I use 'typical' and 'atypical' here as admittedly imperfect indicators that bodies are merely numerically common or unusual, without also imputing innate ability or disability. Typical bodies, then, are "enabled to act in and by the practices and relations in which they are located, and… become actors because agency is distributed and attributed" (Moser, 2006, 384). They can readily form ensembles, and acquire the associated agencies. Not only that. Such ordering is structured by the guiding motif of modernity: the autonomous human, or 'normal subject'. Indeed, it is only on account of practices, both historical and contemporary, that have distributed technological resources around typical bodies, that they can move and act in ways that correspond with the autonomy they are alleged to possess naturally (Moser, 2009). The modern, *able* self is fleshed out by its technological consorts, and can realise the standard of the 'properly human'. For ability to be enacted reliably and repeatedly, the appropriate technologies must consistently be in place; otherwise "many, if not most, bodies end up *dis*-abled" (Reynolds, 2018, S34). However, technologies routinely do meet typical bodies halfway, bringing abilities to life.

If ordering practices enable typical bodies, they have rarely acknowledged or accommodated those outside the sphere of purported normality. Atypical bodies have been ignored within, or placed outside, the domain of validated human action. However, this disregard is not truly passive, or simple oversight. The centring of typical bodies does not just happen in the natural course of events. Making a habitable world for any body requires effort. Expending effort on some bodies simultaneously de-centres others: it distributes enabling relations away from them, to positively produce the conditions for disability to happen (Moser, 2006). One aspect of disability occurs because ordering practices create routes to agency for typical bodies at the expense of atypical bodies. This distributes agency away from the latter, making alternative ways of interacting less realisable. Disability, like ability, does not reduce to physical properties. It exists within body-technology arrangements, at the level of ensembles. It is not intrinsic to atypical bodies that they cannot act in some environment; historically-ordered environments accommodate activity only for typical bodies. In a time-worn example, a wheelchair-user becomes disabled only on encountering space that is incompatible with their capacities. In congruent spaces, ability happens, because they enter an ensemble whose elements—that include their body—can create agency.

Mundane Technology and the Technological Unconscious

However, ability and disability do not only involve straightforward presence or absence of appropriate technological associates. They also involve the degree of ease bodies feel about entering technological relations. To address this, I will now build upon the foregoing ANT-inspired section by taking a more phenomenological tack that considers the roles of habit and anticipation in both ability and disability, and how inadequate technological support frustrates habituation and familiarisation, to hamper more general ease in the world.

While this involves technological relations in general, I am particularly interested in some that resemble Ihde's background relations. Those, recall, involve technologies that are not incorporated during activity, but instead are part of a quasi-natural technological background. I will first expand upon Ihde's definition, to call 'intermundane technology' anything artefactual, whether simple or complex, that contributes to activity without being incorporated, where that contribution eludes attention, and—as we will soon see—that is orientated only to certain bodies, even though this is not obvious. Even walking typically involves technology. A pathway is as much a technology—for expediting movement, but also for demarcating territory, domesticating 'nature', modifying spatio-temporal relations—as is a stone axe or a smartphone. It is a modification, undertaken for human activities, whose consequent role in ambulation—in a walking ensemble—typically goes undiscerned. Alongside Ihde's examples—shelter technology, traffic control systems, automatic household appliances, lighting and temperature systems—we might consider other mundane technological features and characteristics: the textures, dimensions and gradients of pathways and roads; the dimensions of everyday and domestic spaces, and how elements are distributed therein (for instance, standardised heights for counters and light switches); distances between buildings in public space; lighting and shade. These fall somewhere between technical artefact and environmental feature. These are *mundane* not only due to their ordinariness, but—as the etymological antecedent *mundus* suggests—because they are immersed within a background world and scarcely register as artefactual at all. Where embodied technologies invite engagement and become incorporated, intermundane technologies are simply assumed, without incorporation. By *inter-*, I mean that these modifications exist 'between' or 'among' other technologies. Because they are not incorporated, their contribution generally is not closely linked to an activity or goal. They are more like connective tissue between more evident tools, and perform an auxiliary role from the obscure periphery of ensembles. Despite their marginal status within awareness, they are highly consequential: as ubiquitous semi-constants, these contribute to and expedite agency by quietly supporting engagements with other technologies, and smoothing out movements within, and transitions between, technological environments.

Intermundane technologies resemble aspects of what Nigel Thrift (2004) calls the 'technological unconscious'. Bodies, Thrift suggests, repeatedly stage relations with quotidian technological artefacts: from roads and lighting to cables, screens, and wireless signals. Through repetition, there arises a "prepersonal substrate of guaranteed correlations, assured encounters, and therefore unconsidered anticipations" (Thrift, 2004, 177). Thanks to "their utter familiarity" (Thrift, 2008, 91), these technologies sit in the background and scarcely register as products of human work. Moreover, relations with these also acquire a quasi-natural status. This technological unconscious, then, encompasses both technological environments made to efface or naturalise themselves, whose contribution to activity goes unheeded (these resemble intermundane technologies); and correlated bodily comportments that tacitly anticipate these environments (these resemble the stabilisations of habit memory). The technological unconscious is like the totality of stabilisations with mundane and intermundane technologies, and the technologies themselves. When this state obtains, not only can bodies generally transition from here to there—from ensemble to ensemble—with unbroken transitions. Crucially, they can *anticipate* that such transitions will go smoothly.

Unsafe Ground

For the most part, these conditions are available only to typical bodies. They inherit a world in which things are already 'reachable' (Ahmed, 2007), having been ordered to ensure smooth passages (Moser and Law, 1999). This has several outcomes. These bodies can comfortably stabilise technological relations. These relations can enable without demanding explicit attention, especially intermundane forms whose artefactuality is already obscure. Situations simply appear habitable, as availing possibilities, while all the work involved in producing and maintaining such habitability can disappear. Typical bodies need not explicitly thematise how to act in common environments; they simply can 'do things'. Finally, the point where body ends and world begins becomes obscure (Ahmed, 2007).

Since these conditions obtain in most situations, typical bodies *generally* experience smooth transitions, while perturbations are limited in amount and extent. They can enjoy a feeling of extempore and endogenous freedom. A well-established technological unconscious, then, is like transparency writ large: it allows bodies to generally, reliably, and repeatedly forget themselves and their relations. Typical bodies find their world, if not homely, at least manageable. This also engenders a generalised sense of spontaneity: a feeling that free action is possible even in environments that have yet to be encountered. I do not mean that activity is always perfectly fluid, only that when the preponderance of encounters goes smoothly, an anticipatory dimension of agency results: an 'ambient faith' in the world at large. Beneficiaries can confidently anticipate that in most cases, the world will come to them as they go to the world, that neither body nor technologies will cause problems or stall the flow of action.

This is a second dimension of agency, in addition to its distributed character. Not only do technologies participate in the enaction of abilities, where these are understood as 'bare' functional capacities. The 'shape' of technologies permits stabilisation, which is part of the capacity to act extemporaneously. As such, the technologies are part of that capacity. Phenomenology suggests that bodies have an 'I can' relation with the world—they can simply gear into possibilities without reflection—on account of bodily powers of habituation. I suggest, however, that spontaneous action also centrally involves the continual, silent presence of countless technological auxiliaries: embodied and intramundane technologies, arrayed to not only avail of avail of use, but to extend the shape of the body (Ahmed, 2006).

Disability also has an anticipatory dimension. This involves consequences for stabilisation and transparency when technologies are unsuitable or absent. Since most ordinary embodied technologies—stationery, cutlery, computers, automobiles—are tailored for typical bodies, anyone outside this range of bodily characteristics may find these less manageable. This hinders incorporation, and formation of durable habitual relations. As for intermundane technologies, the fact that these are not incorporated, are not brought close to bodies, may suggest that they are not tailored towards particular users. However, they are just as much orientated to typical bodies. An apparently unremarkable walkway surface may be a tripping hazard; what seems like natural interior light may induce migraines; an ostensibly manageable distance between conference venues may prove exhausting. These background technological arrangements are far from obvious, but are tailored to the properties of typical bodies, and can disable atypical bodies. This also frustrates the formation of stable relationships with these dimensions.

However, the world does not always and identically frustrate expectations. Agency is not precluded outright. That atypical bodies are de-centred does not mean they are entirely ignored. Rather, they are enabled inconsistently, in something like what Florence Caeymaex calls a "continual process of inclusion and exclusion, and the unequal distribution of agency" (2014, 112). The aforementioned non-visual man may enjoy spontaneous activity thanks to prosthetic incorporation. However, when this complementary arrangement associates with non-complementary elements, agency collapses: "[w]hen he cannot safely cross a street because of a lack of curb cuts or audible walk signals, that incorporation is also disrupted" (Reynolds, 2017, 424). Again, this has more general effects. Where enablement is inconsistent and perturbations more likely, relations between body and space cannot readily be forgotten. Someone may navigate their accessible campus comfortably using colour-coding signage and differentiated floor surfaces. This does not mean that they can expect to do so when visiting another campus. The point is not that they cannot—it may well be accessible—but that they cannot do so spontaneously, without planning. They realise, correctly, that environments generally distribute agency away from bodies like theirs. Overall, someone may incorporate certain technologies, but not to the point of transparency, because these are not made with them in mind; they may carve out a sphere in which spontaneous action is possible, but when moving beyond this, find that things change. This can lead to something broader and more general concerning the sense of possibility: the obverse of ambient faith, which I call 'unsafe ground'. This does not mean one can never act, but that a not-quite-habitable world unsettles confidence that it will support possibilities (Ratcliffe, 2012). A permanent question hangs over the reliability of relations. Uncertainty colours encounters. This impedes formation of robust stabilisations with technological environments (or perhaps uncertainty itself becomes a disposition).

This has additional ramifications concerning anticipation about the future in a general sense (Ratcliffe et al., 2014; Ratcliffe, 2012). While formed via repetition, habits are fulcrums for innovate activities, and means "of altering our existence through incorporating new instruments" (Merleau-Ponty, 2012, 145). They anchor the vectors that run from present realities to future possibilities. By destabilising habituation, unsafe ground attenuates this anticipatory structure: it dampens the potential to reckon otherwise, to incarnate new relations, to imagine that things will be different (Ratcliffe et al., 2014; Ratcliffe, 2012). It slackens the threads connecting anticipation to what Matthew Ratcliffe calls ‘teleological time’: directedness toward more remote but not necessarily less determinate goals. Instead of a future of significant possibility, there is one where possibilities are bounded in advance.

(In)visibilisation

Finally, I will outline how the local enabling and disabling events I have just discussed contribute to the wider effect of naturally-able and naturally-disabled bodies. This centrally involves how technological distributions become invisible even as they enable or disable. I concur with Moser (1999) that enactment of the entity called the ‘normal subject’ involves how technological distributions produce agency while remaining invisible. Not only is technology “made invisible by its own success” (Latour, 1999, 304), standing out only when malfunctioning or ill-fitting. Further, since technologies are ordered around the contours of typical bodies, technologies generally do work for them, and “agency [flows] without constant interruption” (Moser, 2006, 384). Their technologically *en*-abled status does not come into focus: they become normal subjects without needing to stake any claim as such (Moser and Law, 1999). Bodies that meet normative standards, though technologically-enabled, are attributed freedom in the same measure that the enabling role is leeched away from technologies, including all the work, both historical and contemporary, that goes into making such enablement happen. Again, technologies get inscribed in a passive domain of things: “the commonsense external background of human and social action” (Latour, 1999, 308). Additionally, the consolidation of the normal subject involves habituation. When technologies can be smoothly incorporated, and transparency can result, this only ramifies the existing propensity of technologies to become obscure. In such cases, technologies are invisibilised because working, *and* transparent because familiarised. The body, for its part, can ‘trail behind’ action, to also become invisible (Ahmed, 2006). What really gets invisibilised here is the pre-established compatibility of technologies with some bodies: a compatibility that permits this very invisibilisation, that is not natural, and is the effect of ordering work. Moreover, habituation occurs in contexts where the prevailing common sense has the idea of active subjects and passive objects as an implicit premise, and in whose orderings the shape of the autonomous human subject is deeply ingrained. The upshot is that the normal subject, already common sense, is confirmed time and again—often on a habituated and pre-reflexive level—for those whose bodies already fit.

For atypical bodies such invisibilisation is often impracticable. Disturbances occur. Since neither relations nor body can disappear, transparency is less achievable. Moser suggests that “the distributions remain visible and present in the situation” (2006, 385). Indeed, an incongruity manifests in relations between body and world. This ‘visibilisation’ could provide an impetus for radical revaluation, were it accompanied by recognition that the congruence of any body whatsoever with environments is no natural occurrence, but the result of ordering work. However, this is made unlikely by the common-sense position in which the world is objective and independent: here, all bodies inhabit the same space, that affords the same opportunities to each, in the same way. This being so, when disruptions do occur, even allowing that these are arise from a mis-fit between body and world, the ultimate cause cannot be the world. After all, normal subjects can act there without disruption. The problem must instead flow from the body that does not fit (Garland-Thomson, 2011). Put differently, a common-sense picture of free subjects and passive objects cannot accommodate relational agency: when ‘visibilisation’ occurs, focus does not remain on relations. Intermundane technologies are especially germane here. Where embodied technologies are at least somewhat conspicuous when not working, when intermundane forms do not cooperate, they simply remain obscure. Overall, when disability occurs, the locus of disruption is shifted away from relations and towards the atypical body. It is made visible, even hypervisible, precisely as a problem. This is another way the heterogeneous and relational reality of disability gets reduced and simplified. A problem of disabling distributions becomes one of pathological bodies.

Concluding Remarks

Ability and disability are not inherent bodily properties. They are events, enacted by relations among bodies and extra-somatic bits and pieces of the world. Indeed, ability is different from 'normal ability'. Ability emerges from relations: "if the networks are in place, if the prostheses are working, then there is ability" (Moser and Law, 1999, 201). This holds for typical and atypical bodies alike. Each can enjoy ability. Merely atypical embodiment neither equals nor causes disability. Normal ability is different. It is that type of ability that occurs first, between a typical body and normalised relations; second, where technologies are ordered to allow such bodies to feel at ease in the world; and third, where relational aspects of ability get obscured. Disability, as I have discussed it, occurs, first, because normalised relations do not enable atypical bodies; second, because this produces a sense that the world is not generally hospitable; and third, because atypical bodies are made visible as problems. This is not an exhaustive explanation of disability. Disability is produced within a great many regimes, from religious to medical, moral to legal, to administrative and bureaucratic. What I have described is just one vector of its production that becomes imbricated with these others.

The organisation of technologies, then, is highly consequential. Living involves association with myriad technological elements. Some, as incorporated, may be intimately involved in that life. Others, while less intimate, still comprise a persistent dimension of activity. All are participants in engagements through which bodies constitute themselves. Atypical bodies find participants consistently unsympathetic. This attenuates agency, ungrounds habit, and erodes confidence in a world. Such effects unsettle, or even preclude, the establishment of secure footing from which to launch the projects that comprise a life. Resistance to these effects entails focus upon ability as much as disability: a recognition that ability is relational and distributed in every case; that the normal subject and its putative autonomy are effects of enabling technologies; that the primacy of the latter, and the invisibilisation of its technological enablement, have deleterious consequences for atypical bodies. Such recognition would help to dissolve sharp categorial distinctions between ability and disability, and could greatly expand the scope when imagining how all bodies might live with technologies.

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Notes

[1] Though this example is certainly open to criticism, like that of (Reynolds, 2017)

[2] I will not address the acknowledged differences or incompatibilities between actor-network theory and postphenomenology. For work on this topic, see (Langsdorf, 2015; Kroes and Verbeek, 2014; Verbeek, 2009)

[3] The others are hermeneutic relations (with technologies like wristwatches, that feature a readout or display that, when interpreted, gives a transformed relation with the world); and alterity relations (with, e.g.,

GPS devices or smart assistants, in which the technology is encountered in a self-other relationship as a 'quasi-subject'). See (Ihde, 1990)

[4] This concept resembles what Gilles Deleuze and Félix Guattari call an 'assemblage', and of course an actor-network. I have opted for different terminology because this concept also draws upon the phenomenological tradition to incorporate habituated relations with technologies. (Deleuze and Guattari, 1987; Law, 1992)

[5] I am not discussing chronic illness or chronic pain, about which there is debate about whether this is a brute reality, or is to some extent conditioned by social structures. These topics are very complicated, and fall outside the scope of this paper.

Works Cited

Ahmed, S. (2006) *Queer Phenomenology: Orientations, Objects, Others*. Duke University Press, Durham, NC.

Ahmed, S. (2007) A phenomenology of whiteness. *Feminist Theory*, 8, 149-168.

Bergson, H. (1988) *Matter and Memory*. Zone Books, New York.

Boorse, C. (1977) Health as a Theoretical Concept. *Philosophy of Science*, 44, 542-573.

Borgmann, A. (1984) *Technology and the Character of Contemporary Life*. University of Chicago Press, Chicago.

Buchanan, A.E. et al. (2000) *From Chance to Choice: Genetics and Justice*. Cambridge University Press, Cambridge.

Caeymaex, F. (2014) Critical and Political Stakes of a Philosophy of Norms: Part II: Theory of Norms and Social Criticism. In *Care of Life: Transdisciplinary Perspectives in Bioethics and Biopolitics,* (Eds, de Beistegui, M., Bianco, G. & Gracieuse, M.) Rowman & Littlefield, London, pp. 109-120.

Deleuze, G. (1988) *Spinoza: Practical Philosophy*. City Lights Books, San Francisco.

Deleuze, G. & Guattari, F. (1987) *A Thousand Plateaus: Capitalism and Schizophrenia*. University of Minnesota Press, London.

Esposito, R. (2012) *Third Person: Politics of Life and Philosophy of the Impersonal*. Polity, Cambridge.

Esposito, R. (2015) *Persons and Things: From the Body's Point of View*. Polity, Cambridge.

Feenberg, A. (2002) *Transforming Technology: A Critical Theory Revisited*. Oxford University Press, Oxford.

Foucault, M. (2001a) Space, Knowledge, and Power. In *Power: Essential Works of Foucault, 1954-1984,* (Ed, Faubion, J.D.) The New Press, New York, pp. 349-364.

Foucault, M. (2001b) The Birth of Social Medicine. In *Power: Essential Works of Foucault, 1954-1984,* (Ed, Faubion, J.D.) The New Press, New York, pp. 134-156.

Frost, S. (2016) *Biocultural Creatures: Toward a New Theory of the Human*. Duke University Press, London.

Galis, V. (2011) Enacting Disability: How Can Science and Technology Studies Inform Disability Studies? *Disability & Society*, 26, 825-838.

Garland-Thomson, R. (2011) Misfits: A Feminist Materialist Disability Concept. *Hypatia: A Journal of Feminist Philosophy*, 26, 591-609.

Ihde, D. (1990) *Technology and the Lifeworld: From Garden to Earth*. Indiana University Press, Bloomington and Indianapolis.

Ihde, D. (1993) *Postphenomenology: Essays in the Postmodern Context*. Northwestern University Press, Evanston.

Ihde, D. (2003) If phenomenology is an albatross, is postphenomenology possible? In *Chasing Technoscience: Matrix for Materiality,* (Eds, Ihde, D. & Selinger, E.) Indiana University Press, Bloomington, pp. 131-144.

Introna, L.D. (2014) Towards a Post-human Intra-actional Account of Sociomaterial Agency (and Morality). In *The Moral Status of Technical Artefacts,* (Eds, Kroes, P. & Verbeek, P.-P.) Springer, Dordrecht, pp. 31-53.

Kafer, A. (2013) *Feminist, Queer, Crip*. Indiana University Press, Bloomington and Indianapolis.

Kroes, P. & Verbeek, P.-P. (Eds.) (2014) *The Moral Status of Technical Artefacts* Springer, Dordrecht.

Langsdorf, L. (2015) Why Postphenomenology Needs a Metaphysics. In *Postphenomenological Investigations: Essays on Human-Technology Relations,* (Eds, Rosenberger, R. & Verbeek, P.-P.) Lexington Books, London, pp. 45-54.

Latour, B. (1988) Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer. *Social Problems*, 35, 298-310.

Latour, B. (1993) *We Have Never Been Modern*. Harvard University Press, Cambridge, MA.

Latour, B. (1994) On Technical Mediation – Philosophy, Sociology, Genealogy. *Common Knowledge*, **3**, 29-64.

Latour, B. (1999) *Pandora's Hope: Essays on the Reality of Science Studies*. Harvard University Press, Cambridge, MA.

Latour, B. (2003) The promises of constructivism. In *Chasing Technoscience: Matrix for Materiality,* (Eds, Ihde, D. & Selinger, E.) Indiana University Press, Bloomington, pp. 27-46.

Latour, B. (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford University Press, Oxford.

Latour, B. (2008) A Cautious Prometheus? A Few Steps Toward a Philosophy of Design (with Special Attention to Peter Sloterdijk). *Networks of Design, Proceedings of the 2008 Conference of the Design History Society,* 2-10.

Law, J. (1992) Notes on the Theory of the Actor-Network: Ordering, Strategy, and Heterogeneity. *Systems Practice*, **5**, 379-393.

Law, J. (1993) *Organizing Modernity: Social Order and Social Theory*. Wiley–Blackwell, Oxford.

Law, J. & Singleton, V. (2013) ANT and Politics: Working in and on the World. *Qualitative Sociology*, 36, 485-502.

Malafouris, L. (2016) *How Things Shape the Mind: A Theory of Material Engagement*. MIT Press, London.

Merleau-Ponty, M. (1964) The Primacy of Perception and Its Philosophical Consequences. In *The Primacy of Perception,* Northwestern University Press, Evanston, pp. 12-42.

Merleau-Ponty, M. (2012) *Phenomenology of Perception*. Routledge, London.

Mitchell, J.P. (2020) Disability and the Inhuman. In *Perception and the Inhuman Gaze: Perspectives from Philosophy, Phenomenology and the Sciences*, (Eds, Daly, A. et al.) Routledge, London, pp. 298-307.

Mol, A. (2002) *The Body Multiple: Ontology in Medical Practice*. Duke University Press, Durham.

Mol, A. (2010) Actor-Network Theory: Sensitive Terms and Enduring Tensions. *Kölner Zeitschrift für Soziologie und Sozialpsychologie. Sonderheft*, 50, 253-269.

Mol, A. & Law, J. (2004) Embodied Action, Enacted Bodies: the Example of Hypoglycaemia. *Body & Society*, 10, 43-62.

Moser, I. (2006) Disability and the promises of technology: Technology, subjectivity and embodiment within an order of the normal. *Information, Communication & Society*, 9, 373-395.

Moser, I. (2009) A body that matters? The role of embodiment in the recomposition of life after a road traffic accident. *Scandinavian Journal of Disability Research*, 11, 83-99.

Moser, I. & Law, J. (1999) Good passages, bad passages. In *Actor Network Theory and After,* (Eds, Law, J. & Hassard, J.) Wiley-Blackwell, pp. 196-219.

Paterson, K. & Hughes, B. (1999) Disability Studies and Phenomenology: The Carnal Politics of Everyday Life. *Disability & Society*, 14, 597-610.

Pyyhtinen, O. & Tamminen, S. (2011) We have never been only human: Foucault and Latour on the question of the *anthropos*. *Anthropological Theory*, 11, 135-152.

Ratcliffe, M. (2012) Varieties of Temporal Experience in Depression. *Journal of Medicine and Philosophy*, 37, 114-138.

Ratcliffe, M., Ruddell, M. & Smith, B. (2014) What is a "sense of foreshortened future?": A phenomenological study of trauma, trust, and time. *Frontiers in Psychology*, 5, 1-11.

Reynolds, J.M. (2017) Merleau-Ponty, World-Creating Blindness, and the Phenomenology of Non-Normate Bodies. *Chiasmi International*, 19, 419-436.

Reynolds, J.M. (2018) The Extended Body: On Aging, Disability, and Well-being. *Hastings Center Report: What Makes a Good Life in Late Life? Citizenship and Justice in Aging Societies*, 48, S31-S36.

Rosenberger, R. (2014) Multistability and the Agency of Mundane Artifacts: from Speed Bumps to Subway Benches. *Human Studies*, 37, 369-392.

Rosenberger, R. & Verbeek, P.-P. (2015) A Field Guide to Postphenomenology. In *Postphenomenological Investigations: Essays on Human-Technology Relations,* (Eds, Rosenberger, R. & Verbeek, P.-P.) Lexington Books, London, pp. 9-41.

Scully, J.L. (2014) Disability and Vulnerability: On Bodies, Dependence, and Power. In *Vulnerability: New Essays in Ethics and Feminist Philosophy,* (Eds, Mackenzie, C., Rogers, W. & Dodds, S.) Oxford University Press, Oxford, pp. 204-221.

Sharon, T. (2014) *Human Nature in an Age of Biotechnology: The Case for Mediated Posthumanism*.

Shildrick, M. (2012) *Dangerous Discourses of Disability, Subjectivity and Sexuality*. Palgrave Macmillan, Basingstoke.

Solomon, R.C. (1988) *Continental Philosophy Since 1750: The Rise and Fall of the Self*. Oxford University Press, Oxford.

Spinoza, B. (1996) *Ethics*. Penguin, London.

Stiker, H.-J. (1999) *A History of Disability*. University of Michigan Press, Ann Arbor.

Thrift, N. (2004) Remembering the Technological Unconscious by Foregrounding Knowledges of Position. *Environment and Planning D: Society and Space*, 22, 175-190.

Thrift, N. (2008) *Non-Representational Theory: Space | Politics | Affect*. Routledge,

Tremain, S. (2018) *Foucault and Feminist Philosophy of Disability*. University of Michigan Press, Ann Arbor.

Verbeek, P.-P. (2009) Cultivating Humanity: Towards a Non-Humanist Ethics of Technology. In *New Waves in Philosophy of Technology,* (Eds, Berg Olsen, J.K., Selinger, E. & Riis, S.) Palgrave Macmillan, Basingstoke, pp. 241-264.

Watkin, C. (2017) *French Philosophy Today: New Figures of the Human in Badiou, Meillassoux, Malabou, Serres and Latour*. Edinburgh University Press, Edinburgh.

Weiss, G. (2008) *Refiguring the Ordinary*. Indiana University Press, Bloomington.

Zylinska, J. (2010) Playing God, Playing Adam: The Politics and Ethics of Enhancement. *Bioethical Inquiry*, 7, 149-161.

Embodied practices of prosthesis

By Maria Bee Christensen-Strynø & Camilla Bruun Eriksen

Abstract

While the prosthesis is often thought of as a technology or an artefact used to 'fix' or make 'whole' a disabled body, it has also become an important figuration and metaphor for thinking about disabled embodiment as an emblematic manifestation of bodily difference and mobility. Furthermore, the ambiguity and broadness of prosthesis as an object and a concept, as well as its potential as a theoretical and analytical thinking tool, show up in widely different areas of popular culture, art and academic scholarship. In this article, we explore the opportunities of the ways in which prosthesis might be a helpful and productive figure in relation to framing, analyzing and understanding certain healthcare-related practices that are not traditionally associated with disability. Our aim is to suggest new ways of building onto the idea of the performative value of the prosthetic figure and its logics as a continuum through which very different forms of embodied practices could be meaningfully understood and analyzed. Thus, we argue that the logic of the prosthesis can be helpful in uncovering tensions related to idealistic and dominant ideas about health and embodiment. First, we engage with the theoretical discussions from cultural studies, including critical disability studies, in which we broaden the scope of the concept of prosthesis. Second, we introduce and discuss two illustrative case examples in the form of dance therapeutic practices for people with Parkinson's disease and group therapeutic practices in male-friendly spaces. In doing so, we seek to raise new questions about the ongoing cultivation of bodily and health-related interventions through the lens of the prosthetic spectrum, which we have labelled *embodied practices of prosthesis*.

KEYWORDS: Prosthesis, embodied practices, disability, therapeutic and healthcare-related interventions.

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Introduction: Setting up the interrogation

Back in 2014 the Latvian-British pop artist Viktoria Modesta released the music video *Prototype* produced specifically for British Channel 4's disability media awareness-raising campaign *Born Risky*.[1] "Forget what you know about disability", the campaign told us, "Some of us were born to be different. Some of us were born to take risks". Throughout the video, Modesta is, much like any other fashionable and replaceable accessory, 'wearing' a number of noticeable prosthetic legs; one is a black metal spike, another is fluorescent and lights up, and a third is covered in sparkling crystals. The video's mixture of both fleshly and prosthetic body parts, shifting costumes, dancing ensembles, fashion excess and exclusivity, not only reminds us – as is intended – that being born (or becoming) disabled can be negotiated in creative ways, or that bodily diversity should be considered a location of originality. But also, that an object like the prosthesis does not exist outside of mainstream consumption or pop-cultural consumerism, and rather than being merely an addition to a human body, it may even extend into other areas of our cultural imaginations. This is, for instance, demonstrated by Danish artist Jesper Just who in the summer of 2019 presented the exhibition *Servitudes* at Kunsthal Charlottenborg.[2] The exhibition, an architectural installation, consisted of eight synchronized nine-minute films on a loop revolving around three characters of which one was "the iconic One World Trade Center in New York, a prosthesis of the city and a phantom limb occupying the void left by the traumatic loss of the Twin Towers" (Kunsthal Charlottenborg 2019). Using the prosthesis, Just investigates concepts like agency, hybridity and (dis)ability and in doing so, attempts to blur the lines between machines and organisms, fiction and experience (Ibid.).

Both Modesta's music video and Just's art installation present us with expansive versions of what prosthesis might be or signify, showing off the ambiguity and broadness of prosthesis as an object and a concept, as well as its potential as a theoretical and analytical thinking tool. As already noted by Maria Bee Christensen-Strynø (2016), Modesta's use of prosthetics in her video is an illustrative example of how popular cultural imagery of, in this case, disability can serve as both a form of *resistance* as well as *incorporation*; a point we will return to and wish to explore further in this article by paying special attention to the prosthesis – or what we are calling *embodied practices of prosthesis*.

While the prosthesis has been (and often still is) thought of as a technology, or an artefact, used to 'fix' or make 'whole' a disabled body, it has also (quite contrarily) proven useful for critical disability scholars in contesting "the illusion of an originary unified and singular body, exposing instead the fluidity of categorical boundaries [and raising] fundamental questions about the hybrid nature of intercorporeality" (Shildrick 2017: 142). As such, the prosthesis within critical disability studies has become an important figuration and metaphor for thinking about disabled embodiment as an emblematic manifestation of bodily difference and mobility not only in the sense of confinement and limitation (Campbell 2009; Sawchuk 2013), but also as possible transgressions and expansions of normative bodily functionality as well as the somatechnic interventions and alterations shaping our everyday lives (Cadwallader & Murray 2007; Shildrick 2015; Sullivan & Murray 2009).

In this article, we explore the opportunities of the ways in which the prosthesis might be a helpful and productive figure in relation to framing, analyzing and understanding communal healthcare-related practices that are not traditionally associated with disability. While our aim here is to broaden the scope of the concept of prosthesis in ways that can help us uncover tensions related to dominant and idealistic conceptions and notions of health and embodiment, we are also deeply aware of the potential pitfalls of extending the concept of prosthesis. Therefore, we want to make clear from the beginning that our intention is not to argue for an all-encompassing *universal* understanding of the prosthetic concept. Rather the aim of this article is to consolidate the critical value of the concept and its embeddedness within a disability theoretical framework, and thus its indisputable connections to the lived experiences of (some) disabled people, while also suggesting ways of building onto the idea of the performative properties of the prosthetic figure and its logics as a continuum through which very different forms of embodied practices could be meaningfully understood and analyzed.

Through our current work on two different research projects,[3] we have become particularly concerned with tensions occurring in the developments and formations of collective therapeutic practices and prevalent ideas and discourses of health, treatment and cure, which in many aspects seem to manifest themselves as performative enactments through specific logics deriving from the concept of the prosthesis. Drawing on our research fields through two illustrative case examples, *dance therapeutic practices for people with Parkinson's disease* and *group therapeutic practices in male-friendly spaces*, we also, in turn, hope to show how these logics interestingly emerge as blurry tensions of binary relations between notions of *conformity and resistance* as well as *extension and integration*.

We start out by engaging with the theoretical discussions of the prosthesis that have taken place within cultural studies, including in critical disability studies, in order to flesh out and later on attempt to broaden the scope of the concept of prosthesis. Next, we introduce and discuss our two illustrative case examples and in doing so seek to raise new questions about the ongoing cultivation of bodily and healthcare-related interventions by activating the performative properties of the prosthesis as an analytic lens.

What is in a word?

The term prosthesis is used to describe the "replacement of a missing part of the body with an artificial one" and first appeared in medical texts in the early eighteenth century (Wills 1995: 215). However, the use of different tools and mechanical aids to enhance bodily functionality is, of course, much older and not solely correlated to medicine. A point taken up by Elaine Scarry in *The Body in Pain: The Making and Unmaking of the World* (1985) in which she argues that *all* artefacts in some way or other recreate and extend the body. Following the work of Scarry, Ellen Lupton and Abbott Miller have pointed out that while many of us might not grant it much thought in our everyday use of such objects, "[c]hairs supplement the skeleton, tools append the hands, clothing augments the skin" (1996: 9). As such, "[f]urniture and houses are neither more nor less interior to the human body than the food it absorbs nor are they fundamentally different from such sophisticated prosthetics as artificial lungs, eyes and kidneys" (Ibid.). Keeping in mind, then, that bodily materiality is always vulnerable and inscribable, all bodies are, in different ways, prostheticized. Some bodies, however, are more closely linked to and associated with prosthesis – especially those marked by disability. As underlined by disability scholars David T. Mitchell and Sharon L. Snyder prostheses are constituted within *a regime of tolerable deviance*: "If disability falls too far from an acceptable norm, a prosthetic intervention seeks to accomplish an erasure of difference altogether; yet, failing at that, as is always the case with prosthesis, the minimal goal is to return one to an acceptable degree of difference" (2000: 7). Often put forward as an obvious, indisputable and necessary 'solution' to a body deemed lacking and/or unfunctional, the prosthesis carries with it notions of lack, compensation, correction and normalization. Thus, within a framework of rehabilitation and therapy, the prosthesis holds the promise of a 'return to normal'.

Since its first appearance in medical texts the prosthesis has been taken up by a wide range of scholars and is now an interdisciplinary term used in vastly different ways. An example of this is feminist scholar and writer Audre Lorde's use of the prosthesis in her discussions of empowerment, subjectivity and resistance. In the third and last chapter of *The Cancer Journals* (1980) entitled "Breast Cancer: Power vs. Prosthesis", Lorde centers her writing around the question of whether or not to attempt to normalize her post-surgical body by wearing breast prostheses after her double mastectomy. Underlining that such a decision is always a personal one, Lorde herself posits that the breast prosthesis is a societal misogynist cover-up reducing women to a matter of physical appearance. In framing the prosthesis as a problematic 'quick fix', Lorde simultaneously deconstructs notions of healing and reconstruction therapy and in doing so bids a powerful critique of the way a prosthesis, according to her, inherently offers the meaningless comfort of "*nobody will know the difference"* (Ibid.: 53, emphasis added). For Lorde, then, the prosthesis is firmly intertwined with feminist politics of visibility, silence and the body, and her writing on the matter has inspired a large (and still growing) body of related work (e.g. Al-Zubi 2007; Crompvoets 2012; Herndl 2002; Major 2002; Reiffenrath 2016; Waples 2013).

In a similar vein, in terms of the politics of visibility, is Mitchell and Snyder's use of the prosthesis in their investigations into the traditions of cultural representation of disability. In their highly influential book *Narrative Prosthesis. Disability and the Dependencies of Discourse* (2000), the two authors develop a narrative theory of the discursive dependency on disability in literature and film, asserting that "disability has been used throughout history as a crutch upon which literary narratives lean for their representational power, disruptive potentiality, and analytical insight" (2000: 49). According to Mitchell and Snyder, "[t]he very need for a story is called into being when something has gone amiss with the known world, and, thus, the language of a tale seeks to comprehend that which has stepped out of line. In this sense, stories compensate for an unknown or unnatural deviance that begs an explanation" (Ibid.: 53). As such, stories tend to follow a specific pattern: First, a difference is exposed which, secondly, calls for an explanation that, thirdly, continues to bring difference to the forefront of the story before, lastly, the difference can be 'fixed' and the story brought to an end (Ibid.) For Mitchell and Snyder, the prothesis makes possible an analytical framework for critical interpretations of cultural representations of disability.

Lastly, a popular take on prosthesis, perhaps not surprisingly, are writings on and theorizations of the prosthesis lacing together bodies and technology (e.g. Christie & Bloustien 2010; Goggin & Newell 2005; Reeve 2012; Shildrick 2017), as is the case with the emerging field of *somatechnics* grounded in the position that bodies and technologies do not exist outside of, or separate from, one another as bodily being "is always already technologized, and technologies are always already enfleshed" (Sullivan & Murray 2009: 7). Using the prosthesis both as metaphor and specific empirical point of entry, disability and somatechnical scholar Margrit Shildrick has worked extensively on boundaries of embodiment:

> *As I understand it, it is in the nature of prostheses to effect powerful transformations to the embodied subject that move beyond mere modification towards the far more radical step of rethinking the limits of the human. As both troubling and productive, in invoking an inevitable hybridity, those supplements to the human body raise the question of discrete corporeal boundaries to another register (2013: 271).*

Akin to Shildrick's somatechnical thinking, scholars like Elizabeth Grosz as well as Donna Haraway have in their ground-breaking works (respectively: *Volatile Bodies: Toward a Corporeal Feminism* (1994) and "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective" (1988)), used the prosthesis as a metaphor for comprehending and unfolding the different ways in which science and technology shape and are shaped by our bodies.

Contesting the cultural imaginations of prosthesis: Not feeling posthuman

Along with the gradually expanded conceptual and theoretical interests in prosthesis, especially in the fields of cultural theory and arts-based research (e.g. Garoian 2013; Grosz 1994; Mitchell & Snyder 2000; Shildrick 2013, 2015, 2017), there has also been a number of critics voicing their concerns with these, in some instances, very broad definitions of and approaches to prosthesis. In slightly crude terms, Katherine Ott asserts that much work from cultural theory has promoted inaccurate and erroneous definitions of prostheses (2002: 2f.). As a curator of medical science and located within a scholarly context of history, one could easily write off Ott's criticism as being rooted in a strong disciplinary positioning of prosthesis in her own particular field of research. Yet, the critical stances toward the ampler theorizations of the prosthesis are also echoed within frameworks of cultural studies. As Vivian Sobchack notes in an account of her own lived experience of being an amputee living with a prosthetic leg:

> *When I put my leg on in the morning, knowing that I am the one who will give it literal (if exhaustible) vitality even as it gives me support, I don't find it nearly as seductive a matter – or generalized an idea – as do some of my academic colleagues (Sobchack 2006: 17).*

Being a media and cultural theorist herself, Sobchack expresses an internal skepticism towards a tendency of sensationalizing 'the prosthetic' through its elusive metaphorical value, which she calls "a tropological currency for describing a vague and shifting constellation of relationships among bodies, technologies, and subjectivities" (Ibid.: 19). With reference to Sarah S. Jain (1999), who has investigated the trope of prosthesis within a framework of science and technology studies' fascination with human-technological relationships and boundaries, Sobchack points out that the concept of prosthesis in most disciplines (except in disability studies) has been blurred to such a degree that the literal and material connections of prosthesis to lived embodied experience have been entirely forgotten (Sobchack 2006: 20). In this sense, Sobchack also reiterates Ott's criticism that "[c]yborg theorists who use the term 'prosthesis' to describe cars and tennis rackets rarely consider the rehabilitative dimension of prosthetics, or the amputees who use them" (Ott 2002: 3).

The criticism of contemporary uses and conceptualizations of prosthesis in such academic settings thus reminds us that prosthetic realities are, in fact, still made up of people who, in Sobchack's words, "actually use prostheses without feeling 'posthuman' and who, moreover, are often startled to read about the hidden powers that their prostheses apparently exercise both in the world and in the imaginations of cultural theorists" (2006: 20). However, despite placing important critiques of the imprecise and disembodied notions of the prosthesis, the critical voices offered by Sobchack and others still resonate with the idea that the experiences of wearing, using and living with prostheses challenge and broaden how we think about embodied practices of our everyday lives. Sobchack acknowledges that the convergence of fleshly and synthetic bodily materiality (as well as *phantom limbs* – see Sobchack 2010), allows the body to be re(con)figured into new 'ensembles' that are "*organically* related in practice" (Sobchack 2006: 26, emphasis in the original), which might even be the cause of an extended or heightened bodily awareness (Ibid.: 32).We shall return to this particular idea later on in relation to our two case examples.

As such, the retention of the prosthesis in relation to the lived experiences of material bodies is not in opposition to the thought that some form of 'prosthetic logic' exists along the lines and is representative of, for instance, the somatechnic interventions and augmentations of our everyday lives. As noted by Shildrick:

> *The current fascination with and critique of the prosthetised body arises not from any sudden change which would demand radical reconfigurations of the concept of human corporeality, but rather from the ubiquity and availability of technological interventions into the body that have pushed the issue into lay consciousness (Shildrick 2013: 271).*

Rather than merely encouraging bizarre cyborgian abstractions as explanations for a technologized-driven society, it is, according to Shildrick, possible to understand the prosthesis as a critical approach to rethinking human hybridity in ways that have also gained a certain everyday ordinariness and recognizability; one that does not necessarily cancel out the subjective and lived experiences of human corporeality. While not uncomplicated, we find this observation of prosthetic ‘commonplaceness’ to be especially intriguing for reasons that we will now endeavor to explore as forms of *embodied practices of prosthesis*.

Testing the waters: Embodied practices of prosthesis

In continuation of the conceptual developments and the criticisms thereof, our aim in this article is to further an understanding of the prosthesis by suggesting that the broadened recognition and popularization of prosthesis (in its sum of being a figure/trope/metaphor/material object/theoretical concept) may also hold a productive potential to be explored and understood through its performative properties in relation to the embodied experiences and expressions in certain health-care-related practices. These, we detect, resonate both with the theoretical discussions of bodily lack, replacement and enhancement, as well as with tangible human bodies involved in processes of rehabilitation and therapeutic interventions.

Our framing of the prosthesis in relation to these health-oriented practices builds on performativity theory as developed by (amongst others) Judith Butler. Butler’s highly influential work on performativity and subjectivity calls into question the existence of boundaries between material and immaterial entities by instead suggesting performativity as a form of repeated stylization involving a myriad of acts that “congeal over time to produce the appearance of substance, of a natural sort of being” (Butler 1990: 33). Thinking along these same lines, we want to suggest that the prosthesis can be viewed as an ‘entity’ performatively constituted within and through the rigid and regulatory processes of recognition governed by norms and power.

By explicitly reframing the prosthesis through its performative properties it suddenly also becomes a matter of prosthetic enactments in which something apparently much more mundane than an artificial limb, such as therapeutic dancing, could emerge as a prosthetic practice. This suggestion is, of course, an abstraction from the conventional notion of the prosthesis as merely a physical object. Yet, as we have discovered from delving into the many theoretical discussions of prosthesis, it is a concept resting upon ambiguous logics which often seem to find legitimization in both rehabilitative, therapeutic and normalizing functions, as well as in the ability to expand and enhance non-conventional ways of embodied being (e.g. Booher 2010). While this exact tension, or what we could call *the equivocal logic of the prosthesis*, may find its paragon expression in traditional prosthetic devices, we have also become more and more aware of the performative complexities of prosthetic logics present in certain forms of health-oriented practices.

We are aware that our suggestion of instrumentalizing the prosthesis through its performative properties, and hereby also allowing it to be viewed as a set of extended embodied practices, thus continues to be in an exposed position of being rejected as yet another ‘casual abstraction’, especially because none of our illustrative case examples are directly connected to bodily experiences of the presence and absence of (non-)fleshly human limbs. Nevertheless, we hold that the productive potential of broadening the scope of the concept of prosthesis has a significant analytical value while we, at the same time, wish to stay sensitive towards not trivializing and diminishing the real-life narratives of amputees and their embodied experiences. In other words, we wish to show that an understanding of the prosthesis as *neither* simply ‘disembodied metaphor’ *nor* ‘everyday-embodied-technology’ but instead as a set of social and performative practices, or collective *doings,* makes the ambiguous yet productive capacity of the concept of the prosthesis intelligible. As we shall see, then, our examples *both* (re)produce the prosthesis’ normalizing form *and* hold the potential to resist prevailing understandings of how health should be embodied; a process we have named *embodied practice of prosthesis*.

Furthermore, our motivation for highlighting the productive potential of the concept of prosthesis has additional implications which are related to the cultivation of the field of critical disability studies and its ‘tool-box treasuries’. Therefore, we think it would be helpful to understand why we decided to write this article in the first place. Both of us, the authors of this text, position ourselves within or with close ties to the field of critical disability studies (see e.g. Christensen-Strynø 2018, 2020; Christensen-Strynø & Eriksen 2020; Eriksen 2017), but – as is the case for many disability scholars – we are also situated within interdisciplinary research contexts and communities of cultural, media and communication studies, through which our approaches to and through disability are continuously shaped and adjusted. Our locations in academic settings that are, more often than not, grounded in areas that do not have specific disability-related entry points and frameworks (which is also the case in our current research projects), have taught us to think through critical disability perspectives as a productive prism for in-depth scrutiny of the intersections of bodily and embodied aspects of privilege, marginalization and power dynamics that apply to a wide range of social contexts and practices. In this sense, we firmly believe that critical disability studies *as a discipline,* as well as its developments of theoretical discussions of specific concepts such as prosthesis, compels us to pose questions that sometimes reach far beyond the scope of disability as a category in and of itself.

Dan Goodley states that “[c]ritical disability studies start with disability but never end with it: disability is the space from which to think through a host of political, theoretical and practical issues that are relevant to all” (Goodley 2013: 632). Following Goodley, we believe that while the concept of prosthesis may be inseparably linked to certain forms of disabled embodiment, its inherent logic also extends to and allows us to raise critical discussions about other and more normative forms of embodied practices, even if these are only in-part, or not at all, directly associated with disability. More precisely, by accepting the performative properties of the prosthesis as ubiquitous regulatory embodied processes, it becomes a concept that concerns most (if not all) of us, rather than a few. A broadened conceptualization of prosthesis as an integral part of regular embodied practices could thus serve as a critical lens for understanding some of the inner workings of not only particular forms of disability, but also more general therapeutic and rehabilitating practices as represented in our two case examples. Consequently, a primary motivating factor for writing this article is to stress the importance and relevance of critical disability theoretical frameworks and concepts for broader discussions of our everyday social realities.

That being said, we are not interested in the theoretical exercise of applying the concept of prosthesis to just any everyday social practice. As mentioned, our current work on two different research projects has confronted us with particular tensions that occur in the developments and formations of collective therapeutic practices and prevalent ideas and discourses of health, treatment and cure. While of course different from each other in a variety of ways, the two examples do share similarities that we believe make them interesting as prosthetic enactments. Most obvious perhaps, they are both examples of therapeutic and rehabilitative inspired social practices taking place within collective communities with close ties to contemporary and normative notions of health and embodiment.[4]

To sum up, we believe that a broadened conceptualization of prosthesis as an integral part of certain health-related practices holds a productive potential not only in relation to disability, but also when exploring forms of embodiment involved in more general therapeutic and rehabilitating practices as represented in the following two case examples.

Dance therapeutic practices for people with Parkinson’s disease

In recent years therapeutic dancing classes and related forms of arts-based therapies in relation to Parkinson’s disease (PD) have increased in popularity (Aguiar et al. 2016; Hackney & Bennett 2014; Houston 2019; McGill et al. 2014). Research indicates that dance may help to delay or slow down the development of symptoms of PD, while another emerging perspective is the experiences of dance as a valued social activity among people living with PD (Houston 2019; Parkinson s.d.).

Reading PD-related dance activities through the lens of prosthetic logics initially draws the attention towards, on the one hand (or another optional limb), the utilizable and technical qualities of dancing as a 'prosthetic crutch', reflecting the compensatory and rehabilitative properties of a prosthetic device. On the other, there are the obvious indications of further considering the questions whether the practice of dance extends, modifies and ultimately changes people with PD's bodies and minds in new ways, especially through the social and artistic dimensions of dancing together. Although this may at first seem a rather simplified transference of prosthetic logics to the areas of PD and dance, these are, in fact, what we would consider to be the main qualifying markers of an embodied practice of prosthesis. Yet, in order to flesh out this idea more thoroughly, and to offer a more complex analytical understanding, we will seek to address the composite entanglements of the prosthetic properties in relation to PD and dance as an emerging social activity which seem to latch onto broader discussions of established notions and norms about health and embodiment.

People with PD are diagnosed within the context of neuropathology, and the progressions of illness are primarily managed through medical healthcare (Parkinson s.d.). However, the PD diagnosis, which is broadly categorized as a chronic neurodegenerative condition, known to affect the motor system in different ways and over time, is not easily characterized by uniform courses of illness and treatment. Rather the diagnoses and treatments are informed and framed by unpredictable progressions of a variety of symptoms, such as tremors, rigidity and slowness, and a life course possibly affected by a wide range of accompanying health conditions. Consequently, areas of non-medical healthcare in relation to PD have also been given increased attention, primarily through physiotherapeutic guided exercising (Ibid.). In Denmark, *Parkinsonforeningen* (The Parkinson's Association) encourages people with PD to exercise on a regular basis which is based on the reasoning that people with PD are at a much greater risk of becoming physically inactive, and which, as it is articulated on the association's website, may cause various 'lifestyle' diseases and, furthermore, may lead to social isolation and loneliness (Ibid.). In this sense, the non-medical perspective of PD treatment correlates strongly to the biomedical area of focusing on counteracting physical deterioration, but it also accentuates the social consequences and underlying social norms of living with a chronic health condition as PD.

Highlighting the dual logic in the non-medical treatment of PD might seem quite trivial but is important to recognize as this attitude also flows into the ways in which dance is being positioned in the discourse of PD treatment. Although dance is framed, first and foremost, as a social activity intended to create shared experiences of joy (Ibid.) by linking aesthetic values to well-being (Houston 2019), it also, at least in part, seems to find its validation in the direct effects it might have on relieving physical symptoms of PD. This, for instance, becomes quite clear from interviewing PD dancers about their personal experiences with dancing,[5] as many of the interviewees chose to highlight that through dance they experience reductions of tremors and improvements in fine motor skills. Parts of these self-narrations seem to be closely connected to dominant ideas and guidelines about health as obtained through treatment and bodily intervention. From this point of view, the connection to the aiding properties of the prosthesis does not seem too far out of sight. Thus, it also becomes more obvious that the act of dancing, as well as dance as a discipline and an art-form, have tool-like characteristics that work in disciplinary and stabilizing ways. Furthermore, and with Lorde's (1980) understanding of 'the prosthetic quick-fix' in mind, dance and dancing as a form of rehabilitating therapeutic practice for people with PD seems to be profoundly entwined with ideas about maintaining or 'returning to normal' through a common understanding of dance as a social practice that is not traditionally associated with illness. However, whereas Lorde emphasizes the oppressive consequences of prosthetic cover-ups, it could also be argued that the 'return to normal' in relation to PD dance might lead to other less despondent conclusions.

As opposed to physiotherapeutic exercising, which is medically recommended and made eligible for subsidy in PD healthcare treatment in Denmark, dance as a social practice upholds a position of being a chosen activity. While also a complicated policy issue, the important point to be made here is that the practice of dancing, to some extent, signals independence and autonomy. Not only is the dancing PD body given an opportunity to reclaim an identity not entirely tied to medically informed understandings of illness, it is also allowed to regain an everyday experience of agency and control with individual preferences and values, for instance, of aesthetic pleasure and artistic performance. This perspective thus reflects the 'enhancing' qualities of dance as an embodied practice of prosthesis, as well as its possible social transformative potential. Returning to Sobchack's appreciation of her body as an 'organic ensemble' in which her prosthetic leg has made her "more – not less – intimate with the operation and power of [her] body" (2006: 32), we might also come to think about the ways in which the dancing PD bodies acquire new forms of strengths, skills and sensory awareness, even if these are also deeply rooted in biomedicalized needs and desires for rehabilitation and cure.

Group therapeutic practices in male-friendly spaces

Originating from Australia in the mid-1990's, the now international and non-profit organization *Men's shed* operates on a local level promoting social interaction and community building with the overall aim of increasing men's quality of life (see e.g. Golding 2015; Ford, Scholz & Lu 2015). Organized in Denmark by the *Forum for Mænds Sundhed* (Men's Health Forum), the social meeting places called *Mænds Mødesteder* (Men's meeting sites) are part of the organization's two-fold ambition: To support knowledge sharing between scientists, clinicians, therapists and health workers invested in men's health, diseases and well-being, and to participate in a wide range of activities that focus on and aim to raise awareness of men's health (Forum for mænds sundhed, s.d.). The very existence of a highly popular organization like *Men's shed* along with others (e.g. global NGO *Movember*[6] and *Men's shed's* own sub-project *Spanner in the Works,*[7] both designed to encourage men to learn about health and seek regular medical check-ups) points to and supports a common notion that men's health is, in fact, in crisis and in dire need of attention. A recent report by the World Health Organization (WHO) backs this claim in stating that men, compared to women and across categories such as socioeconomic status, sexuality, race, ethnicity and age, access primary care health services less frequently, are less involved in preventive initiatives and health promotion and are less health-literate (WHO 2018: 66).

According to Mitchell and Snyder it is exactly the perception (real or not) of a 'crisis' or 'special situation' that historically has made disabled people the subject of governmental policies and social programs aimed at 'fixing' bodily as well as mental and cognitive 'shortcomings' (Mitchell & Snyder 2000: 47). While it is not our intention to collapse the two categories by arguing that men – qua their 'inability' compared to women to seek help and talk about their feelings – should be considered disabled, we want to draw attention to the similar 'special situation' or even 'crisis' created around notions of men's health in recent years. By framing men's health as lacking and in crisis the possibility as well as need for intervention is established and thus, much like was the case of PD, a seemingly non-medical initiative like 'male friendly spaces' easily and neatly aligns itself with broader biomedical logics of 'prevention' and 'treatment' invested in curbing mental illnesses. Thus, a 'male-friendly space' like the shed can be thought of as a therapeutic and rehabilitative space constituted by the social interactions and activities taking place within in but also, with our embodied practice of the prosthesis in mind, as a prosthetic device or 'crutch' used to, if not 'fix', then perhaps optimize or enhance what is framed by *Men's shed* as an uncultivated potential in men('s health). Aimed at helping men 'deal' with, or perhaps even learn for the first time how to better manage, their health, *Men's shed* stresses the generally positive outcome of 'male-friendly spaces' but also the vital impact such therapeutic spaces can have on men's lives:

> *Sheds are about meeting like-minded people and having someone to share your worries with. They are about having fun, sharing skills and knowledge with like-minded people and gaining a renewed sense of purpose and belonging. As a by-product of all of that they reduce isolation and feelings of loneliness, they allow men to deal with mental health challenges more easily and remain independent, they rebuild communities and in many cases, they save men's lives (Men's shed s.d.).*

While the biopolitical and normalizing potential of the prosthesis in regards to the management of health might be hard to overlook, it is also possible to think about such acquired practices (like talking about one's feelings with others) as something that extends one's abilities not just on an individual level but also through the simultaneous reconfiguration of traditional masculinity ideals. Thus, the description of what a shed 'is about' quite accurately points to the ambiguous and slippery quality of the prosthesis, that we throughout this article have tried to expand on, and as such underlines our suggestion, namely that the performative, social and collective doings (e.g. the 'sharing skills and knowledge') taking place amongst members might be viewed – with its inherent rehabilitative and compensatory but also enhancing potential in mind – as a no less prosthetic matter than any other prosthetic device (e.g. a wheelchair, a crutch, a prosthetic arm) or limb.

In addition, it is worth noting the overall popular use of the term 'integration' in relation to the prosthesis, as the final aim of any prosthesis, more often than not, is to ensure the amputee the independence needed in order to be 'integrated into society' (e.g. through promotions of equal access to and opportunities for education, work and housing). An example of this can be found in praise given to *Men's Shed* by the WHO stating that the organization "breaks down gender-based barriers to health-care access while *integrating* men as active and healthy members of their community" (WHO 2018: 70, emphasis added).

While we want to be cautious not to reduce the prosthesis to a matter of semantics, we find it important to acknowledge just how common, widespread and almost invisible the logic of the prosthesis operates. This is something a more performative-oriented approach to the prosthesis might help us to do by pointing to not only particular devices integrated in various ways into and onto the body but to the kind of social and collective health and rehabilitation activities that most of us, in some way or another, take part in on an everyday basis in order to be and feel part of a given community. Thus, paying closer attention to the various ways in which the logics of the prosthesis permeate our ways of thinking and 'doing health' may help us understand the body as it emerges in and through various forms of health practices that seek to optimize, stabilize and discipline.

Concluding remarks

In this article, we have focused on the productive capacities of broadening the scope of the concept of prosthesis. Through our engagement with different takes on the usefulness of prosthesis in a variety of academic discussions within the traditions of cultural studies and critical disability studies, we have argued that the ambiguousness of the concept fruitfully demonstrates the ways in which certain social health practices performatively enact prosthetic logics as embodied practices of prosthesis.

While this is by no means meant to be a comprehensive analysis of the ways in which prosthetic logics operate in relation to dance therapeutic practices for people with PD and group therapeutic practices in male-friendly spaces, it seems that through the lens of the prosthesis we are offered a way to critically analyze and display some of the important nuances in the negotiation and sustainment of health and embodiment in very different social settings. With our two case examples we have attempted to show that a broadened conceptualization of prosthesis as an integral part of certain embodied practices holds a productive potential not only in relation to disability but also when exploring forms of embodiment involved in these more general therapeutic and rehabilitating practices.

Through the duality of both the prosthesis' therapeutic and corrective properties, as well as its inherent enhancing and transformative potential, our two illustrative case examples underline the prosthesis' inevitable entanglement with health-optimizing and biomedical informed notions of prevention, rehabilitation and cure. The two examples illustrate how some health-related practices, in all their diversity, can help make visible the workings of an underlying set of values preserving and promoting individual bodily control as well as a broader societal desire for accountability, independence and autonomy. Thus, while therapeutic dance for people with PD may seek to rehabilitate 'lost' bodily skills and control, male-friendly therapeutic spaces like *Men's shed* aim at enhancing men's health-related competences thought to be 'missing' in the first place.

In conclusion, we have made a case for operationalizing the concept of prosthesis towards a broader spectrum of bodily and healthcare-related interventions, arguing that this does not have to be at the cost of more direct and tangible versions of prosthetic expressions and experiences. On the contrary, our hope is that our reframing of the concept can be a helpful contribution in creating more access to the productive yet often overlooked potential of the many important concepts and theories from critical disability studies.

Notes

1 See http://www.viktoriamodesta.com (Accessed on 29-08-2020).

2 See https://kunsthalcharlottenborg.dk/en/exhibitions/jesper-just/ (Accessed on 29-08-2020).

3 *Dancing with Parkinson's* (2019-2021) is a collaborative research project in which people with Parkinson's disease and their relatives reflect on their bodily, sensory and aesthetic experiences with dance. Based on dialogic communication theory and through the use of a variety of creative collaborative methods, the aim of the study is to co-create and share knowledge that qualifies patient-involved treatment and the use of dance as a therapeutic art activity.
The research project *Medicine Man* (2018-2022) explores how everyday cultures and perceptions of middle age men's bodies unfold when masculinity is increasingly both mediatized and medicalized, and is based on a theoretical framework of somatechnics and assemblage theory. The project considers medicalization as a cultural phenomenon, which emerges inseparably from contemporary media, and thus adds humanistic research to health and social sciences about how mediatized culture shapes the body and its medicalized interventions.

4 In addition to stressing the exploratory mindset of the linkages between the prosthetic logics and our chosen examples, we also want to emphasize that we are not, per se, critical toward communities and organizations whose purposes are to prevent and reduce loneliness, or to increase the quality of life for people with chronic illnesses. While being mindful about not diminishing the possibly empowering experiences of people who choose to be part of and identify with these specific practices, we do, however, find it equally important to identify and discuss the underlying logics of the ways in which such practices emerge and are being sustained.

5 The interview material from the research project *Dancing with Parkinson's* consists of 46 qualitative interviews conducted with PD dancers (31), relatives (8) and dance instructors (7) about their personal bodily and sensory experiences with therapeutic dancing classes for people with PD in the greater capital region in Denmark.

6 See https://au.movember.com/ (Accessed on 29-08-2020).

7 See https://malehealth.org.au/ (Accessed on 29-08-2019).

References

Aguiar, L.P.C., da Rocha, P.A. & Morris, M. 2016. Therapeutic Dancing for Parkinson's Disease. *International Journal of Parkinsonism and Restless Legs Syndrome*, 4, 1-25. DOI: https://doi.org/10.1016/j.ijge.2016.02.002

Al-Zubi, H. 2007. Autopathography and Audre Lorde's the Cancer Journals as a Narrative of Illness. Revising the Script of Disease. *Dirasat: Human & Social Sciences*, 34, 857-870.

Barker, G., Ricardo, C., Nascimento, M., Olukoya, A. & Santos, C. 2010. Questioning gender norms with men to improve health outcomes: evidence of impact. *Glob Public Health,* 5, 539–553. DOI: https://doi.org/10.1080/17441690902942464

Booher. A.K. 2010. Docile bodies, supercrips, and the plays of prosthetics. *International Journal of Feminist Approaches to Bioethics* (Special Issue). *Disability Studies in Feminist Bioethics*, 3(2), 63-89. DOI: https://doi.org/10.3138/ijfab.3.2.63

Butler, J. 1990. *Gender trouble: Feminism and the subversion of identity*. New York: Routledge. Cadwallader, J. & Murray, S. 2007. Introduction. Somatechnics: Reconfiguring Body Modification (Special Issue). *Social Semiotics*, 17(3), 259-261. DOI: https://doi.org/10.1080/10350330701448538

Campbell, F.K. 2009. *Contours of Ableism. The Production of Disability and Abledness*. London: Palgrave Macmillan. DOI: https://doi.org/10.1057/9780230245181

Christensen-Strynø, M.B. 2016. Mainstreaming and misfitting: Exploring disability and its intersection with gender in online disability awareness-raising videos. *MedieKultur: Journal of media and communication research*, 32(61), 58-75. DOI: https://doi.org/10.7146/mediekultur.v32i61.22387

Christensen-Strynø, M.B. 2018. *Online mediations of Disabled Embodiment. Intimacies / Mobilities / Temporalities*. PhD dissertation, Department for Communication and Arts, Roskilde University.

Christensen-Strynø, M.B. 2020. Writing Letters to the Dead: Cripping Networked Temporalities on Social Media. *Scandinavian Journal of Disability research*, 22(1), 88-96. DOI: hhttp://doi.org/10.16993/sjdrr.627.

Christensen-Strynø, M.B. & Eriksen, C.B. 2020. Madeline Stuart as disability advocate and brand: Exploring the affective economies of social media. In: Garrisi, D. & Johanssen, J. (eds.). *Disability, Media, and Representations: Other Bodies*. New York & Abingdon: Routledge.

Christie, E. & Bloustein, G. 2010. I-cyborg: disability, affect and public pedagogy. *Discourse: Studies in the Cultural Politics of Education*, 31(4), 483-498. DOI: https://doi.org/10.1080/01596306.2010.504364

Crompvoets, S. 2012. Prosthetic fantasies: loss, recovery, and the marketing of wholeness after breast cancer. *Social Semiotics*, 22(1), 107-120. DOI: https://doi.org/10.1080/10350330.2012.640058

Eriksen, C.B. 2017. *FAT. Pop Cultural Narratives about the Fat Body.* PhD dissertation, Department for the Study of Culture, University of Southern Denmark.

Ford, S., Scholz, B., & Lu, V.N. 2015. Social shedding: Identification and health of men's sheds users. *Health Psychology*, 34(7), 775-778. DOI: http://dx.doi.org/10.1037/hea0000171

Forum for mænds sundhed. s.d. *Om os* [online]. [Accessed on 21-08-2020]: Available at: http://www.sundmand.dk/Om-os.php

Garoian, C.R. 2013. *The Prosthetic Pedagogy of Art. Embodied Research and Practice*. Albany, NY: State University of New York Press.

Goggin, G. & Newell, C. 2005. Introduction: The Intimate Relations Between Technology and Disability [online]. *Disability Studies Quarterly*, 25(2). DOI: https://doi.org/10.18061/dsq.v25i2.547

Goodley, D. 2013. Dis/entangling critical disability studies. *Disability & Society*, 28(5), 631-644. DOI: https://doi.org/10.1080/09687599.2012.717884

Golding, B. (ed.). 2015. *The men's shed movement: The company of men.* Champaign, Illinois: Common Ground Publishing. DOI: https://doi.org/10.18848/978-1-61229-788-0/CGP

Grosz, E.A. 1994. *Volatile bodies: Toward a corporeal feminism*. Bloomington, Indiana: Indiana University Press.

Hackney, M. & Bennett, C. 2014. Dance therapy for individuals with Parkinson's disease: improving quality of life. *International Journal of Parkinsonism and Restless Legs Syndrome*, 4, 17-25. DOI: https://doi.org/10.2147/JPRLS.S40042

Haraway, D. 1988. Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist studies*, 14(3), 575-599. DOI: https://doi.org/10.2307/3178066

Herndl, D.P. 2002. Reconstructing the Posthuman Feminist Body Twenty Years after Audre Lorde's *Cancer Journals*. In: Warhol-Down, R. & Herndl, D. P. (eds.) *Feminisms REDUX: An Anthology of Literary Theory and Criticism* (2009), 477-486. New Brunswick, New Jersey: Rutgers University Press

Houston, S. 2019. *Dancing with Parkinson's*. Bristol, UK: Intellect Ltd.

Jain, S.S. 1999. The Prosthetic Imagination: Enabling and Disabling the Prosthesis Trope. *Science, Technology, & Human Values*, 24(1), 31-54. DOI: https://doi.org/10.1177/016224399902400103

Kunsthal Charlottenborg (s.d.). 2019. *Jesper Just - Servitudes* [online]. [Accessed on 21-08-2020]: Available at: https://kunsthalcharlottenborg.dk/en/exhibitions/jesper-just/

Lorde, A. 1980. *The cancer journals*. San Francisco: Aunt Lute Books.

Lupton, E., & Miller, A. 1996. *Bathroom, the Kitchen, and the Aesthetics of Waste (A Process of Elimination)*. Hudson, NY: Princeton Architectural Press.

Major, W. 2002. Audre Lorde's *The Cancer Journals*: Autopathography as Resistance. *Mosaic: A Journal for the interdisciplinary Study of Literature*, 35.2 (June 2002), 39-56.

McGill, A., Houston, S. & Lee, R.Y.W. 2014. Dance for Parkinson's: A new framework for research on its physical, mental, emotional, and social benefits. *Complementary Therapies in Medicine*, 22(3), 426-432. DOI: https://doi.org/10.1016/j.ctim.2014.03.005

Men's shed (s.d.).*What is a Men's Shed?* [online]. [Accessed on 15-07-2020]: Available at: https://mensssheds.org.uk/about/what-is-a-mens-shed

Mitchell, D.T. & Snyder, S.L. 2000. *Narrative Prosthesis. Disability and the Dependencies of Discourse.* An Arbor: The University of Michigan Press. DOI: https://doi.org/10.3998/mpub.11523

Ott, K. 2002. The Sum of Its Parts. An Introduction to Modern Histories of Prosthetics. In: K. Ott, D. Serlin & Mihm, S. (eds.) *Artificial Parts, Practical Lives. Modern Histories of Prosthetics*. New York & London: New York University Press.

Parkinsonforeningen (s.d.). *Fakta om Parkinson* [online]. [Accessed on 29-08-2020]: Available at: https://www.parkinson.dk/fakta-om-parkinson

Reeve, D. 2012. Cyborgs, cripples and iCrip: Reflections on the contribution of Haraway to disability studies. In: Goodley, D., Hughes B. & Davis, L. (eds.) *Disability and Social Theory. New Developments and Directions*, US91-111. London: Palgrave Macmillan. DOI: https://doi.org/10.1057/9781137023001_6

Reiffenrath, T. 2016. *Memoirs of Well-being. Rewriting Discourses of Illness and Disability*. Bielefeld: Transcript Verlag. DOI: https://doi.org/10.14361/9783839435465

Sawchuk, K. 2013. Imparied. In: Adey, P, Bissell, D., Hannam, K., Merriman, P. & Sheller, M. (eds.) *The Routledge Handbook of Mobilities*, 409. Taylor and Francis. ProQuest Ebook Central. [Accessed on 29-08-2019]: Available at: http://ebookcentral.proquest.com/lib/kbdk/detail.action?docID=1596850.

Scarry, E. 1985. *The Body in Pain: The Making and Unmaking of the World.* New York & Oxford: Oxford University Press.

Shildrick, M. 2013. Re-imagining embodiment: Prostheses, supplements and boundaries. *Somatechnics*, 3(2), 270-286. DOI: https://doi.org/10.3366/soma.2013.0098

Shildrick, M. 2015. Why Should Our Bodies End at the Skin?: Embodiment, Boundaries, and Somatechnics. *Hypatia: A Journal of Feminist Philosophy*, 30(1), 13-29. DOI: https://doi.org/10.1111/hypa.12114

Shildrick, M. 2017. Border Crossings: The Technologies of Disability and Desire. In: Waldschmidt, A., Berressem, H. & Ingwersen, M. (eds.) *Culture – Theory – Disability. Encounters between Disability Studies and Cultural Studies*. Bielefeld: Transcript Verlag, 137-151. DOI: https://doi.org/10.14361/9783839425336-010

Sobchack, V. 2006. A Leg to Stand On: Prosthetics, Metaphor, and Materiality. In: Smith, M. & Morra, J. (eds.). *The Prosthetic Impulse: From a Posthuman Present to a Biocultural Future*, 17-41. Cambridge: MIT Press.

Sobchack, V. 2010. Living a 'Phantom Limb': On the Phenomenology of Bodily Integrity. *Body & Society*, 16(3), 51-67. DOI: https://doi.org/10.1177/1357034X10373407

Sullivan, N. & Murray, S. 2009. *Somatechnics: queering the technologization of bodies*. Farnham, Surrey/Burlington, VT: Ashgate. DOI: https://doi.org/10.4324/9781315609867

Waples, E. 2013. Emplotted bodies: Breast cancer, feminism, and the future. *Tulsa Studies in Women's Literature*, Oct 1, 47-70.

WHO – World Health Organization. 2018. *The health and well-being of men in the WHO European Region: better health through a gender approach* [online]. [Accessed on 15-07-2020]: Available at: http://www.euro.who.int/en/publications/abstracts/the-health-and-well-being-of-men-in-the-who-european-region-better-health-through-a-gender-approach-2018

Wills, D. 1995. *Prosthesis.* Stanford, California: Stanford University Press.

Interrogating disability and prosthesis through the conceptual framework of NEODISABILITY

By Tine Fristrup & Christopher Karanja Odgaard

Abstract

This article investigates the emerging field of critical disability studies in order to explore understandings of *disability* and *prosthesis* through the intersection of dis/ability studies, studies in ableism, and philosophical enquiries into the biopolitics of disability and neoliberal psychopolitics. We present the interpretation that contemporary Western *ableism* is configured by neoliberal arrangements operating on the individual in ongoing processes of self-improvement. People who fail in the achievement society see themselves as being responsible for their own situation, blaming themselves as individuals instead of questioning the *ableism* that organises contemporary societal orderings in the neoliberal production of inferiority. We offer a conceptual framework of *neodisability* by unfolding internalised *disabling* processes in which the bifurcation of 'dis' and 'ability' operates through the forward-slash in dis/ability. The forward-slash captivates the optimistic cruelty in the workings of contemporary *ableism* in search of excellence through prosthetic configurations in an achievement economy: desiring the invisible prosthesis of *willpower* in the constant pursuit of overcoming the 'dis/'. *Neodisability* engenders contemporary *psycho-neoliberal-ableism*, with people turning their aggressions against themselves in never-ending processes of *dis-ing* parts of themselves as 'not-fit-enough', while being in constant need of therapeutic interventions to employ and promote the self-optimising efforts in times of *neodisableism*.

KEYWORDS: Dis/ability, ableism, dis-ing, neoliberalism, biopolitics, psychopolitics.

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A conceptual framework of *neodisability*

> *Critical Disability Studies is a 'location populated by people who advocate building upon the foundational perspectives of disability studies whilst integrating new and transformative agendas associated with postcolonial, queer and feminist theories' (Goodley 2016, 190–191). This merging of epistemological perspectives and ontological desires has created a rich tapestry of concepts and frameworks (Goodley et al. 2019, 974).*

In keeping with this rich tapestry of concepts and frameworks, we align the conceptual framework of *neodisability* with the exponential rate of scholarship productions in critical disability studies according to Dan Goodley et al. (2019). Their concern encompasses how it is possible to hold the dual interest between the established theories of disability and disablism alongside nascent critical studies of ability and ableism, without watering down the politics of disability on which studies of disability were based in the past. They make a new case for reflexive and politicised critical disability studies, and we follow this emphasis with the conceptual framework of *neodisability*.

According to Dan Goodley, the logic of *neoliberal-ableism* is a philosophy that pursues "the (hyper) normal" (Goodley 2014, xiv). Hyper normality echoes Fiona Kumari Campbell's understanding of *ableism* as an epistemology locating "the perfect, species typical and therefore essential and fully human" (Campbell 2001, 44). The entanglement "between epistemologies (knowledge-forms) of ableism and the production of internalised ableism" (Campbell 2009, 23), as Campbell argues "induce an internalisation or self-loathing" (Campbell 2009, 20). In his book titled *Psychopolitics* (2017) Byung-Chul Han defines our contemporary ableism as a form of *neoliberal psychopolitics* which is dominated by the excess of positivity and works with positive stimuli "as a machine of positivity and with the compulsion always to achieve more and more" (Han 2017, 32). The imperative of *neoliberal-ableism in a psychopolitical framing* is the workings of boundless optimisation leading to mental collapse because "the ego grapples with itself as an enemy" (Han 2017, 30). Our understanding (as well as critique) of neoliberal-ableism in a psychopolitical framing coincides with Hi´ilei Julia Kawehipuaakahaopulani Hobart and Tamara Kneese's formulations of *neoliberal self-care*, as "[b]oth a solution to and a symptom of the social deficits of late capitalism, evident, for example, in the way that remedies for hyperproductivity and the inevitable burnout that follows are commoditized in the form of specialized diets, therapies…" (Hobart & Kneese 2020, 2). When unpacking compulsory ableist notions, we begin to address what Han calls "the course of inaugurating the age of exhaustion" (Han 2017, 30). Contemporary ableism operates in the realm of *the burnout society* (Han 2010); where *neuronal power* functions in favour of *hybridisation* beyond borders, transitions, thresholds, fences, ditches, and walls in order to accelerate universal change and exchange. The excess of positivity concerns the surplus positivity and the violence of positivity "that derives from overproduction, overachievement, and overcommunication" (Han 2010, 5). According to Han, "the violence of positivity does not deprive, it saturates; it does not exclude, it exhausts" (Han 2010, 7); and depression, ADHD and burnout syndrome are all indicators of an excess of positivity. Mental maladies such as depression and burnout "express profound crisis of freedom as they represent pathological signs that freedom is now switching into manifold forms of compulsion" (Han 2017, 2). When building from Han's approach to psychopolitics, we disclose an *achievement economy* that is working beyond *overcoming* physical resistance and in the direction of *optimising* physical processes. In this setting, we take Sharon L. Snyder and David T. Mitchell's understanding of the biopolitics of disability within contemporary neoliberal biopolitics that "references all bodies as deficient and in need of product supplementations to treat the in-built inferiority within, a system of bodily referencing shorn of environmental causes" (Mitchell and Snyder 2015, 39-40) in the direction of the psychopolitics of ability.

In the conceptual framework of *neodisability,* the psychologicalisation of ableism does not emphasise the Cartesian split between body and mind because contemporary ableism can be elaborated as a way of making *governable* bodies through psycho-power which (as Han points out) follows the political rationality of bio-power (Han 2017). Our conceptualisation of *neodisabilty* does not subscribe to any clear-cut distinction between able-mindedness and/or able-bodiedness when scrutinising ableism. When we elaborate contemporary *ableism* through the prism of neoliberal psychopolitics, we are standing on the shoulders of different disciplines embracing *body politics* as a crucial point of reference, following the feminist thinking of Donna J. Haraway. Haraway points to the union of the political and the physiological by underlining that "bodies, then, are not born; they are made" (Haraway 1991, 208). When applying the non-essentialist body politics of Haraway to the framework of *neodisability*, bodies are made through contemporary ableism and the knowledge available to produce govern-able subjects that live by the affective formation of *cruel optimism* (Berlant 2011) embedded in the union of the political, the physiological and the psychological. When analysing ties between affect studies and critical disability studies, Dan Goodley, Kirsty Liddiard and Katherine Runswick-Cole (2018) describe the ramifications of Lauren Berlant's notion of cruel optimism as producing "feelings of emotional and ontological invalidation" (208) with the risk of "causing emotional distress, as one fails to match up to the labour and consumption demands of late capitalism" (209).

With cruel optimism enveloped in the achievement economy, practices of prosthetic solutions alter distinctly, as the notions of failure are embedded in the achievement economy, shifting "the prostheses' function from supplementation to enhancement", according to Hsiao-yu Sun (2018, 15). This entails that rehabilitating efforts relying on prosthetic solutions likewise shift their emphasis: from *substitution* in order to *overcome disablement/disability* to *optimisation* in order to *retain abledment/ability.* In a medical approach to disability, prosthesis signifies the absences or deficiencies of the disabled body, thereby functioning as a *substitution* by adding or supplementing normalcy and wholeness to the abnormal and inadequate body. When we operate in an achievement economy, the rehabilitating efforts of self-optimising processes work through an understanding that prosthesis is "the invisible prosthesis of willpower" (23) in search of perfect*ability*. This exploration of prosthetics counters the emergence of the normal body as *neodisability* by accentuating the current promotion of the hypernormal body through a kind of nonmaterial prosthetic embedded in never-ending therapeutic interventions that maintain the *psycho-neoliberal-ableist* prerogative.

A case of *neodisability* in higher education

To demonstrate how the conceptual framework of *neodisability* works, we present an outline of a statement written by a Danish student named Naja Momberg Christiansen, published in the Danish newspaper "Dagbladet Information" on 22 June 2019:

> *The market has made me mentally ill. It is nourished by the fact that we feel bad about ourselves. Although I think I can see through the neoliberal market logic prevailing throughout society, I am unable to escape from it. It has installed a sense of inferiority in me which has triggered an eating disorder. [ ] Unfortunately, I cannot find any answers to this problem. However, I realise that the neoliberal, economic mindset has become the answer to the serfdom of ancient times, but places Man in the very chains from which it once freed us. [ ] You cannot be present without constantly being confronted with your inferiority - more or less unspoken: You are not good enough. You cannot cope with the labour market today without focusing on how to be more efficient and productive by moderating and improving your efforts (Christiansen 2019 – translated by the authors).*

This student claims that the neoliberal configuration of contemporary society has triggered her eating disorder. At Aarhus University in the spring semester of 2016, it was discovered that the number of students availing themselves of the special educational support service owing to psychological or neurological diagnoses had increased by 27 per cent over a two-and-a-half-year period (Omnibus 2016). This radical increase in the number of students seeking this kind of help in the year 2016 aligns with the study progress reform in Danish higher education in 2014, a reform which aimed to reduce the average length of time students took to complete their university education. There were changes in Danish higher education in the wake of neoliberal reforms of austerity, with modalities of time, speed and support entangling and creating new forms of *precarity* embedded in the production of deficiency and inferiority, and causing a radical increase in psychological and neurological disorders among students at Aarhus University from 2014 to 2016. The university's special educational support service has become a personalised prosthetic solution to an inherently political problem. When the number of psychological and neurological disorders increases in society and higher education, it engenders psychopolitical prosthetic solutions such as support systems based on forms of therapeutic interventions. At Aarhus University, the Support Centre has become a self-contained unit inside the university with its own finances. In 2012 it had a budget of DKK 33 million (Aastrup 2011), which was two years before the implementation of the study progress reform in 2014 pointing to the 27 per cent increase in psychological and neurological diagnoses. Whether the budget has increased with the same percentage can only lead to speculation in how the enterprise has grown. The therapeutic (and in this case pedagogical) efforts in the support system have led to what the Danish economist Mogens Ove Madsen (2009) has called an "entrepreneurial university" embedded in a globalised knowledge economy, acting on the premise of the market in creating new enterprises as a consequence of the university reform in 2003. Such a *marketisation* of higher education has developed a support system that seems to function as a prosthetic arrangement for students with diagnoses.

Until 2012, the special educational support offered to students with a diagnosis by the Support Centre at Aarhus University was framed by educational psychology based on Lev Vygotsky's cultural-historical theory combined with philosophical enquiries into existentialism and psychoanalysis (Dræby Sørensen 2016). This combination is no longer applied in the Support Centre's pedagogical interventions, which are now based on the perspective of Vygotsky alone (Pedersen and Pors Knudsen 2015). The support works as a *prosthetic pedagogy* through Vygotsky's concepts of scaffolding and zone of proximal development, enabling students with a diagnosis to learn what they do not yet know through the guidance of teachers or advanced peers in processes of mentoring. Mentoring reframes the individual problems embedded in medical diagnoses by emphasising structural problems in order to overcome the diagnostic deficit approach (Pedersen and Pors Knudsen 2015). The educational support system works through the deficit model legitimised as a way to *compensate* the physical, psychological and neurological deficits or impairments operating on the logic of disorders as pathological a thus as an *anti*-thesis to normalcy and therefore in need of a *pros*-thesis in order to rehabilitate the equilibrium from before the deficit through prosthetic solutions. At the Support Centre, they try to resist the synthetic closure in the dialogical framework of thesis/antithesis/synthesis through a *prosthetic pedagogy* embedded in scaffolding as a prosthesis that will act as an enabler and not a disabler. In this regard, the prosthetic arrangements in the Support Centre employ knowledge of critical psychology aiming towards sustainability in order to prevent students from developing mentoring dependencies. This effort, focusing on the sustainability of the student's subjectivity, underlines the pedagogical approach to prosthesis in contrast to the therapeutically orchestrated configuration of prosthesis, the latter enclosed in the will to dependency as part and parcel of the support systems, i.e. the prosthetic solutions, engendering the imperative of growth and perfect*ability* within neoliberal economics and contemporary ableism. Contemporary *ableism* embraces prosthesis as the *representation of excess* pointing to the *excess of positivity* rooted in the neoliberal marketisation and the economic ordering of society. Vygotsky's scaffolding and zone of proximal development affirm a learning distance between the present and the future where the former, within the 'entrepreneurial university', translates into *diminished* and the latter into *augmented* in accordance with neoliberal marketisation and the production of 'surplus'. The overcoming of this distance is the continuous aiming at excessing positivity as the never-ending pursuit to get a step closer to the value of surplus.

Unfortunately, this exhausting effort, as intrinsic it might be to contemporary ableism, evokes *cruelty* in its practice, because one will never succeed in reaching excess. No matter how much energy is put into the effort, one will continue to fail as the goalpost of ableism continues to be out of reach. This is the ongoing process of internalised *disabling*, or as we would like to present it here in the conceptual framework of *neodisability*: an ongoing process of (bodily) *dis-ing*. As Goodley and Runswick-Cole (2016) argue, to *dis* is to trouble. Following this understanding, we separate dis and ability into a bifurcation rubbing against the forward-slash on both sides demonstrating how the forward-slash incarnates the prosthetic arrangements in excessing positivity. We simply place excess on the right side of the forward-slash, thus illustrating the connection between excess and ability, showing how the 'dis/' continuously tries to overcome the forward-slash as if it was a barrier in order to approach excess illustrated through '/ability' or '/ableism'. The 'dis/' displays deficiency and inferiority with a relational reference to perfection and superiority as '/ableism'. This process emerges clearly in the case of the Danish student Naja Momberg Christiansen and her experience of inferiority propelling an eating disorder because of the constant pressure to overcome 'dis/' and move towards '/ableism' as being preyed upon by the compulsory excess of positivity. This process of *dis-ing* highlights the disjunctive, incongruous and fragmented bodily terrains in search of excellence, desiring excess of positivity. In these desiring efforts, the *dis* becomes a formation of 'dis/*ability*' and lacks the possibility of troubling '/ability'. It is the desiring efforts that engender inferiority as people turn their aggression against themselves in a constant process of *dis-ing* parts of themselves as *not-yet-fit* (not necessary degenerated) but in constant need of therapeutic interventions or quick fixes. *Neodisability* becomes a way to conceptualise the interdependency between 'dis' and 'ability' through the forward-slash in dis/ability, which underlines our point of departure in critical dis/ability studies.

Departing from critical dis/ability studies and studies in ableism (SiA)

"Disability is always haunted by the spectre of ability", Goodley writes in the closing chapter of his book, thus summarising his overarching theoretical project as "working the dis/ability complex" (Goodley 2014, 153). Throughout the book, Goodley polemically explores the binary imaginaries dividing the dichotomised notions of disability and ability by contesting the static binary divide *itself* (this is indicated by a forward slash in between 'dis' and 'ability': dis/ability). Instead, Goodley argues, we have to begin to "think simultaneously about disability *and* ability" (Goodley 2014, xi). As a theoretical project, Goodley's conceptualisation of dis/ability departs from what he describes as British disability studies and the steadfast fixation within the social model of disability, yet without disavowing the importance of the social model acknowledging "that the social model of disability has saved and continues to save lives" (Goodley 2014, 7). What essentially separates Goodley's project of dis/ability studies from the social model of disability is on the one hand, the project's tandem understanding of disablism and ableism as complex, unstable and continuously overlapping vectors, and on the other hand, the project's intersectional and transdisciplinary subscriptions aligning dis/ability studies with "political and thinking allies – others who are engaged in contesting oppressive practices" (Goodley 2014, xiv). More specifically, dis/ability studies find this intersectional alignment among other “non-normative, queer, crip and marginalised Others and their allies” (Goodley 2014, x). Dis/ability studies are founded on a substantial subscription to work ‘outside’ the field of disability studies, in particular queer, postcolonial and feminist thinking.

Following Goodley’s approach to dis/ability, we understand the dividing practices between disablement and ablement as constructions of *disablism* in the wake of contemporary *ableism*. Our understandings of *ableism* are elaborated with reference to Fiona Kumari Campbell’s work (2001, 2008a, 2008b, 2009, 2012, 2017, 2018, 2019), in particular her latest attempt to develop *studies in ableism* (SiA) as a research methodology. When accentuating ableism, we cease from confining our enquiry into disablism and its practices and production, while losing sight of the constitutive other of disablism: *ableism*. Studies in ableism explicitly insist upon the exploration of epistemologies and ontologies that constitute contemporary ableism as “a network of beliefs, processes and practices that produces a particular kind of self and body (the corporeal standard)” (Campbell 2001, 44).

Recognising the subtle nature of ableism which makes it (according to Campbell) “hard to pin systems of ableism down because these systems are a series of permeable practices” (Campbell 2019, 11), we draw on Campbell’s presuppositional construction of the “foundations of systems of ableism” (Campbell 2019, 1), in order to grasp the densely complex and slippery notions of ableism. In her 2019 article “Precision ableism: a *studies in ableism* approach to developing histories of disability and abledment”, Campbell puts forward both a definition of ableism and a methodological approach aimed at researching ableist formations. It is crucial, at this juncture, to note that Campbell’s thinking on ableism draws strongly on the work of Foucault and his original formulations on subjectivity and power concerning *dividing practices* ‘between’ and ‘within’ (Foucault 1982a). This is most evident when Campbell refers to ableism as both *dividing elements* and *dividing practices* (Campbell 2019, 11). In this way, ableism always consists of relations ‘between’ and ‘within’ as *relations of ableism* or *ableist relations* (Campbell 2019, 15), which constitute the (prosthetic) formation of ‘dis’ concerning ableism/ability as *dis/ableism* or *dis/ability*. In this setting, the forward-slash indicates the relational aspect and points to “an ontology of *negation* or absence but still situated within an ontological paradigm” (Campbell 2019, 11). Campbell further refers to ableism as something which is practised in the West in relation to demands for “an unbridled form of individualism that is pre-occupied with continuous self-improvement and corporeal enhancement (fit, benchmarked and upgradeable bodies) that struggles with the reality of illness, disability and contingency” (Campbell 2019, 11).

Campbell continues her outline of the dividing elements with a particular emphasis on the ableist relations concerning the *notion of the normative* and what she called “a *constitutional divide*” (Campbell 2009, 6). In 2019, Campbell elaborated this divide as a system with two elements, “namely the *notion of the normative* (and normal individual, e.g. the prized body/mind/aesthetic) and the *enforcement of a divide* between a so-called perfected or developed humanity (how humans are supposedly meant to be) and the aberrant, the unthinkable, underdeveloped and therefore not really human” (Campbell 2019, 11). Preoccupied with the order(ing) of sentient life, the ableist divide splinters life into demarcated and fixed bodily states of being, which in turn strengthen a fantasy of corporality, “where the uncertainties and leakiness of the body dis-appear within a teleological narrative of ‘progress’, improvement and empire building towards a pristine model of ablement” (Campbell 2019, 11). Campbell argues that “with the development of enhancement technologies (cosmetic neurology and surgery for instance) the notion of the norm is constantly sliding, maybe creating a larger pool of ‘abnormal’ persons who because of ‘choice’ or limited resources cannot ‘improve’ themselves and hence lapse into deficiency” (Campbell 2019, 12). It becomes clear that any enquiry into an ableist belief system surely requires some form of articulation on the underpinnings of such a system. This begs the question: what undergirds contemporary ableism? What compounds – in terms of structures and trajectories (economically, ideologically and culturally) – such an ableist belief system?

Searching for answers to these questions requires, as Goodley writes, an "unpacking [of] the ableist context" (Goodley 2014, 26) in demonstrating that "ableism clings to economic and ideological conditions" (Goodley 2014, 26), which reveal ableism in its current adherence to *neoliberalism*. This ongoing affiliation, ableism vis-á-vis neoliberalism leads Goodley to define our current ableism as "*neoliberal-ableism*" (Goodley 2014, 26). We correspond with Goodley's understanding of neoliberalism as "providing the ecosystem for the nourishment of ableism" (Goodley, Lawthom and Runswick-Cole 2014, 981). It is crucial to underscore that any robust attempt to analyse the contemporary formations of ableism involves scrutinising the rise of neoliberalism and neoliberal subject formations. However, accepting this entanglement between the two (neoliberalism and ableism), as Campbell cautions us, does not liberate us from taking into account the fact that "[a] bleism is everywhere, but its manifestations as a practice are not the same everywhere and in every moment" (Campbell 2019, 17). Hence, the examination of ableist formations entails uncovering distinct circumstances that give rise to particular historically situated ableist formations. When examining contemporary ableism in relation to neoliberal-ableism, we frame ableism in accordance with Foucault's genealogy of advanced liberal government, as the birth of biopolitics in the eighteenth century, when "the administration of bodies and the calculated management of life" (Foucault 1978, 140) underlined the disciplinary approach to the ordering of society and the abbreviation of power over life as the performances of the body became an investment in life itself, in contrast to the sovereign power as a power of death. Within the era of biopolitics, the population became the centre of political attention and "an indispensable element in the development of capitalism" (Foucault 1978, 141), with its standard reference to growth concerning both the phenomena of population and the economic processes in favour of availability and docility.

According to Foucault, the biopolitical had to opt for "methods of power capable of optimizing forces, aptitudes, and life in general without at the same time making them more difficult to govern" (Foucault 1978, 141). Biopower disciplines the social body through institutions like the family, the army, schools and the police, individual medicine and the administration of collective bodies (Foucault 1978, 141) within the realm of segregation and social hierarchisation in order to valorise investments in bodies as the celebration of human growth and an expansion of productive forces. Disciplinary power makes it possible to control life by managing risks (of death) and adjusting individual behaviour to improve collective welfare. Biopolitics is at the forefront of disciplining the bodies in the regulation and optimisation of the population.

The biopolitics of disability

Neoliberalism, as Mitchell and Snyder argue, thrives on the production of new spaces for exploitation. Today, the body has become a multisectional market, with neoliberalism dividing us within our bodies as we become "perpetual members of an audience encouraged to experience our bodies in pieces – as fractured terrains where the 'bad' parts of ourselves are ever multiplying" (Mitchell and Snyder 2015, 221).

In following Mitchell and Snyder, we access the scenes of division *within* our bodies under the biopolitics of late capitalism, which trains everyone to separate the 'good' and the 'bad' parts. This kind of internalised *disabling* is based in inferiority: always failing to become 'good enough'. This neoliberal logic incarcerates what Berlant has described as *cruel optimism:*

> *[ ] a relation of attachment to compromised conditions of possibility whose realization is discovered either to be impossible, sheer fantasy, or too possible, and toxic. What's cruel about these attachments, and not merely inconvenient or tragic, is that the subjects who have x in their lives might not well*

> *endure the loss of their object/scene of desire, even though its presence threatens their well-being, because whatever the content of the attachment is, the continuity of its form provides something of the continuity of the subject's sense of what it means to keep on living on and to look forward to being in the world (Berlant 2011, 24).*

Building from Berlant, one could summarise that even though you work hard on the *betterment* of your body in your desire to improve your achievements, you will never feel fulfilled; you can always work a little bit more or want more – in order to improve more. This *cruel optimism* points to the cruelty in desiring practices because desiring means always wanting more and never being fully satisfied; continuously striving for perfectibility, which in turn can never be accomplished or fulfilled due to the logic of the market operating on individual practices of self-enhancement. Following Berlant, the object of desire "contributes to the attrition of the very thriving that is supposed to be made possible in the work of the attachment in the first place" (Berlant 2006, 21). This indicates that the subject is optimistically attached to an object of desire despite the disappointments, leading to "a cluster of promises we want someone or something to make us and to make possible for us" (Runswick-Cole and Goodley 2015, 167). This resonates with Foucauldian understandings of the biopolitical constitution of desire and the emerging individualised responsibilisation in which, as argued by Runswick-Cole and Goodley: "The individual is asked to solve their problems that, at the bottom, are not individual problems to solve" (Runswick-Cole and Goodley 2015, 168).

The neoliberal agenda works with and against your desires while marketisation is staging a *cruel optimism* that comes into play as a never-ending capacitation of what rightly could be seen as incapacitation. According to Mitchell and Snyder, incapacity becomes a capacity in the neoliberal marketplace, and "the late capitalist litany of bodily frailties, imperfections, and incapacities gluts advertising networks as the hegemonic product pitch strategy of today" (Mitchell and Snyder 2015, 220). Within such treatment-based environments, "disability rapidly becomes synonymous with a humanity that we are all seeking to *overcome*" (Mitchell and Snyder 2015, 220). When imperfections and incapacities become the reference for marketisation, "new industries of comfort" (Mitchell and Snyder 2015, 220) transcend disciplinary regimes of the therapies and their medically subordinate position within the health sciences to become our mainstream training gurus for improving on bodily imperfections writ large. When capacitation in neoliberal-ableism becomes a question of targeting our efforts to overcome a constant incapacitation or debilitation of our bodies through internalised dividing practices, the notion of disability can be explored and (re)conceptualised as *neodisability*.

Thus, *neodisability* is embedded in neoliberal-ableism and the ceaseless pursuit of rehabilitation to improve the not necessarily degenerated or lost parts of the body, but rather the parts that can be improved and become even better than before the therapeutic intervention. In other words, this is a never-ending story: an infinite movement in an achievement economy, where bodily parts are constantly scrutinised within the neoliberal demands and standards of productivity.

Neodisability, we argue, explores disability by pushing disability beyond its negatively determined disabled subject and into a positive determination of the ableist achievement subject. In the exploration of disability, *neodisability* is embedded in the economic discourse concerning what Yann Moulier Boutang (2008) has described as *cognitive capitalism*, where *immaterial labour* works in contrast to Karl Marx's category of *abstract labour*. In this way, the conceptual framework of *neodisability* points towards an understanding of *ableism* which is enrolled in the efforts of *the economics of cognitive capitalism*. The exploration and rearticulation of disability is somewhat different from the articulation of the division between impairment and disability in terms of the social model of disability. The social model refers to a sociological turn in disability studies, whereas the framing of *neodisability* aligns with the turn towards studies in ableism (SiA) and an intersection with philosophical and cultural studies on societal transformations as an analytical prism. The emphasis on *neo* in *neodisability* refers to both neoliberal-ableism and the production of new forms of disability engendered in the precarious self-exhaustion as the psychological efforts become *the* productive force in Western societies.

Neoliberal psychopolitics

Following the previous part of the article, we outline systems of ableism as a system of dividing practices, thus understanding dividing practices as being aligned with Foucault's central formulation of biopolitics *and* his turn towards technologies of the self in the early 1980s. Foucault developed the historically situated ethics of the self. And according to Han, Foucault did this in a context which was primarily detached from technologies and techniques of power and domination: "Consequently, it is often assumed that his [Foucault's] ethics of the self stands in opposition to power and domination. Indeed, Foucault himself pointed out the shift he was making from technologies of power to technologies of the self" (Han 2017, 27). Han points out that Foucault's analysis of the technology of power under the neoliberal regime overlooked the fact that the neoliberal regime claims the technology of the self completely for its own purposes. "*Perpetual self-optimization*" (Han 2017, 28) becomes the exemplary neoliberal technology of the self that represents a highly efficient mode of domination and exploitation. In his essay "Psychopolitics - Neoliberalism and New Technologies of Power" from 2017, Han outlined how we live in a neoliberal regime governed by *psychopolitics* that follows from the biopolitical regime outlined by Foucault, in his work on *biopolitics*. Han unfolds Foucault's analysis of the transitions from the power of sovereignty to the disciplinary power that followed the changes in forms of production by emphasising "the shift from agrarian to industrial production" (Han 2017, 19), and "as industrialization proceeded, it became necessary to discipline the body and fit it to machinic production. Instead of torturing the body, disciplinary power yokes it into a system of norms. […] The body is calibrated to be a production-unit" (Han 2017, 19-20). Disciplinary power is normative because it subjects the body to a set of rules, norms, commandments and prohibitions to eliminate deviations and anomalies. Han (2017) points to the pursuit of *allo-exploitation* in both sovereign and disciplinary power constellations. In contrast, psychopolitics unfolds *auto-exploitation* as "the self-as-a-work-of-art amounts to a beautiful but deceptive illusion that the neoliberal regime maintains to exhaust its resources entirely" (Han 2017, 28). As Han points out, neoliberal psychopolitics is always coming up with more refined forms of exploitation, where "neoliberalism has discovered integral *human being* as the object of exploitation" (Han 2017, 29). According to Han, the neoliberal regime is in the course of inaugurating the age of exhaustion and the psyche itself. The psychic turn is the turn towards psychopolitics, which connects to the modes of operation of contemporary and cognitive capitalism, as immaterial and non-physical forms of production are what determine today's course of capitalism, where "the body no longer represents a central force of production, as it formerly did in biopolitical, disciplinary society. Now, productivity is not to be enhanced by *overcoming* physical resistance so much as by *optimizing* psychic or mental processes" (Han 2017, 25). In following Foucault's biopolitics, we point to the docile body as being *compliant* to the productive forces through dynamics of inhibition and repression. Still, in following Han's psychopolitics, neoliberal dynamics seeks to activate, motivate and optimise, proving its effectiveness by pleasing and fulfilling instead of operating by the biopolitical means of forbidding and depriving. Psychopolitics help to make people *dependent* (Han 2017, 14), and neoliberalism has discovered that the psyche is *the* productive force (Han 2017, 25). In these efforts, psychopolitics has replaced the biological, the somatic and the corporeal as the politics of the body in favour of the politics of the psyche. Han distinguishes between the physical and the mental in stating that "the disciplinary power reaches beyond the physical realm, into the mental sphere" (Han 2017, 20). Disciplinary power operates in biopolitics with its discovery that *the population* is a productive and reproductive mass which should be administered carefully. In contrast, psychopolitics operates on the individual or *the person* and its internalised divided representation of the self as "a process that objectivizes him" (Foucault 1982a, 208). This objectivisation and fragmentation of the self is a trademark of late capitalism, and corresponds with what Brian Massumi describes as the absorbent way in which "[c]apitalism has learned to descend to the infra-level where the individual is emergently divided among potential inflections of its own self-formative movement" (Massumi 2017, 14), thus functioning as "[a]n extraction of surplus-value from an infra-level" (13).

When we apply notions of ableism which were initially developed in a more or less articulated biopolitical framework, we opt for a psychopolitical (re)framing of neoliberal-ableism and the outline of the neoliberal achievement subject that engages in auto-exploitation under the neoliberal imperative of self-optimisation. This self-optimisation serves to promote perfect functioning, pointing towards weaknesses and mistakes which need to be dealt with therapeutically to enhance efficiency and performance. In this case, *neodisability* points towards a necessary questioning of what it means to be human in neoliberal times. Since 2013, Dan Goodley has been working with several colleagues at the University of Sheffield in the UK to pull together an interdisciplinary research centre (*iHuman*) studying new ways of understanding humanism in the interconnections of culture, economy, human movement and technology (Goodley 2020). *Neodisablity* offers a perspective on these new understandings of humanism in the contemporary cultural, economic and global context described as *posthuman* following the work of Rosi Braidotti (2006, 2013, 2018), and the work of Dan Goodley, Rebecca Lawthom, Kirsty Liddiard and Katherine Runswick-Cole on their intellectual and political project named *DisHuman* (Goodley 2020). In this project, they embrace "the ambivalence that Braidotti, Wynter, Fanon, and Haraway have towards the human (not least in terms of the dominant ways in which this category has been shaped and morphed in modernity)" (Goodley 2020, 44). The DisHuman project is oriented towards a time when dis/human becomes *dishuman*, and when thinking about the human involves thinking about disability (Goodley and Runswick Cole 2016). *Neodisability* encompasses the ongoing workings on being included in the normative order, i.e. ableist order of things. That is why we have to *dis* the processes of *dis-ing* in *neodisability* as a critical intervention into the unsettling of humanism's universalism and the primacy of rationality and the unitary subject (Braidotti 2013).

Neodisability works on the confinement of dis/*ability*, and we opt for future work on *dis*/neodisability that emboldens the other side of the binary and troubles *neodisability*. The question of the *human* has always been central to the politics of disability, and will continue to be central to the conceptual framework of *neodisability*, pointing towards *DisHuman* times and efforts in society in general and in higher education in particular.

References

Berlant, L. 2011. *Cruel Optimism*. London: Duke University Press.

Boutang, Y.M. 2008. *Cognitive Capitalism.* English edition 2011. Cambridge: Polity Press.

Braidotti, R. 2006. Posthuman, All Too Human: Towards a New Process Ontology. *Theory Culture Society 23 (7–8)*, 197–208. DOI: 10.1177/0263276406069232.

Braidotti, R. 2013. *The Posthuman*. London: Polity Press.

Braidotti, R. 2018. Posthuman Critical Theory. In: Braidotti, R. and Hlavajova, M. eds. *Posthuman Glossary*, 339–42. London: Bloomsbury.

Campbell, F.A.K. 2001. Inciting Legal Fictions. 'Disability's' Date with Ontology and the Ableist Body of the Law. *Griffith Law Review*, 10(1), 42-62.

Campbell, F.K. 2008a. Exploring internalized ableism using critical race theory. *Disability & Society*, 23(2), 151-162, DOI: 10.1080/09687590701841190

Campbell, F.K. 2008b. Refusing Able(ness): A Preliminary Conversation about Ableism. *M/C Journal,* 11(3). Online: http://journal.media-culture.org.au/index.php/mcjournal/article/view/46

Campbell, F.K. 2009. *Contours of Ableism. The Production of Disability and Abledness*. Hampshire: Palgrave Macmillan.

Campbell, F.K. 2012. Stalking Ableism: Using Disability to Expose 'Abled' Narcissism. In: Goodley, D., Hughes, B. and Davis, L. eds. *Disability and Social Theory. New Developments and Directions.* Hampshire: Palgrave Macmillan. Chapter 13: 212-230.

Campbell, F.K. 2017. Queer Anti-sociality and Disability Unbecoming: An Ableist Relations Project? In: Sircar, O. and Jain, D. eds. *New Intimacies, Old Desires. Law, Culture and Queer Politics in Neoliberal Times.* New Delhi: Zubaan Publishers. Chapter 10: 280-316.

Campbell, F.K. 2018. Refocusing and the Paradigm Shift: From Disability to Studies in Ableism. In: Ghai, A. ed. *Disability in South Asia. Knowledge and Experience.* New Delhi: Sage Publishing. Chapter 3: 38-57.

Campbell, F.K. 2019. Precision ableism: a *studies in ableism* approach to developing histories of disability and abledment. *Rethinking History.* DOI: 10.1080/13642529.2019.1607475

Christiansen, N.M. 2019. Article available in the following link: https://www.information.dk/debat/2019/06/markedet-gjort-psykisk-syg-lever-mennesker-daarligt?lst_tag (05072019)

Dræby Sørensen, A. 2016. *Pædagogisk Psykologisk Uddannelsesrådgivning 2004-2011*. Aarhus: The State and University Library - Aarhus. 141 pp. Report from The Danish School of Education (DPU - Danmarks institut for Pædagogik og Uddannelse), Aarhus University. Link: https://ebooks.au.dk/index.php/aul/catalog/book/115 (16082019)

Foucault, M. 1978. *The Will to Knowledge. The History of Sexuality. Volume 1.* Reprinted in Penguin Books under the present title 1998. London: Penguin Books.

Foucault. M. 1982a. The Subject and Power. In: Dreyfus, H.L. and Rabinow, P. eds. *Michel Foucault. Beyond Structuralism and Hermeneutics*. Second Edition. 1983. Chicago: The University of Chicago. Afterword: 208-226.

Foucault, M. 1982b. Lectures on Technologies of the self at the University of Vermont, autumn 1982. In: Martin, L. H.; Gutman, H. and Hutton, P. H. eds. *Technologies of the self: a seminar with Michel Foucault.* 1988. London: Tavistock.

Goodley, D. 2014. *Dis/ability studies: Theorising disablism and ableism*. London: Routledge.

Goodley, D. 2020. Theorising Disability and Humanity. In: L. Ware ed. *Critical Readings in Interdisciplinary Disability Studies (Dis)Assemblages.* Critical Studies of Education 12, Cham: Springer. DOI: 10.1007/978-3-030-35309-4_4, 41-52. Chapter 4: 41-52.

Goodley, D. & Runswick-Cole, K. 2016. Becoming dishuman: thinking about the human through dis/ability. *Discourse: Studies in the Cultural Politics of Education, 37:1*, 1-15, DOI: 10.1080/01596306.2014.930021

Goodley, D.; Lawthom, R. & Runswick-Cole, K. 2014. Dis/ability and austerity: beyond work and slow death. *Disability & Society.* 29:6, 980-984, DOI:10.1080/09687599.2014.920125

Goodley, D., Lawthom, R., Liddiard, K. & Runswick-Cole, K. 2018. Feeling disability: theories of affect and critical disability studies, *Disability & Society, 33:2,* 197-217, DOI: 10.1080/09687599.2017.1402752

Goodley, D., Lawthom, R., Liddiard, K. & Runswick-Cole, K. 2019. Provocations for Critical Disability Studies. *Disability & Society, 34:6,* 972-997, DOI: 10.1080/09687599.2019.1566889.

Goodley, D., Lawthom, R., Liddiard, K. & Runswick-Cole, K. 2020. The Desire for New Humanisms. *Journal of Disability Studies in Education 1.* 1-20.

Han, B-C. 2010. *The Burnout Society*. English edition 2015. Stanford: Stanford University Press.

Han, B-C. 2012. *The Transparency Society*. English edition 2015. Stanford: Stanford University Press.

Han, B-C. 2017. *Psychopolitics*. London: Verso.

Haraway, D.J. 1991. *Simians, Cyborgs, and Women. The Reinvention of Nature*. London: Free Association Books.

Hobart, H.J.K & Kneese, T. 2020. Radical Care: Survival Strategies for Uncertain Times. In: *Social Text* (2020) 38 (1 (142)), 1–16. DOI: 10.1215/01642472-7971067

Madsen, M.O. 2009. *Universitets død. Kritik af den nyliberale tendens*. København: Frydenlund.

Massumi, B. 2017. *The Principle of Unrest. Activist Philosophy in the Expanded Field.* Link: http://openhumanitiespress.org/books/download/Massumi_2017_The-Principle-of-Unrest.pdf (05102020)

Mitchell, D.T. & Snyder, S.L. 2015. *The Biopolitics of Disability. Neoliberalism, Ablenationalism, and Peripheral Embodiment*. Michigan: University of Michigan Press.

Omnibus, 2016. Article available in the following link: http://omnibus.au.dk/en/archive/show/artikel/flere-studerende-soeger-stoette-paa-grund-af-psykiske-lidelser/ (05072019)

Pedersen, L.M & Pors Knudsen, M. 2015. Er det mig, der er problemet? - En virksomhedsteoretisk analyse of studiemæssige vanskeligheder. *Psyke & Logos*. 36, 67-90.

Runswick-Cole, K. & Goodley, D. 2015. Disability, austerity and cruel optimism. *Canadian Journal of Disability Studies*. 4(2), 162-186.

Sun, H-y. 2018. Prosthetic Configurations and Imagination: Dis/ability, Body, and Technology. *Literary and Cultural Studies*. 44 (1), 13-39.

Aastrup, V. 2011. A power-point presentation available in the following link: https://www.rm.dk/globalassets/.../oplag.../6-oplag-willy-aastrup.pptx (03072019).

Your feet are not your feet

(Rephrased from Children by Kahlil Gibran)

By Jenni-Juulia Wallinheimo-Heimonen
textile and conceptual artist

I was seven years old when I saw a stump for the first time. My hoarsely laughing grandma wrote film subtitles for a living, and smoked so much tobacco that her leg had to be amputated. I thought she needed a prosthesis. But the stump was bruised, inflamed, and so sore that the prosthesis could not even be considered. I overheard adults discussing a traditional method of using leeches to treat the wound. The following night I had a nightmare where Grandma was dangling her feet in a lake full of blood-thirsty beasts.

In the 1980s, prostheses were passive, skin-coloured mannequin pieces made of hard plastic. I stared at them in the nursing home where Grandma moved after the toes on her other foot were amputated. Later, in 2007, when I organized Finland's first assistive technology design competition, I started collecting pictures of assistive devices. I divided these into folders based on how the product reflected its designer's perception of disability: 1. fashionable/attractive ones; 2. practical/functional ones; and 3. shameful/degrading aids. The prosthesis that I saw in my childhood would today be somewhere between practical and embarrassing, even though this type is still a luxury in most countries around the world.

Technology embodies values

Assistive devices utilise robotics, material- and nanotechnology, together with neuroprosthetics. The stump is not a dead end in the transmission of physiological data, but is intended to provide bidirectional communication between the prosthesis and the user. There are prosthetic hands that are capable of transmitting "skin-like" impulses to the brain. The neural interface makes it possible to send mental command signals to prosthesis servos via muscle electrodes. I´m super happy if "life-like" bionic body-parts help people after accidents and traumatic losses. However, as a third generation with a hereditary disability, I can´t help but wonder when repairing an individual to bring them closer to an imaginary norm is good for disability policy—and when the trend is actually delaying the development of our human rights by reinforcing the outdated medical model of disability.

If a middle-aged, working, straight, white man with a family loses his leg, he is allowed to participate in the Paralympics, but he doesn't necessarily become disabled. In the 21st century, disability is not an automatic consequence of a missing limb. Impairments become disabilities when social structures leave some people outside common experiences. Disability occurs when we treat people differently, and undesirably, because of their features. If a privileged person has a good safety net, and if he is regarded as almost the same after an injury, he does not instinctively recover from disability prejudices in rehabilitation. Nor does he heal from marginal allergy,[1] and start writing songs about thresholds and segregation harms in special education. Still, he might do that – later.

The current model of disability excludes quite a lot of people who have first-hand experience of change, unravelling, or shrinkage of the body, but have not necessarily experienced—and hopefully never will experience—discrimination, otherness, poverty and violence. These experiences, however, are the reality for most people with inborn disabilities, in a life where social services cost estimates decorate our very first playsuits. If the world is set up for you since birth, and society doesn't kick you off the field after the traumatic loss of breast, organ, toe, finger or limb, you may still have a long way to go before you meet the definition of disability.

New, well-meaning professional groups have appeared alongside doctors, physiotherapists and prosthetists to fix and mend people with disabilities so that they resemble the majority. But rehabilitating and equipping people to what is supposedly normal isn't politically correct anymore for any minority other than us: persons with disabilities (PWDs). Instead of solutions that concentrate on individuals and imitate conventional bodies, we should actively develop practices to destroy societal obstacles that perpetuate discrimination. In the UN Convention on the Rights of Persons with Disabilities, persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments *which in interaction with various barriers* may hinder their full and effective participation in society on an equal basis with others. But how much knowledge of human rights policy can be required from the designers of prosthetics or cochlear implants?

From emergency to empowerment

In developed nations, prosthetics, and other assistive equipment whose design prioritises compensation, are old-fashioned right from the start. I claim that they even maintain the low status of disability. A practical but ugly aid is like the uniform of an unproductive outcast, that by default positions its user on the margins. Such prostheses are reality for the majority who cannot afford preferable options, or in whom society does not want to invest. In a way, prostheses are unique and custom built, but the elements supporting identity are not included in the package.

In Finland, assistive technology is mostly paid for by municipalities and hospital districts, or in some cases is covered by traffic or accident insurance. Sophie Oliveira de Barrata's sculptural prostheses for Victoria Modesta and other celebrities wouldn't win this public bidding process. Those devices are dreams that require wealth or exceptional artisanal skills to come true.

In autumn 2018, the Ministry of Social Affairs and Health published guidelines on national criteria for assigning assistive devices in medical rehabilitation. The purpose of the guide was to make instructions on assistive devices consistent throughout the country. In the past, there were major differences across Finland especially in providing expensive devices. When allocating prostheses, a person's activity level is evaluated. In practice, a woman over the age of fifty who exercises regularly will rarely receive as good a prosthesis as a man in his twenties with no particular sporting hobbies. Procurement has also been centralised among a handful of players to save money. People don't always receive the best assistive device for them, only the best device available from the chosen supplier.

I hope that rehabilitation engineering studies will attract more people with disabilities in the future. Subconscious fear, pity and prejudices hamper empathic design thinking, which is reflected in the products. As a hobby, I like to reveal the patronising guardianships and harmful approaches behind assistive innovations. Technical features are often valued more highly than visual appearance, even though prostheses, crutches and wheelchairs are parts of everyday self-image, along with clothing choices. Users are invited to participate only after the primary function of a new device has already been established; when it is, for example, decided to solve mobility difficulties with a prosthesis. The aim of product design for people with disabilities is almost never to find alternative ways of being human.

The most common form of discrimination faced by people with disabilities is an inaccessible environment. If you don't walk, you can't go everywhere. This discriminatory attitude is so pervasive in our culture that people often take it for granted, as correct, even neutral. A foot prosthesis expands the environment more than the coolest portable vehicle with AI gadgets. Yet many disability activists claim that the medicalised viewpoint overrates walking. Consequently, there are still children who have not been allowed to use a wheelchair, but are instead forced to walk for purposes of rehabilitation. The result is sad childhood memories of shambling alone behind the others, suffering from pain, and living in constant fear of falling over.

New interpretations of assistive technology disrupt purity

In 2011, I facilitated a workshop for landmine survivors in Bosnia Herzegovina with the topic "the assistive devices of your dreams". Participants—who were mostly former soldiers—indicated that the two most important features of a prosthesis are: getting women and making money. They wanted folding wheels for their foot prostheses so they could skateboard when in a hurry, and narrow displays on the surface to sell advertising space, since people already stared at their feet. These guys wanted to display blinking hearts as they pass a beautiful woman and campaign against the war. I got sick with prosthesis-envy for not having such versatile artificial body parts! Except, that is, for hearing aids that I can switch off when I need to concentrate.

In another workshop, a participant came up with the idea of a soft, allergy-free, purring pet hand-prosthesis, that would tempt people to touch, lean against and hug: something like the therapeutic PARO Seal robot. An interactive body-animal could help someone to calm down, to fall asleep, or become aroused. My friend has a very sensitive dash line between her paralyzed hand and receptive shoulder. She finds this convenient: she can sit on the couch, tired, watching the children play on the floor, and enjoy her spouse gently caressing her upper arm with clothes on. A nice bonus feature for prostheses that operate via neural signals.

An environmental activist drew a rollator with a front panel full of herbs and attractive salads to snack on. We were wondering if something could also be grown on the surface of a prosthesis. Short tuft moss, cress, or mushrooms as a substitute for meat? Imagine a vegan athlete explaining to a doctor that he wants to amputate his brawny leg to replace it with a less energy-hungry and more environment-friendly shiitake log plantation. Could we reduce our carbon footprint and compensate for overpopulation by harnessing our bodies for food production in the future? Literally enhance assistive technology to fight malnutrition, which is one of the major causes of disability.

I´ve been thinking about whether rollators could be topiary art, could consist of trees and shrubs growing to a desired shape from flower pots attached to the wheels. What had been the pariahs of assistive equipment would become desirable walking aids for tree-huggers and everyone who thinks green. The visual appearance of the walker would follow the seasons. If it was no longer needed, it could be planted in the garden. As an offshoot of this idea, I've grown organic wheelchair seedlings since 2015; I've planted them in parks, both in Finland and abroad. I predict that the updated versions of historical wooden legs will return to prosthetic fashion in the West for environmental reasons. Maybe even in living form.

Perhaps there are already prosthetic teeth on the market that taste like chocolate when they touch the tongue. When we played "the floor is lava" with the kids, I came up with a "lava lamp prosthetic" bubbling fluid and oil. A fire-proof prosthesis would guarantee sweeping victory in that game, help trampling down campfires, and save people from burning houses. Hydrofoil prosthesis could make it possible to walk on water. I have sketched an invisible prosthesis based on compressed air, and steps that rest on flushed air columns from the stump. A Mary Poppins umbrella-cane with a drone would fly me over level differences, and take people with visual impairments to their destinations, travelling through the air without colliding with objects.

Inspired by the leech nightmare, I´ve been thinking about a fishing rod prosthesis: you thread the worm through a hook on the big toe, and enjoy the Scandinavian midnight sun by the lake. In the sad version, the prosthesis of a person sitting on the pier looks like a block of stone. And an animal prosthesis, with giraffe horns at the heel, the muzzle at the metatarsus, and the giraffe neck as a telescopic pylon that lifts someone up to pick fruit from higher branches. A prosthesis that imitates a goat leg with a cloven hoof might amuse Narnia fans; an artificial foot pole could please drum mat musicians—or people with restless legs. And how about a brooch on the face instead of prosthetic eye, or a tiny sculpture for a nose?

The common denominator of all the previous examples is that they have nothing to do with practicality, or “what is good for us”, because I am allergic to the structures of power. Some of us love devices that carp about mealtimes, medicine and sufficient sleep. But I don’t want a tooth implant to count calories, or a crutch with a pedometer. Being born with a disability does not make me anyone’s rehabilitation project. A healthy lifestyle isn’t enough to satisfy my passions and goals in life. When I heard about a sweater by Ying Gao, which has metal fibres that react to the voice, I began to hope for a jacket for short statured people, with hairs that bristle if you use baby talk.

We have developed pill dispensers that tattle to the doctor if a patient does not take his medication, but we don’t have necklaces that send emergency messages to politicians and the media if a home care client has not been taken out for a week. Pressure sensors and smart skincare materials sound great in prosthesis, but what if they start to read body signals and send warnings that your life is going in circles? Or even worse, that you are idling? Every year a new fashion design student wants to make an “easy-to-dress” line for wheelchair users. It´s an important aim for firefighters, but people with disabilities aren’t outside the fast-moving trends of fashion. The need to follow fashion applies to prostheses too, and therefore their appearance should be easy to modify. Independence is an important value, but if it reduces the clothing choices of people with disabilities from millions to a few dozen in this appearance-oriented world, it becomes one more limitation involved in living with impairments. In particular, girls and women with disabilities should receive enough personal assistance to help them into the dresses and skinny jeans that they really want. According to studies, strengthening of self-expression protects us from violence and abuse.

Well-fitting prosthesis rubbing the mind

My mother tried to find a peer group where Grandma could deal with her amputations. There were other residents with missing limbs in the nursing home, but the only discussion group was for women who had undergone mastectomy. Grandma figured that losing her ability to walk affected her femininity more than a breast removal would have. Because the stumps did not heal enough to allow for prostheses, Grandma relieved her anxiety by paying excessive attention to her clothing. My mom searched for, borrowed, and repaired outfits that Grandma demanded to get, but most of them ended up in a closet. She couldn’t imagine going shopping in a wheelchair—not because of missing legs, but missing shoes!

Assistive technology invented in art workshops is often related to identity and self-expression. It is hoped that these devices can convey hints about interests and socially prestigious positions: I’m not a patient, but a parent, activist, athlete, blogger, dog trainer, culinarist, and magician. Many of the obstacles that threaten the dreams and achievements of PWDs would be removed if we were seen as potential co-workers, friends, spouses and loved ones, rather than being "lifted up" to walk in an upright position. Assistive devices and prosthesis are an underutilised advertising platform. Unfortunately, they often simply make people think of illnesses. In the US, I've never been asked why I'm walking with a crutch, or what's wrong with me. In Finland, this repeated curiosity about "what happened" has made me wonder how people would react if a car crash survivor wore a prosthesis made from smashed toy cars? How would curious people react to a prosthesis that looks like a dropped axe, or made to resemble a cigarette?

On Instagram, a little girl shakes an irritating stone from her shoe, even though she has a foot prosthesis. When I was introducing the "Aid of your dreams" competition to assistive engineering students, their teacher said that he had never thought that a wheelchair or walker should bring pride or emotional pleasure to its user. Even though they are kept close to the body, almost all day long. It's no secret that a corset is beautiful but a back brace is not. Why, in Finland, are prosthetic socks only available in black, white and beige, but not orange? Assistive technology that is given as medical rehabilitation doesn't transform into part of our expressive attire because we don't insist that it should.

For some, an amputated limb is a more private body part than those underneath the swimsuit. In women-only workshops, opinions are divided on whether a prosthesis should be stunningly gorgeous, or should hide the "problem areas". Brutally speaking, is a woman with a disability a "real woman" when the prosthesis gathers admiring looks, or does a person with a disability (often considered genderless) qualify as woman only when the impairments are carefully disguised? For some, a realistic cosmesis is an essential protection against uncomfortable staring, while others find silicone skin with wrinkles, blood vessels and moles more suitable for Halloween.

In 2008, the Norwegian artist Morten Traavik organised the world's first Miss Landmine competition in Angola, to provoke discussion on the use of landmines. His other goal was to empower injured women by taking beautiful pictures. Although the first prize (a prosthesis) was handed out by Angola's First Lady, Ana Paula dos Santos, some local people and Angolan organisations alleged that the project was racist, and claimed that photographing limbless women was abuse. The following year, an attempt was made to ban the competition in Cambodia, because a local ministry suddenly wanted to protect the honour and dignity of landmine victims. Traavik was a white man without disability who came from far away. Or was it just that the two taboos, women with disabilities and landmines, was too hot a combination for international attention?

New interpretations of the limbs

I wish that the first visit to the prosthetic unit after amputation would be more like the experience of looking for a new car than getting a car repaired. The customer could gasp with delight, as though watching puppies or new-born babies. They could participate in prosthesis tasting, before promising to stay together in sickness and in health.

I have been asked to give assistive device decoration workshops. My reason for refusing is that decoration is strongly related to credibility and power. Breath-taking assistive artworks such as A. Laura Brody's Le Flaneur Rollator, or Greg Hurley's Steampunk Electric wheelchair, are results of countless stages and months of work by talented professional artists. Stickers, glitter, fabrics, paint or knitwear that get added during a workshop do not necessarily decrease suspicious attitudes towards assistive equipment. Children decorate phone covers and bikes, but few adults customise their shoes and winter jackets themselves. People with disabilities are often thought to be childish. It´s unfair to assume that we should be able to pimp up our mobility aids and prostheses to be street credible.

Grandma's shadow changed radically during my childhood. After her both legs were amputated at knee height, we spoke again about the prosthesis. Grandma laughed and said that she would like to get ones with nails that grow fast, like witches. A pedicure school did practical training at the nursing home, and Grandma entertained herself inviting new students to cut her toenails. My shrinking Grandma imagined being stronger (or dealt with the trauma) through fooling around with non-existent toes.

My prosthesis-envy, transmitted in Bosnia, got worse when images of the Alternative Limb Project spread on social media after the exhibition at the Victoria & Albert Museum in 2013. I don't admit to having BID, a rare condition in which there is a mismatch between the mental body image and the physical body, characterised by a desire for amputation of a limb, or to become blind or deaf. Rather, it was about my interest in wearable art and statement wear. Then, in 2014, when I was browsing vintage postcards of people with parasitic limbs (a medical condition where a partly developed twin exists inside another person), I came up with a way to use prosthesis without first losing body parts.

I made the first pair of parasitic leg prostheses for a conference in Bergen in 2015. These looked like legs that branch from two to four down from the knees. The impression is somewhat similar to the multiple hands of Indian goddesses, or to Scylla's dog heads in the Odyssey. The only purpose of parasitic prostheses was to make me able to wear very high heels, but I also imagined how robotic versions would make me dance. As if by chance, on the first day of the event there was much talk about how the idea of restoring something missing is old-fashioned in a time when perceptions of the body are expanding rapidly.

We are already giving up the assumption that the number of human limbs is unconditional. New technological lumps are popping up from our hands and heads. In the children's book, Babar the elephant lifts a teacup charmingly with his trunk. My friend dreams of a tail that enables her to pull her kids closer in the street when her hands are full of grocery bags, or to lift stuff from high shelves. My son would like to have four arms and legs like da Vinci's Vitruvian man, as seen on our toilet seat cover. If the weight of the body gets redistributed in the future from two limbs onto four or even more, walking becomes softer and more swinging. The classic image in which a monkey transforms from picture to picture into a human in standing position will acquire a new evolutionary stage—a rocking human.

I predict that it is only a matter of time until parasitic prostheses become fashion. Who would not want to browse social media with parasitic hands while cooking, or to be able to both knit and bite one's nails while watching a horror movie? Pet three, four, five cats at the same time? This increase in limbs will affect the fashion industry, since we need clothes with more sleeves and legs, as well as single, un-paired shoes and gloves. Dani Clode already has a "third thumb" project, where the thumb acquires another, 3D printed, pair below the little finger on the side of the palm.

In Memory

I think of Grandma when I see wedding cars with shoes hanging behind them. In the last few weeks of her life, both of Grandma's legs were amputated just below the pelvis. The outline of the bulge under the blanket was so short that her hands extended beyond the body. She lay shivering in a hospital bed and called herself a snowman without legs. When Grandma died, I didn't dare to ask where her leg pieces had been buried over the years. Later I heard about an old belief that a person also lacks limbs in the afterlife if the amputated parts are not buried with them. And again I wondered, where in the world could those pieces have been preserved for years, in the old days?

Grandma's coffin was adult-sized, even though she could have fitted into something smaller. Years later, I read about a man who wanted to be buried as a whole, with all four of his prostheses. Perhaps they will delight archaeologists one day, since disability and assistive technology are underrepresented in historical collections. Spare parts add challenges to burial. Metal plates and implants are already popping and exploding in cremation. Soon, more and more 3D-printed tissues will be melting in the oven, or needing thousands of years to decompose. In that sense it may become necessary to include recycling policies in discussions about the last journey.

I haven't lost a body part. I don't know how it feels when a part of you is lost, resigns, is stolen, or dies. There are narratives about life-long crises, and grief that resembles the loss of a loved one, as well as about people who find themselves again after the shock; those for whom the prosthesis is like a springboard to new levels of cognition. Because my network consists of many people with rare diseases, I probably know more people born without, so to speak, "typical" body parts than amputated ones. People about whom it would be strange to say that they are missing something.

Some of my friends use prostheses; some don't, because of difficulties or discomfort. They say that they don't want to limit partying because of a swollen leg the morning after a heavy dinner. Or, they don't want to spend time adjusting the fit, to tolerate pressure and sweating, to take extra care of skin when wheelchairs and crutches keep them going fast. For one friend, the skin sensations in the stump are so important for functionality that everyday tasks feel clumsy with the prosthesis. And yet despite everyone's right to choose, rehabilitation guidelines for children with dysmelia, for example, contain some slightly coercive phrasing about how to make a child get used to the prosthesis.

If the definition of prosthesis is "an artificial device to replace or augment a missing or impaired part of the body", it is impossible to design a prosthesis for a person who does not feel defective, but instead feels like a manifestation of biodiversity. Pathologising some deficiencies in people, often just to justify unequal treatment, maintains discrimination. Rehabilitation should rethink the concept of assistive devices from the point of view that some people with disabilities want to act in their own refined way, some are interested in devices to improve their birth body, and only some are content with traditional compensation.

Will a prosthesis have conscience, moral sense?

When the stories about E-NABLE's free 3D printable prostheses spread in the media, I was so delighted I could have cried. I had long been afraid that high-tech devices, robots, and body-powered prostheses would remain out of reach for people with disabilities, that they would become a luxury for people without impairment. Millionaires would jog in exoskeletons that relieve the load on joints, have robots to take care of cooking, climb cliffs with prosthetic hands, and cruise along the beach boulevards in wearable cars. The E-NABLE network shared the design and printing instructions for a prosthetic hand online, free of charge to anyone anywhere in the world, and connected people with 3D printers with those who needed prostheses. We need more open-source activity around disability, but also ways to reach people outside the internet. Equality of opportunities allows people to really choose whether to use a prosthesis or other assistive technology.

Depiction of disability is almost always produced by physically privileged people, and based on imagination of what it would be like to live with an impairment, or to become disabled. When repeated regularly, these stereotypical fantasies also affect our definitions of ourselves. Prostheses based on multi-million-dollar research are presented together with sentimental stories that try to convince the general public that technologically-advanced societies will one day be able to get rid of disability. Bionics are praised for blurring boundaries between people with and without disabilities. We are assured that we should all have the right to escape from our disabled bodies. Amputees walk and talk in large arenas because they are easy to identify with. But I´m afraid that human rights policy will be different in the future if its only advocates are people who were born physically privileged and later lost that position, rather than if people who have never had such an identity also contribute.

Making empowering, stylish and intelligent assistive devices is human rights work. It is also anti-poverty work and equality work. But disability as a phenomenon does not disappear, even though we continue making new innovations. Tampering with individual features does not eliminate discrimination. People with inborn disabilities do not have sensors in their bodies that constantly monitor how we differ from other people. Anomaly and otherness are always put on us from outside, and it's important to question those labels. If we want to increase overall eudaemonia, we should find smarter ways to change attitudes and structures around the whole concept of well-being.

Notes

[1] An artist/feminist term for the anger or discomfort some people feel when conversation turns to minority issues about intersectionality, patriarchy, and disability, making them avoid situations where these will come up.

The Gendering of Objectivity and Resistance to Feminist Knowledge

An Interview with Anne Fausto-Sterling and Julie Nelson

by Lea Skewes, Post-Doctoral Researcher, Department of Political Science, Arhus University & Mads Ananda Lodahl, author and speaker

Introduction

What is the difference between having an *opinion* on gender and having *knowledge* about gender? Can both laypeople and scientists tell opinion and knowledge apart? Can we successfully separate science from cultural assumptions about gender? These were some of the questions we invited Anne Fausto-Sterling (who is a Professor Emerita of Biology at Brown University) and Julie Nelson (who is a Professor of Economics at University of Massachusetts Boston) to discuss at the Women's Museum in Aarhus in March 2015. We chose these two professors because they are both famous feminist icons who have chosen to raise important discussions about gendering in science within their disciplines of biology and economics, respectively.[1]

Some of the highlights from our discussion center on how the discipline of science and the concept of objectivity have been fundamentally gendered from the beginning, with white European men being understood as the ideal scientists, while women and people of color have been disqualified from legitimate knowledge production simply because of their gender or skin color. We also cover the topic of backlash against feminist progress and how two feminist steps forward often lead to one step back. Here, Fausto-Sterling offers the example of the birth control debates in the US. She explains that the right to birth control was won many years ago but is currently being challenged again; a challenge which, after our dialogue, has in fact been carried out to the extreme under the Trump presidency, where women's abortion rights have suffered immense setbacks. Nelson also underlines that feminist progress is not necessarily linear. She offers the example of electing the first Black president of the US, Barack Obama, which to some was interpreted as the end of racism, only to then bear witness to the local riot of Ferguson in 2014 after the Black man Michael Brown was shot and killed by police. Since our dialogue, the Black Lives Matter movement, which was born out of Ferguson, grew to become a national riot in 2020 during the corona pandemic when yet another Black man, George Floyd, was suffocated by a police officer. This captures the fact that struggles for equality and justice – the old as well as the new – are as pervasive as ever, and that we need to understand these struggles if we want to understand the age in which we live. We hope that you can find some inspiration for your equality and justice struggles in this interview.

Positioning Oneself and Feminist Objectivity

LODAHL: "I will start by introducing myself in order to explain who I am and why I have been invited to carry out this interview. About 10 years ago, I was so fed up with homophobia that I got together with some friends and formed a revolutionary, militant, underground group. We worked as an affinity group, an artist collective, a queer street gang, and a political cell. We called ourselves *Queer Jihad* and considered ourselves part of a queer movement. We taught self-defense to queer kids and painted graffiti. We also organized parties, film screenings, and lectures and wrote on the topic. Basically, we just wanted to run into what we called *the straight world order* and put things on fire! We were angry. Two years into this project, Trine Munk, another co-founder of the group, told me she had found out that there was something called *queer theory* and *feminist theory* – which was something they taught at the university. None of us had heard about this before. We started studying queer theory and feminist theory on our own, and while I had had the anger, the political involvement, and the motivation before, I now got a deeper understanding of the political situation as well as better arguments to promote my cause. So, queer and feminist theory functioned like gasoline to the fire that was already burning!"

"Today, we have two people with us who have been teaching some of these things since before I was born. So, I feel very privileged and honored to be able to engage in this dialogue. Let us start with you Julie Nelson. You have been part of a group of people who invented something called *feminist economics* in the 90s. I would like you to tell me what the main question you have been asking in your research has been? What has been the main topic you have been trying to investigate in your research, and what have you found?"

NELSON: "The main thing that I have been working on is the discipline of economics itself and how the ways we think about the economy is affected by beliefs about gender. When I started working in economics, thinking about there being *two* genders was an improvement over what was there before because it was assumed that there was just *one* human experience and that was the male experience. Yes, there were all these other people – women – but they were not considered to do anything interesting or valuable, so as economists, we assumed that we did not need to pay attention to them."

LODAHL: "But what is the problem with that in the discipline of economics?"

NELSON: "For example, there is a total neglect of everything that women traditionally did in households. So, when women left what they had traditionally been doing at home and got jobs, this just looked like there was added productivity. There was no account of the loss of things that had been done before because the work at home had not been included in the model in the first place. In this way, there was no account of the general welfare of people; only what had been done in a masculine market because that was all which would be counted. This revealed that we had all these gender biases built into the economic models about what actually contributes to human welfare."

"I have also worked on some more nerdish things that have to do with how economists go about their studies – that there is a big elevation of quantitative research and no respect for more qualitative research – which also fits into a gender binary with the quantitative research being perceived as more masculine while the qualitative research is perceived as more feminine. And let me say, I do not think the answer is to flip the coin on the other side and say, 'Math is pure evil – we have to do purely qualitative research instead.' But we are limiting ourselves by only using half of the methods we could be using to investigate the world when we buy into that gendered quantitative-versus-qualitative binary."

LODAHL: "Why is this important? What does it give us to include women in the models of economics?"

NELSON: "In my own case, I have been interested in why we think of the economy and commerce as a realm where it is okay to be self-interested, rational, and even opportunistic – why this is even expected of people working in business whereas we tend to still think of our families in terms of care and interrelations. Why do we have these binary expectations? I think we have lost an older idea of business and commerce as an area which was also about care and responsibility. But by thinking of the economy as this kind of mechanical and mathematical realm which sides with masculine self-interest and rationality and conflicts with interpersonal relations, we have severely hampered how we think about the ways in which money and the markets actually do work."

LODAHL: "So, masculine qualities like self-interest or profit maximization versus feminist qualities of care and interpersonal relations exist in both private realms and work spaces?"

NELSON: "Yes, I think they actually do exist in both realms, but we have gotten into the habit of thinking about them along this gender binary that bifurcates our perceptions so that home is only about care and work places are only about self-interest. And the implicit assumption is that we cannot raise the bar to include care in the workplace."

LODAHL: "Okay, so you think that both realms might benefit from opening up these narrow binary perspectives?"

NELSON: "Yes exactly!"

LODAHL: "Anne Fausto-Sterling, you have been working in biology and gender, so I am going to ask you the same question: Can you tell us about the main question that you have been trying to investigate throughout your career and what your research findings were?"

FAUSTO-STERLING: "I think that it has changed a bit over time as the political circumstances have changed. I got involved in these issues in the late 1970s to early 1980s as an activist in the feminist movement. I was part of the feminist movement, which was arguing for greater political participation and economic rights for women. We were pointing out things like the fact that women's work in the home has value even though it is unpaid – these kinds of topics that were part of the second wave of feminism. One of the responses we often heard from the opposition was couched in arguments about biology – that women could not do certain types of work because they were not strong enough, smart enough, or aggressive enough. A very famous example of this biological essentialism was put forward by Hubert Humphrey, who was the vice president of the US at that point. This was shortly after the Cuban missile crisis when Kennedy and Khrushchev were considering dropping nuclear bombs and starting World War III. What Humphrey said was that if there had been a woman as president at the time, she would not have had the emotional stability to face Khrushchev and make him back down. In other words, he assumed that we would have ended up with WW III if we had had a female president."

"I was hearing arguments like that. I was hearing arguments about how men get ahead because they are more aggressive than women. I was a young biologist at that point. I had just completed my PhD, and until then I had primarily worked on fruit flies – I did not know much about human biology. But people would stand up in meetings and cite these experiments on the link between testosterone and aggression in rats. And people would turn to me and say; 'Well you are a biologist – is that true?' And I was like, 'I do not know!' Motivated by this, the first feminist intervention I made was to write a book called *Myths of Gender – Biological Theories about Men and Women*, in which I looked at each of these myths – as I came to conclude they were – about biological theories. I looked at each of these theories in detail using my skills as a biologist to analyze the work and then explain to a bigger audience what the work *was* and, more importantly, what it *was* *not*. But making that book raised questions for me because what was astounding to me was that the authors of this work were major biologists of their time. Take for example, Charles Darwin or the people who founded the field of psychology in the United States. It was researchers like Thorndike, who was the author of a dictionary we all grew up with back then. These were the best scientists of their time, and they received rewards for doing this work even though contemporary biologists would look back at it and say, 'Oh that is just bad science!' And I would say, 'Yes, it is bad science, but it was done by the best scientists at the time!'"

"So, I left that book needing to understand how that could be. How could the best science of the time get it so wrong? How could science – which was supposed to be objective and have no point of view – have such a strongly gendered point of view? How could the best minds of the time have this gendered point of view and not even know it and even sometimes actively deny their point of view? So, the next book I wrote tried to make sense of how culture becomes an ingrained part of science – in this case the culture of sexism. How does sexism become part of the fabric of science without people even knowing it? In order to answer that question, I turned to a different intellectual movement called *Feminist Science and Technology Studies* (Feminist STS), which I am still very actively engaged in. And then I wrote my second book, *Sexing the Body – Biology and the Social Construction of Gender*, in which I tried to show how cultural knowledge of gender actually becomes folded into what looks like objective knowledge".

LODAHL: "This is interesting because we often have this perception of science as producing objective knowledge in contrast to subjective opinion. But what you are describing is how cultural opinions shaped the knowledge that was produced – without the researcher even being aware of it. In this way, you are blurring the traditional distinction between knowledge and opinion."

NELSON: "That distinction between knowledge and opinion is interesting because when we started putting the word 'feminist' and 'economics' together in the same sentence, most economists immediately rejected it as *too* subjective and political. They assumed that economists were producing neutral and objective knowledge and feminists were trying to politicize it. The assumption was that economics had objective knowledge, and we were adding a bias which was not there beforehand. My first individual book, which is called *Feminism, Objectivity and Economics*, points out that the feminist critique is not that economics is too objective but, rather, that it is not objective enough! You can look at some of the early work on economics and the household, and you can read right out of it what the economists' gender assumptions were. For instance, the models were 'proving' that it made sense for women to specialize in staying at home because they earned less than a man on the market. This was used to rationalize that men should be the only ones on the market. Nobody asked, 'well why is it that we get that wage differential on the market to begin with?' We get it because women specialize in the home, and that gives them less experience on the market. In this way, it was this circular argument which was accepted within the economist profession as the best objective explanation. This just shows that it is very difficult making a distinction between opinion and knowledge. Separating opinion and knowledge is very shady in practice. I am a real social scientist at heart. I want to see what knowledge data can bring. In my recent work, I have been exploring how behavioral economists have been reproducing gender stereotypes by treating their data unprofessionally. They have been reproducing ideas about how women are more risk averse than men, and it is simply not there in the data. I really strive to look at what the data is telling me. And I am sure that someone coming 20 years after me can look back at my work and say, 'She did not notice that she had this assumption'. And they would be right because it is very difficult to be aware of all of your assumptions in your work, but that does not mean that we cannot try. This is why, it is so important that we do not hold onto a definition of objectivity which focuses on whether the individual follows some particular method or mathematical reasoning. Instead, our definition of objectivity should focus on whether our work stand up to larger and more diverse communities? It should be the wider community that checks whether we are being objective, not an abstract method carried out by one person in isolation."

FAUSTO-STERLING: "Feminist STS and feminist approaches to science in general included philosophers of science and historians of science right from the start. We struggled with this idea of objectivity because it has been so intimately linked to science. So, we spent a lot of time thinking about what was meant by objectivity. There is some wonderful historical work on the rise of the idea of objectivity. There is a classic book in science studies by Shapin and Schaffer called *Leviathan and the Air-Pump*. The book is about Thomas Hobbes and Thomas Boyle. Boyle is often seen as the person who originated the scientific method. He did all his early work on gas laws and vacuums. In the 15th century, there was a huge scientific debate about what a vacuum was: Was it the absence of air, or was it something else? So, he did all of these experiments using a vacuum pump. For instance, he would place a bird inside a glass, and then he would pump out the air and show that the bird would die. But the way in which it was established as 'objective' science was by having a group of people observe the experiment. The observation by others was what made it become an 'objective' fact. These people – the observers – who in the language of the time were called *modest witnesses* were necessary for the scientific process. Anyone familiar with Donna Haraway's work will know that phrase from her title *Modest_Witnesses*. But the point is that women were explicitly excluded from being modest witnesses – they were excluded from the notion of objectivity because they got upset when the bird died. In this way, they interfered in the process of science by having a viewpoint about killing birds. Therefore, it was concluded that they could not be relied upon to validate something as a fact. This means that the exclusion of women from science and placing women in opposition to the notion of objectivity was an ingrained part of science from the dawn of modern science. It was an explicit exclusion of women. It was not an accidental exclusion. So, when people began researching the history of modern science and the history of the idea of objectivity, it became clear that gender was embedded in the understanding of both science and objectivity from the very beginning. Even the use of the word objectivity was a weapon against the inclusion of women. Therefore, the question for feminist researchers became how to counter that use of the word so as to not exclude women. And of course, women were not the only ones who could not be modest witnesses – there were many others who fell short of objectivity. Only white middle-aged men could validate a fact."

"Because of the explicit and intentional exclusion of women from the production of scientific facts, there was a whole intellectual movement in the 70s, mostly from feminist philosophers who was writing about objectivity. They were trying to figure out how to reclaim objectivity in a way that made it more inclusive of different points of view. This is what became standpoint theory, and it was part of a movement to reclaim objectivity and to reclaim who could make facts. This introduced the idea that facts that covered more of the world, as seen by a wider diversity of people, were considered better facts than facts that just covered the middle class nobility in England in the 15th century."

"This explicit gendering of science, and in particular the concept of objectivity, has shaped large parts of my career. But now I have made a shift in my career where I have started to focus on how we have conversations about sex and gender and also race without getting into a language of nature versus nurture. Now, I want to explore how bodies come into being; how bodies acquire what we think of as gender; how bodies become racialized. And for that, I have turned to the work which I am currently doing. I have returned to empirical work, and I am trying to use a dynamic approach to human development to understand how we become who we are. I am looking at development from before birth and through the entire life cycle. I am looking at the dynamic between the biology and culture, which I think are not separable. What I am arguing is that culture actually changes nature and vice versa. So, that is where I am at now."

LODAHL: "So, the biology of the brain for example can be changed by culture – how?"

FAUSTO-STERLING: "It is quite well-established in neuroscience that when infants are born they have relatively few interconnections between their neurons. Their development does not primarily consist of them growing new nerve cells but, rather, of them developing increased interconnectivity, which is the branching of connections between each nerve cell. This interconnectivity between the nerve cells grows enormously in the first few months of development and throughout the first five years of life. So, you start out with neuronal networks that look like a set of small, almost dead bushes because they have no leaves in the beginning, and then, by the end of the five years, you have this enormous brain with very complex trees of interconnectedness with lots of branches and leaves. And this increase in complexity is what neuroscientists call *experience dependent*. So, if you think of a baby, it is like a little sensory sponge. Hearing, seeing, and experiencing touch, it uses all the five senses to take in the world. The senses function as a constant input for the little baby. If you have an infant who has been deprived of sensory input, for instance in an orphanage, its brain does not develop properly. And it is very clear that all of this development is driven by the inputs. So, the idea that you are born with a fixed brain has long been refuted. No one with knowledge of neuroscience believes that today. So, for me the question is what all those sensory inputs are doing. How are they shaping the brain? How are they shaping the brain from the very beginning? Because their shape will affect behavior as the infant grows."

Choosing the Right Metaphors to Capture Gender Differences

LODAHL: "If development of the brain is experience dependent is there then an essential difference between men and women? Because that does seem to be one of the persistent myths – that there are important biological differences that will manifest themselves no matter what stimuli people are exposed to. Last night we talked about the book *Men Are from Mars, Women Are from Venus* (1992) by author and relationship counselor John Grey. I do not know if anyone in the audience has read it. I read it. It is funny and really stupid. Basically, what it argues is that there are these essential difference between men and women, and they will manifest themselves no matter what. So, as you say, we already know scientifically that this is not necessarily the case so why do people want to believe this narrative?"

NELSON: "Economists have recently started looking at how people actually behave instead of exploring how they would logically behave in a formal model. This is called *behavioral economics*, and it includes some aspects of psychology. Some of my more recent work is looking at our beliefs about gender versus what we actually do in choosing and enacting our own gender roles. It turns out that this binary belief about what is masculine and what is feminine is important in structuring our brains, but it is something that we make up in our brains rather than essences that are out there. We use it all the time, so it is very important for how we sort things. Let us illustrate this with an example: cats and dogs. Do people have gendered associations? Generally, in European and American cultures, dogs are considered more masculine. We can get even more abstract: odd and even numbers. Odd numbers are sometimes considered more masculine and even numbers more feminine. Pythagoreans thought that odd numbers were more masculine because they could not be penetrated by the number two. So, our brain definitely uses these binaries. And some psychological studies have looked at this. There tends to be a lot of agreement within a culture on what a stereotypical man is and what a stereotypical woman is. However, when you start asking people what *they* are then you get what psychologists call mosaicism. Rather than one big uniform tile, it is a multitude of different colored tiles. So, if you are a man and you like art and music, we have already picked a couple of things out of that feminine category. If you are a woman who is heterosexual, but you like football or controlling your own money, then you are picking things out of the masculine category. And if you look at things which behavioral economists are interested in like risk aversion, competition, and altruism, then we tend to think about it in this Mars-versus-Venus kind of way. It is a metaphor that leads us to think in extreme differences. I think we should use a different metaphor – and this is a US-based one, so you can create your own one if you like. The alternative metaphor which I suggest is that men are from North Dakota and women are from South Dakota (which are two neighboring states in the US). It is not a metaphor that leads you to expect extreme differences. There are gender differences that are detectable, but they are not this radical difference in behavior – there is a whole lot of overlap. So, when we talk about gender differences, we should talk about both gender differences *and* similarities. Yes, there are some differences on average on behaviors, but there is also an enormous amount of overlap and similarity – and that gets lost with the Mars-versus-Venus metaphor."

Changing Minds by Changing Discourse

LODAHL: "If something as simple as the choice of a metaphor can feed into biased perceptions of both gender and science, then how should we strive to get this nuanced perspective out to the common public?"

NELSON: "There are at least two sides to that. The most important thing is that scientists themselves should not be putting the wrong facts out there! For instance, economists are often extremely naïve on the issues of gender and have put out these statements about women being more altruistic and more risk averse even though their data does not back this up. Many economists really do not understand the gendered problems ingrained in these claims at all, maybe because some of these economists believe that there are essential differences between men and women at a Mars-versus-Venus level. Therefore, we sometimes end up with scientific articles that read as if the gender-stereotypical conclusion was written before they collected the data. There is so little evidence there, and yet they conclude with these broad-sweeping, gender-essential statements. I am trying to convince my fellow economists to do research and make claims only based on their research data – I know it is revolutionary."

"The other challenge when communicating about science to the common public is the translation into media. This requires the journalists to be responsible in their reporting. I have personally been trying to experiment a little with conveying statistics in ways that are more approachable. For example, some economists say that women are more risk averse than men, but what would that mean if you selected one man and one woman at random? What is the chance that the woman would be more risk averse than the man? If there was no gender difference, the chance would be 50/50. The difference they *do* find is closer to 56/44. We are not talking about 100/0 or 90/10; we are talking about this small difference, and we should remember to be explicit about that."

FAUSTO-STERLING: "Keep in mind that we are living in a remarkable period in terms of social media, which everyone in this room has access to. I mean, you can write something that counters the wrong messages and put it up on a blog. You can tweet about it or devote a homepage to the myths of economics or any particular area you specialize in. It is no longer true that you have to hope that some newspaper editor will come and interview you. The journalists and editors no longer hold all the power in terms of getting different ideas out to the public. Everyone in this room could have a blog about gender and once a month put up a post and develop an audience. You can do it with

WordPress, Facebook, or if you are less longwinded like I am, you can use Twitter. It is a little bit like the Wild West out there, but it is an opportunity to change the discourses for the better."

LODAHL: "Are you optimistic that we can change the discourse for the better around both science and gender? And what would it take for us to break through the gender stereotypes?"

FAUSTO-STERLING: "Sometimes scientific discourse becomes monopolized, and it can be hard to break through with alternative messages. I spent some time thinking about how certain academics gain the majority voice in a field. A perfect example of this is John Money, who was a sexologist from the US. He worked on intersex topics in the 50s, 60s, and 70s, and he came to control the discourse about what could be said within this field. You could not get something published if Money did not agree because he was on every editorial board, and he published everywhere. For a long time, he became the only voice on the topic. So, one of the things about changing discourse is that you do have to be repetitive. You cannot just go out there once and say, 'No, it is not this way, it is this way.' You have to say that again and again. For instance, I get a lot of phone calls from reporters who want me to comment on a new paper that is out which says it is 3% genetic and 97% culture. And the first thing that I do is that I refuse to engage with that language. Then I try to explain a more dynamic view. But I refuse to engage with the nature-versus-nurture construct of the question. That is the first thing you can do. The other thing is to try to come up with better ways of saying it – like Julie's example with the metaphor of North Dakota versus South Dakota. It is not enough to say that the current approach is wrong; you also have to have a lot of good sound bites showing a better way to think about it. Changing the actual language of discourse at a broad cultural level is a slow process. It requires persistence. You have to keep at it in many different venues. When people come to you with the nature-versus-nurture construct, you have to avoid engaging with them and, instead, insist that they leave that language at the doorstep and consider this other, more dynamic language."

NELSON: "I think you should also keep in mind that you can use terminology strategically – even if the terminology is sometimes limiting. For instance, in the work I have done in critiquing behavioral economics, I am using a male-female binary because that is what they use in this research. Do I believe that there is a simple male-female binary? No! But if I were to spend pages explaining this at the beginning of the research, they would never get to the critique. There are times when you do need to stop the discourse at the door and say, 'You know what? I am not going to deal with the nature-versus-nurture or the male-female binary.' But there are also times when you have to use the categories strategically – and that is a judgement call. I disagree with people who believe that you can never use the tools of the master. I think that, sometimes, it can be strategically wise to do so if you want people to engage with your critique."

Power Dynamics and Backlash

LODAHL: "But if people think in these extremes and they use these misguided metaphors, how do we then achieve change? Do you think we first need to understand why people are eager to believe in this binary?"

NELSON: "I can think of two reasons that should both be considered. 1) Are there issues of power? Is it in the interest of some people in power to maintain power? Because if you get some advantages from believing that men are more competent in the workplace, then you probably want to continue spreading that belief. We should not neglect the power aspect. 2) You can also be psychologically motivated to buy into the binary just because it is simple and easy to think within that framework. It can give a certain kind of confidence or safety to think, 'Oh, I am a woman; I do not have to be financially responsible because somebody else should take care of me.' I find that to be a horrible attitude, but you have to admit that it can have some appeal if you do not want to take on that kind of responsibility for yourself. It might reflect a fairly suppressive mindset, but it might feel safer because it is familiar. These kinds of dynamics might feed into the preservation of these kinds of dichotomies."

FAUSTO-STERLING: "I think it is important to mention that even though there is resistance to change things have changed a great deal since the new wave feminism of the late 1960s! There have been great changes, and they have become integrated in the legal system. I mean, as a result of new wave feminism, discrimination has been made illegal! Women are entitled to the same pay for the same work – that is now in the law – even though we still have not achieved it in practice. There has been a whole series of changes around questions of violence against women. There are rules against sexual harassment in the workplace that did not exist before. The laws around rape and sexual violence have improved. There is even a whole infrastructure around the violence against women that did not exist before. There are women's shelters. There is counseling. There are people who are experts within these fields now. And that change has come because of political activism! This change came exactly because we had a mass movement. This mass movement changed people's minds. It is not that this kind of attitude has gone. It takes generations to change the deeply embedded cultural ideas about gender. I think the time scale that I had in mind as a young feminist was completely off. I thought 10 years would be enough to solve the problems, but now I realize that it is going to be more like five generations. But during that time, you can observe the change. So, I think when we worry about resistance to change, we also need to remember that there has in fact been a lot of change for the better."

LODAHL: "I can relate to that. When I started getting involved in fighting hate crimes, I gave myself six months to solve it. By the end of that time, I promised myself, there would be no more hate crimes in Denmark. Of course, I later realized that this was unrealistic. A bit silly even. Sometimes when talking about political struggles, but maybe especially in relation to gay rights struggles, I have heard people use the phrase 'We are almost there' as in 'We have come a long way – we still have a way to go, but we are almost there.' But will we ever get 'there'? What will it be like 'there'? And how long can we stay 'there'? Where will we go afterwards?"

FAUSTO-STERLING: "I do not have an answer for that – especially about what the future will be like. I think there will continue to be incremental improvement, but it will not necessarily be unidirectional. I think that at the moment in the States we are in a time of tremendous pushback against all the change that has in fact occurred. And there are areas where ground is being lost that I would never have imagined would ever be lost! For example, there is now a vocal political movement against birth control. Birth control was something that women won in the 20s! And we thought that we would never go back! The fact that there is even a space where people can get public attention to argue that birth control is a bad thing is definitely a step back. At the moment, there is a tremendous pushback against women's clinics and health care for women, and it is all under the umbrella of anti-abortion, but it is much more than anti-abortion. So, we are reliving battles that we thought were won. I do not think we will go back to an era where birth control is illegal, which it was when I was young, but the fact that it is even on the table again is astounding to me. This is the kind of pushback we get, and we have to push back against the pushback. It is this movement of two steps forward and one step back. I could not have predicted what I consider a dark political period for the US, and it makes me very weary of making predictions. I think there are large social forces that I do not understand well enough to know when they are going to come rising out and go 'Enough!' So, we just have to keep pushing for what we believe the progressive things are even though there will always be a lot of unknowns out there. Societal dynamics cannot always be predicted. For example, the event in Missouri this summer where a young Black man was shot and killed by police exploded into an entire mass movement, which is still going on. It was the Ferguson case. So, there are things that happen during political change that are not predictable – both for good and for bad."

A Feminist Paradise?

LODAHL: “Do you think that there will be something like a post-revolutionary society where we can say, ‘Now it is done, let us just sit back and enjoy’?”

NELSON: “No. You asked when we will get ‘there.’ The truth is we are never ‘there.’ We are always ‘here.’ There is a Buddhist saying: ‘Wherever you go, there you are’ – you never get ‘there.’ That should not be a point of discouragement. It does not mean that you should not work for positive change, but the linear story which assumes that you will get to the pot of gold at the end of the rainbow is actually a quite dangerous narrative. I can illustrate that with an example. We finally elected an African American president, Barack Obama, and then we got the Missouri riots, which led to an unmasking of all the cases about police brutality. This shows that just because we elected an African American president we are not ‘there’ yet. To assume that we are ‘there’ is just another binary – then versus now. Think about what I was saying before. We have allowed capitalism to go down its worst possible road by believing that people have no choice but to be opportunistic and selfish in business and the market place. This only holds true if we accept the binary of home versus marketplace or care versus rationality. There are older alternative traditions, which we could draw on, in which we can actually use the market and business to do more than maximize profit. That phrase, *maximizing profits*, was invented by economists. It was not invented by business people – there are a lot of people who move into business because they want to make good products, because they want to innovate. So, if we can get out of the economistic mode of thinking about profits, then we can think about how businesses, as other institutions, should be serving human good. And let us start from where we are and try and make progress rather than aim for the gold at the end of the rainbow.”

LODAHL: “I think that will be the last words, so I hope that everyone got some gasoline for their fire so we can all go out and change the world in each of our different fields. It has been a real pleasure talking to you.”

Notes

[1] This interview was made possible by generous funds from the *Interacting Minds Centre* at Aarhus University, and it was organized by the founder of *Gendering in Research*, Lea Skewes.

Literature Recommendations

Anne Fausto-Sterling

Fausto-Sterling, A. 1992. *The Myths of Gender - Biological Theories About Women and Men.* New York: Basic Books.

Fausto-Sterling, A. 2000. *Sexing the Body – Gender Politics and the Construction of Sexuality.* New York: Basic Books.

Fausto-Sterling, A. 2012. *Sex/Gender: Biology in a Social World.* New York: Routledge.

Julie A. Nelson

Nelson, J. A. and Ferber, M. A. 1993. *Beyond Economic Man: Feminist Theory of Economics.* Chicago: University of Chicago Press.

Nelson, J. A. 1996. *Feminism, Objectivity, & Economics.* London: Routledge.

Nelson, J. A. 2017. *Gender and Risk-Taking: Economics, Evidence, and Why the Answer Matters*. New York: Routledge.

Mads Ananda Lodahl

Lodahl, M. A. 2018. *Upassende Opførsel – 100.000 ord imod den heteroseksuelle verdensorden.* Copenhagen: Solidaritet.

Lodahl, M. A. 2012. *Queer Jihad – Se den heteroseksuelle verdensorden går i stykker.* Copenhagen: Solidaritet.

Why We Should Tackle Suppressive Gender Stereotypes in the *Manosphere*

Laura Bates:

Men Who Hate Women – From Incels to Pickup Artists, The Truth About Extreme Misogyny and How It Affects Us All

Simon & Schuster, London, pages 360, Price: 199,95 DDK at SAXO

By Lea Skewes
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All feminists hope to change the world for the better. Very few feminists can claim that they have contributed as much to feminist progress as Laura Bates who initiated the famous *Everyday Sexism Project*. The idea was simple but revolutionary: ask people to report (anonymously online) on their personal experiences with sexism or sexual harassment in their everyday life. This project documented that sexism and sexual harassment is a problem which affects people from all walks of life, in all types of contexts, and all over the world. In other words, it built the foundation for the discussion and the feminist progress that then followed when the #MeToo movement´s international launch started yet another revolutionary anti-sexism campaign in 2017.

Bates´ former book “Everyday Sexism” (2014) is a *must* read for anyone who wants to understand sexism and the suppressive dynamics at play in gender discriminatory interactions. It makes very clear how all-encompassing sexism and sexual harassment is, but also how it is a key element of sexism and sexual harassment that the cards are stacked against the ones who speak out. That is, very often saying “stop”, or even labelling the problem as sexism or sexual harassment, leads to very aggressive attempts to silence the people speaking out.

However, backlash experiences have not stopped Bates’s battle for justice. In fact, she has managed to turn other people´s hate into yet another constructive feminist project by writing a new book called: “Men Who Hate Women - From Incels to Pickup Artists, The Truth About Extreme Misogyny and How It Affects Us All” (2020). This book explores the online platforms of the *manosphere*. In order to do this, Bates went undercover with a fake online (male) persona, and is now reporting back to us about what she found.

She does not sugar coat their language or their brutal misogyny. On the contrary she reports on it in its horrific detail. The result is brutal reading. Bates systematically unveils one online *manosphere* platform after the other, laying bare their ideology and offering concrete examples of discussions, as well as the type of material which is disseminated amongst the members. Concretely, she goes into detail with four different groups:

- *Involuntary Celibate (Incels)* and
- *Pickup Artists (PUA)*, whose attitudes to women Bates captures with the following description: "Both groups [incels and Pickup Artists] depend on the separation of men and women into narrow, highly stereotypical categories. Both casts heterosexual sex as the pinnacle of male achievement, and portray women as little more than objects, whose sole purpose is to provide sexual pleasure to men, like some kind of pornographic slot machines. The difference is that incels regard the machine as rigged, paying out only to a few, pre-determined, socially superior elites (…). PUAs, on the other hand, believe it is possible, for a high enough price, to learn the exact secret combination of buttons to push and levers to pull, in order to trick the machine into paying out every time, regardless of the customer" (64).
- *Men Going Their Own Way (MGTOW)*, are men who chose to "eschew relationships with women altogether" (95) because women are considered "irreversibly toxic and dangerous" (96).
- *Men´s Rights Activists (MRA):* who Bates captures as follows: "There *is* a community of men´s organisations focused on tackling issues like mental health, masculine stereotypes and relationship violence. But this isn´t it. Instead, MRAs are concerned, to the point of obsession, with attacking women. And their particular target is feminism." (115)

After this introduction to the different representatives of the *manosphere* (incels, PUAs, MGTOW and MRAs) which you, as a feminist, wish did not exist, and definitely hope never to encounter, Bates reveals how their misogyny and hate is seeping into her own life on an everyday basis in the form of hate mails: "Receiving these messages day in, day out is like drowning in slow motion, but nobody else can see the water. And even if you try and tell them, they don´t understand" (144).

Bates goes on to unpack some of the strategies used in order to recruit and gradually radicalise more and more members for the *manosphere* platforms and ideologies. For instance, she shows how the excuse of irony or satire is intentionally used to gradually desensitise newcommers to increasingly more misogynistic attitudes and actions. She also points to the strategy of using pseudo-scientific facts in order to lend credence to the misogynistic ideologies. Sometimes, even going as far as, inventing fake statistical data, which is then disseminated as scientific "facts".

For a moment, as a reader, you are allowed to hold onto the hope that this extremely misogynistic world might be a unique problem only for outspoken feminists. However, then Bates moves on to reveal how the *manosphere* discourse, attitudes and actions have already trickled down through the online platforms and into the real-world in the form of real-life politics. She runs through concrete examples of how the pseudo-scientific facts of the *manosphere* are picked up by politicians all over the world. She offers the example of the most well-known representative from the *manosphere*, namely Steven Bannon. She shows how Bannon has advised and shaped not only the former American President Donald Trump´s policies, but also the current Prime Minister of England Boris Johnson´s political speeches (illustrating her point with Johnson´s famous speech in which he referred to Muslim women who wear burkas as "letterboxes").

Bates then goes on to show how the *manosphere´s* radicalization process of (particularly young) men is accelerated by platforms such as YouTube, simply because the platform aims to maximise profit. Concretely, YouTube algorithms are developed to increase viewers screen time (because increased screen time equals more exposure to advertisement which is how YouTube makes a profit), and they achieve this by suggesting increasingly radical videos on whatever topic a viewer started out from. This has the consequences that radical misogynistic views are not only sought out by a minority of viewers, but in fact, suggested to viewers who never went looking for these on their own accord. In other words, YouTube's algorithms are designed to offer up new recruits for the *manosphere* and the company benefits financially from this function.

With such powerful financial incentives to offer up more new recruits for the *manosphere*, *and* the powerful political players buying into the *manosphere* discourse, it becomes obvious that this is not just a problem for a few outspoken feminists. It is not just people like Bates, who are "drowning in slow motion" (144) from the exposure to extreme misogyny. The *manosphere* is a new misogynistic reality we all have to address and tackle, if we want to live in a world where extreme misogyny – and the gender violence that comes along with it – is recognised as the atrocity it in fact is. Toxic gender stereotypes are trickling down from the online manosphere platforms, into our real-world politics, and we need to do something about it if we want to prevent everyone from drowning in toxic gender stereotypes.

Opgøret med diversitetsdiskurs

Ahmed, Sara:

Et Ulydigt Arkiv

Forlaget Nemo, 2020, 208 sider. Pris: 240 kr.

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Ahmed på dansk

På et lille forlag i et lille land er et lille oversætter-kollektiv lykkedes med at gøre nogle af nutidens vigtigste undertrykkelses-teoretiske tekster tilgængelige på dansk. Det drejer sig om en samling kortere tekster, både essays og artikler, af kultur-, race-, diversitets-, køns- og queer-forskeren Sara Ahmed, udgivet under titlen *Et Ulydigt Arkiv*.

Ahmeds forskning har fået global opmærksomhed i de seneste årtier, og hendes akademiske stjernestatus blev ikke forringet, da hun gjorde teori til virkelighed og trådte tilbage fra sin stilling på Goldsmiths University i solidaritet med studerende ramt af seksuelle krænkelser/sexchikane. Hendes forskning har også fået sit indtog i den danske kontekst, især som følge af forskerkollektivet Peculiars hyppige citering af hende. Derfor er det også et passende valg, at to af kollektivets medlemmer, Mons Bissenbakker og Michael Nebeling, leverer et kontekstualiserende forord som introduktion til værket.

I den danske kontekst er det primært Ahmeds affektteoretiske arbejde, der hidtil har vundet indpas. Affektteoriens anvendelighed i Danmark tydeliggøres også af Bissenbakker og Nebelings indledningsvise analyse af ghettoloven: ”Den hyperbole fremskrivning af faren og utrygheden i ”ghettoerne” konkretiseres i udspillet til frygten for ”bander og kriminelle”, der, som racialiserede betegnelser, på en gang intensiverer angsten og samtidig giver den retning og genstand” (s.18).

Det er en gave, at bogen både indledes af et forord af nogle af de danske forskere, der har haft primær indflydelse på Ahmeds anvendelse og udbredelse i Danmark, og samtidig også tilbyder læseren et forord af Ahmed selv. Ahmed fremhæver i eget forord en gennemgående tråd i de valgte tekster, som vil være helt central for danske læsere; produktionen og genkendelsen af *den fremmede*. Heri får vi også en lille smag på de dele af Ahmeds tankegods som stadig fortjener tættere læsninger i Danmark, og som heldigvis med denne oversættelse måske vil opnå netop dette.

Ulydige læsninger

Ahmed er nemlig en forrygende tænker inden for kritiske hvidhedsstudier, racialiseringsforskning og kritisk raceteori, og både teksterne ”Hvidhedens fænomenologi” og ”Hvidhedserklæringer: Antiracismens ikke-performativitet” fortjener en genlæsning på dansk, i forbindelse med de spæde skridt der i disse dage tages til etablering af kritiske hvidhedsstudier i Danmark. Hvis dansk hvidhedsforskning skal bevæges forbi et argument om differentieret hvidhed (hvad Ahmed kendetegner som tidlige hvidhedsforskeres ængstelighed ved at gøre hvidhed ”essensbærende”, s. 59), er det dermed nødvendigt med kritiske bearbejdninger af positionalitet og magt, også blandt de få eksisterende hvidhedsforskere i Danmark.

Det er imidlertid Ahmeds banebrydende arbejde omkring institutioner, diversitets-politik (og -arbejde) og klager, som for alvor vækker genklang i forhold til mit eget forskningsområde, og som ligeledes med fordel kunne antænde en nødvendig kritik af dansk (forskning i) arbejde med diversitet og anti-racisme i institutioner.

Der er – især i forhold til den danske hyperfokusering på distraktionsordet ”krænkelseskultur” – nemlig meget at hente i Ahmeds arbejde med klager, i forhold til de verserende debatter og undertrykkelsesmekanismer på danske uddannelsesinstitutioner, både i relation til studerende og i relation til ansatte i udsatte og politiserede forskningsområder. Det centrale argument, der her går igen, er, at vi må undersøge, hvad der sker, når den klagende bliver gjort til problemet – snarere end hvad der klages over: ”Ordet ’klagende’ har en negativ klang. Det tilhører den samme familie af ord som glædesdræberen: Klagende, klynkende, jamrende, stivstikker, lyseslukker, glædesdræber.” (s.50)

Denne (i en dansk kontekst) ofte mere oversete del af Ahmeds forskning skriver sig ind i en bred international kritik af diversitets- og mangfoldighedsarbejde, som påpeger, hvordan diversitets-diskurs og multikulturalisme effektivt kan erstatte eller marginalisere mere dybdegående analyser af ulighed og undertrykkelse. I England er eksempelvis forskerne Anamik Saha, Sarita Malik og Clive Nwonka alle med til at fremme denne kritiske analyse af diversitets-diskurs i forlængelse af Stuart Halls kritiske Birmingham-skole-kulturteori (Malik, 2013; Nwonka, 2020; Nwonka & Malik, 2018; Saha, 2018). I min egen forskning har jeg for nyligt vist, hvordan dette udfolder sig i den danske filmbranche, hvor ’berigelse’ og ’diversitet’ udgør fremtrædende diskurser (Skadegård Thorsen, 2021).

Ahmeds analyser skaber således brugbare værktøjer til analyser på tværs af køns-, queer-, crip-, race- og klasse-teori (og langt mere). Arkivet i bogen er teoretisk ulydigt, ligesom det modsætter sig en hierarkisering af Ahmeds forfatterskab, ved ikke kun at anderkende og kanonisere Ahmeds peer-reviewede forskning eller affekt-teoretiske forfatterskab.

Obligatorisk læsning

Ahmed er kendt for at være en ordsmed og benytter sig ofte intentionelt af ord med merbetydning eller flere betydninger. Det må have været en utaknemmelig opgave, at skulle oversætte hendes ofte nørklede og spillende sprog til dansk. Derfor er det også en fornøjelse, at man som læser foræres en del oversættelsesteknisk indblik i de beslutninger og konsekvenser, oversættelsesarbejdet medvirker: Flertydige begreber er markeret med klammer [brackets], og noter angives sideløbende i tekstens margin, hvilket bidrager til en gnidningsfri læseoplevelse.

Det er et centralt og brugbart værk med anvendelighed på tværs af fagområder. Selv kan jeg se anvendelighed på vores kurser på Center for Køn, Seksualitet og Forskellighed, hvor en stor del af teksterne allerede fremgår på pensa i deres engelske originaler, og hvor de studerende jævnligt efterspørger danske tekster. Anmelder-kollektivets positionalitetsrefleksioner og forsigtighed tydeliggøres i deres efterord, som man skal sikre sig at læse med.

Litteratur

Malik, S. 2013. “Creative diversity”: UK public service broadcasting after multiculturalism. *Popular Communication*, *11*(3), 227–241.

Nwonka, C. J. 2020. The new Babel: the language and practice of institutionalised diversity in the UK film industry. *Journal of British Cinema and Television*, *17*(1), 24–46.

Nwonka, C. J., & Malik, S. 2018. Cultural discourses and practices of institutionalised diversity in the UK film sector:‘Just get something black made.’ *The Sociological Review*, 0038026118774183.

Saha, A. 2018. *Race and the cultural industries*. Cambridge: Polity Press.

Skadegård Thorsen, T. S. 2021. “Enriching Danish Film with Cultural Diversity”: Danish representational politics through the lens of the Danish Film Institute (DFI). In C. J. Nwonka & A. Saha (Eds.), *Black Film, British Cinema II (Forthcoming)* (p. 228). London: Goldsmiths Press, MIT Press.

Beauvoir i oversættelse – om at læse *Det andet køn* på dansk

Simone de Beauvoir:

Det andet køn, Bind I. Kendsgerninger og Myter
& Bind II. Erfaringer og oplevelser.

Gyldendal, 2019, 388 hhv. 608 sider. Pris: 350 kr. Oversat fra fransk af Karen Stougaard Hansen, Svend Johansen og Mette Olesen. Revideret af Claus Clausen.

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På dansk har vi ikke en *petit ami/boy friend* eller en *petite amie/girl friend*, men bare en 'kæreste', og vi har ikke *sex* over for *gender*, men bare 'køn'. Det er på den ene side vores held – så behøver man hverken antage kønnet på andre menneskers romantiske partnere, eller beslutte om man med køn mener noget biologisk forankret eller noget socialt, som om de to ting kan skilles entydigt fra hinanden. På den anden side er det netop sådanne forskelle sprogene imellem, der giver vanskeligheder ved en oversættelse. Paradoksalt nok fungerer disse vanskeligheder samtidigt som sprækker ind i tænkningens maskinrum.

I anledning af 70-året for Simone de Beauvoirs hovedværk *Le deuxième sexe* (1949) har Gyldendal revideret den danske oversættelse fra 1965, der siden blev genudgivet på det nu hedengangne forlag Tiderne Skifter. Genudgivelsen har medført en række sproglige moderniseringer og, ikke mindst, en oversættelse af det (lange) andet kapitel af tredje del (*Mythes*) af første bind, der oprindeligt var udeladt i den danske udgave, således at værket nu endelig forelægger i sin helhed på dansk.

Det andet køn har med tiden – og med god ret – opnået klassikerstatus inden for kønsteori og feministisk tænkning og aktivisme. Ikke desto mindre er det filosofiske ærinde i Beauvoirs tobindsværk af politiske og filosofihistoriografiske grunde ofte blevet negligeret. Men hvis vi nu insisterer på at læse værket som *filosofisk* tekst, er det altafgørende at have blik for den præcise begrebsbrug. I det følgende vil jeg derfor pege på nogle af de betydningsmæssige dimensioner, man bør holde sig for øje, når man læser værket på tværs af sproglige traditioner.

Oversættelsesanmærkninger

Gyldendals reviderede oversættelse er rent æstetisk en lise for sjælen og gør på den måde originalteksten ære. Men man kan som læser hurtigt blive forlegen, fordi teksten fremstår ganske nøgen og hverken ledsages af et forklarende forord eller en begrebsliste og (næsten) ikke indeholder nogen informative oversættelsesanmærkninger. Det kan dog være ganske nyttigt med et fundamentalt kendskab til værkets terminologi. Lad mig illustrere med et par eksempler.

Ligesom på engelsk tager fransk sit ord for køn fra latin (*sexus*), men udover 'køn' (*le beau sexe, le sexe mâle*) har ordet også betydningen 'sex'. Så når Beauvoir skriver, at kvinden har fået bestemmelse af *le sexe* slet og ret (DS I s. 18;192), har vi udover kønnet en i al fald mulig forbindelse til begæret, det seksuelle, der ikke fremgår på dansk: at være *sexué* ("kønsvæsen" cf. I s. 225) vil sige at blive *kønnet* i og med, at man gøres til begærsobjekt.

Snarere end det vi kender som *sex/gender*-distinktionen – der blev introduceret første gang på engelsk i 1960'erne – skelner Beauvoir mellem *mâle/femelle* (han- og hunkøn), der defineres ud fra reproduktive roller, og den eksistentielle kategori *la femme, le féminin* (kvinden, kvindelighed), der udgør værkets egentlige filosofiske omdrejningspunkt. Det 'feminine' eller 'kvindelige' betegner kort sagt den måde hvorpå kvindens 'situation', dvs. hendes biologiske, økonomiske og historiske omstændigheder, er blevet gjort meningsfulde. Værkets andet (og tungeste) bind bærer den fænomenologisk funderede titel *L'expérience vécue,* 'den levede erfaring', der henviser til ideen om *le corps vécu* ('den (op)levede krop') – svarende til Frantz Fanons 'l'expérience vécue du noir' (1952) – som det *fortolkede* sæt af kendsgerninger i modsætning til *det blot givne*, fx biologiske kendsgerninger, der i sig selv er meningstomme. På dansk er dét blevet til 'Erfaringer og oplevelser', hvilket om ikke andet er bedre end 'Woman's life today', som det hed i H.M. Parshleys berygtede engelske oversættelse fra 1953.

Visse steder presser det danske sprogs germanske rødder sig på, som når vi har 'væsen' (tysk *Wesen*) frem for det franske *essence*, som vi til gengæld kender gennem anglofon påvirkning. Formentlig med en intention om at hjælpe læseren til at registrere forbindelsen til feministiske diskussioner af 'essentialisme', har man udvalgte steder oversat 'essence' med låneordet 'essens' (I s. 369; II s. 20). Andre gange gengives det med 'natur' (II s. 11), ligesom '(et) væsen' kan gøre det ud for '(un) être' (II s. 16; 319). Når Beauvoir skriver om kvinden som det 'ikke-væsentlige' (I s. 223), får vi undtagelsesvist originalen indsat: "ikke-væsentlig (*inessentiel*)" (II s. 256). Sine steder er oversættelsen så fri, at man bør konsultere originalen, hvis man skal arbejde seriøst med teksten. Se fx dette stykke:

> I mandens skikkelse fremtræder medmennesket som et *andet* væsen, der er forskelligt fra hende selv – ligesom hun selv er dette andet væsen for manden, men for hende fremtræder den Anden som hendes eget væsen, og sig selv oplever hun i dette forhold som den, der har sit væsen uden for sig selv (II s. 85)
>
> Dans l'homme s'incarne à ses yeux l'Autre, comme pour l'homme il s'incarne en elle : mais cet *Autre* lui apparaît sur le mode de l'essentiel et elle se saisit en face de lui comme l'inessentiel (DS II s. 81)
>
> I hendes øjne inkarnerer den Anden sig i manden, ligesom den Anden i mandens øjne inkarnerer sig i hende; men denne *Anden* fremtræder som noget væsentligt for hende, og konfronteret med ham begriber hun sig selv som det uvæsentlige (min oversættelse)

Der er gode grunde til, at vi således ikke har nogen én-til-én-konsekvens i disse tandem-termers optræden. Men når udgivelsen samtidig ikke indeholder nogen hjælp i form af et teknisk apparat, kan forståelseslagene let gå ens næse forbi. Som det fremgår af eksemplerne indeholder *essence/essentiel* flere betydninger der komplicerer vores vante anglo-danske diskussion af emnet: den ideologiske forestilling om en given, transhistorisk identitet; det absolutte frem for det relative; det fikserede resultat af et historisk forløb.

I forbindelse med genudgivelsen af værket er sproget gjort mere tidssvarende – fx får vi "feminismedebatten" (I s. 13) for "La querelle du féminisme" frem for det 70'er-tunge "kvindesagsstridighederne" (1977 I s. 11) – men overordnet er det den samme tekst. Og hvilken tekst! Et banebrydende intellektuelt essay der introducerer kønnet som genstand for filosofisk undersøgelse, en kritisk analyse af undertrykkelsens ideologiske legitimation og eksistentielle udtryk i individet og, endelig, en tilskyndelse til at kæmpe for frigørelse – ikke 'ligestilling', men frihedskamp.

LITTERATUR

Beauvoir, Simone de. 1976 & 1949. *Le deuxième sexe, tome I-II.* Paris: Gallimard.
Beauvoir, Simone de. 1977. *Det andet køn, bind I-II.* Tiderne skifter.