

## Disability and Prostheses

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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 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.<sup>1</sup> 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 enactment of ability and disability. This enactment 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 anomaly 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

- <sup>1</sup> 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.

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