# Thinking Through Post-constructionism: Reflections on (Reproductive) Disembodiment and Misfits

CARLA LAM University of Otago, New Zealand

ABSTRACT In this article, I draw together feminist research on the distinct areas of assisted human reproduction (or new reproductive technology) and post-constructionist theory to examine some common methodological and epistemological issues fundamental for reproductive justice. I revisit the notion of technologically-assisted (reproductive) disembodiment (e.g., in vitro fertilization, surrogacy and egg donation) in light of theoretical developments in feminism, in particular post-constructionism. Specifically, I ask what light is shed on the paradox of reproduction (in particular disembodied reproduction) by feminist post-constructionism?

KEYWORDS feminism; feminist theory; new materialism; post-constructionism; embodiment; disembodiment; misfits; politics of reproduction

In previous work on new reproductive technology and disembodiment (Lam, 2015), I was concerned with the paradox of reproduction, or women's reproductive experiences, as a source of both profound power and vulnerability in patriarchal cultures based on liberal individualism. Theorizing the epistemological dimensions of new reproductive technologies. which remove conception from women's bodies (hence disembodying reproduction), I claimed they magnified this paradox, offering both greater control and vulnerability to women as potentially pregnant and birth giving. In cultures underpinned by Descartes' privileging of mind over body, pregnancy and birth are powerful reminders of the material origins of human life, but not often in its true complexity. Women's bodies in particular, as markers of material reproduction, are predominantly portrayed in terms of vulnerability, rather than as part of the continuum of vulnerability and power all bodies encompass over the life course. Such representations betray a greater struggle with the reality of human (inter) dependency or "the facts of corporeal vulnerability" (Whitney, 2011, p. 554), because as embodied agents

Correspondence Address: Carla Lam, Department of Politics, PO Box 56, Dunedin, 9054, New Zealand; Email: Carla.Lam@otago.ac.nz





we all are reliant on others, especially as infants, and when we are ill, elderly or dying. Such Cartesian dualism echoes through time and remains in contemporary social and political theory as the nature/nurture or biology/society debate, which mis-portrays matter as passive biology rather than as a complex biosocial process.

My work engages the biology/society debate, tracing how discourses surrounding biotechnology conform to restatements of an ultimately false dichotomy of (biological) determinism/(social) constructionism. In other words, the biology/society division plays out as what is given (biology) versus what is constructed (society and culture) and is ubiquitous in social and political thought, including in feminism. My approach attempts to mitigate this polarization and its effects by complicating the overly simplistic and longstanding dualistic patterns of thought on which the biology/society opposition is based. This is not a new endeavour in feminist theory. The renegotiation of nature and culture can be found in, for example, Mary O'Brien's (1981) notion of biosocial reproduction and more recently in transdualistic approaches emerging as new material feminisms (see, e.g., Alaimo & Hekman, 2008) or post-constructionism (Lykke, 2010a). Indicative of these approaches, Rosemarie Garland-Thomson's (2011) materialist concept of "misfits" demonstrates recent feminist thinking about biosocial embodiment, highlighting how bodies in the world are best understood as intra-active processes rather than preexisting, distinct, biological or social entities.

In this article, I draw on such post-constructionist ideas to make sense of the epistemological significance of reproduction as an instance of gendered embodiment, in its complex relation to techno-science, inequality and social justice. I revisit the notion of technologically assisted (reproductive) disembodiment (e.g., *in vitro* fertilization, surrogacy and egg donation) in light of theoretical developments in feminism, in particular post-constructionism. Specifically I ask, what light is shed on the paradox of reproduction (specifically disembodied reproduction) by feminist post-constructionism?

### **New Reproductive Technologies and Disembodiment**

Elsewhere I have argued that new reproductive technologies (NRTs), which disembody and disaggregate the female reproductive process, largely represent a new manifestation of an old paradigm of birth appropriation (Lam, 2015, p. 3). This view, stemming from Mary O'Brien's political theory and Somer Brodribb's excellent elaboration of O'Brien's work (e.g., Brodribb, 1986, 1993), is based on the idea of men's and women's differing reproductive biologies (or consciousnesses in O'Brien's terms), and the erasure of women's reproductive roles through patriarchal representations in techno-science, medicine, culture and politics. For example, men become

"fathers" of democracy, and the church, and are seen to create life as scientists, thereby eclipsing women's reproductive roles and contributions figuratively and otherwise. Yet NRTs can be seen to reveal the paradox of women's reproductive experiences in patriarchal society as both, and often simultaneously, experiences of power and vulnerability. Conceptive technologies, like their predecessors, are contradictory in their ability to both challenge women's control over reproduction and offer reproductive freedom and justice for many including lesbians, gay men, and those with congenital diseases.

Conceptive technology is like contraceptive technology in creating a division between sexuality and reproduction for women; but what is new about conceptive, reproductive technologies is that they take conception outside of women's bodies, which changes their reproductive experiences. While contraceptive technologies let women choose not to bear children, at least in ideal circumstances and for some women, the new reproductive technologies take this for granted and add whether to have children, when and how to have those children and increasingly what kind of children to have. Moreover, conceptive technology is paradoxical: that is, on the one hand, it offers a greater degree of technological control over reproduction, which can be perceived as a threat to pregnant women's autonomy over their bodies, operating within techno-medical norms that render opting out of its use difficult. On the other hand, it can also potentially liberate them from the toils of traditionally conceived reproduction and sexuality, including biological timelines and heteronormative family building.

O'Brien's work does not constitute a return to biological essentialism, (although it is often categorized as such) once her understanding of reproduction as a biosocial process rather than brute biological event becomes clear. Such a complex understanding is key to a grasp of any materialism, including forms emerging under post-constructionism. Her political theory constitutes a thorough feminist reworking of Marxist materialism, best described as dialectical reproductive materialism that bears the marks of its particular ideological and historical moment, but if we can look past such signifiers most critical scholars would readily accede to her ideas: that at the level of embodiment, itself a process, reproduction has been normatively inscribed and hence experienced as fundamentally binary along the lines of the largely imaginary, but nonetheless embodied, experience of the binary norms of "the feminine" and "the masculine."

While the exercise of assigning theoretical (and historical) pedigree to the kind of materialism that post-constructionism engages is important (Åsberg, Koobak, & Johnson, 2011, p. 222; Hinton & Liu, 2015, p. 134; van der Tuin, 2008, pp. 414-415), and I have begun such work elsewhere (Lam, 2015), here I highlight the biosocial conceptual mediation that I see as common to postconstructionism and my theory of women's disembodied reproduction, which involves O'Brien's philosophy of birth. Put differently, the emphasis of my investigation is not into the specific theoretical foundations of various articulations of feminist materialism, but on the body and its sensibilities as "an old concern of materialist feminism as it ranges from historical (dialectical) materialisms to new (non-dialectical) materialisms" (Åsberg et al., 2011, p. 222; see also Lam, 2015). From this focus on gendered embodiment, and its political and epistemological significance, emerges a common transdual negotiation of the biology and society tension from across feminist theoretical and historical frames of reference (Lam, 2015).

# Reproduction

The significance of NRTs' disembodiment of reproduction was its constitution of a new material reproductive process reflected in profound, radically new social relations, and new reproductive consciousnesses: a new reproductive praxis. This idea was based on O'Brien's (1981) demonstration of the way historical changes in reproduction provided the material grounds for new configurations of the human condition at the levels of ideas and society; but it was her student, Somer Brodribb, who first applied O'Brien's reproductive consciousness to new reproductive technologies and their legal and other ramifications in the 1980's.

In O'Brien's feminist Marxist analysis, biological processes are not fixed but dialectic, involving the mediation of social, material and ideological realms. O'Brien substituted birth/reproduction for production as the foundation of social life. She grants reproduction ontological and epistemological primacy over production in a feminist reconfiguring of dialectical materialism. The result of O'Brien's integration of reproductive process and dialectical materialism is a thoroughly dialectical understanding of reproduction as the substructure of history best described as "reproductive dialectical materialism" (Hearne, 1999, pp. 62, 15). O'Brien's considerable revisioning of Marx remains dialectically materialist, in the sense that things do not "exist outside of or prior to the processes, flows, and relations that create, sustain, or undermine them" (Harvey, 1996, cited in Hartsock, 1999, p. 64). More broadly, this "profound" restructuring of base and superstructure is what O'Brien calls the philosophy of birth (Burfoot, 2014, p.177).

It is the notion of reproduction as a biosocial process, not a "thing" – a dialectical reproductive materialism as captured in her notion of reproductive consciousness – that is most important for understanding the paradox of reproductive disembodiment. O'Brien believes that men share a reproductive consciousness shaped by alienation from pregnancy and birth, and women share a disjunction between sexuality and reproduction (at least in the developed world) because of contraceptive technologies. But women's "natural" (non-technologically mediated) embodied reproductive experiences are of connection rather than alienation because they end in birth rather than ejaculation.

O'Brien's insights about men's "second natures" as coming from their

mediation of reproductive experiences (of alienation) are unique and widely recognized in feminist studies. That this way of seeing the world effects a masculinist denial of birth, or "first nature," evident in a death impulse, is attributed to Brodribb (1993) who traces such in the denial of matter (considered the feminine principle) and its significance by comparison to form (presented as masculine principle) from Classical Greek texts through to postmodern psychoanalysis.

Especially pertinent to the paradox of reproduction, or women's embodied experiences of their reproduction as a source of both profound power and vulnerability, is O'Brien's conceptualization of two moments of significant change in reproductive process, the second of which is important here. For her, contraceptive technology (the birth control pill) signified great change in the social relations of reproduction, as it allowed women to separate heterosexual intercourse and reproduction for the first time: an experience that without technology is only men's. This entails a change in women's experience of reproduction, in its overlapping biological, psychological, and sociocultural dimensions. Significantly, the advent of mass contraceptive technology, by enabling women to reliably separate sex from reproduction for the first time on a mass scale enabled radical new understandings of the self as an autonomous sexual and reproductive agent, including behavior visà-vis potential sex partners, not just co-parents.

Since contraceptives go back to pre-Christian Egypt, the key distinction with the pill is its potential for women's reproductive control (as opposed to, for example, condoms), as well as its mass production, widespread use, and groundbreaking effectiveness. For these reasons, O'Brien believed that mass contraceptive technology had the promise of liberating women, not just of furthering patriarchal control over women's sexuality and reproduction. In short, modern contraception constituted a "world historically" significant change in reproductive process because it provided a previously nonexistent material basis for gender equality (O'Brien, 1982, p. 110). Before the advent of mass contraception, the only way for women to reliably choose parenthood was to be celibate or homosexual.

Similarly, I've argued that the paradox of women's reproduction in the age of NRTs is that with increasing material disembodiment of reproductive processes, men's and women's physiological differences are potentially mitigated, which can have progressive effects, but only where patriarchal practice is similarly altered. Although these changes may "free" women from embodied reproduction (and its associated roles) they also further naturalize men's embodied reproductive experiences of the separation between sex and reproduction, and pregnancy and parenthood; in essence, of bio/physiological act and social role. With NRTs and DNA testing, for example, men's and women's differences in reproduction are radically altered; men can technologically mediate their paternal uncertainty, and women's reproductive processes (and maternal certainty) can be disembodied by NRTs (see e.g., Burfoot, 2014, p.177). Androcentric dualism is not automatically challenged in the development and use of NRTs and has a significant reinforcing role in a continuous history of birth appropriation.

O'Brien never resolved the contentions and quarrels that surrounded her radical theory. Most significantly, O'Brien's universalist claims, for example in her attribution of "world historical" significance to the changes in birth process she theorized, were challenged as essentialist. But although the open parameters of her theory need attention, her work highlights male and female reproductive experiences of normative and epistemological significance related to the differentiated corporality of sex/reproduction which NRTs erode. Furthermore, her complex understanding of the relationship of ideas, society and biology in reproduction (or consciousness, social relations, and biological process in her terms), is relevant and critical to the feminist movement today, and indeed to the unresolved nature/nurture (or sex/gender) tension in Western culture more broadly (see Harstock, 1998, p. 66).

Ultimately, O'Brien's focus on women's reproductive commonality is sorely needed in contemporary feminist theory, especially when it is paired with a substantive understanding of diversity and difference and genuine strategies to address intersectionality, or the way multiple social locations fundamentally shape one's experience of reproductive consciousness. Reproductive justice is yet to be achieved; the benefits and disadvantages of NRTs are unevenly distributed amongst women, as revealed by debates ranging from the provision of free contraception to welfare beneficiaries in New Zealand, to discrimination concerning access to IVF throughout liberal democracies. To better understand the biosocial dialectic at play in O'Brien's philosophy of birth as relevant to contemporary reproductive politics, it is helpful to revisit Nancy Hartsock's (1983) feminist standpoint theory in which such a complex negotiation of biology and society is also evident.

#### **Standpoint Epistemology**

Socialist feminist Nancy Hartsock (1983) developed feminist standpoint epistemology as the ground for a specifically feminist historical materialism that is implicit in O'Brien's biosocial theory of reproductive consciousness. O'Brien may not have framed her contribution in terms of feminist epistemology generally, nor of standpoint epistemology specifically, but her work implicitly proposes a specific standpoint from men's and women's differing reproductive consciousnesses. As Hartsock recognizes: "[O'Brien's] argument for a superior understanding which has not had power is more nuanced than my own in my feminist standpoint essay, but the impulse and conclusion are similar" (1999, p. 66).

Following from the sentimentalization of an underclass in Marxist inspired standpoint theories are assumptions about the notion of women's critical consciousness as essentialist, not unlike in critiques of O'Brien's reproductive consciousness. Hartsock's theory advocates a feminist

standpoint, rather than a woman's perspective; the former is won by struggle and activity conscious of complicity and complexity in multiple (and even contradictory) consciousnesses. Although standpoint privileges the epistemic position of the oppressed insofar as it can give rise to an improved, counterhegemonic, not just a different kind of knowledge, it does not essentialize the source of such awareness. As Sandra Harding clarifies, "standpoint theory does not require feminine essentialism but rather analyzes the essentialism that androcentrism attributes to women; nor does it assume that women are free of participation in racist, classist, or homophobic social relations" (1998 p. 233); "rather it is to note that marginalized groups are less likely to mistake themselves for the universal 'man.'" (1998, p. 236).

Hartsock addressed the claims that she (and O'Brien) were similarly biologically determinist, emphasizing misunderstandings of Marx's more subtle than recognized biosocial dynamic in dialectical materialism. This is addressed in Hartsock's explanation that in her use of sex rather than gender, she meant to imply nature as never outside sociality in Marx's sense. The claims that her work was essentialist stem from a lack of familiarity with this fundamental Marxist principle; there may be no outside to "nature" in Marxist theory, but such nature is fundamentally social and historical – that is, our nature is a social process.

As a standpoint is implicated in a process involving critical awareness of difference and its political and epistemic implications, it is linked to the other claim of standpoint theory that such knowledge is "less partial and distorted, and hence more objective" (Grasswick, 2013, n.p.). This is a new kind of objectivity associated with feminist philosopher of science, Donna Haraway, in the history of feminist science and technology studies whereby objective doesn't mean the view from nowhere, but the critical awareness of the view from as many somewheres (especially marginal ones) as possible. Hence obiectivity takes on a democratic dimension, and is seen as a "social process" whereby the inclusion of as much diverse experience (not just interests or values per se) as possible is a fundamental feature of reliable knowledge (Grasswick, 2013, n.p.). This is where the ethical and political aspects of the epistemological come into view.

Knowing as a social practice rather than a purely solitary activity which happens through engagement with others requires ethical accountability. Feminist post-constructionist theorist Karen Barad's "ethico-epistemontology" is shorthand for this rather complex idea (2007, p. 23). There is, in fact, a "complex network of epistemic relations between knowers" which requires us all, especially those engaged in research and knowledge production to take responsibility for patterns of ignorance and illumination of some ways of knowing and not others (as per Haraway) (Grasswick, 2013, n.p.). In other words, we must strive for an inclusive reproductive justice that acknowledges reproductive experiences outside mainstream reproductive norms like heterosexuality and coupledom. In a time when reproductive lives play out in the context of advanced reproductive technology that disembodies

reproduction, and in theory gives women more choices and control over their reproductive lives, it is important to consider what may be lost or forgotten in their wake.

#### Dis/embodiment

At the heart of my, and many, feminist critiques of NRTs is that they disembody women and can thus de-subjectify them on at least two levels: by taking female reproductive processes outside of women (for example by physically taking conception out with in vitro fertilization and embryo transfer) and presenting the embryo as a "free-floating" entity (with ultrasound and imaging technologies). Both are linked to the displacement of women's epistemological standpoint as potential birth-givers. The subject position associated with women's embodied reproduction as one of interconnection with another developing corporeality, is delegitimized and displaced with other logics, specifically that of the individual at the foundation of liberal narratives of personhood.

The term "embodiment" conveys the boundaries of human corporeality that are the condition of possibility for one's relative autonomy and community. I draw from Lisa Mitchell's useful discussion of "embodied perception" where she distinguishes between the "body...defined as 'a biological, material entity," and "embodiment as 'the existential condition of possibility for culture and self" (2001, p. 15). Embodiment also signifies the interplay of biological and social forces in the construction of gendered selfhood, identity, and agency. To be an embodied self, or subject, acknowledges the rootedness of subjective experience in bodies that are lived out materially, but never wholly determined by their biological features. This suggests that embodiment involves a conscious self, inseparable from its body in any complete sense (out of body experiences aside) and as the condition of possibility for autonomous agency.

Although the body in liberal cultures that emphasize individualism implies at least partial autonomy of a self-legislating and self-governing being, embodiment is an irreducibly social process. Subjectivity arises in awareness of this separation and connectedness, but it also defies Cartesian dualism because there is no meaningful separation between one's body and one's self. Mitchell notes that "a central assumption of this approach is that 'our bodies are not objects to us...[rather] they are an integral part of the perceiving subject" (2001, p. 15). This perception affects self and other in an interconstitutive fashion.

Moreover, others' bodies are an integral part of our own, not only materially (as hereditary genetics and pregnancy make clear at one extreme) but also psycho-socially as, for example, with inherited lifestyle, beliefs, and culture. Sara Ahmed aptly challenges "the body" as a concept of the singular, privatized/individualized self with the claim that "the lived experience of

embodiment is always already the social experience of dwelling with other bodies" (2000, p. 47). Our embodied experiences, she argues, are fundamentally social as a necessary condition for experiencing ourselves as separate and unique, something many feminist theorists and other contemporary philosophers such as Charles Taylor have explored (1991, 1992). Such relational theories of autonomy are at the heart of feminist ethics of care and feminist standpoint epistemology, as critiques of individual autonomy in liberal theory. Women's reproductive potentialities put them in a counter-hegemonic subject position, both as actual and as potential birthgivers in patriarchal cultures built on gender binaries. Women, as those who hold the potential to be other than individual (literally, "one who cannot be divided") are *de facto* epistemological outsiders in Western cultures rooted in liberal political thought (see Franklin quoted in Mitchell, 2001, p. 13; see also Eisenstein, 1988; Tyler, 2000; Vickers, 1994) though the larger point is that none of us are discrete individuals.

The inter-constitutive relationship of bodies and selves is a cornerstone of Western feminism. For instance, one of the most internationally successful anglo-American feminist texts was the Boston Health Collective's Our Bodies Ourselves (1969), which, as the title implies, promotes a view that for women the body is an "intrinsic part of the self" (Woodward & Woodward. 2009, p. 63). Announcing the women's health movement in second wave feminism, it came with the politicized message that having control over your body was synonymous with being in control of yourself. Wendi Hadd rejects the discourse of women's "control," over their bodies adopted by feminists in reproductive debates, because it perpetuates a mind/body dualism that is inimical to their aims. She writes, "The body is not only a physical manifestation of the self but an integral component of the self, it is not just where we live but an element of our living" (Hadd, 1991, p. 173). This argument, properly understood, performs a trans-dualistic understanding of the body that combines Mitchell's concepts of body and embodiment or the "body...defined as 'a biological, material entity," and "embodiment as 'the existential condition of possibility for culture and self" (2001, p. 15). Furthermore, its most important implications stem from insisting on the agency of the biological body, which is common to O'Brien's biosocial understanding of reproduction, and recent articulations of embodiment in post-constructionist feminisms.

Many feminists theorize the body from the perspective of social epistemology, the philosophical study of the nature of knowledge that emphasizes the inseparability of individual knowers and communities of knowers. Feminist social epistemology, then, recognizes sex/gender as a feature of embodiment (or corporeally mediated subjectivity) that is always (socially) situated. Embodiment is best understood in contrast to Cartesian dualist theories, based on the mind/body division, which sees the thinking mind as separate from the physical body. As the educational theorist Madeleine Grumet wrote, "it is not I think therefore I am,' rather it is

because I am embodied and situated that I think in particular ways" (cited in Mooney & Evans. 2007, p. 76).

Feminist standpoint theory is materialist in a Marxist sense because it is based on the idea that what we do shapes who we are (rather than the other way around). Moreoever, standpoint posits that all knowledge is partial because it is constituted of life experiences which differ, and that sex/gender shapes women's and men's experiences as distinct. In addition, the epistemological position of the feminist subject gives her an epistemically privileged knowledge, compared to men's, because in theory it is a historically subjugated way of seeing less invested in upholding the patriarchal status quo (van der Tuin, 2008, p. 51). Importantly, Hartsock's original notion of standpoint emphasized its status as something "struggled for" rather than simply one's unreflective point of view.

A standpoint comes about through the recognition of more than one view of the world, which originates in a discord or misfit between one's own experience and the mainstream discourse about the world. This can, in theory, lead to the more complex and broader understanding of situated knowledges and multiple subjectivities, and a critical epistemology. This view contradicts the major critique of feminist standpoint theory as universalist narrative based on a sex-linked essentialism, but Hartsock's response to such critiques, especially in her reflection on the original argument 15 years after its publication, enable us to get deeper into the biosocial negotiation relevant to feminist studies from O'Brien, through Hartsock, to the post-constructionist material feminisms.

Nina Lykke's (2010a) term "post-constructionism" references a deeply entrenched debate in Anglo-western feminist theory. The history of such feminist theory from at least as early as Simone de Beauvoir's The Second Sex (1989; first published in 1949) can be seen as a constant negotiation of the bio/social dualism, in terms of the sex/gender debate. More recently, this tension has resulted in an impasse between feminist approaches that fall (more or less) on one or the other side of a biological essentialism or social constructionism division. One key dimension of the sex/gender debate in feminism is the rift between biological determinism and social constructionism, whereby those arguing the former emphasize biological characteristics (often considered permanent or fixed) in sex difference, while those advocating the latter highlight the influence of social conditions or constructions (perceived as changeable). However, both positions attribute certain essential features to women as a category, specific characteristics that a person must possess to be defined as a woman; hence both arguments can be considered essentialist

But essentialism and determinism are often mistaken for each other when it comes to biological descriptions of women as distinct from men, something which gave rise to feminist social constructionist theories as a corrective to biological determinism in the first place; however, many feminist theorists have revealed that the problems associated with determinism are not limited to rooting sex/gender difference in biology. For instance, Lykke demonstrates that categorizing people on the basis of essences or defining characteristics. regardless of their foundations in social or biological realms, can be limiting; she calls this tendency "gender conservatism in the shape of biological determinism and cultural essentialism" (2010a, p. 132). In other words, there is ground to challenge the essentialism/constructionism split as a false dichotomy. More positively, feminist biologists like Birke show how biology can be "a feminist ally" (Asberg & Birke, 2010, p. 416) if understood transdualistically - that is, through challenging biology's determinist connotations, as I've discussed with biosocial reproduction and embodiment (Lam. 2015).

Even though many feminist theorists throughout history have posited a biosocial or material body that challenges determinism regardless of its origin in social or biological theory (Birke, 1986, 1999; Fausto-Sterling, 2000, 2005; Kirby, 1997, 2008), this complex notion of biology is arguably experiencing a renaissance. In 2011, feminist philosopher Iris van der Tuin characterized the "new feminist materialisms" as a multidisciplinary phenomenon in Western academia that "feminist theory is at the cutting edge of...." (2011, p. 271). I prefer to use Lykke's (2010a) term postconstructionism, but include in this phenomenon "new materialisms" (Coole & Frost, 2010) "new feminist materialisms," (van der Tuin, 2011) or simply "material feminisms (Alaimo & Hekman, 2008) in recognition of authors' choices

Post-constructionism is an umbrella term for the diverse and numerous theories that are critical of the limits of constructionism, without falsely categorizing them dualistically; that is, in a chronological history or as simply imbricated in one or another theoretical dispute (Lykke, 2010a). The prefix "post" which can be taken to imply beyond or after, can be misleading in this regard because she intends to subvert any sense of chronology and the valorization of "new" forms of body theory over what has come before. Instead, the term post-constructionism is intended to showcase how feminist theories that take matter as a starting point constitute a new methodological tool, or 'thinking technology' (Lykke, 2010b, p. 134), which provides a crucial platform of exchange to discuss trans-dualistic theory developments. This presentation also delineates a workspace where a set of theoretically and disciplinarily diverse approaches to a similar topic converges to compare notes. As such, post-constructionism (and especially feminist studies as part of it) is "committed to a process of intense transdisciplinarity" (Lykke, 2010b, p. xi), because it questions the taken for granted distinctions between the humanities, the social sciences and the medical, technical and natural sciences

Because its features are often characterized as new, with a connotation of replacing and bettering, post-constructionism has been met with controversy amongst feminists. Arguments about the newness of approaches that subvert biological determinism and social essentialism through a focus on biological

materiality have focused particularly on biology in feminism, and whether "the call to bring biology into feminism really is new" (Irni, 2013, p. 41). Some of these arguments claim that feminist academics, especially many feminist science and technology scholars like Donna Haraway and Anne Fausto-Sterling, have previously dealt with biology in a similar manner to post-constructionism; others argue that the notion of biology in earlier feminist theory was largely a critique of biological determinism, rather than an account of biology that acknowledges its positive agency.

The point of difference between post-constructionism and previous approaches is that biology or matter has agency. In other words, postconstructionist theory views biology as an active agent in a reconceptualized notion of becoming that undoes the biology/society dualism. Postconstructionist feminist theories make use of feminist thought from across disciplines and historical moments, looking beyond binary constructs to address the biosocial body "in ways that neither push feminist thought back into the traps of biological determinism or cultural essentialism, nor make feminist theorizing leave bodily matter and biologies 'behind' in a critically under-theorized limbo" (Lykke, 2010a, pp. 131-132). The postconstructionist material turn understands its object of analysis (the "material"), as itself an active participant in the processes of life, rather than something that precedes human life activity in its complex natural-sociality. Post-constructionism breaks through the essentialist/constructionist binary by taking matter seriously as a starting point, but without approaching matter as either natural or sociocultural.

When matter is seen as agential it becomes possible to interact with matter in a way that affects both nature and sociality; furthermore, what is classified as "matter" is opened up to include almost anything. Post-constructionist terms and concepts like transcorporeality, the material-discursive, and posthuman (ities) undermine dualistic paradigms of thought and practice. In the case of the biology/society division, such transdualism means that what matters is placed in the moment of (material) interaction between various subjects and objects (for example, human and non-human "nature"), which is happening everywhere – all of the time – and allows such differences to be seen as active processes between elements previously understood as distinct. Put differently, lived embodiment, or the biosocial body, is a process of movement and change, simultaneously entailing freedom and possibility, restraint and limit. For instance, the concept of the material-discursive, rather than suggesting the solidity of subjects or agents in the world, independent of each other and their relationship with other "things" in the world, signifies that agents are made in the sense of defined and reinforced through their process of inter-relation.

Feminist scientist Karen Barad's (2003) concept of "intra-action" is important because it signifies difference as enacted everywhere, all of the time, through each engagement with the environment. Intra-action marks a "profound conceptual shift" in the subject/object relationship, making

bounded and autonomous subjects/objects not the precondition of relationality, but rather its outcome. These bounded and autonomous subjects. in other words, are made such only in interaction with others. For example, in each daily interaction in the world, we act but are also acted upon or changed. Eating, moving, absorbing heat, cooling down, or exercising are all intraactions – or engagements with the material world of which we are irreducibly a part - and in which we are changed by, and effecting change on, the environment. Thus, in an important sense, we both make and are made by our daily, even mundane, biosocial or material engagements with the world.

Feminist theorist Stacey Alaimo's notion of transcorporeality (Alaimo & Hekman, 2008, p. 238) similarly explodes the nature versus culture separation by breaking down the notion of the human as neatly separate from the greater environment. Some good examples of how fitting this concept is in contemporary global life include issues of environmental health (e.g., how human use of antidepressants and birth control pills change aquatic life. including fish DNA, which is then recycled in human consumption); environmental justice (e.g., surrounding hurricane Katrina); and genetic engineering (e.g., tomatoes with fish genes, and xenotransplantation that involves growing human hearts in pigs for human transplantation) (Alaimo & Hekman, 2008, p. 239).

In summary, post-constructionist feminist theories are dedicated to elaborating upon a complex materiality that refuses to separate biology and society, or to make one prior to the other. These new material feminisms are associated with the notion of the post-human as a major paradigm shift within (Western) academia, which undermines taken-for-granted boundaries between human and non-human nature, body and environment, and mind and matter by focusing on material life as biosocial process, or materiality, which dissolves the duality in its multiple manifestations. This radical move encompasses the macro (institutional), and the micro (genetic or sub-cellular).

The term "post-humanities" refers to highly transdisciplinary fields which subvert the nature/culture dichotomy by subjecting to analysis the notion of the human (understood as separate from the non-human) in the various disciplines constituting social and human studies. Such undoing of humanism also questions the meaning of separating social and natural sciences. Significantly, Cecilia Asberg and colleagues (2011) include materialist feminist theorizing under post-humanities or post-human studies. Similar to Lykke's use of the prefix in post-constructionism, post-humanities signifies no simple breakage, but an ongoing and productive reworking of the defining features of the human subject at the foundation of social sciences, especially in the wake of highly technologized contemporary life in the affluent world (Åsberg et al., 2011, p. 225).

# Disembodiment, the Post-Human, and Misfits

The post-human can be seen as a way to make sense of disembodied, disaggregated subjectivity, facilitated by the hyper techno-permeated lives of those in affluent northern and western worlds. Furthermore, the post-human is a concept that informs post-humanities, but more broadly and deeply challenges the "anthropocentric imaginary" (Åsberg et al., 2011, p. 219) in arguing that not even our (human) bodies are our own. Given that at the genomic level human and non-human animals significantly overlap, and "bacteria outnumber by at least a thousand times the number of human cells in the body (!), we incorporate more bacterial than human genes into that which we consider *our* body" (Åsberg et al., 2011, p. 219). In a clear reference back to a key feminist text, the non-human world challenges the assumed grounds of "*our bodies, ourselves*" the assumed coherent aggregated self as an accurate starting point for any social research or practice, including that of feminists, and my own.

This brings us back to the original questions driving the article: What light is shed on the paradox of reproductive disembodiment by feminist post-constructionism? Is disembodiment, which I elsewhere associated with new reproductive technology, and the dream to transcend the limits of human bodies ("transhumanism") one and the same with the post-human? The argument I made regarding women's disembodied reproduction as a result of the advent of conceptive technology has a similar sounding logic, but is actually quite different. The post-human doesn't advocate moving beyond the confines of the human body, so much as grounding subjectivity in the face of increasingly dis-unified human subjects, which Braidotti (2013, p. 11) calls the "post-human predicament". More positively, she clarifies the post-human nomadic subject as: "materialist and vitalist, embodied and embedded" and as "firmly located somewhere" (2013, p. 188).

At least one dominant feature of disembodiment in patriarchal technosociety is the view from nowhere (for example, gender neutral and without race): Haraway's (1991) "God trick" or the disavowal of privileged subject positions (see Åsberg et al., 2011, p. 223). I have critiqued new reproductive technology as an example of such disembodiment because it undermined women's unique reproductive epistemologies by reference to a hegemonic liberal individualism, further privileging normative masculinity (men's experiences as representative of the human). But post-constructionist new materialism seems to enable and require a more radical reconsideration of the post-human (and techno-mediation by association) as, at best, epistemically advantageous, and perhaps, in any case, unavoidable in contemporary life.

Ironically, such new material thinking with its complex theorization of biosocial entanglements in contemporary technosociety draws me back to the universally human experience of embodiment as constituted of independence and dependence, vulnerability and strength, surpassing gender norms. What I previously critiqued as women's precarious (reproductive) embodiment, now

seems associated with the grounds for commonality amongst not only women, nor women and men, but ultimately all embodied creatures. What more fitting base could there be for equality, including reproductive and other kinds of justice I advocate? The post-human highlights the untenable notions of not only the body as containment of a unified subject, but even its singular or unmixed human-ness. The post-human thinking tool undoes the binary code which places the human as a reinforcement of the wearied biology/society frame, and offers a way to re-embody disaggregated subjecthood in light of the messy tangle of material-discursive elements that constitute human embodied life.

Dis/ability theorist Rosemarie Garland-Thomson's (2011) concept of "misfits" allows us to revisit the paradox of reproduction in light of postconstructionist or new material embodiment. A misfit, as part of postconstructionist feminist materialism, radically re-conceives the ground of normative embodiment, because it focuses on the moments of interaction between "flesh and environment," rather than placing disability in particular bodies. Consider, for instance, a flight of stairs versus an elevator, and someone in a wheelchair trying to get to an upper floor meeting. In addition, misfits contextualize moments of fit as precarious in ever-changing and universally human, daily, material encounters with the world. Garland-Thomson (2011, p. 600) writes, "a misfit occurs when world fails flesh in the environment one encounters – whether it is a flight of stairs, a boardroom full of misogynists, an illness or injury, a whites-only country club, subzero temperatures, or a natural disaster." The phenomena of fitting or misfitting with the world, places the experience of vulnerability in the material situation, the spatiotemporal location of the event and is a happening, rather than a fixed characteristic of the body. Whether one fits or misfits in any given moment is contingent on fluid bodies in a lifelong and constant process of intra-action with an equally changeable material environment.

In linking vulnerability to constant and ever-changing material intra-actions, Garland-Thomson as opens up disability an area of concern/significance and engages power relations in situations that are unavoidable as part of the embodied life course (we will all age, get sick, and eventually die). At the same time, the concept of misfits is an invitation for analytic approaches rooted in the nexus of gender, disability and other axes of marginalization and power, as a basis for more equitable social practice. Undermining the misrepresentations of human corporeality has implications. for example, to recognize women as reproductive misfits in patriarchal cultures and aim toward social and economic policies to correct for the disadvantage that pregnancy, birth and lactation typically present in androcentric societies founded on liberal individualism.

Misfitting applies particularly well to women as reproductive misfits in patriarchal cultures in spite of the androcentric NRTs which offer women the chance to reproduce like men. I would add that a misfit occurred when, as Charlotte Witt has exemplified, a mother in 1939 guit her job because the norms of maternity in that place and time "precluded women from working outside the home" (2011, p. 131), or a pregnant woman in 1946 was denied access to graduate school because Harvard University didn't admit pregnant women. In an ongoing sense, women's reproduction creates ontological and epistemological, or "onto-epistemological" (Barad, 2003) discord when, for example, would-be mothers forego childbirth altogether because of the particular misfits of professional and corporeal lives. Annette Burfoot (2014, p. 185) similarly discussed, with tongue in cheek, how joint custody in the age of technocapitalist reproduction might mean hiring a surrogate mother as well as a housekeeper and nanny.

Garland-Thomson's misfits concept is material in the sense of a concern with the lived body, and also materialist in recognizing the socio-economic (and other) structures that must be navigated in our daily lives, but which we also have a role in sustaining, or making anew. The concept of misfit nicely builds on O'Brien's biosocial reproduction and post-constructionist, new material feminisms because it emphasizes interactive material/social dynamics rather than positing biological or social determinism; in Lykke's terms, it is a post-constructionist corpo-materialist feminist theory. It remains focused on the interface of (performing) material-discursive agents in moments of misfitting and fitting without reifying either: "the dynamism between body and world that produces fits or misfits comes at the spatial and temporal points of encounter between dynamic but relatively stable bodies and environments" (Garland-Thomson, 2011, p. 594; emphasis added). Moreover, misfits demonstrate social attitudes as barriers but also material structures, and the concrete effects of this phenomena, namely the privatization (or exclusion from the public sphere) experienced by those who misfit in an ongoing daily way.

Furthermore, misfitting is a universal experience: an ever-present and, in fact, unavoidable situation that affords a unique and beneficial onto-epistemic standpoint (Garland-Thomson, 2011, p. 603). It highlights the embeddedness of human life as never outside the frame of particular bodies in their unique biosocial entanglement. This simply stated but rather complex idea brings together social epistemology, or the social element of knowing and being, and draws attention to the privileged "view from nowhere" as androcentric reproductive consciousness in new reproductive technologies. We can frame androcentric dualism as a complicated form of epistemic imbalance or "epistemic injustice," indicating the complex, political nature of the interrelationship between knowers. Although "strategic ignorance" or not knowing the marginal perspective is undoubtedly a position of privilege, it is also an epistemic disadvantage, as Garland-Thomson (2011) shows.

Rather, the "epistemic status" that misfits confer is necessary and practical for everyone as a way of being and engaging the world and others in it who all, at one point or another, will misfit with the world and experience disability as a result. This radically extends the scope and status of traditional, gendered understandings of the embodiment of vulnerability, including the

feminization of care. Misfitting also brings with it distinct advantages – just as reproduction holds enormous epistemological (and other) richness in patriarchal cultures – that can inform politics and culture (even on a global level), as disability theorists and feminist care ethicists show (Garland-Thomson, 2011, p. 604). For example, sophisticated language cultures have developed from the experience of hearing "disabilities." Among Garland-Thomson's examples are Claude Monet's development of a more impressionistic style as he became blind, and Jurgen Habermas's revelation that having multiple surgeries positively influenced his intellectual development.

If we take the misfit concept to heart we are always intra-acting with the environment on a micro-level; hence, such theorization leads to the complex ontology associated with post-constructionist feminisms. Garland-Thomson (2011, p. 594; emphasis in original) writes, "misfit...reflects the shift in feminist theory from an emphasis on the discursive toward the material by centering its analytical focus on the co-constituting relationship between flesh and environment." The profound and transformative insight related to this theoretical proposition has to do with embodiment that does not amount to another "wounded attachment" (Brown, 1993), but is a real negotiation of the terms of dualism (including corporeal vulnerability and power) in a sensuous material sense. In this view, existence is a function of a constant process of interaction and change. Agency is fundamentally reconceptualized as in Barad's notion of intra-action rather than inter-action, arguing that we are constantly becoming a part of the world and in co-creation with it, rather than merely placed in it (2003, pp. 827, 829). Perhaps most importantly, fitting comes at a distinct cost: "complacency about social justice and a desensitizing to material experience" (Garland-Thomson, 2011, p. 597). This is reflected in a patriarchal society that values control over the body (in its material processes, including reproduction) based on the biology/society or Cartesian mind-over-body dualism.

At the same time, I am in agreement with disability theorist Susan Wendell (1988) who reminds us that bodies are not only sources of pleasure to be simply "reclaimed" for women, and debunks the myth of western medicine that we can "control" our bodies. This is precisely why attending to differential embodiment, especially those reproductive bodies associated with pure nature, body (instead of mind), and vulnerability (instead of power) is needed, especially at a time when it is technologically possible to mediate such differences. Furthermore, as I have argued using O'Brien's theory, embodied reproduction is a uniquely female experience of transmogrification of the body: an experienced transduality with profound psychological, sociopolitical and philosophical ramifications if seriously engaged. By recognizing the value in the fluctuation of bodily states (our own and others, and over the life course), we also access the powers inseparable from vulnerabilities that women's embodied reproduction symbolizes in patriarchal cultures, seeing them as the world-transforming insights they are.

### References

and Schuster.

- Ahmed, S. (2000). Strange encounters: Embodied others in post-coloniality. New York:
- Alaimo, S., & Hekman, S. (Eds.). (2008). Material feminisms, Bloomington, IN: Indiana University Press.
- Åsberg, C., & Birke L. (2010). Biology is a feminist issue: Interview with Lynda Birke. The European Journal of Women's Studies, 17(4), 413-423.
- Åsberg, C., Koobak, R., & Johnson, E. (2011). Beyond the humanist imagination. NORA Nordic Journal of Feminist and Gender Research, 19(4), 218-230.
- Barad, K. (2003). Post-human performativity: Toward an understanding of how matter comes to matter. Signs: Journal of Women in Culture and Society, 28(3), 801-831.
- Barad, K. (2007). Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Durham & London: Duke University Press.
- Birke, L. (1986). Women, feminism and biology: The feminist challenge. Brighton, UK: Wheatsheaf Books.
- Birke, L. (1999). Feminism and the biological body. Edinburgh: Edinburgh University Press. Boston Women's Health Book Collective. (1973). Our bodies, ourselves. New York: Simon
- Braidotti, R. (2013). The Posthuman. Cambridge: Polity.
- Brodribb, S. (1986). Off the pedestal and onto the block? Motherhood, reproductive technologies, and the Canadian state. Canadian Journal of Women and the Law, 1(2), 407-423.
- Brodribb, S. (1993). Nothing mat(t)ers: A feminist critique of postmodernism. Toronto: James Lorimer & Company.
- Brown, W. (1993). Wounded attachments. Political Theory, 21(3), 390-410.
- Burfoot, A. (2014). Revisiting Mary O'Brien Reproductive consciousness and liquid maternity. Socialist Studies/Etudes socialistes, 10(1), 174-190.
- Coole, D., & Frost S. (Eds.). (2010). New materialisms: Ontology, agency, and politics. Durham, NC: Duke University Press.
- De Beauvoir, S. (1949/1989). The second sex. (H. M. Parshley, Trans.). New York: Vintage
- Eistenstein, Z. (1988). The female body and the law. Berkeley, CA: University of California Press
- Fausto-Sterling, A. (2000). Sexing the body: Gender politics and the construction of sexuality. New York: Basic Books.
- Fausto-Sterling, A. (2005). The bare bones of sex: Part I, sex and gender. Signs, 30(2), 1491-1528
- Garland-Thomson, R. (2011). Misfits: A feminist materialist disability concept. *Hypatia*, 26(3), 591-609.
- Grasswick, H. (2013), Feminist social epistemology. In E. N. Zalta (Ed.), The Stanford Encyclopedia of Philosophy. Retrieved from
  - http://plato.stanford.edu/archives/spr2013/entries/feminist-social-epistemology/.
- Hadd, W. (1991). A womb with a view: Women as mothers and the discourse of the body. Berkeley Journal of Sociology, 36, 165-175.
- Haraway, D. (1991). Situated knowledges: The science question in feminism and the privilege of partial perspective. In Simians, cyborgs and women: The Reinvention of Nature (pp. 183-201). London: Free Association Books.
- Harding, S. (1998). Is science multicultural? Postcolonialism, feminisms and epistemologies. Bloomington, IN: Indiana University Press.
- Hartsock, N. (1983). The feminist standpoint: Developing the ground for a specifically feminist historical materialism. In S. Harding & M. Hintikka (Eds.), Discovering reality (pp. 283-310). Boston, MA: D. Reidel.
- Harstock, N. (1998). The feminist standpoint revisited & other essays. Boulder, CO: Westview Press
- Hartsock, N. (1999). Mary O'Brien's contributions to contemporary feminist theory. Canadian Woman Studies, 18(4), 62-68.

- Hearne, J. (1999). Mary O'Brien...certainly the most important single intellectual influence. Canadian Woman Studies, 18(4), 13-17.
- Hinton, P., & Liu, X. (2015). The im/possibility of abandonment in new materialist ontologies. Australian Feminist Studies, 30(84), 128-145.
- Irni, S. (2013). Sex, power and ontology: Exploring the performativity of hormones. NORA Nordic Journal of Feminist and Gender Research, 21(1), 41-56.
- Kirby, V. (1997). Telling flesh: The substance of the corporeal. New York: Routledge.
- Kirby, V. (2008). Natural convers(at)ions: Or, what if culture was really nature all along? In S. Alaimo & S. Hekman (Eds.), Material Feminisms (pp. 214-236). Bloomington, IN: Indiana University Press.
- Lam, C. (2015). New reproductive technologies and disembodiment: Feminist and material resolutions. Dorchester, UK: Ashgate.
- Lykke, N. (2010a). The timeliness of post-constructionism. NORA Nordic Journal of Feminist and Gender Research, 18(2), 131-136.
- Lykke, N. (2010b). Feminist studies: A guide to intersectional theory, methodology and writing. New York: Routledge.
- Mitchell, L. M. (2001). Baby's first picture: Ultrasound and the politics of fetal subjects. Toronto: University of Toronto Press.
- Mooney, A., & Evans, B. (Eds). (2007). Globalization: The key concepts. New York: Routledge. O'Brien, M. (1981). The politics of reproduction. Boston, MA: Routledge & Kegan Paul.
- O'Brien, M. (1982). Feminist theory and dialectical logic. In O. Nannerl, O. Keohane, M. Z. Rosaldo & B. C. Gelpi (Eds.), Feminist theory: A critique of ideology (pp. 99-112). Chicago: University of Chicago Press.
- Taylor, C. (1991). The ethics of authenticity. Cambridge, MA: Harvard University Press.
- Taylor, C. (1992). Multiculturalism and the "politics of recognition." Princeton, NJ: Princeton University Press.
- Tyler, I. (2000). Reframing pregnant embodiment. In S. Ahmed, J. Kilby, C. Lury, M. McNeil & B. Skeggs (Eds.), Transformations: Thinking through feminism (pp. 288-302). London & New York: Routledge.
- van der Tuin, I. (2008). Deflationary logic: Response to Sara Ahmed's "Imaginary prohibitions: Some preliminary remarks on the founding gesture of the 'New Materialism'." European Journal of Women's Studies, 15(4), 411-416.
- van der Tuin, I. (2011). New feminist materialism. Women's Studies International Forum, 34, 271-277.
- Vickers, J. (1994). Notes toward a political theory of sex and power. In H. L. Radtke & H. J. Stam (Eds.), Power/gender: Social relations in theory and practice (pp. 174-193). London:
- Wendell, W. (1988). The flight from the rejected body. In A. Minas (Ed.), Gender basics: Feminist perspectives on women and men (pp. 56-64). Belmont, CA: Wadsworth.
- Whitney, S. Y. (2011). Dependency relations: Corporeal vulnerability and norms of personhood in Hobbes and Kittay. Hypatia, 26, 3, 554-574.
- Witt, C. (2011). The metaphysics of gender. New York: Oxford University Press.
- Woodward, K., & Woodward, S. (2009). Why feminism matters: Feminism lost and found. Basingstoke, UK: Palgrave Macmillan.