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Diffraction & Reading Diffractively[1]

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According to classical physics, diffraction is a physical phenomenon that comes into being when a multitude of waves encounter an obstacle upon their path, and/or when these waves themselves overlap. Waves in fact always already overlap and extend into one another, so even in the classical rendering, when pushed to an extreme, "we can understand diffraction patterns—as patterns of difference that make a difference—to be the fundamental constituents that make up the world" (Barad, 2007, p. 72). Seen through the perspective of quantum physics, however, we are invited to think about the inherent diffractivity of sets of waves, of single waves, and of single particles, under the right (experimental) conditions.

In contemporary feminist theory, diffraction is often employed figuratively, to denote a more critical and difference-attentive mode of consciousness and thought. Both literary theorist Trinh T. Minh-ha and feminist science studies scholar Donna J. Haraway have engaged with the metaphor of diffraction in their oeuvres in relation to thought, difference(s), and alterity. This engagement matters to the tradition of new (feminist) materialism because the new materialist tradition approaches difference as making a difference in terms of both genealogy, figurative conceptualisation, and of matter coming to matter (Butler, 1993; Barad, 2007). Although Minh-ha does not explicitly refer to diffraction as such, it is clear that her philosophical approach towards identity and difference is a relational, diffractive one, as it radically steps away from what she understands to be the apartheid-based, segregational type of difference, or, put in different terms, the traditional modern Western philosophical approach in which

[1] This piece is a slightly edited republication of the original New Materialism Almanac entry. See Geerts & van der Tuin, 2016.

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difference is seen as to-be-captured, to-be-assimilated, and, eventually, to-be-wholly-eradicated (see e.g., Minh-ha, 1997). Moving through and beyond such a reductive Hegelian Self/Other dialectics, Minh-ha's diffractive conceptualisation of identity and difference focuses on a non-dualistic, non-separational model of identity and difference, in which identity categories, identified groups, and even identified single entities, diffractively crisscross, interfere, and co-establish one another, and differences are respected and allowed to exist and flourish (also see e.g., Minh-ha, 1996). After all, the noun 'identification' and the verb 'to identify' come from the Latin *identificare*, which combines *identitas* and *-ficare* (from *facere*: to make).

Haraway follows in Minh-ha's footsteps when discussing diffraction for the first time in "The Promises of Monsters" (2004): Haraway here explicitly refers to Minh-ha's idea of inappropriate/d others—a notion that expresses how subjects are in a "deconstructive relationality, in a diffracting rather than reflecting (ratio)nality" (Haraway, 2004, p. 69). Part of her feminist critique and revisioning of objectivity within scientific thinking, diffraction for Haraway is a "more subtle vision" than the traditional reflective scientific forms of optics and thinking that actually spotlights "where the effects of difference appear" (p. 70). To rephrase this in more Irigarayan terms: Thinking diffractively steps out of the phallogocentric, reflective logics of producing the Same all over again by acknowledging the differences that exist, while at the same time pointing at where the problematic reductions and assimilations of difference have taken place. Haraway in *Modest_Witness@Second_Millenium* (1997, p. 16) expands on this new form of optics and way of thinking by using diffraction as "an optical metaphor:" Diffraction here is even more contrasted with the traditional way of producing (scientific) knowledge, namely "[r]eflexivity." Such a practice "only displaces the same elsewhere," according to Haraway, and creates oppositional distinctions between the real and the figural, whereas diffraction—now reformulated as seeing and thinking diffractively—is all about making "a difference in the world" by paying attention to "the interference patterns on the recording films of our lives and bodies." This does not mean that Haraway wants to get rid of reflexivity: She keeps on working through and beyond reflective paradigms of science, social movements, and policy-making, but it is clear that she considers diffraction to be a more "critical consciousness" than reflexivity, as it gives us the opportunity to become more attuned to how differences are being created in the world, and what particular effects they have on subjects and

their bodies (Haraway, 1997, p. 273). Seeing and thinking diffractively therefore implies a self-accountable, critical, and responsible engagement with the world.

It is exactly this aspect of diffraction that has been picked up by feminist new materialist philosopher and fellow feminist science studies scholar Karen Barad in *Meeting the Universe Halfway* (2007). For Barad, reading (and theorising) diffractively expresses what a self-accountable feminist type of intellectual critique and textual engagement ideally should consist of: Rather than employing a hierarchical methodology that would put different texts, theories, and strands of thought against one another, diffractively engaging with texts and intellectual traditions means that they are dialogically read "through one another" (p. 30) to engender creative, and unexpected outcomes. And that all while acknowledging and respecting the contextual and theoretical differences between the readings in question. This methodology thus stays true to Haraway's idea of diffraction: Rather than flat-out rejecting what has been theorised before, the foundations of the old, so to say, are being re-used to think anew.

Reading diffractively therefore not only appears to transcend the level of critique, ultimately based in a Self/Other identity politics, but in Barad's regard also can be regarded as a boundary-crossing, trans/disciplinary methodology, as it brings about "respectful engagements with different disciplinary practices" (2007, p. 93). Blurring the boundaries between different disciplines and theories to provoke new thoughts and theories, this methodology examines how and why boundaries between disciplines and strands of thought have been made and how they can be (re)made to matter more toward inclusion than apartheid.

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