

Entanglement

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It seems all too easy to speak in terms of entanglement today: Everything is connected with everything – economically, ecologically, politically. Who would not know that? The discourse that everything depends on something else is omnipresent; and also that really changing anything is impossible, because everything is always entangled with everything else. Neoliberalism is the short term for this discourse (Butler and Athanasiou 2013; Brown 2015; Harvey 2007), and its current grip must also be seen from within this framework. Its (sad) ideology of self-sufficient individuals can only ever be so effective under conditions in which no-thing, not even the cosmological nothing as quantum field theory shows (Barad 2012), is categorically separable from every-thing (else). So, one thing that I want to claim here, somewhat “in general,” is that today’s realities make aware – everywhere and to everybody (though *precisely not* in the same way to and for every-body [Ferreira da Silva 2009; Wynter 1994]) – that in this globalized and interconnected **world** one major critical symptom of the planetary condition is the very state of being entangled: often painfully entangled, implicated, caught up, and complicit.

From this beginning the problem of making entanglement an **affirmative** critical tool is obvious: criticality must be at **work** in order to twist entanglement away from the above

44 characterization – another **vision** of and **regard** for entanglement is needed. Karen Barad’s use of diffraction – a term that Donna Haraway introduced into critical discourses as “a metaphor for another kind of *critical consciousness*” (Haraway 1997, 273) – might be inspirational here. In Barad’s quantized version (which in no way implies a removal from “reality”), diffraction is the phenomenon of entanglement *par excellence*. In *Meeting the Universe Halfway*, she spells out that “[i]n fact, diffraction not only brings the reality of entanglement to light, it is itself an entangled phenomenon” (Barad 2007, 73). And in her central chapter on “Quantum Entanglements: Experimental Metaphysics and the Nature of Nature,” which discusses the quantum mechanical and mathematical details of the two-slit diffraction experiment and its lively discursive history in twentieth-century quantum physics and beyond, Barad specifies further:

Importantly, I suggest that Bohr’s notion of a phenomenon be understood ontologically... phenomena do not merely mark the epistemological inseparability of “observer” and “observed”; rather, *phenomena are the ontological inseparability of intra-acting “agencies.”* That is, *phenomena are ontological entanglements.* (333)

Speaking of the ontological inseparability of intra-acting “agencies” emphasizes the necessity to no longer envision entanglement(s) as based on pre-existing *relata*. Rather, “*relata-within-phenomena emerge through intra-action*” (334); or, as Vicki Kirby argues in her *Quantum Anthropology*: “Entanglement suggests that the very ontology of entities emerges *through* relationality: the entities do not pre-exist their involvement” (Kirby 2011, 76).

Compared to the neoliberal diagnosis, the approach to entanglement as *relational ontology* introduces then a significant difference. With Gregory Bateson one can say it introduces “a difference which makes a difference” (Bateson 1972, 453). Entanglement here is precisely not a descriptive matter of fact (the neoliberal “everything is entangled”), which relies on the

claim that its measurement is not (part) of the same entangled constellation it seeks to understand; or, put differently, that “we” could simply be taken out of the equation when measuring (this assumption also underlies the classical image of critique in which the subject of critique is clearly delimited from its object). To the contrary, as soon as entanglement(s) are engaged in the quantized sense outlined above, they matter. They are *constructive* matters of concern. “Phenomena are the basis of a new ontology” (Barad 2007, 333), and entanglements, therefore, imply the real possibility for the **transformation** of how things *are*.

Yet, this claim for transformation, a new ontology, should not mislead us, and neither should the understanding of entanglement as foundational relationality. We might easily believe that these hopeful sounding attributes in themselves necessitate a “better” toward which “we” are heading; as if a progressive direction could still guide us here. Nothing would be a greater misunderstanding of the quantum critical registers, which show that temporalities are anything but linear and in which (ontological) indeterminacy rules. A strong claim for this can once again be found in Barad’s discussion of “nature’s queer performativity” (Barad 2012) in which she stresses the *onto*-epistemological dimension of indeterminacy (Bohr) over uncertainty (Heisenberg). While the latter zooms in on the epistemological dimension only and ultimately maintains a humanist (and therefore progressivist) linearity, the entanglement of ontology and epistemology shakes up such an understanding. The radical *onto*-epistemological dimension of indeterminacy can no longer offer a progressivist **temporality** on which an understanding of indeterminacy as (epistemological) uncertainty would still stand.

To recapitulate then, instead of taking entanglement as a mere “given” to which there is no alternative (neoliberalism) or proposing it as the “better solution” (progressivism), working with entanglement as an affirmative critical tool entails something else. It means attending to the constructive and/as relational ontology in a diffractive sense and/as utter indeterminacy. It

46 means attending to the phenomenon as a question to *arrive*. Here, I refer to Jacques Derrida, whose radical thought of “undecidability” and “hauntology” (instead of onto-theology) lives of the same warped (or queer) temporality: “Turned toward the future, going toward it, [the question] also comes from it, it precedes *from* [*provient de*] the future. It must therefore exceed any presence as presence itself.” (Derrida 1994, xix)

If entangledness as undecidability and indeterminacy is the (onto-/hauntological) state of every-thing; if there is, therefore, no non-related (outside) position from which an authoritative or prescriptive critical judgment and evaluation can be issued, what follows for how we can take measure of the world – this **capital** of critique that we cannot afford to lose, although we realize how entangled, implicated, or complicit we *are*? What definitely follows is that **responsibility** for how things take shape with-in their entangledness will in no way shrink, but instead is growing. If entanglement is not seen as a mere descriptive denominator of how things appear today (matter of fact) but is rather taken seriously as the entangling situation itself in which *how* something is accounted becomes just as important as *what* is accounted for (matter of concern), then one can once more agree with Barad’s statement: “Accountability cannot be reduced to identifying individual causal factors and assigning blame for this or that cause.... Taking account entails being accountable, for all ac/countings are from within, not without” (Barad 2012, 46–47).

We have moved from a matter-of-fact-engagement with entanglement to one that still acknowledges its systemic – and therefore intra-active – nature, yet approaches it as a matter of concern, a mattering matter in need of attunement and care (Chow 2012; Latour 2004; Puig de la Bellacasa 2011). Entanglement in this **perspective** – as hauntology – entails that there is no simple opposite to entangledness, but only the in(de)finite re-arrangement of every-thing in its differential becoming. Every cut, split or categorical delimitation, in as much as every turning away in indifference or as refusal, does not escape the condition

of entanglement or relationality. Instead, it is but one form of (non-)relating to the issues at stake. In this matter lie both the painful or **terrifying** aspect of entanglement and its ethico-political potential. As Sarah Nuttall announces in her study on post-apartheid South Africa:

Entanglement is a condition of being twisted together or entwined, involved with; it speaks of an intimacy gained, even if it was resisted, or ignored or uninvited. It is a term which may gesture towards a relationship or set of social relationships that is complicated, ensnaring, in a tangle, but which also implies a human foldedness. (2009, 1)

The ethico-political potential lies in the ways we fold, or better yet, in the ways we become fold, i.e., the ways we practice (our) foldedness. Nuttall continues: "A focus on entanglement in part speaks to the need for a **utopian** horizon, while always being profoundly mindful of what is actually going on." (11, emphasis added) And Barad spells this out as follows: "An ethics of entanglement entails possibilities and obligations for reworking the material effects of the past and the future" (Barad 2012, 47). Final redemption is never the goal of such an ethics. Rather, in a most affirmative sense it calls for the persistent work of opening up, in as much as it demands the "wit(h)nessing" (Ettinger 2006) of the very specific entanglements we are inhabiting: They are never innocent, always with-in asymmetrical **power** relations and always having certain lives more precariously affected than others.

References

- Barad, Karen. 2012. "Nature's Queer Performativity." *Women, Gender & Research* (1-2): 25-53.
- Barad, Karen. 2007. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University.
- Bateson, Gregory. 1972. *Steps to an Ecology of Mind*. New York: Ballantine Books.
- Brown, Wendy. 2015. *Undoing the Demos: Neoliberalism's Stealth Revolution*. New York: Zone Books.

- 48 Butler, Judith, and Athena Athanasiou. 2013. *Dispossession: The Performative in the Political*. Cambridge: Polity Press.
- Chow, Rey. 2012. *Entanglements, or Transmedia Thinking about Capture*. Durham: Duke University Press.
- Derrida, Jacques. 1994. *Specters of Marx: The State of the Debt, the Work of Mourning, & the New International*, translated by Peggy Kamuf. London: Routledge.
- Ettinger, Bracha. 2006. *The Matrixial Borderspace*. Minneapolis: University of Minnesota Press.
- Ferreira da Silva, Denise. 2009. "No-Bodies: Law, Raciality and Violence." *Griffith Law Review* 18 (2): 212-236.
- Haraway, Donna. 1997. *Modest_Witness@Second_Millennium.FemaleMan©_Meets_Onco Mouse™*. London: Routledge.
- Harvey, David. 2007. *A Brief History of Neoliberalism*. Oxford: Oxford University Press.
- Kirby, Vicki. 2011. *Quantum Anthropology: Life at Large*. Durham: Duke University Press.
- Latour, Bruno. 2004. "Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern." *Critical Inquiry* 30: 225-248.
- Nutall, Sarah. 2009. *Entanglement: Literary and Cultural Reflections on Post-Apartheid*. Johannesburg: Wits University Press.
- Puig de la Bellacasa, Maria. 2010. "Matters of Care in Technoscience: Assembling Neglected Things." *Social Studies of Science* 41 (1): 85-106.
- Wynter, Sylvia. 1994. "'No Humans Involved': And Open Letter To My Colleagues." *Forum N. H. I.: Knowledge for the 21st Century* 1 (1): 42-73.