

(Mis)understanding Intra-active Entanglement

– Comments on René Rosfort’s
Criticism of Karen Barad’s
Agential Realism

BY MATZ HAMMARSTRÖM

In my article “Challenging Mainstream Meta-physics” in *Women, Gender & Research* 1-2/2012, I described Karen Barad’s agential realism as “a well thought through and well argued prolific theoretical foundation for a disruption of the mainstream metaphysics of separateness” (Hammarström 2012: 88). Other articles in the same issue showed the concrete practical use of Barad’s theorizing for their research, such as Milwertz and Fengxian’s on how Barad’s distinction between interaction and intra-action provided them with a conceptual tool that made it possible for them to theorize and analyse non-governmental organizing in China, and Højgaard, Juelskjær and Søndergaard’s, stating that

[a]gential realism gives us a theoretical framework that allows access to a much wider set of enacting forces to be considered in any analyses of any type of phenomena, including gendered subjectivity and practice (Højgaard, Juelskjær and Søndergaard 2012: 76).

DEBAT

In sharp contrast to this, René Rosfort, in his article “Different Kinds of Matter(s)”, claims that although Barad may offer an “impressive (meta)physical theory about matter,” her “insistence on the inescapable entanglement of phenomena [...] is no help against the more concrete and serious problems of [...] human being[s]” (Rosfort 2012: 61). He, therefore, advises “contemporary feminist theorists [...] to employ her ideas with caution, if we are to avoid losing sight of disturbingly concrete ethical problems that are still in need of careful analysis” (56). According to Rosfort, subjectivity, body, and ethics are “if not neglected then at least unattended to in Barad’s ambitious project”, but the overarching problem in his (mis)reading of Barad is what he calls her “methodological conflation of ethics, ontology, and epistemology” (56, 59, 61, 64), and he describes as his “main point” that “in spite of Barad’s methodological conflation, various questions about subjectivity, the body, and individuality still matter to contemporary feminism” (59).

Confronted with Rosfort’s criticism the attentive reader of Barad’s works may raise an eyebrow or two. Does Barad really neglect questions of subjectivity, body, and ethics? Does she really suggest a conflation of ontology, epistemology, and ethics? My answer is decidedly no, and the aim of this article is to clarify the meaning of the concept of intra-active entanglement that lies at the very heart of the diffractive methodology of Barad’s agential realism, and to show that Rosfort’s criticism of Barad’s methodology being conflated is due to his failure to understand and/or his unwillingness to accept the implications of the paradigmatic shift from an interactive to an intra-active perspective.

INTRA-ACTIVE RELATIONALITY

Of fundamental importance for an understanding of Karen Barad’s agential realism

is her concept of intra-action. Intra-action is a neologism coined by Barad to express the idea that the relata (the ‘entities’ that are related) do not precede the relation but emerge in and through it. The intra-active perspective necessitates a rethinking of central philosophical concepts such as subject, object, agency, causality and individuality. It also entails a radicalized understanding of relationality and entanglement, making intra-active relationality and intra-active entanglement into something quite different and more challenging than its interactive counterparts.

In spite of the crucial importance of intra-action for Barad’s agential realism (referred to on no less than 62 pages in Barad’s magnum opus *Meeting the Universe Halfway – Quantum Physics and the Entanglement of Matter and Meaning*), Rosfort neglects to comment upon the concept in any way, he just mentions it en passant a couple of times. A suitable starting point for an effort to come to grips with the idea of intra-action is the first passage dealing with the concept in *Meeting the Universe Halfway*:

The notion of intra-action is a key element of my agential realist framework. The neologism ‘intra-action’ *signifies the mutual constitution of entangled agencies*. That is, in contrast to the usual ‘interaction,’ which assumes that there are separate individual agencies that precede their interaction, the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action. It is important to note that the ‘distinct’ agencies are only distinct in a relational, not an absolute, sense, that is, *agencies are only distinct in relation to their mutual entanglement; they don’t exist as individual elements* (Barad 2007: 33).

Of utmost importance for an understanding of her thinking are the two lines italicized by Barad, both expressing the idea of “*the mutual constitution of entangled agen-*

cies”, that is, that the constituents of the relation do not pre-exist as individual elements; they *are* distinct, but in a qualified meaning, only in a relational and not in an absolute sense. Or, more to the point, expressing both the relational and the active, agential aspect: they are *made* to emerge *as* distinct in the context of a specific phenomenon, through an ‘agential cut’, a term Barad uses as a contrast to what she calls the ‘Cartesian cut’ (333). The latter signifies the idea that there is an inherent pre-existing cut separating subject and object, and other elements understood as existing in themselves. The relational distinction Barad calls “agential separability” (176) as opposed to the rejected idea of ontological separateness, and the idea of ontological separateness versus agential separability is a key factor for understanding Barad’s agential realism, on a par with and intimately related to the idea of interaction versus intra-action.

Agential realism provides an alternative to the mainstream metaphysics of separateness, an intra-active relationalist metaphysics according to which the ontological primary is not pre-existing ontologically separate things or objects but agentially produced *phenomena*. A phenomenon is an entanglement of intra-acting ‘agencies’, marking the ontological non-separateness of observer and observed. Contrary to the pervasive individualism and atomism of mainstream metaphysics with its standard matter-of-fact view of *relata* as prior to relations, the agential realist perspective is that “phenomena are ontologically primitive relations – relations without pre-existing *relata*” (139). An important consequence of this is that distinction presupposes relation (not vice versa as in the interactive perspective). It is this distinction-in-intra-active-relation that Barad expresses by her concept of the agential cut as a “cutting together-apart” (Barad 2012a: 16). Thus, Barad does not rule out difference and differentiation, but in her intra-active perspective

“differentiating is not about othering or separating but on the contrary about making connections and commitments” (Barad 2007: 392). This “relational nature of difference” (72) is a crucial aspect of Barad’s diffractive methodology.

THE DIFFRACTIVE METHOD

In *Meeting the Universe Halfway*, Barad writes that “[t]he phenomenon of diffraction is an apt overarching trope for [the] book” (70), and that she sees diffraction as her method. The physical phenomenon of diffraction is described by Barad as having “to do with the way waves combine when they overlap and the apparent bending and spreading of waves that occurs when waves encounter an obstruction” (74). Of paramount importance for the development of quantum physics is that matter, given a certain experimental set-up, shows a diffraction pattern. This indicates that matter might not be as particular as it is generally supposed to be. The relevant point here for an understanding of Barad’s thinking, is that different experimental set-ups (different apparatuses) produce different phenomena, and that, consequently, the apparatus is to be seen as *part* of the phenomenon. Diffraction points to what Barad describes as “the entangled structure of the changing and contingent ontology of the world” (73), and this, she says, makes diffraction useful as a “heuristic to mark the kinds of shifts that are at issue in moving away from [...] representationalism (reflecting on the world from outside) to a way of understanding the world from within and as part of it” (88).

In contrast to reflection, which Barad characterizes as concerned with separate entities, diffraction as “an ethico-onto-epistemological matter” is concerned with specific entanglements and “challenges the presumed inherent separability [i.e., the ontological separateness] of subject and object, nature and culture, fact and value, hu-

man and nonhuman, organic and inorganic, epistemology and ontology, materiality and discursivity” (381). Important to notice, however, is that this rejection of ontological separateness does not mean that the binaries nature and culture, epistemology and ontology etc., are conflated or collapsed. Nature and culture, epistemology and ontology are still different, but intertwined and mutually co-constitutive, that is, intra-actively entangled. Barad writes:

Diffraction marks the limits of the determinacy and permanency of boundaries [...] *Diffraction is a matter of differential entanglements. Diffraction is not merely about differences, and certainly not differences in any absolute sense, but about the entangled nature of differences that matter*” (ibid). And of crucial importance is the above-mentioned agential cut that “cut things together and apart (ibid).

ENTANGLEMENT IS NOT CONFLATION

Rosfort is critical of Barad’s “ethico-ontology, in which ethics, ontology, and epistemology are no longer separate fields of study” (Rosfort 2012: 58). It is correct that Barad wants us to see the three as entangled, that the diffractive paradigm “challenges the presumed inherent separability” (Barad 2007: 381). But through neglecting the crucial word ‘inherent’ Rosfort fails to recognize the difference between agential separability and inherent (ontological) separateness. This makes him miss what Barad stresses as crucial, that “diffraction attends to the relational nature of difference; it does not figure difference as either a matter of essence or as inconsequential” (72). Rosfort’s position seems to be that either difference is a matter of essence, or there is no difference at all. Since Barad rejects an essentialist understanding of difference, he interprets her as conflating the entangled ‘entities’, which to Barad are agentially separable.

Rosfort’s article rests largely on this mis-

apprehension that ‘entanglement’ is synonymous with ‘conflation’. He writes repeatedly about Barad’s alleged “attempts to conflate ethics, ontology, and epistemology” (Rosfort 2012: 56, 59, 61, 64). But while conflation means that two or more entities are fused into and reduced to one, entanglement does not carry this reductive meaning. Entanglement expresses the idea that two or more entities are intimately related, so that one of the entities cannot be fully understood or described without considering the other(s). Regardless of how many times Rosfort repeats his accusation; Barad’s insistence on the entanglement of ontology, epistemology, and ethics does *not* mean that she conflates the three. And furthermore: Barad’s intra-active perspective radicalizes the idea of entanglement, since the intimately related entities *are* entities only in and through the entanglement.

I read Rosfort’s criticism of Barad for not paying attention to subjectivity, body, and ethics, and for conflating ontology, epistemology, and ethics, as a consequence of his failure to understand and/or appreciate the idea of intra-action. From Rosfort’s interactive perspective the rejection of the idea of pre-existing separate individuals preceding the relation apparently looks like a wholesale rejection of individuals, which makes him believe that he has to safeguard the individual from Barad’s methodology. Consequently he writes that he insists “on the individual, because [he] believes that the concrete problems of the individual person should always be at the centre of [...] gender studies” (64). But the individual as concrete human person is not lost in Barad’s perspective, only differently (diffractively) understood – as Barad expresses it herself:

the notion of an individual needs to be taken seriously [...] At the same time, it’s crucial to raise the question of how ‘the individual’, including any particular individual, is iteratively (re)constituted (Barad 2012a: 11).

Far from neglecting subjectivity, body, and ethics, Barad reconceptualizes these concepts in a way that, to my mind, enhances our understanding of and possibilities to deal with a whole range of important questions, not least for contemporary feminism.

The idea of entanglement does not mean that what are entangled cannot be differentiated, discussed, or remedied, only that the different entangled strands cannot be adequately dealt with in isolation, as if they were unrelated to the others. As explained above, an intra-active understanding of entanglement also entails that the entangled strands are not understood as self-subsistent entities, but as continuously and co-constitutionally refigured in and through their mutual interdependence.

It is very difficult to understand how and why the consequence of Barad's insistence on the entanglement of ontology, epistemology and ethics should be that we "ignore these dimensions" (Rosfort 2012: 63), or let them subside "into the entangled background of Barad's account." I find no arguments in Rosfort's text to support this, only a constant repetition of the accusation. If anywhere, entanglement is in the *foreground* in Barad's account.

Rosfort writes that "[e]very problem is always an entangled product of epistemology, ontology, and ethics" and that "entangled human problems" are "all too often investigated and handled in reductive [...] ways" (60), but still he finds Barad's insistence on this very entanglement "reductive" (ibid.). This may seem paradoxical, but my way of understanding it is that Rosfort accepts the need of a multidisciplinary approach to human problems, but that his perspective is interactive in contrast to Barad's intra-active approach. Acknowledging intra-active entanglement is not a question of relating what is unrelated and separate to begin with, but to realize that the relational entanglement is the primary. Ontology, epistemology and ethics are not three distinct and separate disciplines that

are to be kept apart, neither is it enough to relate the three to each other. Barad's point is that ontology, epistemology and ethics are always already related and so intimately intertwined that a neat demarcation between the three is impossible. However, that they are intra-actively entangled does not mean that they are one and the same or that distinctions between them cannot be made. What it means is that they are, and are *what* they are in and through the ongoing intra-active relation that iteratively reconfigures them, and that the one cannot be understood without considering the others. Neither is it a correct description of Barad's position when Rosfort writes that she does not make a distinction between mind and body, or between subject and object. On the contrary, Barad's point is that we must actively (and iteratively) *make* this distinction since it is not given, that is, mind and body, subject and object (like ontology, epistemology, and ethics) are agentially separable, but not ontologically separate.

THE INTRA-ACTIVE ENTANGLEMENT OF MIND AND BODY

To support his idea of the importance of seeing ontology, epistemology, and ethics as "distinct explanatory layers" (69), and to bring home his main point "that – in spite of Barad's methodological conflation – various questions about subjectivity, the body, and individuality still matter to contemporary feminism" (59), Rosfort uses the correspondence between Princess Elisabeth of Bohemia and René Descartes on the question of the relation between mind and body.

According to Descartes the world consists of two separate and distinct kinds of substances or things: minds and bodies. Minds are thinking things, bodies are extended things, and we humans are a combination of these two separate and distinct substances. Elisabeth starts her correspon-

dence with Descartes in 1643 upon reading his *Meditations*, mainly because she is puzzled by the question of how mind and body, understood by Descartes as two fundamentally different and separate substances, can interact.

To support the Christian doctrine of the immortal soul Descartes needs the idea of separateness, but at the same time he is uneasy with this idea. In the final part of his *Meditations* he writes that sensations like hunger and pain teach him that he is not present in his body “as a sailor is present in his ship”, but that he is “very closely conjoined to it, and as it were, mingled throughout it” (Curley 1988: 56). When Elisabeth continues to press him and writes that she finds it easier “to attribute matter and extension to the soul than to attribute to it the capacity to move a body, and to be moved by it, without having matter” (58f), Descartes answers that “she should feel free to attribute matter and extension to the soul, ‘for that is nothing but conceiving it as being united to the body’” (Letter 28 juni 1643 (quote from Curley 1988: 59)). This answer from Descartes, hinting at the entanglement of mind and body, Rosfort neglects to share with his readers, possibly because he shows a strong tendency himself to dissociate mind from body (here Rosfort seems more Cartesian than Descartes), and thinks and speaks of the body as “mine,” as a kind of vessel for the mind, “a pre-reflective organ through which I interact with the world” (Rosfort 2012: 61).

The correspondence between Elisabeth and Descartes is resumed in the spring of 1645 when Elisabeth suffered from what Rosfort denotes as a “physical malaise”, although it is “perceptibly” diagnosed by Descartes as “sadness” (59). This insight into the (entangled) relatedness of mind and body, that the malaise might as well be classified as psychic, Rosfort surprisingly takes as showing us “why ethics, ontology, and epistemology are not as easily conflated as is the case in Barad’s ‘ethico-onto-epis-

tem-ology’” (ibid.). Here the two different ways to understand relationality and entanglement are displayed again: Rosfort’s (and Descartes’) *interactive* understanding, where the relation is seen as preceded by *relata*, understood as separate pre-existing individuals; Barad’s (and possibly Elisabeth’s) *intra-active* understanding, where the relation is not preceded by pre-existing *relata*, but is, as French philosopher Gilbert Simondon has put it “*simultaneous* to the terms for which it ensures the existence” (Simondon 2009: 10, my italics).

Rosfort insists that “[e]xplanations of the mind and the brain are still two different enterprises.” I agree that they are but we are led into an impasse with Rosfort’s questions

What is the accurate description of sadness? Is it the careful description of complex neuro-modulators [...] or the just as careful description of the experiential features of sadness? (60).

This kind of questioning is as misplaced as asking for the “accurate description” of light. Neither light nor sadness is something determinate in itself.¹ Different apparatuses, that is, the complex material-discursive ways through which we intra-act with and as part of the world (in a very broad meaning measuring it) give rise to different phenomena: light-as-particles, light-as-waves; sadness-in-terms-of-neuro-modulators, sadness-in-terms-of-experiential-features. Sadness-as-brain-fact and sadness-as-introspectively-experienced, are two different phenomena, and the one is not *causing* the other.

In an article referred to by Rosfort, Lena Shapiro deals with the correspondence between Elisabeth and Descartes, and argues that Elisabeth in her letters

defends neither a reductionist materialism nor a substance dualism, but rather wants to find a way of respecting the autonomy of thought

without denying that this faculty of reason is in some essential way dependent on our bodily condition (Shapiro 1999: 506).

Elisabeth's view, according to Shapiro, is that Descartes' "principle of independent subsistence is belied by the phenomena" (507), and that mind and body are to be viewed as distinct but mutually dependent. This idea of distinction in mutual dependence comes close to Barad's idea of intra-active entanglement, according to which mind and body, neither of them being a self-subsisting entity, are to be seen as only relationally distinct.

Shapiro describes Elisabeth's view as "an alternative metaphysics which is neither a substance dualism nor a reductionist materialism" (516). I would say that this is quite a good description of Barad's view as well. The question is why Rosfort salutes Elisabeth's insight and discredits Barad's.

CONCLUSION

In spite of his professed acknowledgement of entanglement, Rosfort's perspective remains one of separateness. He sees the epistemological, ontological, and ethical aspects of sadness as separate matters linked to "distinct explanatory layers" (Rosfort 2012: 60). According to Rosfort "any attempt to conflate the various methodologies [...] risks losing sight of what is really at stake – namely, to understand and cope with sadness" (ibid.). I would say that to Barad, what is necessary to be able to understand and cope with sadness (or anything else) is precisely to understand the intra-active entanglement of mind and body, and of ontology, epistemology, and ethics. Rosfort *seems* to be aware of this entanglement when he writes that "[e]very problem is always an entangled product of epistemology, ontology, and ethics," and that "entangled human problems [...] are all too often investigated and handled in reductive [...] ways" (ibid.). The best expla-

nation I can divine for his finding Barad's insistence on this very entanglement reductive and conflating, is that he interprets Barad's intra-active perspective from within his own interactive perspective, which leads him to interpret the contingent iteratively reconfigured individuals of Barad's agential realism as non-existent.

I would be very surprised if Barad did not share Rosfort's opinion that "various questions about subjectivity, the body, and individuality still matter to contemporary feminism", and far from leaving these aspects 'unattended', Barad refers to them on numerous pages in *Meeting the Universe Halfway*. Where she differs from Rosfort is in her opinion that the best way to understand, formulate and deal with these questions is to acknowledge the intra-active entanglement of ethics, ontology, and epistemology. This does not amount to a conflation of the three, but expresses the insight that questions of being, knowing, and doing are intimately related, that is, that it is impossible to do ontology, without at the same time do epistemology and ethics. As Barad stresses, different ways of understanding, describing and explaining the world (sadness included) "materializes a different configuration of the world, not merely a different description of a fixed and independent reality," and "[w]e are responsible for the world of which we are a part, not because it is an arbitrary construction of our choosing but because reality is sedimented out of particular practices that we have a role in shaping and through which we are shaped" (Barad 2012: 390).

NOTE

1. In her most recent publication, the short *What is the Measure of Nothingness? Infinity, Virtuality, Justice*, Barad expresses this idea succinctly: "Measurements are agential practices, which are not simply revelatory but performative: they help to constitute and are a constitutive part of what is being measured" (Barad 2012b:6).

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- Matz Hammarström, Ph. D. Fellow
Centre for Theology and Religious Studies
Lund University, Sweden