THEORIZING IS WORLDING — TEACHING NEW FEMINIST MATERIALISMS IN CONTEMPORARY FEMINIST THEORY COURSES

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Thinking is an action.

For all aspiring intellectuals, thoughts are the laboratory where one goes to pose questions and find answers, and the place where visions of theory and praxis come together. 254

What makes the phenomenon of *diffraction* o meaningful in new feminist materialit cholar hip? ne key ugge tion is that, with it, it can be explained how the two realm that are till o often aid to be utterly distant from each other—theory and praxis—are never categorically separated entities or realms. ²⁵⁵ The concept-phenomenon of diffraction help us to articulate how theorizing is worlding in a much as how worlding is theorizing. arrying on earlier work on tandpoint C epistemologi and ituated knowledg, ²⁵⁶ and understanding diffraction as a

²⁵⁴ bell hooks, Teaching Critical Thinking: Practical Wisdom (London and ew York: Routledg., 2010), 7.

ne of the foundational texts for what has become known in the last years as New (Feminist) Materialism is Kar n Barad's Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning (Durham and London: Duke University Press, 2007). In this work, Barad centers the development of the onto epistemologi al framework of "agential realism" on the discussion of the quantum physical two-slit diffraction experiment (see pecially 97–185). Ihis experiment has been used to determine if light is particle (as classically held by Newton) or wave (a experimentally shown by Young in 1803), and the experiment resulted in the regnition of the entangled nature of the matters at stake, because "the nature of the observed phenomenon changes with corresponding changes in the apparatus" (106). Ihe term diffraction has urfated also already earlier in the feminist context with Donna Haraway's discussion of diffraction as a critical tool to envision difference(s) differently: not as binary opposition but as a productive interference pattern; cf. Donna Haraway, Modest Witness@econd_Millennium.FemaleMan_

Meets_OncoMouse™ (London and ew York. Routledge, 1997). For detailed work with the diffraction apparatus, ee auzet's contribution to this volume.

e Patricia Hill Jollins, Black Femini t Thought: Knowledge, Jonsciousness, and the Politi of Empowerment (London and ew York: Routledge, 1991); Sandra Harding, Who Science? Whose Knowledge? (Ithaca: ornell University Pr., 1991); Donna Haraway, "ituated Knowledge: The Science uestion in Feminism and the Privilege of Partial Perspective," Feminist Studies 14.3 (1988).

methodology for a critical practice "committed to making a difference," 257 Karen Barad's "new materialism" stresses arduously that by following diffraction in the quantum-mode, "knowing, thinking, measuring, theorizing, and observing are material practices of intra-acting within and as part of the world."258 With Barad, then, it is essential to stress that "the point is not simply to put the observer or knower back in the world (as if the world were a container and we needed merely to acknowledge our situatedness in it) but to understand and take account of the fact that we too are part of the world's differential becoming."259 Accounting for Niels Bohr's Gedankenexperiment on diffraction from the early twentieth century, Barad's specifically posthuman(ist) discussion brings to the fore that "being part of" is no longer to be thought of in atomistic terms — as, for instance, a smaller unit placed within a larger unit, or, we, humans, being also part of the (natural) world.²⁶⁰ Rather, by rigorously understanding diffraction as entanglement in onto-epistemological terms, "we" (and this "we" needs to be put in quotation marks because it has lost its seemingly natural delimitation) are always/already entangled with-in the "world" as differential becoming (or "worlding").261

Now, bringing this conceptual-phenomenal insight of entanglement to the very persistent theory/praxis divide that tends to dominate many academic discussions, any hierarchical split between the supposedly separate realms of theory and practice can no longer be made from such diffracted/-ing beginnings. Instead

²⁵⁷ Donna Haraway, Modest_Witness@Second_Millennium.FemaleMan©_Meets_ OncoMouse™ (London and New York: Routledge, 1997), 16.

²⁵⁸ Barad, Meeting the Universe Halfway, 90 (emphasis added).

²⁵⁹ Barad, Meeting the Universe Halfway, 91.

²⁶⁰ See Karen Barad, "Posthumanist Performativity: Toward and Understanding How Matter Comes to Matter," Signs: Journal of Women in Culture and Society 28.3 (2003): 801–831.

The significance of the quantum level is, to me, very close to the more chemically instructed Deleuze-Guattarian emphasis on "molecular" thinking; e.g. Deleuze and Guattari, A Thousand Plateaus: Capitalism and Schizophrenia II, trans. Brian Massumi (Minneapolis: University of Minnesota Press, [1980] 2000). In respect to both the (physical) "quantum" and the (chemical) "molecule," it is not adequate to assume that these realities would only be valid for what we usually call the realm of the "invisible," i.e. the micro-processes, and that on the macro-level, or what we so often presuppose as the properly human level, we must (or we can) continue working with separable units such as "individual" and "world." "It matters what matters we use to think other matters with," Donna Haraway says poignantly in a public address at the Pilgrim Award in 2011 ("SF: Science Fiction, Speculative Fabulation, String Figures, So Far," California via Lublin, Poland, July 7, 2011, http://people.ucsc.edu/-haraway/PilgrimAward.html (accessed April 13, 2015)), and if we start with quantum entanglement, what once was a categorical difference between micro- and macro-processes becomes, at most, an immanent "threshold" or a question of "degree" (of density, for example) within the (singular-plural) dis/continuous processes of becoming that is world(ing). For a discussion of a politics of (non-)location in new materialism and situated knowledges that is also very relevant in this context, see Peta Hinton, "Situated Knowledges' and New Materialism(s): Rethinking a Politics of Location," Women: A Cultural Review 25.1 (2014): 99–113.

of assuming that theory is a process of reflection on specific practices — where practices are seen as part of the world while theory is seen as abstraction from the world — in a new materialist framework, theory itself is (always/already) a praxis, which, rather than "reflecting on," diffracts (with) other practices in a thinking, measuring, and accounting manner. The emphasis on the "new" in new feminist materialisms, therefore, appears appropriate in one specific sense. It is not, as some discussions would suggest, that this "new" should imply a turn away from supposedly outworn questions (call them cultural or historical, language-oriented, or even very generally as coming from within the "old humanities") towards the inclusion of more material and thus supposedly more scientific matters (such as physics or chemistry).²⁶² And I also do not want to understand the "new" in new feminist materialisms as an implication that such "new" scholarship is no longer interested in critical investigations, thereby losing its political force, just because proper critique can either only be done from an ideological-critical perspective (Marxist materialism) or because critique as such has "run out of steam."263 Instead, what can be marked with the addition of "new" in contemporary feminist thinking is our capacity to imagine and work with different beginnings, with different "initial conditions," 264 with which we then can also ask why we "admittedly... do not tend to think of signs as substantively or ontologically material."265 What if — this is what I would like to suggest in discussing teaching with new feminist materialisms — we could make again a "new" feminist claim to take up the challenge of engaging all kinds of practices as material engagements? What if we will not stop short on the theoretical side simply because in today's

²⁶² Barad begins one of her recent articles by stating that "[d]iffraction owes as much to a thick legacy of feminist theorizing about differences as it does to physics" ("Diffracting Diffraction: Cutting Together-Apart," *Parallax* 20.3.72 (2014): 168). I also join Vicki Kirby in her argument that "if we look closely at the work of physicist Karen Barad, the tantalizing provocation in her argument is that she is not challenging us to learn physics so that we can understand complexity. Instead, what informs her reworking of interaction as 'intra-action' is the suggestion that we are already practicing physics" ("Initial Conditions," *Differences: A Journal of Feminist Studies* 23.3 (2012): 204). For a similar focus on the specific significance of diffraction for methodological and pedagogical discussions, see also Christina Hughes and Celia Lury, "Re-Turning Feminist Methodologies: From a Social to an Ecological Epistemology," *Gender and Education* 25.6 (2013): 786–799.

²⁶³ See, Bruno Latour, "Why Has Critique Run Out of Steam?," Critical Inquiry 30.2 (2004): 225–248. Two recent special issue publications take up these concerns for critique and politics in respect to new (feminist) materialist scholarship, see Peta Hinton and Iris van der Tuin, Special Issue "Feminist Matters: The Politics of New Materialism," Women: A Cultural Review 25.1 (2014), and Birgit M. Kaiser and Kathrin Thiele, Special Issue "Diffracted Worlds"— Diffractive Readings: Onto-Epistemologies and the Critical Humanities," Parallax 20.3.72 (2014).

²⁶⁴ Kirby, "Initial Conditions."

²⁶⁵ Vicki Kirby, Quantum Anthropology: Life at Large (Durham: Duke University Press, 2011), 73.

discursive climate (academic, public, and political) we too often assume that theories (as "ethico-onto-epistemological" frameworks) are needed only in order to be applied, rather than practiced with-in and amongst other practices?

Re-Turning (to) the Matter of Thinking

Before I continue my discussion on contemporary feminist theory and the practices of teaching it in today's academic milieu, I want to draw upon what may appear to be an unrelated reference in the context of new feminist materialisms: the philosophical work of Hannah Arendt. In her investigations into the relation of thought and practice more than half a century ago, Arendt made a very similar claim in respect to the matter(ing) of thinking as practice. When reading her Vita activa oder vom tätigen Leben (in English, titled simply The Human Condition)267 with these questions of theory as practice and thought as action in mind, Arendt's specific point in respect to "thinking" in this historico-philosophical analysis is very illuminating (even if clearly written from within the Western/ European philosophical tradition). In the final part of her analysis, she argues that the major transformation (Umstülpung) occurring with the Modern Age (Neuzeit) might not be seen as the actual dethronement of the (pre-modern) vita contemplativa — a life guided by contemplation and reflection and oriented towards immortality — by the (modern) vita activa — a life determined most of all by what we do, work, and labor for within the clear delimitations of our finite existences. Rather, the true "reversal" that, at this moment, is occurring is that thinking itself is fully subjugated to the economical logic of production and manufacture (Herstellen).

Actually, the change that took place in the seventeenth century was more radical than what a simple reversal of the established traditional order between contemplation and doing is apt to indicate. The reversal, strictly speaking, concerned only the relationship between thinking and doing, whereas contemplation in the original sense of beholding a truth, was altogether eliminated.²⁶⁸

²⁶⁶ In Meeting the Universe Halfway, Barad specifies this terminology in a list that explores important aspects of diffraction by stating: "ethico-onto-epistem-ology — ethics, ontology, epistemology not separable" (90).

²⁶⁷ See Hannah Arendt, The Human Condition (London and Chicago: The University of Chicago Press, 1958); and Vita activa oder vom tätigen Leben (München: Piper Verlag, [1967] 2007).

²⁶⁸ Arendt, The Human Condition, 291.

If, as (new) feminist materialists, we are now merely irritated by Arendt's strong emphasis on "contemplation" and "beholding of truth" when it comes to describing thinking, we might miss the most interesting aspect of her argument. We might forget that Arendt's point here is not to complain (in an idealist, humanist manner) about the change occurring in socio-political hierarchies, i.e. that vita activa (doing) actually becomes the dominant practice and thereby replaces the privilege of a vita contemplativa (contemplation) in modern times. Instead, what I see as far more significant and telling in relation to that question of "what it means to think," is Arendt's contention that this modern threshold is accompanied by an inherent process in which certain activities become marked as significant, while others — because they are seemingly useless and therefore of no value, just like contemplation — are falling out of sight completely. The antique (and much more than merely Western) understanding that thinking is contemplation but as a doing, an action, a practice, becomes thereby unthinkable as such and is substituted by the far too simple opposition of vita contemplativa and vita activa, now both obeying the demands of use value and production. In her striving to rehabilitate thinking as practice, Arendt ends The Human Condition with an ancient dictum on the guestion of thinking and, as her readers know, she stays preoccupied with this aspect of acting and/as thinking in her work to come.²⁶⁹ So much so that in her Report of Eichmann in Jerusalem, written in 1963, she most provocatively argues that it is precisely the incapacity and unwillingness "to think" (taken as an inevitably a/ effective doing) that becomes the shocking truth of "the banality of evil." 270

After this historical digression, let me now come back to the present moment. In what follows, I further elaborate that my interest in working with-in the

The final paragraph of *The Human Condition* reads: "For if no other test but the experience of being active, no other measure but the extent of sheer activity were to be applied to the various activities within the vita activa, it might well be that thinking as such would surpass them all. Whoever has any experience in this matter will know how right Cato was when he said: 'Numquam se plus agere quam nihil, numquam minus solum esse quam cum solus esset — Never is he more active than when he does nothing, never is he less alone than when he is by himself'" (Arendt, 325).

²⁷⁰ See Hannah Arendt, Eichmann in Jerusalem: A Report on the Banality of Evil (New York: Penguin Press [1963] 2006). After the disturbing public reception of this claim, Arendt continued to work on this ethically (and therefore politically) significant question of what it means to think. See for example her lecture "Some Questions of Moral Philosophy" in Social Research 61.4 (1994): 739–764, which can also be read as a response to her critics from the Eichmann trial book, The Life of the Mind, that devotes the first volume to "thinking" (Das Denken); see Hannah Arendt, The Life of the Mind (New York: Harcourt Inc., [1971] 1978). For the use of "a/effective" — i.e. folding together "affect" and "effect" in a Spinozian manner in which an effect is produced via the capacity to affect and be affected, see my discussion of an "ethics of becoming" in Kathrin Thiele, The Thought of Becoming: Gilles Deleuze's Poetics of Life (Berlin and Zürich: Diaphanes 2008).

thought horizon of new feminist materialisms in contemporary feminist theory courses, and also the challenge of doing so, is a twofold endeavor. On the one hand, I see in new feminist materialisms another promising *conceptual practice* for different initial conditions and, therefore, for different stories to be told — a possibility that I, as a feminist, still regard as urgently needed in our contemporary world. And on the other hand, to expose students to such theoretically challenging possibilities and to encourage them to learn about how nature/culture, subject/object, and theory/practice are "cut-together-apart," for me continues the *transformative potential* that feminist theories stand for, as such. As a genre — and I join here in Elizabeth Grosz's evaluation — feminist theory always aims to bring about change:

In addressing the question, 'What is feminist theory?', we are primarily addressing the question what it is to think differently, innovatively, in terms that have never been developed before, about the most forceful and impressive impacts that impinge upon us and that thinking, concepts, and theories address if not resolve or answer.²⁷²

From-with-in feminist new materialisms, we are able to not only a/effectively acknowledge that subject-object-relations are entangled — understood in Barad's terminology as "intra-action," that is, not assuming existing entities before the entanglement itself²⁷³ — but we can also create a toolbox with which the ordering framework of theory and praxis, still too often hierarchically split, is attuned in our (feminist) (research) practices.²⁷⁴ The misleading presupposition that the concepts, ideas, or knowledges we use are "above" the analyses and objects we investigate at (and as) a concrete moment, i.e. the assumption that they are abstractions from, or transcendental reflections on, the world we live in, can there-

²⁷¹ Karen Barad, "Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and Justice-to-Come," *Derrida Today* 3.2 (2010): 240–268.

²⁷² Elizabeth Grosz, Becoming Undone: Darwinian Reflections on Life, Politics, and Art (Durham and London: Duke University Press, 2011), 77.

²⁷³ See again Barad, Meeting the Universe Halfway.

²⁷⁴ That theory and practice are not separated is, of course, one of the most original feminist claims as such, and thus in no way unique to new feminist materialist works. Yet, it is apt to argue, and certainly not coincidental, that it is again contemporary *feminist theory* that reminds us of this necessarily *political* dimension in every scientific endeavors, in a time when a return of scientific positivism (be it in respect to quantitative data analysis or a hyperattention to what is called "empirical realities") cannot be disputed. Unfortunately, I also see parts of feminist studies in danger of what I want to call "the empirical trap," when more and more academic discussions, journals, and/or events are hastily responding to the demand to be *applicable* rather than allowing themselves to continue asking new question and telling new stories.

by be transformed into a constellation that is always/already *theoretico-practical*. To think — to learn to analyze and practice an argument — *is* a doing that needs to be accounted for. Looking back to Arendt's considerations and connecting them to Grosz's "Dream for New Knowledges," feminist theory might even be a most a/effective practice, able to impinge on the (deadlocked) systemic forces of today's socio-political realities, which, very similar to Arendt's times, are still (if not even more so) driven by the logics of use and consumption, i.e. by purely economical concerns.²⁷⁵

Think-Practicing New Feminist Materialisms in the Classroom

In working with and teaching new feminist materialisms in feminist theory classes, the somewhat difficult theoretical corpus that most authors expose us to in this tradition, therefore, fulfills a very necessary function. It forces us to (again) learn *how to practice theory* — an always difficult and necessarily time-consuming (i.e. contemplative) task, yet one that, in its praxis, becomes transformative. ²⁷⁶ By learning to practice theory as action, a learning that also encompasses *un*learning the habits of merely using concepts and theoretical categories on a representational level, contemporary feminist theory becomes again a place where to also find effective strategies and tools (as "weapons" to counteract the dominant discursive climate that "there is no alternative." These claims are too often employed as rhetorical strategy to discredit foundational research whose "practical impact" cannot easily be measured. ²⁷⁸

And yet, there is more to be said when such an affirmative gesture toward a specific "academic label" or "theory" is made as both thinking and teaching horizon. For the above could still too easily be misunderstood as a claim that

For a resonating analysis of the problems of privatization, capitalization, and growing competitiveness in the "new" university, and, more generally, the whole academic milieu today, see Hanna Meißner's contribution to this volume.

²⁷⁶ See, for an example, the chapter of 'van der Tuin and Dolphijn in this volume, where concept testing in the class-room becomes also transformative praxis.

²⁷⁷ Grosz, Becoming Undone, 76.

Being employed at a Dutch research university, I cannot overstate the changes that the Netherlands' research profiling has undergone in this regard during the last years. To provide one specific example: going back only a few years, academic grant applications still explicitly have asked for theoretical embedding of research. Today, not only has "methodology" replaced this theoretical and/or conceptual corpus in such applications, but also dimensions such as knowledge utilization and knowledge valorization (quantifiable and applicable "to the broader public") have grown immensely in respect to the evaluation of academic research projects. That this is not Dutch practice alone can also be seen in the new research profiling of the European Union Horizon 2020.

new feminist materialist scholarship surpasses other (feminist) approaches in the endeavor "to think differently," and that teaching feminist theories today means to correct those other endeavors from a new feminist materialist perspective. It could be interpreted as an assumption that in teaching I aim at yet another ("new") conceptual framework, one that provides us again with a solid theoretical toolbox that then can lead us safely into practical applications, only this time from a new feminist materialist point of view. In order not to be misunderstood in these ways, and before I conclude my contribution — which indeed can be read as a rehabilitation of theory and thinking as practices that matter substantially with-in-for this world and that therefore need sufficient time and specific curricular spaces in which thinking can be taught and learned as such a practice - I want to address some aspects that should be kept in mind in order to counter the above suspicions. As Kirby has formulated it in her article on "Initial Conditions," from which I have quoted earlier, the "tantalizing provocation" 279 of new feminist materialisms (in Barad's, but also in other scholars' work) might not lie in a mere move toward new areas for our (feminist) studies, for example now involving physics, chemistry, or biology as (theoretical) tools to work with (i.e. enhancing our interdisciplinarity). Rather, it is a specific methodological claim that is made here; a diffractive methodology that new materialist approaches suggest, in which what subject matters we engage with is (immanently) entangled with how we account for them. This is the provocation of "intra-action," or the claim that "we are already practicing physics," as Kirby writes. What seems crucial in this argument in respect to contemporary academia is that even if current quests for interdisciplinarity are so virulent, they will remain unsatisfactory if they merely mean engagements that comprise questions from "beyond" the limits of one's own field of study. For example, a mere turn to the natural sciences from a humanities point of view will not do (and never has done) the work that is needed in order to transform and transgress limited mono-disciplinarity. Rather, it is the questions themselves, it is the ethico-onto-epistemological approaching of the issues at stake that are (to be) transformed within such inter-, or better even, intra-disciplinary engagements in order for them "to matter." It is precisely in such processes of diffractive transformation that I see the capacity to practice thinking differently to be of such great significance.

²⁷⁹ Kirby, "Initial Conditions, 204.

To concretize this still a little further: if, for instance, the issue of ecology for many good reasons currently enters a lot of contemporary feminist work, such engagements should not confine themselves to the task of only asking questions about climate change, the anthropocene, or environmental pollution. 280 What is asked in diffractive engagements is, instead, the transformation of how and what we even understand "ecology," "climate change," or "weather" to be. It means re-working established (theoretical) frameworks, splits, and categorical orderings that have so far determined research into these questions. ²⁸¹ Such an emphasis on what can also be called "thick" engagements is explicit in UCSC's Women's Studies collaboration, co-initiated by Karen Barad, with the Division of Social Sciences, Engineering School, and the Division of Physical and Biological Sciences in The Science & Jus-tice Research Center (Collaboration Group). Their Science & Justice Training Program (SITP), established across these academic disciplines. is not merely about mixing faculty, research themes, and approaches in graduate studies education at one Californian State University campus. Rather, as can be read in their presentation, "SJTP graduate fellows are provided with fellowship funding and faculty mentorship that supports them to explore questions of ethics and justice as they arise in their research."282 The students, and this is one of the project's explicit teaching goals, are to learn that "ethical and social justice issues cannot be known in advance but must be explored in each project individually; students learn by doing... try things out that might not work, labor through frustrations, and feel the freedom to do uncertain and experimental work."283 The consequences from such intra-disciplinary engagements are foundational. They both contribute to a "slow science" and they promise more complex results in which time to think — to wonder, question, and run up against a wall — is one practice amongst others, and needs to be given time to be practiced.

²⁸⁰ The emergence of the usage of the (geological) terminology of "anthropocene" in academic scholarship is very recent, and it functions currently as an umbrella term to bring together scholarship from diverse disciplines that investigate into "our" (post)human(ist) conditions.

²⁸¹ See e.g. Astrid Neimanis and Rachel Loewen Walker, "Weathering: Climate Change and the 'Thick Time' of Transcorporality," *Hypatia: A Journal for Feminist Philosophy* 29.3 (2014). This article builds on a number of new feminist materialist authors such as Alaimo, Barad, Colebrook, Grosz, and Tuana, whose transversal theoretico-practical engagements should be seen as implied in this reference. For an engagement with "weathering" as a theoretico-practical (teaching) tool, see also Neimanis' chapter in this book.

²⁸² Science & Justice Research Center (Collaboration Group), "Experiments in Collaboration: Interdisciplinary Graduate Education in Science and Justice," PLOS Biology 11.7 (2013): 1.

²⁸³ Science & Justice Research Center (Collaboration Group), "Experiments in Collaboration," 2.

To have the time to practice thinking as action again within the university from undergraduate to graduate level and beyond, this might be my dream for new knowledges. A strong alliance between the traditions of (feminist) critical thinking, which as "practical wisdom" — to use the terms of bell hooks — "calls for initiative from everyone, actively inviting all students to think passionately and to share ideas in a passionate, open manner,"²⁸⁴ and contemporary new feminist materialisms, which provide new answers for *how* to teach, think, and do differently *what* we have "in front of us," makes me hopeful that we will not lose this specific capacity — thinking — to (en)act (in) this world.

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²⁸⁴ bell hooks, Teaching Critical Thinking: Practical Wisdom (London and New York: Routledge, 2010), 11.

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