Lakoff, G., and M. Johnson. *Metaphors We Live By*. Chicago: University of Chicago Press, 1981.

Lennon, T. M. "Lady Oracle: Changing Conceptions of Authority and Reason in Seventeenth-Century Philosophy." In *Women and Reason*, edited by E. D. Harvey and K. Okruhlik, 39–61. Ann Arbor: The University of Michigan Press, 1992.

Lloyd, Genevieve. *The Man of Reason: "Male" and "Female" in Western Philosophy*. Minneapolis: University of Minnesota Press, 1993.

———. *Feminism and History of Philosophy*. Oxford: Oxford University Press, 2002.

MacLachlan, A. "Rude Inquiry: Should Philosophy Be More Polite?" *Kennedy Institute of Ethics Journal* 31, no 2 (2021): 175–98.

Ménage, G. *The History of Women Philosophers*, translation and introduction by B. H. Zedler. Lanham: University Press of America, 1984 [1690].

More, H. *The Immortality of the Soul*. London: J. Flesher, 1659; Ann Arbor: Text Creation Partnership, 2011. http://name.umdl.umich.edu/A51304.0001.001.

Mio, J. S. "Metaphor, Politics, and Persuasion." In *Metaphor: Implications and Applications*, edited by J. S. Mio and A. N. Katz, 127–46. Mahwah: Lawrence Erlbaum, 1996.

O'Neill, E. "Women Cartesians, 'Feminine Philosophy', and Historical Exclusion." In *Feminist Interpretations of Descartes*, edited by S. Bordo. University Park: Pennsylvania State University Press, 1999.

———. "Disappearing Ink: Early Modern Women Philosophers and Their Fate in History." In *Philosophy in a Feminist Voice: Critiques and Reconstructions*, edited by J. A. Kourany, 17–62. Princeton: Princeton University Press, 1997.

Rooney, P. "Gendered Reason: Sex Metaphor and Conceptions of Reason." *Hypatia* 6, no. 2 (1991): 77–103.

———. "Philosophy, Language, and Wizardry." In *Feminist Interpretations of Ludwig Wittgenstein*, edited by N. Scheman and P. O'Connor. University Park: Penn State University Press, 2002.

———. "Philosophy, Adversarial Argumentation, and Embattled Reason." *Informal Logic* 30, no. 3 (2010): 203–34.

Schiebinger, L. *The Mind Has No Sex?: Women in the Origins of Modern Science*. Cambridge: Harvard University Press, 1991.

Semino, E., J. Demmen, and Z. Demjén. "An Integrated Approach to Metaphor and Framing in Cognition, Discourse, and Practice, with an Application to Metaphors for Cancer." *Applied Linguistics* 39, no. 5 (2016): 1–22.

Shapiro, L. "Revisiting the Early Modern Philosophical Canon." *Journal of the American Philosophical Association* 2, no. 3 (2016): 365–83.

Shapiro, L., and M. P. Lascano. (eds.) *Early Modern Philosophy: An Anthology*. Peterborough: Broadview Press, 2021.

Thorgeirsdottir, S. "The Torn Robe of Philosophy: Philosophy as a Woman in *The Consolation of Philosophy* by Boethius." In *Methodological Reflections on Women's Contribution and Influence in the History of Philosophy*, edited by S. Thorgeirsdottir and R. Hagengruber. Women in the History of Philosophy and Sciences, vol. 3. Cham: Springer, 2020.

Wackers, D. Y. M., and H. J. Plug. "Countering Undesirable Implications of Violence Metaphors for Cancer through Metaphor Extension." *Metaphor and Symbol* 37, no. 1 (2022): 55–70.

Waithe, M. E. *A History of Women Philosophers* (Vol. 1–4). Dordrecht: Martinus Nijhoff Publishers, 1987–1994.

———. "Sex, Lies, and Bigotry: The Canon of Philosophy." In *Methodological Reflections on Women's Contribution and Influence in the History of Philosophy*, edited by S. Thorgeirsdottir and R. Hagengruber. Women in the History of Philosophy and Sciences, vol. 3. Cham: Springer, 2020.

Wolff, P., and D. Gentner. "Structure Mapping in Metaphor Comprehension." *Cognitive Science* 35 (2011): 1456–88.

Feminist Epistemology and Social Epistemology: Another Uneasy Alliance

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When I first became aware of Phyllis Rooney's writings more than a decade ago, my attention was immediately drawn to a chapter entitled "Feminist Epistemology and Naturalized Epistemology: An Uneasy Alliance."[1] As I was relatively new to feminist epistemology at the time, this chapter helped me reflect on what had been drawing me into its orbit, and why I was finding it increasingly difficult to pull myself back into more familiar conversations. Like Rooney, I was engaging specific questions around social positionality, cognition, and motivation as part of a broader project that draws on epistemological research that could be described as feminist, or naturalistic, or both.[2] With several philosophers ready to endorse the idea that feminist and naturalized epistemologies are closely aligned research programs, I was impressed by Rooney's insistence on scrutinizing this proposed alliance more closely, and I readily sympathized with her feelings of uneasiness.

1. ONE UNEASY ALLIANCE

Rooney's central claim in her chapter is that, "in some important senses of the designation 'naturalistic,' feminist epistemology exhibits more naturalistic tendencies than 'regular' naturalized epistemology does," which suggests that "naturalists who are not already engaged in feminist projects have much to learn from feminist epistemologists."[3] To help motivate this claim, Rooney develops an internal critique of naturalized epistemology—or, more to the point, of epistemologists who call themselves "naturalists." Her basic point is that many naturalists continue to harbor a number of traditional assumptions about knowledge, knowing, science, and epistemology that are at odds with significant impulses motivating naturalized epistemology as a research program. These assumptions are problematic, "not because they pay too much attention to science, but because they pay too little," giving us reason to characterize them as "non-naturalistic."[4]

For example, it is not uncommon for those working under the banner of naturalized epistemology to assume that knowledge and knowing are paradigmatically about *individuals* acquiring and justifying *beliefs*; that beliefs are distinct, isolable "inner" entities amenable to measurement in the lab; that cognitive science gives an accurate representation of how "we" actually arrive at our beliefs; and that scientific representations of cognition form (or will form) a relatively coherent, uniform account that is ultimately reducible to neuroscience, or some other foundational cognitive science.[5] Many naturalists are understandably drawn to research in the cognitive sciences that takes assumptions of these sorts for granted, which helps to ensure that they continue to remain in the background, insulated from empirical scrutiny and potential disconfirmation. As Rooney points out, this is an important way in which "traditional assumptions about gender differences in reasoning capacities have worked

their way into philosophical and scientific conceptions of rationality and cognition," as well as a partial explanation of why such assumptions often remain unchallenged.[6] Would-be naturalists, then, "need to achieve a more critical and reflexive understanding of the assumptions and questions *they* bring to science, and a better understanding of the ways in which some of the 'prior' questions and expectations, many rooted in the epistemological tradition, might be ill-adapted to the very fields of science from which they now seek input."[7]

What does it mean to be a naturalist epistemologist, anyway? As Rooney astutely observes, the designation "naturalist epistemologist" is a great deal more confusing than is typically acknowledged and it is not at all clear to whom it refers. Is it enough to be *committed* to the continuity of epistemology and science in some shape or form? For example, James Maffie's naturalists are united by a "shared commitment" to naturalized epistemology as a project or research program.[8] Yet as Rooney emphasizes, naturalists of this sort need not be engaged in *doing* naturalized epistemology and, in fact, usually are not. "These naturalists seem quite comfortable maintaining some distance from the actual work of building specific conversations and continuities between epistemology and science," notes Rooney, whereas "feminist epistemologists/philosophers of science are already significantly engaged in such conversations."[9]

Is it enough, then, to be *directly engaged* in the scientific study of cognition? For example, Barry Stroud's naturalists include anyone engaged in "the scientific study of perception, learning, thought, language-acquisition, and the transmission and historical development of human knowledge."[10] Yet as Rooney points out, Stroud's description picks out *scientists* as those who are doing naturalized epistemology rather than philosophers. Besides, being involved in the production of epistemologically relevant scientific research does not automatically qualify one for evaluating the relevance of any given research finding. "Of the potentially innumerable findings produced by all of the various cognitive sciences, how are epistemologists to select those that they will find significant in developing an epistemology that is to be a part of, or closely allied with, science?" asks Rooney.[11] This question is all the more pressing given the way that traditional assumptions about gender differences in reasoning capacities continue to work their way into scientific conceptions of reasoning and cognition. Philosophers who are ill-equipped to reckon with the background assumptions lurking behind specific findings in the cognitive sciences run the risk of entertaining those findings as empirical givens, as though they do not already incorporate earlier norms of epistemology.

2. FEMINIST EPISTEMOLOGY AND SOCIAL EPISTEMOLOGY

I find Rooney's critique of naturalized epistemology useful in thinking through what appears to many to be an even less controversial alliance: that between feminist epistemology and social epistemology. Consider, for example, the way that Elizabeth Anderson and Heidi Grasswick characterize the relation between the two. In "Feminist Epistemology: An Interpretation and a Defense," Anderson describes feminist epistemology as the "branch" of social epistemology that "investigates the influence of *socially constructed conceptions and norms of gender and gender-specific interests and experiences* on the production of knowledge."[12] Echoing this manner of aligning feminist and social epistemological research, Grasswick suggests that, "by far the majority of work in feminist epistemology is best understood as a form of social epistemology."[13]

But perhaps these delineations are unduly neat and tidy. Rooney encourages us to slow down and examine the background assumptions at work in prominent conceptualizations of social epistemology, inviting us to subject research in this field to an internal critique similar to the sort she raises for naturalized epistemologists. We might wonder, with Rooney, whether certain assumptions operating within the research of social epistemologists may be at odds with the critical spirit animating the field. Rooney also reminds us to be on the lookout for who is and is not exercising critical self-awareness with respect to such framing assumptions, and to consider whether feminist epistemology might not exhibit more thoroughly socialistic tendencies than "regular" social epistemology.

Take, for example, a recent paper by Elizabeth Anderson entitled "Epistemic Bubbles and Authoritarian Politics."[14] I see this paper as one instance within a genre of social epistemological writings that have emerged during the Trump era, which take seriously the suggestion that the United States is "a nation more divided than ever," epistemically as well as politically.[15] Anderson starts from the plausible premise that political discourse in the US has become seriously distorted by "epistemic bubbles,"[16] and that such bubbles are expressive of increasing group polarization along partisan lines. Not only do Democrats and Republicans disagree about values, but about factual matters, too, including such politically salient factual claims as "human activity is causing climate change" and "carrying concealed weapons makes people safer." Yet it is not mere disagreement over matters of fact that motivates Anderson's concern over partisan epistemic bubbles; it is, rather, the "*failure of a group to update its beliefs in an accuracy-directed response to new information*."[17] The epistemic bubbles inhabited by political parties become "politically consequential," in her view, insofar as they shape political discourse in ways that threaten "sound policymaking and democracy itself."[18] For example, since climate change is a problem facing everyone, one party's refusal to acknowledge associated risks poses a threat to us all. Hence the motivation for Anderson's project is to provide an improved account of how epistemic bubbles form and operate so as to better support ongoing efforts to burst them.

As Anderson points out, two prominent models of how epistemic bubbles work (viz., Cass Sunstein's "group polarization theory" and Dan Kahan's "cultural cognition theory"[19]) converge in denying that Democrats and Republicans differ in their tendency to form bubbles, since several studies have shown that "individuals with different partisan and ideological identities do not differ on average with respect to relevant cognitive characteristics."[20]

Notably, both Sunstein's and Kahan's models attempt to explain the formation of epistemic bubbles on the basis of universal cognitive biases operating at the level of individuals. Since individual variations in degrees of bias are distributed evenly across partisan groups, both models predict the Democrats and Republicans are equally vulnerable to entrapment.

Arguing against this joint assertion of partisan symmetry, Anderson suggests that "social epistemology needs to get more social, by locating critical features of epistemic bubbles *outside* people's heads, in the norms by which certain groups operate."[21] She defends the claim that there is, in fact, significant asymmetry in vulnerability to epistemic bubbles across party lines, for the rise of populist politics among Republicans has brought about a consequential shift in group-level epistemic norms that are invisible to psychologists focused on individual-level cognitive biases. In addition to getting "more social," then, Anderson suggests that social epistemology needs to "get more political, by considering the impact of populist political styles on what people assert and believe."[22]

By deploying us-versus-them narratives that position "elites" as betrayers of "the people," populists seek to delegitimize elite leaders and institutions, steadily sowing mistrust in anyone not belonging to the populist party or movement, coupled with excessive faith in those who espouse the party line. Insofar as Republicans adopt populist social norms of joint information processing, they will tend to exhibit cognitive biases *as a group* that party members may not also exhibit as individuals, and those biases will tend to trap them in an epistemic bubble. For example, given that populism elevates the "common sense" of the people over the deceitful manipulations of academics and scientists, groups adhering to populist norms will tend to downplay the relevance of empirical evidence when advocating for policies that express shared intuitions and sentiments. Critiques of populist policies that insist on data-driven decision-making can easily be dismissed as the machinations of corrupt "fake news" reporters and "deep-state" operatives, all of whom have been bought off by an illegitimate opposition composed of out-of-touch coastal city-dwellers, "woke" liberal "snowflakes," and the unwashed mobs of illegal migrants and despised minorities whose interests they are said to represent. Besides, does it really matter whether Trump's call to "Build the wall!" will result in higher wages for US citizens or prove effective in curbing illegal border-crossings, when further militarizing the border affirms who the *real* Americans are and names their enemies in a single stroke? Slowly but surely, populist epistemic and discursive norms ensure that empirical discussion is usurped by trolling, mudslinging, and the trotting out of conspiracy theories, all of which underscore the untrustworthiness of anyone other than real Americans.

In summary, Anderson argues that Republicans are more vulnerable to entrapment in epistemic bubbles than their Democratic counterparts insofar as the rise of populism within the GOP has introduced epistemically dysfunctional group-level norms. Unlike Sunstein and Kahan, whose proposals focus on addressing individual-level cognitive biases, in proposing remedies for epistemic bubbles, Anderson trains her attention on how Democrats might work with and around populism to better get through to Republicans. For example, she suggests that addressing Midwestern farmers *as property owners* who could turn a profit from siting wind turbines on their farms—rather than *as Republicans* whose gas-guzzling Ford F-150s are ruining the planet—might help Democrats steer clear of the usual identity-expressive trolling. The thought here seems to be that Democrats are already on the right (because empirically better-informed) side of the relevant political issues. Since Democrats are less vulnerable to epistemic bubbles than their Republican counterparts, it is up to them to learn how the epistemic populism of the right works better than populists themselves. Only then will they be able to out-maneuver their political rivals and, in so doing, save everyone from imminent disaster. "Ultimately," writes Anderson, "to stop populist epistemic bubbles or their discursive equivalents, we must find ways to defuse populism."[23] Beyond simply outsmarting Republicans, then, she recommends adopting a sympathetic stance towards populist voters who "are moved by despair over the declining prospects of less educated white males," and developing "an economic agenda focused on improving their material prospects, without excluding others."[24]

3. ANOTHER UNEASY ALLIANCE

As mentioned earlier, I see Anderson's work on epistemic bubbles as one instance within a genre of epistemological writings that have emerged in the wake of the Trump presidency. Following Rooney's approach, I want to ask this: How closely aligned is this shared way of doing social epistemology with ongoing research in feminist epistemology? Recall that Rooney's work helps us to see the extent to which the research of naturalists expresses and protects a variety of non-naturalistic assumptions, and that these assumptions help shape thinking about gender and cognition in ways that feminists ought to recognize as troubling. Following Rooney's lead, I want to draw attention to certain assumptions operating within the work of Anderson and like-minded social epistemologists—assumptions that I take to be at odds with the critical spirit animating the field. Whereas Rooney is concerned about naturalists who continue to harbor traditional assumptions about knowledge, I am concerned about social epistemologists whose research uncritically reflects liberal-centrist common sense in ways that strengthen reactionary populism, rather than defuse it. My concern, in short, is with what I call the "NPRization of social epistemology."[25]

What exactly is the NPRization of social epistemology? Well, consider what it's like to listen to the morning news as someone who does not identify as a Republican. As someone who has done a fair bit of listening myself, it strikes me that one of the chief functions of NPR-style journalism is to reassure Democrats that they are not only generally *better-informed* than their Republican counterparts, but that they are, by that dint, *morally and politically better*, and so have a special role to play in carrying the country into the twenty-first century. Reporting during the COVID-19 pandemic has been particularly illustrative in this regard. Consider, for example, the countless interviews with nurses, doctors, and public health specialists concerning how best to "reach across the aisle" to those who refuse

to mask up in close quarters, get vaccinated, and so forth. Entire manuals could be written detailing the tactics Democrats are supposed to employ to avoid coming across as too conceited and didactic; the kinds of gut-wrenching testimony that might help to build intimacy and trust where previously there had only been mutual suspicion and hostility; not to mention the honesty and restraint that is needed to admit that someone else is simply a lost cause. I think it would be fair to characterize the attitude such reporting is meant to instill as *saviorist* in orientation. After all, it serves to constantly reinforce the notion that NPR listeners generally, and Democrats specifically, are already well equipped to rescue the country from the epistemic, moral, and political backwardness of everyone else.

What does it mean to be in the grips of a saviorist mentality, epistemologically speaking? To begin with, it is important to distinguish saviorism from merely holding a belief one thinks to be true (say, that the COVID-19 vaccine is safe and effective) and challenging somebody who claims otherwise. The crucial difference lies in the nature of the relationship between the parties involved in the exchange and in how the one doing the challenging conceives of their relative standing. It is not the mere fact that I am challenging what I take to be your mistaken beliefs that qualifies my approach as saviorist in orientation. After all, it would be irresponsible of me to simply ignore the fact that your beliefs are not only false, but dangerously so; and in the event that I am the one whose erroneous views are proving harmful, I would expect you to correct me respectfully in turn. Quite unlike a respectful, reciprocal exchange between partners in a shared endeavor, saviorist exchanges are essentially patronizing in character insofar as they involve influencing an out-group, purportedly for the good of all involved, based on the perceived epistemic superiority of the group of which one is a part. Exchanges of this sort are especially problematic when they take place in the context of ongoing domination, exploitation, and resource extraction targeting the out-group in question—as tends to be the case in relations between residents of major US cities and the rural farming communities on which they depend for food, raw materials, waste disposal sites, and the like. Why do these background power dynamics make saviorist attitudes especially problematic? First, because attitudes of this sort are typically *made possible by* relations of power that already reflect and express the degradation and instrumentalization of entire groups of people; second, because they are not only encouraged by but *serve to reinforce* such structurally unjust power dynamics; and third, because they depend, in part, on the *mystification* of those dynamics, insofar as they involve papering over the systematic domination of lands and of peoples with endless chatter focused on political leanings and partisan identities in what is presumed to be a bifurcated world where only one of two parties can truly know best.

Now, it would be inaccurate to claim that all philosophical research on epistemic bubbles, echo chambers, group polarization, and the like is similarly caught up in promoting a saviorist attitude.[26] But I do want to argue that Anderson's work fits the bill, largely because of the way that it uncritically reflects a kind of liberal-centrist common sense already familiar from so much NPR-style journalism. First, Anderson assumes that epistemic bubbles qualify as "politically consequential" only insofar as they shape political discourse in ways that threaten "sound policymaking and democracy itself," by which she means, more specifically, constitutionally enshrined institutions of representative democracy.[27] For example, the January 6 attack on the US Capitol can also be traced to a kind of epistemic populism that poses a direct threat to the continuation of the US as a liberal-democratic polity. Yet this also suggests that epistemic bubbles that negatively impact things other than liberal-democratic institutions fail to qualify as "politically consequential," including all the ways in which people across the globe are harmed by the normal operation of those very same institutions.

Second, Anderson assumes that in the context of the US, politically consequential epistemic bubbles reflect and express polarization around partisan identity first and foremost, which is to say that they are rooted in the group-specific epistemic practices of Democrats and Republicans, respectively. For example, everyone living in the US has been affected by the COVID-19 pandemic, yet group polarization along party lines has repeatedly thwarted efforts to pass the sort of legislation required to secure appropriate funding for preventative measures, testing, and treatment. Yet while partisan polarization is clearly *a* relevant source of epistemic bubbles that are political consequently *in one sort of way*, it is far from obvious that partisan polarization is the only or most salient source. I am reminded here, for example, of Charles W. Mills's extended inquiry into the nature and origins of "white ignorance," a form of group-level cognitive deficiency that is "linked to white supremacy."[28] As described by Mills, the phenomenon of white ignorance cuts across such superficial and fleeting identity markers as political party affiliation and even extends beyond those self- and socially identified as "white," afflicting anyone whose cognitive makeup is causally influenced by white domination.[29] How might our thinking about the epistemic dimensions of responses to pandemics and ecological catastrophes begin to shift as we remove the blinders of partisan politics? What if, instead of looking down our noses at the MAGA crowd, social epistemologists started to reckon with our own co-implication in accepting several hundred COVID-related deaths a day as the cost of "returning to normal"? Who and what is ignored, and with what politically salient consequences, when we only recognize conventional modes of politics as consequential, ignoring all affiliations and identities other than the narrowly partisan?

Notice that Anderson needs to rest on assumptions of both types in order to motivate her proposed remedies for epistemic bubbles. That is, it only becomes plausible to characterize Democrats as epistemically superior in some global sense once it has been taken for granted that conventional politics is the only game in town, and that politically consequential epistemic bubbles do not reflect group identities other than "Democrat" and "Republican." Yet I want to suggest that both assumptions are questionable, for reasons I suspect will be readily apparent to both feminists and non-feminists. For one thing, when Anderson argues that social epistemology needs to get

"more political," she would seem to be working with a notion of "the political" that does not take account of feminist expansions and reworkings of the concept that have emerged over the past several decades. To name just one significant contributor to this critical lineage in feminist political philosophy, Iris Marion Young has long insisted that "the political" encompasses power relations of many different types, whether or not the relationships in question are embedded in or mediated by public institutions.[30] For Young, then, "politics" is not to be understood in the narrow, conventional sense that includes such constitutionally sanctioned activities as running for public office, voting for one's preferred candidates, and engaging with other elected officials in highly ritualized settings, such as the US House and Senate. Rather, "politics" refers broadly to all forms of "public communicative engagement with others for the sake of organizing our relationships and coordinating our actions more justly."[31] If the political is fundamentally about relationships of power, and politics about how we go about organizing those relationships through public communication, then we can expect epistemic bubbles to be politically consequential in a host of ways that are bound to be overlooked by social epistemologists committed to overlooking critical feminist insights in political philosophy.

Of course, Anderson is aware of this literature and usage of "political" and so should be read as using the term to refer to overt or formal political efforts. But, granting that, there is good reason to pause before embracing her proposed remedies for populist bubbles. As Anderson herself points out, the flame of reactionary populism has been fueled by the sentiment that city-dwelling "elites"—including everyone from the Clintons, to the college-educated "creative class," to academics, and so on—are constantly looking down on "the people," whom they conspire to manipulate and betray for nefarious ends. How can a saviorist epistemology do anything other than continue pouring fuel on this very fire? How could it serve to buttress anything other than the kind of "progressive neoliberalism" that, as Nancy Fraser reminds us, created the very material and social conditions that gave rise to reactionary populism in its Make America Great Again guise?[32] What are the all-too-familiar political consequences of reassuring NPR listeners that they are the ones who pay closer attention to science, more reliably propose empirically informed policies, and really ought to be having some "difficult but necessary conversations" with that Trump-supporting uncle they not-so-secretly despise?

4. FEMINIST EPISTEMOLOGY AND SOCIAL EPISTEMOLOGY

Feminist epistemologists tend to be centrally interested in doing epistemology in a way that "transforms the self who knows," conjuring up "new sympathies, new affects as well as new cognitions and new forms of intersubjectivity," in Sandra Bartky's eloquent phrasing.[33] This is critically important work, not only because it tends to be more consistently naturalistic than research conducted under that banner, but also because it helps to generate new and better ways of relating to ourselves and others as knowers and, in so doing, contributes to shifting political relations no less than epistemic ones. A saviorist social epistemology can do neither of these things, since it affirms already operative group-level norms as the lesser of two evils, assuring certain knowers that it is not they, but *the others* who really need to start knowing otherwise. Ironically, saviorism helps to entrench the very social conditions that made it seem like a promising remedy in the first place, ensuring that the ruling class can oscillate comfortably between progressive neoliberalism and reactionary populism for the foreseeable future.

If there is an alliance to be forged between social epistemology and feminist epistemology, I think we have much to learn from Rooney about which terms of alignment are and are not worth entertaining. It is not enough to insist, as Anderson does, that social epistemology needs to get "more social" and "more political," as both can evidently be done in ways that reinforce the political status quo and bring negligible epistemic gains. Much as naturalists are faced with the challenge of selecting which scientific findings to treat as significant in developing a successor epistemology, socialists must confront the challenge of selecting which group-level norms to evaluate in light of the impact of which political styles and with political consequences of what sorts. Insofar as feminist epistemologists are self-conscious about their own framing assumptions and also expose them to empirical scrutiny, Rooney is right to point out that we exhibit more thoroughly naturalistic tendencies than some card-carrying naturalists. If we are also to exhibit more thoroughly socialist tendencies than "regular" social epistemologists, we had better get "more social" and "more political" in ways that involve a similar willingness to expose and—in so doing—begin *transforming* ourselves, making possible those new forms of intersubjectivity that will help transcend our current political predicament.[34]

It is this last point that I want to dwell on in my closing thoughts, not only because it helps me to better appreciate Rooney's contributions to feminist theorizing, but also because it helps bring to the fore why feminist epistemology is not just another branch or form of social epistemology—at least, not for the time being. In another paper, entitled "What Is Distinctive about Feminist Epistemology at 25?" Rooney observes that feminist epistemology continues to elude those neat characterizations and hasty generalizations that are so often deployed by those who are hostile towards it in order to circumscribe or contain it. Yet as Rooney quickly adds, feminist epistemology also continues to elude attempts to identify it too readily with mainstream directions in epistemology—including such projects as naturalized, social, and pragmatist epistemology—which are often deployed by those who acknowledge the contributions of feminist epistemologists in guarded, highly limited ways, while nevertheless exhibiting some of the moves to define and contain that are so obvious in overtly hostile reactions. "What makes feminist epistemology distinctive," argues Rooney, "is that it can still be distinguished from non-feminist or mainstream epistemology, and significantly by the latter's seeming inability to meaningfully appreciate and incorporate feminist epistemological insights and developments."[35] In her efforts to give such insights and developments their due, Rooney focuses on four, elaborating each in response to misplaced criticisms of feminist theorizing. After reviewing these four, I want to

close by adding a fifth, thinking with and building upon Rooney's work.

First, it is often claimed that feminist epistemology is too historically and politically *situated* to count as epistemology proper, whereas real epistemology generates accounts of knowledge and related concepts that are completely ahistorical and apolitical. Yet as Rooney points out, while mainstream epistemology actively or passively distances itself from a commitment to uncovering the epistemic and epistemological fallout of particular aspects of its own history and politics, this "does not make mainstream epistemology less historically and politically situated, and certainly not in a way that renders it less problematic as an epistemological orientation."[36] Feminist epistemology is historically and politically situated, as is the case with *any* epistemological project or direction. Insofar as it remains distinct from mainstream projects, it is because feminist epistemologists purposefully seek to uncover their own situatedness and render themselves accountable for the effects of their intellectual labor.

Second, it is often claimed that feminist epistemologists seek to inject their particular political values, interests, and biases into their work, whereas real epistemologists are politically neutral knowers of knowledge who strive to insulate their thinking from contaminating influence. Yet since the ideal of political neutrality is as chimerical for non-feminists as it is for feminists, Rooney suggests that it would be far more illustrative and productive for everyone to start with the question "Which types of political awareness, commitment, or intervention enhance epistemology and which detract from it?"[37] By shifting the question in this way, Rooney levels the field of play while putting into question many of the assumptions undergirding research in non-feminist approaches to epistemology. "Given that, historically, many epistemologists developed views and theories that (unwittingly or not) reinforced unjust political hierarchies," she wonders, what politically problematic institutions and relations do mainstream epistemologists risk continuing to reinforce through their attempted disavowals of "the political," and "what is it about feminist examinations of the epistemic and epistemological fallout of that history that is e*pistemologically* problematic?"[38]

Third, it is often claimed that feminist epistemology focuses on peripheral or applied questions and topics only, whereas the central or core concepts and questions are left to epistemology proper. Yet it is simply not true that feminist epistemologists have been unconcerned with many of the key concepts of epistemology—such as belief, justification, reason, and evidence—though feminists have contributed a great deal to understanding the significance of these concepts in relation to epistemic, moral, and political considerations that are typically ignored. Besides, the question of what constitutes "the central or core concepts and questions in the field" continues to be a matter of substantive debate. By putting into question an overly narrow preoccupation with defining the concept of knowledge, and by bringing to light the many rich, underexplored questions swirling around such concepts as attending, understanding, remembering, imagining, and knowing well, feminist epistemologists have helped clarify what all is at stake in our decisions about what to count as basic concepts and starting points. "[W]hat we take to be the core or constitutive concepts of epistemology matters," notes Rooney, "since such determinations presume in favor of some epistemic goods or values (and related norms of epistemic practice and conduct) over others."[39] Considerations such as these also help us to think more clearly about the relationships between epistemic, moral, and political normativity.

This brings us to a fourth area where feminist epistemologists have made significant contributions. It is often claimed that feminist epistemologists confuse or obscure the distinction between moral or political normativity and epistemic normativity, whereas this distinction remains an important and carefully monitored one in epistemology proper. Yet as Rooney points out, it is one thing to contend that philosophical theorizing about knowledge needs to take account of moral and political concerns; it is quite another to contend that epistemic normativity somehow reduces to moral or political normativity. Feminists who are committed to examining epistemic normativity—that is, feminists who are committed to doing epistemology—are, of course, not in favor of doing away with the very notion. Instead, feminist work in epistemology is concerned with linking core concepts in the field with moral and political values in ways that shed new light on why and how striving to become good attenders, rememberers, imaginers, and knowers is something that should matter to us—with why, in other words, epistemology is a field of inquiry that genuinely matters, in the sense that *knowing well* is inseparably bound up with *living well*. By drawing attention to the question of what knowing well requires, feminist epistemologists remind us of why it might be important to know how to grow food, as well as how to buy it off a shelf; to not only reflect on which actions are likely to harm other beings and ecosystems, but to be capable of significantly altering our ways of being in the world with others; to focus less on what propositions Jones knows concerning which cats are on which mats, and more on how to acquire the skills of attention and care that Jones will need to promote the flourishing of all the furballs he finds in his midst.

Whether it is a matter of reflecting on their own historical and cultural situatedness, on the specific interests, concerns, and values they bring to their research, or on the questions they start from, the concepts they examine, and the methods they deploy, part of what distinguishes the work of feminist epistemologists is their heightened *epistemological reflexivity*, which Rooney characterizes as "a form of second-order or metaepistemological reflection."[40] Indeed, from Rooney's perspective, epistemological reflexivity stands out as the single thread running through all of these other distinctively feminist tendencies. What does reflexivity of this sort look like? "On an individual level," she explains, "we as epistemologists promote epistemological reflexivity when we bring to our endeavors better understandings of *ourselves* as politically and historically situated knowers of knowledge(s). Such understanding involves owning up to the assumptions, interests, values, and situated questions that frame our epistemological inquiries, including those interests and values that seem to be dictated by an impersonal ahistorical

'tradition'."[41] As we have seen, it is precisely this sort of reflexivity that is lacking in prominent strands of naturalized and social epistemological theorizing.

I agree with Rooney that part of what distinguishes feminist from non-feminist epistemological research is the promotion and practice of metaepistemological reflection. I also agree with her that both naturalists and socialists have much to learn from the examples of feminists who own up to how who, what, when, and where they are in the world informs the shape and character of their research. But it seems to me that feminist epistemologists challenge us to do more than undergo a yet more extensive arc of reflection and responsibility-taking. When Bartky evokes the notion of doing epistemology in a way that "transforms the self who knows," I take her to be pushing beyond a recommendation that philosophers confess their social locations at the outset of writing or giving a talk. Rather, Bartky is speaking to a practice of *personal* transformation that is inseparably bound up with broader movements for *social* transformation—a practice that involves striving to know well not in some timeless sense, but in a sense that is maximally sensitive to the particular demands of *this* place, on *this* moment on the "clock of the world."[42] In other words, part of what makes feminist epistemology so elusive and difficult to define is that it is a way of doing epistemology *in and as movement*—not only self-conscious of its historical situatedness and possible efficacy, but actively striving for the creation of new social forms through which knowing and living well become concretely possible for all. To borrow a phrase from Alexis Shotwell, feminist epistemology is at its most distinctive when it is animated by an erotic desire to know *and be* "otherwise," not merely to better understand and take ownership of oneself.[43] This desire finds expression in the work of more feminist philosophers than can be named and acknowledged here. It courses through Marilyn Frye's efforts to distinguish "loving" from "arrogant" perception[44] and María Lugones's invitation to "world travel."[45] It animates Susan Babbitt's musings on the transformative experiences of LeRoi Jones and the dreaming of "impossible dreams,"[46] while propelling Sue Campbell's reflections on the moral and political achievement that is coming to re-remember our own personal pasts.[47] It is easily recognized in Lorraine Code's efforts to breathe fresh life into the notions of the instituted and instituting social imaginaries,[48] not to mention in Kristie Dotson's generative thinking on the work of coming to grips with and transcending the limitations of entire epistemological systems.[49] Insofar as it continues to carry another world in its heart, feminist epistemology will continue to rest uneasily with any effort to align it with—let alone subsume it within—the still emerging field of social epistemology.

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NOTES

1. Rooney, "Feminist Epistemology and Naturalized Epistemology."
2. Doan, "Climate Change and Complacency"; Doan, "Responsibility for Collective Inaction and the Knowledge Condition"; Doan and Sherwin, "Relational Solidarity and Climate Change."
3. Rooney, "Feminist Epistemology," 207, 208.
4. Rooney, "Feminist Epistemology," 217.
5. Rooney "Feminist Epistemology," 217.
6. Rooney, "Feminist Epistemology," 205.
7. Rooney 2003, 219. For a more detailed account of how assumptions about gender differences in reasoning capacities tend to be intertwined with assumptions about the nature of reasoning simpliciter, see Section III of "Feminist Epistemology and Naturalized Epistemology" (Rooney, "Feminist Epistemology," 221–35), as well as an earlier paper of Rooney's entitled "Rationality and the Politics of Gender Difference."
8. Maffie, "Recent Work on Naturalized Epistemology"; Maffie, 1981
9. Rooney, "Feminist Epistemology," 206, 221.
10. Stroud, "The Significance of Naturalized Epistemology," 71.
11. Rooney, "Feminist Epistemology," 215.
12. Anderson, "Feminist Epistemology," 54, original emphasis.
13. Grasswick, "Feminist Social Epistemology."
14. Anderson, "Epistemic Bubbles and Authoritarian Politics."
15. Jamieson and Cappella, *Echo Chamber*; Pariser, *The Filter Bubble*; Boyd, "Epistemically Pernicious Groups"; Boyd, "Group Epistemology"; Nguyen, "Escape the Echo Chamber"; Nguyen, "Echo Chambers and Epistemic Bubbles"; Baumgaertner and Justwan, "The Preference for Belief"; Furman, "Epistemic Bunkers."
16. Anderson defines an "epistemic bubble" as "a relatively self-segregated social network of like-minded people, which lacks internal dispositions to discredit false or unsupported factual claims in particular domains. Due to factors internal to the network, members are liable to converge on and resist correction of false, misleading, or unsupported claims circulated within it" (Anderson, "Epistemic Bubbles," 11). Notice that Anderson's definition blurs a significant distinction charted earlier by C. Thi Nguyen, namely, that between "epistemic bubbles" and "echo chambers" (Nguyen, "Echo Chambers and Epistemic Bubbles"). For Nguyen, both are social epistemic structures that exclude some relevant voices and evidence, but whereas epistemic bubbles accomplish this exclusion through omission, echo chambers do so through the active discrediting of outsiders.
17. Anderson, "Epistemic Bubbles," 11, original emphasis.
18. Anderson, "Epistemic Bubbles," 12.
19. See Sunstein, *On Rumors*; Sunstein and Vermeule, "Conspiracy Theories"; Kahan and Braman, "Cultural Cognition and Public Policy"; Kahan, "Cultural Cognition as a Conception of the Cultural Theory of Risk"; Kahan, "The Politically Motivated Reasoning Paradigm, Part 1"; Kahan et al., "Culturally Antagonistic Memes."
20. Anderson, "Epistemic Bubbles," 12.
21. Anderson, "Epistemic Bubbles," 12.
22. Anderson, "Epistemic Bubbles," 12.
23. Anderson, "Epistemic Bubbles," 27.
24. Anderson, "Epistemic Bubbles," 27.
25. For readers outside the United States, among others who may not be familiar with the term, NPR is an acronym for National Public Radio, a nonprofit media organization that serves as a national syndicator for more than a thousand public radio stations across the US—including WDET 101.9 FM in Detroit, the local station with which I am most familiar. NPR is widely recognized as among the most trusted sources of news and commentary by self-identified liberals residing in the US, alongside the Public Broadcasting Service (PBS) and the British Broadcasting Corporation (BBC), to name a few.

26. Notice, too, that I am not equating having or promoting a saviorist attitude—let alone doing epistemology in a saviorist mode—with, say, making normative claims about knowledge. After all, my concern with the NPRization of social epistemology is meant to highlight a particular way of doing social epistemology, which is based on a specific set of assumptions about US society and politics and addresses a specific type of audience. My thanks to Stephanie Kapusta for pushing me for greater clarity on this point.
27. Anderson, "Epistemic Bubbles," 12.
28. Mills, "White Ignorance."
29. Mills, "White Ignorance," 22.
30. See, e.g., Young, *Justice and the Politics of Difference*; Young, *Responsibility for Justice*.
31. Young, *Responsibility for Justice*, 123.
32. Fraser and Jaeggi, *Capitalism*, 193–215.
33. Bartky, *"Sympathy and Solidarity" and Other Essays*, 71–72.
34. My thinking about non-saviorist approaches to addressing epistemic bubbles and echo chambers dovetails with the work of Katherine Furman, who emphasizes the importance of creating less hostile epistemic environments in view of our shared tendency to "bunker down" epistemically (Furman, "Epistemic Bunkers," 203). As mentioned earlier, I take it that saviorist attitudes are essentially patronizing in character, insofar as they involve influencing out-group members, purportedly for the good of all involved, based on the perceived epistemic superiority of the in-group of which one is a part. Since creating a less hostile epistemic environment can be yet another tactic deployed for the sake of influencing others in questionable ways, I suggest that more thoroughgoing attitudinal changes are sometimes necessary to make genuinely trusting, solidaristic relationships possible.
35. Rooney, "What Is Distinctive about Feminist Epistemology at 25?" 344.
36. Rooney, "What Is Distinctive," 349.
37. Rooney, "What Is Distinctive," 354.
38. Rooney, "What Is Distinctive," 354.
39. Rooney, "What Is Distinctive," 360.
40. Rooney, "What Is Distinctive," 355.
41. Rooney, "What Is Distinctive," 356, original emphasis.
42. Boggs and Boggs, *Revolution and Evolution in the Twentieth Century*.
43. Shotwell, Knowing Otherwise.
44. Frye, *The Politics of Reality*.
45. Lugones, "Playfulness." My thanks to Letitia Meynell for helping me see the relationship between adopting a saviorist attitude toward others as knowers and perceiving them arrogantly, in Frye's sense (Frye, *The Politics of Reality*).
46. Babbit, *Impossible Dreams*.
47. Campbell, "Dominant Identities"; Campbell, *Relational Remembering*; Campbell, *Our Faithfulness to the Past*.
48. Code, *Ecological Thinking*.
49. Dotson, "Conceptualizing Epistemic Oppression."

BIBLIOGRAPHY

Anderson, Elizabeth. "Feminist Epistemology: An Interpretation and a Defense." *Hypatia* 10, no. 3 (1995): 50–84.

———. "Epistemic Bubbles and Authoritarian Politics." In *Political Epistemology*, edited by Elizabeth Edenberg and Michael Hannon, 11–30. Oxford: Oxford University Press, 2021.

Babbitt, Susan E. *Impossible Dreams: Rationality, Integrity, and Moral Imagination*. Boulder: Westview Press, 1996.

Bartky, Sandra Lee. *"Sympathy and Solidarity" and Other Essays*. Lanham: Rowman & Littlefield, 2002.

Baumgaertner, Bert, and Florian Justwan. "The Preference for Belief, Issue Polarization, and Echo Chambers." *Synthese* 200, no. 5 (2022): 1–27.

Boggs, James, and Grace Lee Boggs. *Revolution and Evolution in the Twentieth Century*. New York: Monthly Review Press, 1974.

Boyd, Kenneth. "Epistemically Pernicious Groups and the Groupstrapping Problem." *Social Epistemology* 33, no. 1 (2018): 61–73.

———. "Group Epistemology and Structural Factors in Online Group Polarization." *Episteme* 20, no. 1 (2023): 57–72.

Campbell, Sue. "Dominant Identities and Settled Expectations." In *Racism and Philosophy*, edited by Susan E. Babbitt and Sue Campbell. Ithaca: Cornell University Press, 1999.

———. *Relational Remembering: Rethinking the Memory Wars*. Lanham: Rowman and Littlefield, 2003.

———. *Our Faithfulness to the Past: The Ethics and Politics of Memory*, edited by Christine M. Koggel and Rockney Jacobsen. Oxford: Oxford University Press, 2014.

Code, Lorraine. *Ecological Thinking: The Politics of Epistemic Location*. Oxford: Oxford University Press, 2006.

Doan, Michael D. "Climate Change and Complacency." *Hypatia* 29, no. 3 (2014): 634–50.

———. "Responsibility for Collective Inaction and the Knowledge Condition." *Social Epistemology* 30, nos. 5-6 (2016): 532–44.

Doan, Michael D., and Susan Sherwin. "Relational Solidarity and Climate Change," in *Climate Change and Health: Bioethical Insights into Values and Policy*, edited by Cheryl C. Macpherson, 79–88. New York: Springer, 2016.

Dotson, Kristie. "Conceptualizing Epistemic Oppression," *Social Epistemology* 28, no. 2 (2014): 115–38.

Fraser, Nancy, and Rahel Jaeggi. *Capitalism: A Conversation in Critical Theory*. Cambridge: Polity Press, 2018.

Frye, Marilyn. *The Politics of Reality: Essays in Feminist Theory*. Freedom: Crossing Press, 1983.

Furman, Katherine. "Epistemic Bunkers," *Social Epistemology* 37, no. 2 (2023): 197–207.

Grasswick, Heidi. "Feminist Social Epistemology." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. Fall 2018 Edition. https://plato.stanford.edu/entries/feminist-social-epistemology/

Jamieson, Kathleen Hall, and Joseph N. Cappella. *Echo Chamber: Rush Limbaugh and the Conservative Media Establishment*. Oxford: Oxford University Press, 2008.

Kahan, Dan M. "Cultural Cognition as a Conception of the Cultural Theory of Risk." In *Handbook of Risk Theory: Epistemology, Decision Theory, Ethics, and Social Implications of Risk*, edited by Sabine Roeser, Rafaela Hillerbrand, Per Sandin, and Martin Peterson, 725–59. Berlin: Springer Science & Business Media, 2012.

———. "The Politically Motivated Reasoning Paradigm, Part 1: What Politically Motivated Reasoning Is and How to Measure It." In *Emerging Trends in Social & Behavioral Sciences: An interdisciplinary, Searchable, and Linkable Resource*, edited by Robert A. Scott, Marlis S. Buchman and Stephen M. Kosslyn, 1–16. Hoboken: John Wiley & Sons, 2016.

Kahan, Dan M., and Donald Braman. "Cultural Cognition and Public Policy." *Yale Law & Policy Review* 24 (2006): 149–72.

Kahan, Dan M., Kathleen Hall Jamieson, Asheley Landrum, and Kenneth Winneg. "Culturally Antagonistic Memes and the Zika Virus: An Experimental Test." *Journal of Risk Research* 20, no. 1 (2017): 1–40.

Lugones, María. "Playfulness, 'World'-Travelling, and Loving Perception." *Hypatia* 2, no. 2 (1987): 3–19.

Maffie, James. "Recent Work on Naturalized Epistemology." *American Philosophical Quarterly* 27, no. 4 (1990): 281–93.

Mills, Charles W. "White Ignorance." In *Race and Epistemological of Ignorance*, edited by Shannon Sullivan and Nancy Tuana, 11–38. Albany: SUNY Press, 2007.

Nguyen, C. Thi. "Escape the Echo Chamber." *Aeon*. April 9, 2018. https://aeon.co/essays/why-its-as-hard-to-escape-anecho-chamber-as-it-is-to-flee-a-cult.

———. "Echo Chambers and Epistemic Bubbles." *Episteme* 17, no. 2 (2020): 141–61.

Pariser, Eli. *The Filter Bubble: What the Internet Is Hiding From You*. London: Penguin, 2011.

Rooney, Phyllis. "Rationality and the Politics of Gender Difference." *Metaphilosophy* 26, nos. 1-2 (1995): 22–45.

———. "Feminist Epistemology and Naturalized Epistemology: An Uneasy Alliance." In *Feminist Interpretations of W. V. Quine*, edited by Lynn Hankinson Nelson and Jack Nelson, 205–39. University Park: Penn State University Press, 2003.

———. "What Is Distinctive About Feminist Epistemology at 25?" In *Out from the Shadows: Analytical Feminist Contributions to Traditional Philosophy*, edited by Sharon L. Crasnow and Anita M. Superson, 340–75. Oxford: Oxford University Press, 2012.

Shotwell, Alexis. *Knowing Otherwise: Race, Gender, and Implicit Understanding*. University Park: Penn State University Press, 2011.

Stroud, Barry. "The Significance of Naturalized Epistemology." In *Naturalizing Epistemology*, edited by Hilary Kornblith. Cambridge: MIT Press, 1985.

Sunstein, Cass R. *On Rumors: How Falsehoods Spread, Why We Believe Them, What Can Be Done*. New York: Farrar, Straus and Giroux, 2009.

Sunstein, Cass, and Adrian Vermeule. "Conspiracy Theories: Causes and Cures." *Journal of Political Philosophy* 17, no. 2 (2009): 202–27.

Young, Iris Marion. *Justice and the Politics of Difference*. Princeton: Princeton University Press, 1990.

———. *Responsibility for Justice*. Oxford: Oxford University Press, 2011.

On the Necessity of Embodiment for Reasoning

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What constitutes reasoning? Phyllis Rooney's work on reason and reasoning brings important attention to what reasoning is, what it requires, and how to do it well.[1] In particular, there are important understandings about the nature of reasoning, on its task directedness, and on the need for choices to frame the tools it uses and the problems it tackles, which her work brings to the foreground.

Much of Rooney's work from the 1990s focuses on how gender has played a problematic and distorting role in philosophical discourse on reason and rationality.[2] Too often in the history of these debates, reason was construed as a tool best employed by men, and set in opposition to feminized understandings of emotion and embodiment. Reason was and often still is viewed as being unemotional, disembodied, and unlocated, as an ideal that seems at odds with human embodiedness. Rooney's papers provide both an assessment of the thin ground for such construals and a program for rethinking rationality and reasoning in ways that do not rely on such outdated tropes.

More recently, Rooney has called for a shift from reason to *reasoning*, a call that draws from insights from her earlier work.[3] Such a shift helps clarify what a focus on reason obscures, and what is required for reasoning to work. Reason has not only been construed as ideally disembodied but also as both formulaic (a formula for which there is only one right answer) and individual—something best done by the isolated reasoner. In contrast, I will emphasize here that reasoning is necessarily embodied, emotionally or valuationally informed, tied to particular locations, and requires choices of skills and framing of problems that should not be ignored. [Delving into the sociality of reasoning, as Helen Longino[4] among others has done, is beyond the scope of this paper, but is also deeply important.] None of this undermines reasoning's potency or importance, but as Rooney has argued, some of these old tropes about reason have to go.

In this essay, I will contribute to the effort of shifting from reason to reasoning by looking back to two philosophers from the 1930s who, each in their own way, embraced the embodiment and locatedness of reasoning: Rudolph Carnap and John Dewey. I will discuss their understanding of reasoning so that we can see how efforts to remove reasoning from embodiment and pragmatic choice, and to make it somehow universal and disembodied, are doomed to fail, and distract us from what constitutes good reasoning. The erasure of embodiment for reason is neither possible nor desirable.

Furthermore, we will see that reasoning is not just about the solving of problems, but the detection and delineation of problems as well. A full account of reasoning to solve problems also requires an account of the detection of problems. While many of the tests for intelligence (IQ tests, Turing tests, etc.) have a predefined task for which successful completion allows for clear evaluation, reasoning and intelligence are crucially needed for task definition and delineation. Just because that is harder to measure does not mean it should be ignored in discussions of what reason is, and what intelligence requires.

Both the lack of a universal reasoning structure and the need for 1) problem detection and definition, 2) the development of tools to address the problems, and 3) the careful use of those tools have important implications for our current understanding of reasoning. I will argue that embodiedness is essential to this fuller understanding of what reasoning requires, and that embodiedness is particularly important for the detection of problems to which our reasoning tools might be applied. This point has important implications for debates about the ethics and responsible development of Artificial Intelligence (AI) and Artificial General Intelligence (AGI). If reasoning requires embodiment and locatedness, AI cannot be generally intelligent, because it cannot perform the crucial task of problem detection. AI can only function when we define the problem it is to address. This means that the threats from AI arise not from some moment of singularity when AI will surpass us, but from the inherent limitations of AI, from how humans fail to understand those limitations, and from an attempt to use AI for purposes for which it is not apt. Like deploying a logic ill-suited for a particular purpose, deploying an AI system beyond its capacities is a crucial ethical and epistemic risk. In pursuit of this line of argument, AGI is shown to be an inapt and likely incoherent idea.

But before we get to that conclusion, we need to start the project of scoping what good reasoning, rationality, and intelligence requires to show that embodiment is necessary. To show this, I will start with Carnap, then turn to Dewey, and finally draw conclusions for AI.