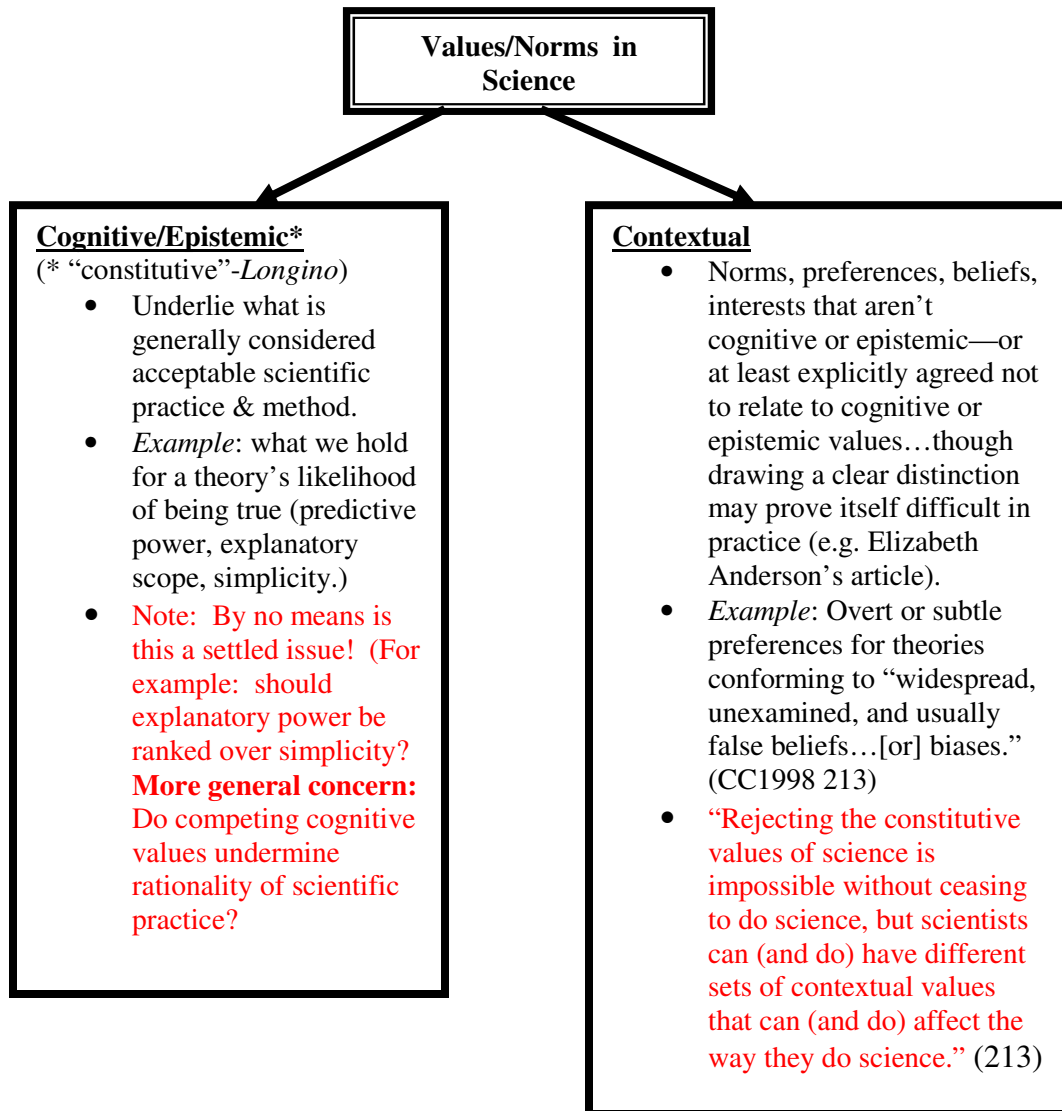


Recall the distinction between constitutive (epistemic/cognitive) and contextual values, as
Mentioned in Lecture VI :



As in the case of Thomas Kuhn and the legacy he left, among post-Kuhnian philosophers of science (Imre Lakatos, Paul Thagard, Helen Longino, Larry Laudan, etc.) serious study is given

¹ Recall Lecture I: Epistemology is the systematic philosophical enquiry into the nature of *knowledge* and claims *based on knowledge*.

to the manner in which contextual values **inform and influence cognitive values**, and **vice versa**. Whether or not one has a favorable or unfavorable attitude toward this dynamic interplay (or, for that matter, believes such a dynamic even plays any kind of meaningful role “when the rubber meets the road” concerning the business of theory-formation) is a separate and secondary issue. The essential point, as recently addressed or advanced by Kuhn², is that both in periods of normal science as well as (and *especially*) in the case of ‘revolutionary’ science, there appear to be significant ‘lacunas’ or lapses in the presumably seamless web of ‘value-neutral objectivity’ as advertised by textbook science. In these many lacunas or holes in this supposedly seamless web is where one finds this significant injection and interplay of cognitive and contextual values as displayed (either consciously or unconsciously) by the individual scientists, or often, for that matter, *scaled up to ‘slant’ the whole paradigm*. Recall Kuhn’s remarks here: *nothing internal to a paradigm addresses these aspects*. Paradigms display a natural self-interest, which entail in this case a blindness to meta-paradigmatic ‘biases’ (i.e. contextual values) which, in the final analysis, *can* threaten paradigm change.³

This last point was especially emphasized and expanded upon by feminist epistemologists and feminist philosophers of science. Writes Elizabeth Anderson:

[P]ractitioners of feminist epistemology and philosophy of science argue that **dominant knowledge practices** disadvantage women by (1) excluding them from inquiry, (2) denying them **epistemic authority**, (3) denigrating their ‘feminine’ cognitive styles and modes of knowledge, (4) producing theories of women that represent them as inferior, deviant, or significant only in the ways that serve male interests⁴, (5) producing theories

² He wasn’t *the first*, clearly. Aristotle already addressed issues concerning the interrelation of “is” and “ought” (how normativity and descriptivity interrelate). Relatively more recently, the 19th century philosopher J. S. Mill likewise questioned this distinction. Prior to Kuhn, 20th philosophers of science like Michael Polanyi and Norwood Russell Hanson also argued that the necessity of some irreducible element of subjectivity exists in scientific knowledge. However, in the case of Kuhn, he advanced rather specific and novel claims, for he developed detailed characterizations of *how* and *why* cognitive and contextual values could interrelate, in a plausible and relatively systematic manner.

³ To name one egregious example of the early 20th century: ‘Eugenics’ or ‘race ‘science’ paradigm was a serious research programme captivating anthropology and sociology (as well as sociobiology) departments across western Europe as well as in the United States. Or seen from the Lakatosian perspective, eugenics and “race ‘science’ ” was a productive research programme, at least for a briefly ignoble period in the early 20th century (1900- late 1930s). *Nothing* in this paradigm addressed the obvious biases of the researcher engaged in the activity of puzzle-solving, usually involving developing statistical ‘studies’ (obviously based on dubious and unquestioned methodological assumptions) correlating, for instance, facial features with dispositional notions such as ‘intelligence.’ Later in the course we will cover in greater depth this issue concerning dispositional terms (i.e. terms like ‘intelligence,’ ‘charge,’ ‘mass,’ etc., which refer to the *disposition* or a *propensity* of a system to exhibit certain characteristics, given certain initial conditions which usually involve artificially-imposed constraints or perturbations). For now, and in this context, consider that due to the exhibited ‘self interest’ of paradigms which usually entail (according to Kuhn) primary allegiance to their own perpetuation or survival, *no mechanism within the paradigm itself* addresses or encourages any kind of critical reflection of the methodological presuppositions which would characterize and constitute the ‘puzzles’ produced. So in the case of ‘race science’ one must adopt an *external perspective* (i.e. outside the paradigm) to come to grips with the issue of contextual values and how (especially in this case) they ‘drive’ the cognitive values. This point was especially brought to light in his essay as discussed in **Lecture VII** (September 20).

⁴ Lest one consider this complaint as ‘dated,’ recall the president of Harvard University’s recent address (2003) in which he claimed that women exhibit inferior cognitive abilities when it comes to abstract, mathematical disciplines like theoretical physics, etc. Along the same lines, i.e. in terms of discrediting women’s contributions in the mathematical sciences, Albert Einstein’s wife also had a Ph.D. in theoretical

of social phenomena that render women's activities and interests...invisible, and (6) producing knowledge (science and technology) that is not useful for people in subordinate positions...that reinforces gender and other social hierarchies. (p1)

From the standpoint of methodology, Anderson states that such contextual values that shape the practices of marginalization and denigration (as listed in 1.) – 6.) above) stem from “flawed conceptions of knowledge, knowers, objectivity, and scientific methodology.” (ibid) The strongest claim made is that introducing reforms requires “changes [that are]...cognitive, not just social, advances.” (ibid) In other words, a vindication of some of Kuhn's points (as well as more strongly articulated by post-Kuhnians) concerning the contextual/cognitive value ‘feedback loop.’

Elizabeth Anderson lists *embodiment, first vs. third person knowledge, emotions & attitudes, personal knowledge, cognitive styles, and relations to other inquirers* (pp. 2-3) as features of the central constitutive claim of *situated or standpoint-dependent* knowledge. At first blush, these notions may seem rather natural and common-sensical. “Of course, our knowledge is based on our perspective, and is conditioned by our stance, what's so surprising about that?” So may be one's initial response. Nevertheless, as part of Kuhn's and other recent philosophers' legacies, it's hard to underestimate how *radically novel* such approaches are, in the face of classical epistemology. Since Plato, “knowledge” was usually described in far stricter and perhaps excessively artificial terms: Knowledge was usually assumed (until relatively recently) to be underwritten by notions like *justified true belief*.⁵ Since Plato and until relatively recently, the mainstream opinion here among philosophers that such latter notions entailed that whatever we mean by ‘knowledge’ should in principle be characterized in *propositional* terms.⁶

physics, and apparently was instrumental in influencing him and informing him on Riemannian geometry, which constituted the theory of General Relativity. Yet Albert Einstein never mentioned publicly such significant contributions made by his wife. In this respect, claim many historians of science, one may never know how much the theory of General Relativity was influenced or authored by Einstein's wife. One of Einstein's friends, Emmy Noether, no doubt one of the most important mathematical physicists of the early 20th century (e.g., ‘Noether's Theorem’) was *eventually* offered an *unpaid* position at the Mathematics Department of the University of Heidelberg. This outraged her colleagues and some of her contemporaries. Remarkably mathematician David Hilbert: “This is supposed to be a university, not a bathing club.” She also had to flee Germany, because she was Jewish, and was eventually offered a position at the Institute of Advanced Studies at Princeton, though her pay was far less than her male colleagues. She unfortunately succumbed because of ill health shortly after she eventually arrived in the United States. Such cases form obviously only the tip of the iceberg. Gloria Steinem perhaps put the matter most succinctly when she remarked that feminists aren't so much interested that the best and the brightest in any profession get equal recognition and status as their male counterparts (though that's obviously a factor), rather that feminists look forward to the day when a ‘woman *schlemiel* has just as good a chance of getting a promotion or a raise as a male *schlemiel*.’ In other words, that reform measures and mechanisms are set in place any profession, science or otherwise, such that androcentric bias is eliminated to employers and employees on *every* level of ability and merit.

⁵ Gettier in the 1950s in some brilliant (and unusually short—for philosopher that is ☺) papers presented counterexamples to all these claims. The issue here is whatever is meant by ‘knowledge’ cannot be captured by such notions...neither as necessity nor as sufficiency claims.

⁶ Of course there were always exceptions. The 19th century philosopher Friedrich Nietzsche, for example, rejected such an account, as did many 20th century Existentialist philosophers (Sartre, Heidegger, etc.) Recall **Lecture II**: a proposition is whatever conceptual content is referred to by a declarative, truth-evaluable, unambiguous, sentence. For example, the proposition expressed by “that cat is on the mat” refers to a concept whose content involves a particular cat and a mat and its spatial relation thereof (sitting), that a speaker is ultimately *referring* to as a concrete state of affairs. On the other hand, sentences like “I promise to love you until death do us part,” “get out of my way!”, “wow, that's cool” don't exhibit propositional content, as they're not declarative (i.e. don't refer to an objective state of affairs.) On the

Today, the whole notion of what, in the final analysis, a proposition *is* remains obscured in and rife with controversy.⁷ However, for quite a while, most considered the notions to be *free* from issues like *context*. (I.e., propositions should be context-independent if they're able to objectively truth-evaluable.) For instance (recall **Lecture II**) even propositions referring to singular states of affairs, like: "I believe that I said that 'I promise to love you until death do us part,'" can be converted into the more abstract and general logical form: "There exists an *x* such that *x* believes-that-*P*." Casting it in this form (according to this tradition, unquestioned until relatively recently) renders the proposition context-independent, and hence truth-evaluable "on its own terms," (whatever, as we'll come to see, *that* means). Standpoint-dependent epistemology argues against this.

Recalling **Lecture I**, the following analogy may prove itself apt: **Just as classical philosophy of science separated the study of scientific activity into contexts of *discovery* versus *justification* (and placed emphasis exclusively on the latter), classical epistemology separated claims that were 'unpropositional' and context-dependent versus propositional (claims whose truth-conditions were in principle context independent) and usually ascribed the honorific 'knowledge' to the latter. As contemporary philosophers of science presuppose no such dichotomization as significant, so standpoint-dependent epistemologists (feminists and otherwise) don't dichotomize and reify notions of knowledge in such strict senses like 'propositional' or context-independent either:**

Feminist epistemology...consider[s] how the social location of the knower affects what and how she knows...[p]artly in virtue of their different ascribed identities, individuals occupy different social roles that accord them different powers, duties, and role-given goals and interests. They are subject to different norms that prescribe different virtues, habits, emotions, and skills that are thought to be appropriate for these roles. (p. 4)

Possible question to explore: Plato separated 'knowledge' from 'opinion.' As mentioned here, the former notion became imbued with all sorts of perhaps excessively artificial and abstract criteria that standpoint-dependent epistemologists (feminist or otherwise) have done well to criticize. Nevertheless, based on Anderson's above quote, how do you think a feminist epistemologist/philosopher of science would distinguish knowledge from opinion? Or do you think such a distinction would even matter or make sense according to their conception of knowledge? Do you think then that inadvertently the import of contextual values is exaggerated or excessively promoted? Do you think Kuhn's and other post Kuhnian (Lakatos, Thagard,

other hand, such statements can always be converted into sentences exhibiting propositional content, on a meta-level. This is done simply by presaging them with phrases like: "*X* believes/knows/understands/...tat [insert sentence]." For example, "I believe that I said that 'I promise to love you until death do us part'" *is* a sentence displaying propositional content, as it specifies truth-conditions for a claim.

⁷ See, for example, Nelson, Thomas & McKay, Thomas (2005a). "Propositional Attitude Reports." *Stanford Encyclopedia of Philosophy* (on-line). <http://plato.stanford.edu/entries/propositional-attitude-reports/index.html>. For example, are propositions reducible to sentence? *Are* they nothing but sentences? If not, what precisely is their relation between logic and language? In these notes, as elsewhere, I take a 'Fregean' line (i.e., I lean towards what the 19th century influential mathematician, logician, and philosopher Gottlob Frege had to say) namely that propositions refer in a meaningful way to *conceptual content*. So they're not reducible to mere sentences in any natural language.

Longino, Laudan) claims suffer the same, or do you think they adequately hedge their claims against such a possibility?

“*De se knowledge*” (p.6) means knowledge pertaining to self, or to the subject bearing such knowledge.⁸ It shouldn’t be equated with *first person* reports since: a) One can express in latter fashion something that isn’t *de se* (“I think the Earth is well over 20,000 years old”), and b) One can express *de se* knowledge other than in first-person form (“you do not understand what it means to me.”) “Physical objects [obviously] do not behave differently depending on whether a man or woman is observing them. But human beings do behave differently according to their beliefs about the gender of who is observing them.” (7) “To the extent that skill is perceived by the agent as the...province of the ‘other’ gender. He or she may have a difficult time seeing himself or herself perform it confidently and fluidly, and this ability to self-identify with the task can impair performance. The feedback effects of the phenomenology⁹”(8) This phenomenon of self-labeling is based on a complex interplay of first-person, second-person, and third-person knowledge (“I see you seeing me, I see the ‘me’ I think you see”) as Anderson discusses in perceptions and executions of gendered skills. **Gendered knowledge**, as she lists and describes (5-10) is characterized by *phenomenology of gendered bodies, first-personal knowledge de se*,

⁸ As opposed to *de re* and *de dicto*, loosely thought of as knowledge-claims pertaining to objects and statements thereon. Modal statements (i.e. statements dealing with possibility/necessity) can be read sometimes in two different ways (i.e., can exhibit an ambiguity in reference to *de re/ de dicto*.) For instance, the sentence “It’s possible that at least one woman will win seats in the upcoming election” exhibits this ambiguity. For on the one hand, it can be translated into *de re* form: “There is at least one woman to whom it is attributable that she may win seats in the upcoming election.” On the other hand, the sentence can be translated into *de dicto* form: “ ‘At least one woman will win’ is a *possibility*.”

⁹ You’ll notice Anderson (as many social and standpoint dependent epistemologists) uses this word frequently. It’s important to clarify what *sense* of the term ‘phenomenology’ she’s using. For on the one hand (recall some of the points discussed in class Q & A) ‘phenomenology’ can mean simply an attempt at a purely *descriptive* enterprise of phenomena, in which one ‘brackets out’ or at least is consciously aware of one’s theoretical and conceptual presuppositions that go into the interpretation of what s/he may be experiencing. To name a simple example, *phenomenologically* a square table close to me appears like a large rhombus (especially if I’m seated at it), *phenomenologically* people I see out my window appear as tall as the 1 foot lamp sitting on the table next to me. Naturally, my conceptual apparatus *interprets* my visual experience in terms of *judgments of perspective* (I ‘know’ the table is actually square) and *depth-perception* (I ‘know’ those people I’m seeing out the window aren’t actually only 1 feet tall). Or to name another example, in terms of perception of motion, if I’m sitting in a train and looking out the window and another train next to me a few feet away begins to move forward, *phenomenologically* it may feel as though I am moving backward, though I ‘know’ my train is at rest.

On the other hand, ‘phenomenology’ also refers to an entire and important philosophical tradition that arose in early 20th century Europe, whose chief promoter/author was Edmund Husserl. Husserl sought to develop an entire epistemology and ontology (i.e. a systematic characterization of the existence of objects) based on this methodological ‘bracketing’ maneuver. Latter-day philosophers like Foucault used much of this tradition to develop political and social philosophies based on the abuse of power and the ‘phenomenology’ of those victimized by power structures. Consider Anderson here to use the word ‘phenomenology’ in an ‘in-between’ sense, i.e. mid-way between the notion of attempting a purely descriptive enterprise in which one consciously brackets out conceptual presuppositions and in the full-blown sense as a philosophical tradition imbued with political overtones. You can see why such notions are so important to feminist standpoint epistemology. For example, consider famous cases like the 19th century authoress George Sand, who deliberately wore men’s clothing. She was living in a time when the tacit conceptual presuppositions concerning women’s behavior and abilities of course sharply forbade such ‘transgressions’. In her attempts to consciously ‘bracket’ such a cultural mentality, she wasn’t just aiming for some purely descriptive experience of what it meant to run around in men’s clothing. She also, of course, was performing a subversive act via the vehicle of irony (recall the role of irony as discussed in pp. 20-21 in Anderson’s discussion on **Feminist postmodernism**.)

gendered emotions, attitudes, interests, knowledge of others in gendered relationships, gendered skills, gendered cognitive styles, gendered background beliefs, relations to other inquirers. As you can tell from reading her synopses here, she's drawing on much empirical data (psychological/sociological). The inevitably controversial aspect of such notions isn't so much that such phenomena undoubtedly *exist* in some form or fashion (whether primarily driven by nature or by nurture is a separate issue, one that need not be addressed vis-à-vis the essential points she is making), but what *conclusions* one can draw thereon. As Anderson writes:

Feminist epistemologists stress the situatedness or perspective-relativity of much knowledge. They do not thereby embrace epistemological relativism.¹⁰ To regard some knowledge claim or form of understanding as situated in a perspective is not to claim that the perspective yields true beliefs or satisfactory understandings (not even "for" those taking up the perspective)...What attention to situated knowledge does is to enable questions to be raised and addressed **that are difficult even to frame** in epistemologies that simply assume that gender, and the social situation of the knower more generally, is irrelevant to knowledge. (10-11)

So what she's saying here (of course) hearkens back to paradigm-talk. Her point being that traditional epistemologies naturally don't even possess the methodological devices or *cognitive values* (recall discussion in page 2 above here in these notes) by and through which such issues can even be discussed (much less appraised and analyzed in the first place). She contrasts this paradigm with the gendered/situated epistemological one to argue that the latter casts a broader net, concerning problems in these matters. Then, as she and many others argue, such broader nets can be cast in such a manner that don't dilute or undermine what we tacitly or traditionally harbor take as 'knowledge'. For instance, recall from Thagard's article the point he makes concerning the necessity of public communication against 'ostrichism'.¹¹

This discussion of situated gender and the role it plays in general knowledge claims segues into a general discussion of **Standpoint Theory**. According to Standpoint Theorists, claims of epistemic privilege/authority are contingent on socially-situated perspective(s) of the knower(s) which must include:

- (i) "The *social location*¹² of the privileged perspective."
- (ii) "[T]he *scope* of its privilege..."
- (iii) "[T]he *aspect* [social role, subjective identity, etc.] of the social location that generates superior knowledge."
- (iv) "[W]hat is it about that justifies a claim to privilege."
- (v) "[T]he *type* of epistemic authority that it claims..."
- (vi) "[T]he *other perspectives* relative to which it claims epistemic superiority."
- (vii) "[M]odes of access to that perspective: is occupying the social location necessary or sufficient for getting access to that perspective?" (11)

Recall her toy example regarding the auto mechanic, vis-à-vis (i)-(vii) above, lending them a reasonable and penetrating character. As she is quick to point out, however, what makes

¹⁰ The claim that *any* perspectives is just as equally legitimate (or illegitimate) as any other, when it comes knowledge-claims.

¹¹ In a way, this can be sharply contrasted with Descartes' epistemological methods which begin in skepticism and end in certainty, and as indicated in his writings *The Meditations* reveal themselves to be an *intensely private* and *solitary* pursuit.

¹² I.e. gender, economic, ethnic, etc.

standpoint theory controversial are its claims of (deep) epistemic authority and predisposition toward those whose social location is marked by oppression and marginalization. “Those who stand outside its gates see the city more clearly.”

[Standpoint Theory] claims to offer deep over surface knowledge of society: the standpoint of the disadvantaged reveals the fundamental regularities that drive the phenomena in question, whereas the standpoint of the privileged captures only surface regularities...[w]here the standpoint of the privileged tends to represent existing social inequalities as natural and necessary, the standpoint of the disadvantaged correctly represents them as socially contingent, and shows how they could be overcome. [Standpoint Theory]..claims to offer a representation of the social world in relation to universal human interests. By contrast, the standpoint of the privileged represents social phenomena only in relation to the interests of the privileged class, but ideologically misrepresents these interests as coinciding with universal human interests. (12)

Recall, for instance, the remark concerning ‘Whig history’ discussed in **Lecture VII**. Whig historians, as Marx already accused them of doing, confuse the *ideal* with the *actual*. “Capitalism is the *best* and most *natural* system to flourish in terms of the distribution of resources (both political and socioeconomic).” Ironically, as discussed in **Lecture V**, the initial resistance towards the teaching of Darwin evolutionary thought in the schools which was exemplified in the drama of the Scopes Trials had much to do with the (now defunct and largely forgotten) *Christian Socialist* movement. Christian Socialists of early 20th century America argued that the teaching of evolutionary theory would lead to the ‘Social Darwinism’ as evidenced in the Dickensian horrors of 19th century industrial England (what of course Karl Marx was reacting against at the time as well). This might give some pause to the contemporary Christian fundamentalists, pushing their so-called ‘science’ for agendas that really have nothing to do with taking care of the poor, let alone establishing government-sponsored safety nets!

The point here, according to Standpoint Theorists, is that any claim(s) made by those whose social standing is in a position of power tends to be hedged in terms of ‘natural necessity’. (To name yet other ignoble notions from recent and ancient history: “Slavery reflects *the natural order*,” “The strong do what they *will*, the weak do what they *must*, to protect themselves from the strong,” -*Thucydides*¹³) On the other hand, the *depth* of epistemic claims by those oppressed and victimized are that they tend to reflect the obvious *contingency* of such distributions of power relations.¹⁴ (“Who said it *must* be this way?”) To put it succinctly, such presumed claims of “necessary, natural, universal” as hedged above exhibit a *rationalizing* character, or (even worse) a character *unconsciously reflecting* such constellations of power-relations. On the other hand, so the Standpoint Theorist argues, those marginalized or oppressed by such a social constellation of power-relations have a clearer perspective regarding the essentially contingent structure thereof (i.e. their *contextual values* are less beholden to the paradigm generated by the particular sociopolitical order.)

¹³ In the *Peloponnesian Wars*. Then again, the ambiguity of Thucydides leaves it open as to whether or not he was: a) merely describing what to him seemed a dismally universal state of affairs about the world, and not necessarily promoting or justifying it, b) or was he making a normative claim (this is how things are and always have been, and therefore how they *ought* to be)

¹⁴ “If thou wilt learn anything profitable, seek to be unknown and of little esteemed.” (St. Thomas a’ Kempis) One can assume ‘profitable learning’ meant for Thomas a’ Kempis something equivalent to what Anderson refers to as the ‘depth’ of epistemic claims from those marginalized from the power structure.

Feminist Standpoint Theorists, co-opt these basic notions of Standpoint Theory, by “claim[ing] an epistemic privilege over the character of gender relations, and of social and psychological phenomena in which gender is implicated, on behalf of the standpoint of women.” (13) For example, drawing on the analogy of Marxist epistemology (concerning the epistemic centrality of those who are socioeconomically marginalized), “[t]he epistemic privilege of women...rests on the fact that women as a class have superior access to information about whose needs get better served under patriarchy,” whereas “[m]en, in virtue of their dominant position, have the privilege of ignoring how their actions undermine the interests of subordinates.” (13) Moreover, “male dominance is based on sexual objectification...[in the sense that] dominant groups project their desires on subordinate groups...mak[ing] subordinate conform to the way dominants want them to be...[when] women refuse to act as sexual objects, women show that representations of women as sexual objects are not natural or necessary.” (13-14) “Women are oppressed, and therefore have an interest in representing social phenomena in ways that reveal rather than mask this...following W.E.B. DuBois, in terms of ‘bifurcated consciousness’: [women’s] ability to see things both from the perspective of the dominant and from the perspective of the oppressed, and therefore to comparatively evaluate both perspectives.” (14-15) For instance, in the case of African-American feminist epistemology, “[b]lack women...hav[e] enough personal experience as insiders to know their social order, but enough critical distance to empower critique.” (15)

The goals of feminist Standpoint Theory are of course practical, or to coin the term from Marx and Engels, “praxic.”¹⁵ “To serve their critical aim, social theories must...supply an account of the world which is usable by the subjects to study to improve their condition...[t]hese pragmatic features of critical theory raise the possibility that claims of superiority for particular might be based more on pragmatic than epistemological virtues...offering true representations that are more *useful* to women than other truthful representations.” (16)

Feminist Standpoint Theory is not without its critics, many of whom are fellow feminist epistemologists. While taking their central claims as internally consistent, Bar On & others argue against their external consistency¹⁶ insofar as “[i]f the feminine ethics of care provides the epistemically privileged perspective on morality, then our access to moral knowledge is predicated on the continuation of existing gender relations, which produce this ethic.” (16) In other words, Standpoint Theorists undercut their very practical goals: their claim to privileged standpoint evaporates once the positive changes are made.¹⁷ Others like Crenshaw and Helen Longino attack the internal consistency of Feminist Standpoint Theory. Longino criticizes the basis as inherently (viciously) circular, in terms of deciding which standpoints are awarded privilege. Crenshaw argues that “women cannot even have privileged access to understanding their won oppression, since this takes different forms for different women, depending on their race, sexual orientation, and so forth.”¹⁸

¹⁵ The idea being that *action* is the goal, albeit action constituted by critical analysis and reflection. “The goal of philosophy is not to contemplate the world, but to change it.” (Marx & Engels)

¹⁶ Recall Kuhn’s criteria

¹⁷ The Standpoint Theorist might respond here and argue that this doesn’t conflict with their goals, insofar arguing that nowhere in Standpoint Theory is the claim made that epistemic privilege should be considered *permanent*. Quite the contrary: once the wrong has been righted, then *all* (former oppressor and oppressed alike) share equal epistemic privilege. How the details of this works out (or doesn’t) in practice is a separate issue, but one that shouldn’t be ignored either.

¹⁸ Again, however, the Standpoint Theorist might counter-claim by pointing out that a multitude of differing perspectives does not entail lack of privileged access. After all, whether one is lesbian, or from a different ethnicity or race, women’s particular perspectives can all nevertheless *overlap* on this issue of being marginalized by the power-structure. In other words, pluralism doesn’t imply ‘incommensurability’

Feminist PostModernism actually construes some of the above critiques (Crenshaw, etc) as *epistemic strengths*, rather than problems, for feminist thought. Recall some of my remarks concerning semantic holism¹⁹ in Lectures VI, VII. Writes Anderson:

Postmodernists...claim that (what we think of as) reality is 'discursively constructed.' This is the linguistic notion of the now inescapable Kantian²⁰ thought not as they are 'in themselves' but only through concepts, signified by words...Meaning holism entails that the introduction of new signs (or elimination of old ones) will change the meaning of the signs that were already in use...these ideas support the 'rejection of totalizing metanarratives'. There can be no complete, unified theory of the world that captures the whole truth about it. (17)

In this respect, recall the challenge that this above claim poses for realists like Ernan McMullin (Lecture VII). Ernan McMullin is no flat-footed doctrinaire here, he's fully aware of the post-Kuhnian legacy and the implications of post-modern thought. So how does McMullin respond to such claims, and still try to argue that scientific theories, as he puts it, aim toward 'the truth'? How may their terms actually refer to existent entities, i.e. concerning the likelihood for the 'explanatory entities' the theory postulates (may) 'actually exist'? Of course what McMullin does is base his entire argument on *history*: rather than seek to engage in some self-defeating quest for standards that might ultimately pick out the theories actually 'referring' to 'the truth' in some *epistemic value* sense (or more strongly stated) algorithmic manner, one should look at the historical evidence: Theories that withstand the test of time do so (*pace* Popper) *not* because they

(recall Lecture VII) as Crenshaw seems to raising the specter of. If anything, this plurality of differing perspectives may add to the *strength* of the Standpoint Theorists' claims.

¹⁹ That the meaning of term(s) is constituted by their reference to *sets of other terms*, i.e. the constellation of their interrelation, and not so much by their reference to *extra-linguistic* entities. (Semantic holists, therefore, naturally tend to favor a coherence theory of truth, rather than a correspondence theory of truth. Coherence theorists argue that a statement is true if it maximally or optimally coheres with a set of beliefs. Correspondence theorists on the other hand claim that the truth of a statement is determined by its correspondence to some external or extra-linguistic state of affairs.)

²⁰ As mentioned in class, David Hume was the 18th century skeptical empiricist who formulated the Problem of Induction in a very stark manner. The implications of Hume's claims were that the general character of scientific laws (like Newton's...recall Popper's issue that scientific laws should always be presented in universal but falsifiable ways) were based on 'customary assumptions' but *not* on logic (which in those days was assumed to be an entirely deductive enterprise). Kant found this too difficult to bear. Kant responded to Hume (in his *Critique of Pure Reason*) by claiming that the universal legitimacy of scientific laws and theories is *not* due to their deductive or inductive merit (or lack thereof), but rather due to the more profound issue (in Kant's view, at any rate) that the *mind* imposes order on the 'blooming buzzing confusion' (to quote William James) of the sensory world, *not the other way around*.. In other words, the regularities 'observed' in Nature (whether basic, like the law of causation, i.e. that every effect follows a cause, etc.) are *imposed upon by the active intervention of mind upon the sensory realm*. Mind actively sorts out the data of the senses, and our reasoning and very consciousness is derivative from the very structure of our mind's active engagement with the sensory realm. According to Kant, for instance, "concepts without percepts are empty, but percepts without concepts are meaningless." In other words, we *never* experience raw sense-data, but we always experience sensory data that is conceptually mediated. (Recall n. 9 above, regarding phenomenology). This has sometimes been described as the "Copernican Revolution" in epistemology, as it reverses the essential mind → world relationship. According to Kant, the British Empiricists were wrong: the mind is *not* some 'blank slate' or *tabula rasa* (John Locke) which passively 'reflects' the world's structure, rather the *mind itself actively imposes its own structure upon the manifold of the senses*. Hence, for Kant, the universal legitimacy of the 'laws' of physics (like Newton's) were underwritten by the *mind's very own structure imposing itself upon the manifold of the sensory 'field'*.

haven't been falsified yet, but because they (may) be actually referring to what actually exists out there...humanity 'fumbles toward objectivity' in this historical sense.

Recall footnote 9. above: (concerning George Sand) "postmodernists celebrate ironic, parodic, and campy renditions of political behavior as politically liberating." (18) The essential point of irony here is to indicate how such actions inevitably subvert "supposed[ly] natural tendency[ies]" of humans to obey particular and contingent authorities. Irony and satire is a vehicle for effective subversion as it (by its very own nature) does *not* pit itself against the contingencies of a particular paradigm in such a manner as to inadvertently or overtly perpetuate the very mechanisms of oppression it seeks to reform or overcome.²¹ Moreover, since:

[There] is no unified self that underlies the play of a stream of signifiers...although subjectivity is constituted through the production of signs, the self ...finds itself entangled in a web of meanings not of its own creation. **Our identities are socially imposed, not autonomously created...**The tensions among these conflicting identities open up spaces for disrupting the discursive systems that construct us. (18)

Anderson is quick to point out the issue here that critiques against postmodernism tend to miss: It's not the case that postmodernists deny the existence of an outside world independent of language (i.e. they're not advocating some subjectivist or idealist²² claim), rather they're advancing a notion of *nominalism* (recall **Lecture V**): "[T]he world does not dictate the categories we use to describe it...innumerable incompatible ways of classifying the world are available to us...the selection of any one theory is a choice that cannot be justified by appeal to 'objective' truth or reality." (19) Among other things, this entails a denial of *essentialism* (i.e., the claim of "any theory [to refer to a, or] identify a universal, transhistorical, necessary cause of..identity." (19)

In terms of feminist postmodernism, "[t]he objection to essentialism is essentially political: in claiming that gender identity is one thing or has one cause, such theories convert discursively constructed facts into norms, difference into deviance....[Hence] [t]he chief faultlines for the

²¹ "Meet to new boss, same as the old boss..." (Pete Townshend)

²² Recent well-known idealists and subjectivists in Western philosophy included the (ironically) empirical-idealist philosophy of Bishop Berkeley. *Esse est percipi*: i.e., "to exist is to be perceived" was the hallmark of his position. For Berkeley, the regularities of the outside world, for instance, were underwritten by the fact that such regularities are constantly attended to by the mind of God. For Berkeley, there was no underlying matter to the world, there are only minds and their associated perceptions. Lest his position strike the contemporary as odd, Berkeley was responding to the problems inherent in John Locke's empiricism, in which Locke points out that the 'material substrate' is an essence by and through which our minds have no direct access to. In other words, our minds only can access the sensory information (whether of the form of primary or secondary qualities) produced by such 'causal powers' generated by material substrate. Berkeley responded to this issue, by arguing that material substrate is dispensable. In other words, Berkeley was merely extending empirical presuppositions (i.e. "if it's imperceptible, ignore it or explain it away", so to speak.) So hence Berkeley advanced an empirical idealism: there are only minds and their associated perceptions (of other minds, and their perceptions and representations). In any way, Berkeley's maneuvers were similar to Einstein's: Einstein responded, in his papers (1904-6) advancing the theory of Special Relativity, to dispense with the notion of an "aether" (read: analogous to Locke's substrate), since "aether" appeared to be in principle unobservable (based on the results of Michelson and Morley) nevertheless was presupposed to be the necessary medium conducting electromagnetic propagations. Einstein merely (for the sake of consistency and efficiency, similar to Berkeley's maneuvers) argued that such a concept was dispensable—and built a theory of electromagnetic and ultimately causal propagation upon which such a concept was purged. By the same token, Berkeley rebuilt empiricism by purging it of this (cognitively inaccessible) material substrate.

category ‘woman’ have thus been the other identity formations along which social inequalities are constructed.” (19) So, for example, in response to the Standpoint Theorists, the consensus among postmodern feminists is that:

[U]niversal claims about women, gender, and patriarchy should be avoided...feminist standpoint theory’s project of identifying a single epistemically privileged perspective is fundamentally flawed, an unjustified assertion of power in the name of an unattainable objectivity...[Conversely] [o]nce the postmodernist critique of essentialism is granted, there is no logical stopping point in the proliferation of perspectives. (20)

Postmodernists...reject the fixity and unity of personal identity on which relativism rests. People are not epistemically trapped inside their cultures, their gender, their race, or any other identity...although we will always have a plurality of perspectives, their constitution is constantly shifting rather than static...there is no stable correspondence between individuals and perspectives. (20)

As in the case of Standpoint Theory, there are also criticisms of postmodernist feminism. By and large the chief complaint has to do with their excessive degree of critical theorizing, which may undercut the ‘praxis’ (recall discussion in page 8 above) of feminism: “Critics argue that feminists would do better if they forthrightly appropriated ideals of human rights and autonomy, rather than embracing the ‘death of the subject’ in the fragmentation of the self.” (21)

Recall some of my remarks concerning Kuhn’s influences (**Lectures V, VII**); namely, W.V. O. Quine and N. W. Hansen. As mentioned, Quine argued that there was no such thing as a distinction between *synthetic* statements (i.e. statements whose predicates aren’t logically equivalent to those of their subject) and *analytic* statements (i.e. statements whose predicates were semantically equivalent to those of their subject.²³) For Quine, there were only ‘webs of concentric belief,’ i.e. networks of beliefs we have consisting of core beliefs like the law of non-contradiction (that something can’t both be *p* and not-*p* at the same time) and on the periphery we have our usual contingently fallible beliefs (notions like the belief that it will rain tomorrow based on the weather report, etc.) For Quine, *all* beliefs are fallible (i.e. they have a chance of being proven wrong²⁴) nevertheless we cherish our core beliefs (like that in the law of non-contradiction) over and against our ‘peripheral’ beliefs, and hence are comparatively obviously far more resistant to give them up. Though there are sharp differences of criteria separating

²³ Keep in mind, that despite outward appearances, this is a separate issue from the question concerning the nature of *a priori* versus *a posteriori* statements, i.e. statements whose truth-values are either independent or dependent upon experience. Though many philosophers assumed there is no difference between *a priori/a posteriori* on the one hand, and analytic/synthetic on the other, philosophers like Kant and (more recently) Saul Kripke argued that there *is*. Kant, for example, argued that *a priori synthetic* statements are possible, i.e. statements which truth-values don’t depend on experience nevertheless whose meanings of their predicates aren’t logically equivalent to the meanings of their subjects. For example, according to Kant, the law of causality works this way: i.e., the law that every effect follows a cause is *not* dependent on experience, nevertheless, if expressed in subject-object fashion: “The law of causation states that every effect follows a cause” the meaning of the predicate “every effect follows a cause” is *not* equivalent to the meaning of the subject “the law of causation” according to Kant. In other words, there could be other laws of causation (the effect could be *simultaneous* with the cause). Of course, much hinges on what notion “follows from” entails: Is it logical? Temporal? Both? Neither? Kant didn’t offer much in the way of clarifying this issue.

²⁴ Quine, though writing this in the 1930s and 1940s, in *Word and Object* was informed well enough about physics to (correctly) note in passing that there are cases in quantum logic in which the law of non-contradiction: $\neg(p \wedge \neg p)$ is violated.

Quine's empirical notions from feminist empiricists (as Anderson discusses), the overarching agreements here are their views that epistemology (like other fields of philosophy) should be 'naturalized,' i.e. that there are no criteria undergirding *any* paradigms that aren't ultimately reducible to metaphysically natural categories, i.e. those pertaining to nature which is in principle observable or capable of being experienced by sentient beings. (*Pace* Quine) "[f]eminist empiricists are concerned with the impact on inquiry of social practices relating to gender, race, class...[t]hey therefore take sociology, history, and science studies seriously...advocat[ing] a socialized epistemology, in which inquiry is treated as a fundamentally social process and the basic subjects of knowledge may even be communities or networks of individuals."²⁵

Again, however, such ideas aren't free form problems or paradoxes.

1. **The 'bias' paradox** (recall the constitutive/contextual values distinction). "[F]eminist science criticism consists in exposing...sexist biases in scientific research...[t]he force of this criticism seems to rest on a prior empiricist commitment to the view that bias is epistemically bad—...lead[ing] to false theories. Yet, advocates of feminist science urge that feminist [contextual] values inform scientific inquiry...amount[ing] to a recommendation that science incorporate certain biases into its operations." (22)
2. **The social construction paradox**: "[M]uch feminist science criticism is devoted to exposing the influence of social and political factors on scientific inquiry...[which] would seem to imply that, to eliminate these social biases, feminists adopt an individualist epistemology. Instead, feminist epistemologists stress the social construction of knowledge. They urge, not that inquirers insulate themselves from social influences, but that the restructure scientific practices to be open to *different* social influences." (22)

Feminist empiricists respond to 1. & 2. by arguing essentially that 'not all biases are bad.' They adopt strategies like the pragmatic strategy (which denies among other things a separation between fact and value), a procedural strategy ("responsible inquiry respects a division of labor between evidence [cognitive values] and social [contextual] values), and moral realist which maintains that social and political value judgments possess truth-values (i.e., they have *propositional* content (see footnote 7. above in these notes)). Among other things, like I the case of the development of many other fields of enquiry, biases at a certain point as seen as "epistemic resources:"

Feminist inquiry begins as a critique of accepted disciplinary methods, assumptions, and canons. As it matures, it develops constructive projects of its own. The history of feminism and science follows this pattern. In the empirical sciences, the pattern helps us see how feminist epistemology negotiates the tension between the tow poles in the paradox of bias that lies at the core of the feminist empiricist project...This practice began by representing bias as a source of error. But as philosophers and historians of science joined the practice of feminist science criticism, they developed a more sophisticated way of understanding some biases as epistemic resources. (24)

As Anderson points out ((1)-(5), p. 25) earlier versions of feminist science criticism tended to focus themselves of the classifications of how sexist contextual values adversely affected women's roles both as research subjects as well as researchers, in the life sciences. "But, as philosophers and historians of science joined the practice of feminist science criticism, alternative models of gender bias were developed, sometimes in cooperation with working

²⁵ Recall Lakatos' notion of *research programme* here.

scientists...[feminist] science critics...claim that they [such biases] are not proven or established, because at this stage in the development of the evidence [used to support some androcentrically biased theory] legitimate and at least equally viable rivals exist.” (25-26)

Recall Thagard here:

Bias in a research program is revealed as *error* to the extent that it is shown to generate or rest on (1) confused...concepts purporting to refer...(2) violations of valid²⁶ methodological principles; (3) belief in a theory in the face of a lack of evidential support for it, or strong evidence against it²⁷ (4) continued commitment to a theory...even when some rival theories dominate it with respect to *all* epistemic values, including empirical adequacy.²⁸ (26)

On the other hand:

Bias in a research program is shown to be *limiting* or *partial*, but not necessarily erroneous, to the extent that it avoid clear error and generates (1) a limited range of concepts and/or (2) uses a limited range of methods, (3) has some empirical successes, while (4) rival theories...can also claim to avoid clear error and to possess some empirical successes...From a normative point of view, feminist philosophers of science argue that we have an epistemic interest in ensuring that certain limiting biases do not dominate research *to the exclusion of other generative biases that would generate rival theories possessing a different range of important empirical successes*. **The point in exposing the androcentric and sexist biases is not to show that they [i.e. such theories] are false (they might end up being empirically vindicated) but to make salient the room for alternative programs not based on such biases.** (27)

As far as specific biases go, some advocate in a picture (similar to postmodernists) in which they deny in the existence of ‘totalizing narratives’ (i.e. they deny that any one particular science can ‘corner the market’ on knowledge or truth-claims) though (*pace* the postmodernists) because of realist commitments concerning the issue that the complexity and nuanced character of reality defies such totalizing narratives. On the other hand, there are those who take a more unitive view, and hold that there are distinctly ‘feminine’ cognitive styles that form legitimate ontological, epistemological, and methodological biases. (27) By and large, such later positions are considered dubious by many, (like Longino) since:

[T]he dichotomy between feminist and mainstream science presupposed...is false. Doing biology, primatology, anthropology, ...or any other special science ...with the aim of answering feminist questions has resulted in many and various *local* methodological innovations, discoveries of new sources of evidence, and developments of alternative theories...Thus, there is no presumption that certain methods, evidence, etc. are uniquely available to serve feminist cognitive interests. (28)

²⁶ **Possible paper question:** What cognitive or contextual values underwrite ‘valid’ here? Is there a possibility of infinite regress? (I.e. that one could argue androcentric biases in terms of what constitutes validity here? Or are there inherently some biases that are beneficial, as feminist empiricists want to claim? Does this block infinite regress?)

²⁷ **Possible paper question** How does this square with some of Kuhn’s claims here? Or would Kuhn unqualifiedly (or qualifiedly) agree?

²⁸ I.e. that the theories’ predictions conform to the constraints imposed by the observed phenomena.

On the other hand, “feminists are more interested in knowledge applicable to meeting human needs than in research programs with little prospect of advancing these interests. These values are feminist in the sense of advancing feminist interests, but their usefulness is not confined to feminism...doing science with any other interest in mind...involves commitment to the cognitive value of producing empirically adequate theories.” (29)

The ensuing discussion (pp 29-37) involves a characterization of how feminists see the essential role contextual values play in research, and how they seek to support their claims that certain contextual values are crucial and mandatory (recall: ‘not all biases are bad.’) By and large, the discussion makes use of the previously introduced points in a systematic manner. The **Underdetermination argument**, (30), for instance, is a theme we will revisit in various guises throughout the course:

Even the staunchest defenders of value-neutrality of science acknowledge that pragmatic factors legitimately influence the choice of objects of study...But the defenders of value-neutral science contend that once inquirers decide where to cast their flashlight, what gets lit up is determined entirely by the nature of the world. Feminist epistemologists argue [on the other hand] that the light of practical interests penetrates more deeply into what is discovered than this. Knowers (subjects) play a more active role in constituting the object of knowledge...[Moreover] [c]onstitution has two senses, representational and causal. In the representational sense, knowers...choos[e] the terms in which they represent it...**If knowing is like seeing, all seeing is a form of ‘seeing as’—and different interests will make us see the ‘same’ things differently...**In the causal sense, some representations have a causal impact on what is represented. **When what we are representing is ourselves, uptake of our self-representations will change who we are and what we do. This follows from our agency, which is the determination to govern ourselves by our self-understandings. This is sometimes what is meant by the claim that subjects, or their identities, are ‘socially constructed.’** (32)

For instance:

[V]ery general framework assumptions come into play in constituting the object of study...[which] are all forms of ‘seeing as.’ Longino and Tiles argue that the selection of framework assumptions may depend on their fit with the interests of the inquirer. Feminists are interested in promoting women’s agency, so they tend to prefer frameworks that permit the representation of women as agents. (35)

A pluralism of theories and research programs should [also] be accepted as a normal feature of science...As long as the different research programmes are producing empirical successes not produced by others, and avoiding clear error and viciously circular reasoning, there is good reason to treat the value-biases animating them epistemic resources, helping us discover and understand new aspects of the world and see them in new perspectives, rather than as obstacles to the search for truth...The price to be paid for this is the disunity of science. **This [however] does not imply relativism.** Value-laden research programs are still open to internal and external critique. A naturalized epistemology that rejects neutrality allows that observations may undermine any background assumptions, including value judgments. (36)

Based on the issues raised here, consider how adequately (or not) Anderson addresses the issues concerning critiques of objectivity (36-43) in the light of the paper topic questions posed and the clarifications of the points made in these notes, as well as some of the additional questions raised.