A Curious Case of Feminist Logic

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- feminist logic program was established by Val Plumwood ("The Politics of Reason: Towards a Feminist Logic", 1993)
- recent surge of interest in the area (Eckert and Donahue 2020; Russell 2020; Restović 2023; Cook 2023; Ferguson 2023; Ficara 2024; Saint-Croix and Cook 2024; Fairbank *forthcoming* etc.)

- ► a relatively new field of research:
 - the main question is foundational: What (if anything) is "feminist logic"?

- I explore three proposed meanings of "feminist logic"
- I claim that the original Plumwood's definition is non-demanding regarding the context of discovery, i.e., that a logic can be *feminist* only in virtue of the context of justification

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▶ as an example, I take my own work in feminist logic

The original meaning of "feminist logic"

- Plumwood (1993): feminist logic is a logic that disables oppressive differentiation
- it deals primarily with *logical negation* (because that's how we express difference)

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her position is founded on a (today well-trodden) feminist critique of "dualisms" and dualistic thinking

Dualisms

Pairs of binary conceptual contrasts characteristic of Western (philosophical) thought.

E.g.: reason/emotion, mind/body, culture/nature, production/reproduction, universal/particular, subject/object, male/female...

Properties of dualisms:

- 1. one term is considered inferior (superior)
- 2. inferior (superior) terms across different dualisms are associated with (map onto) each other
- 3. inferior(ized) terms are associated with the term *female* (as opposed to *male*)

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Mapping: reason—mind—culture—subject (active)—male emotion—body—nature—object (passive)—female

Plumwood's critique of classical logic

- ► dualisms rest on classical negation (mind = ¬ body) i.e. they are mutually exclusive and jointly exhaustive i.e. in the opposition of (classical) contradiction
 - classical negation invites oppressive properties (but only when it is used to model notions found in dualisms)
 - 1. relational definition (incorporation)
 - woman defined in relation to man (and not vice versa)
 - 2. homogenization (stereotyping)
 - no further distinctions inside the non-male category
 - 3. radical exclusion (hyperseparation)
 - if terms are brought together, the system collapses

feminist logic is a logic that disables oppressive differentiation

Two additional proposed meanings of "feminist logic"

- logic guided by feminist values (Russell 2024; Saint-Croix and Cook 2024)
- 2. logic developed from a feminist standpoint (Cook 2023)
- both parallel two influential approaches in feminist philosophy of *science*, which radically depart from traditional (scientific) epistemology

Scientific inquiry:

- 1. is not free from political, cultural and social values
- these values influence the formation/selection of problems and hypotheses
- theories are underdetermined by data, so we fill the gap with values (Longino 1990)
- 2. should not be value-free
- we should choose the right values
- we shouldn't do so dogmatically or exhibit wishful thinking (Anderson 2004)

Feminist science as science developed from a feminist standpoint

- 1. all knowledge is (socially, historically, and culturally) situated: *by* someone and *for* someone
- socially oppressed groups have epistemic privilege in some domains of inquiry, which is afforded to them by their lived experiences
- 3. epistemic privilege is not automatically given by one's identity, but has to be achieved though (group) critical reflection

Similarities:

- ▶ all knowledge is socially situated (Crasnow 2020)
- there no such thing as a "view from nowhere"
- don't denounce objectivity, but offer a reform of the notion

The most salient difference:

 science guided by values: no group has epistemic advantage (although different perspectives help objectivity)

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e.g. Longino (1993): not a view from nowhere nor a view from somewhere, but a view from "many wheres"

But does this apply to logic as well?

Unsurprisingly, it all depends on how one views logic.

Opponents of "feminist logic":

- logic is not like other scientific disciplines
- logic is abstract (topic-independent), a priori, singular, independent of reasoners
- "feminist logic" is a non-sensical term

Proponents of "feminist logic":

- logic is like other disciplines
- i.e. anti-exceptionalism about logic: logic is continuous with science, it can change (Hjortland 2017)
 - values influence knowledge in other areas and logic is not exceptional (Saint-Croix and Cook 2024)
 - ► members of some groups are in a better position to see the (logical) workings of dualisms (Cook 2023)

Values, standpoints, and the context of discovery

Both approaches put feminist prerequisites on the context of discovery:

- 1. feminist values: the **entire** process of inquiry should be guided by feminist values
- 2. feminist standpoint: some social locations are better **starting-points** for research

Both approaches put feminist prerequisites on the context of justification:

- 1. Longino (1993): blaims standpoint theory for not dealing enough with the context of justification
- 2. Harding (1993): *a rigorous 'logic of discovery'* is necessary, but not sufficient

The year was 2019...

- I was working on a formal representation of L.E.J. Brouwer's "theory of the exodus of consciousness"
- all conscious material is built from elementary sensations, which are either egoic (not separated form the subject) or estranged
- estranged sensations are either desired or feared
- complex sensations: a mixture of elementary sensations
 i.e. (desire, fear, egoicity, and estrangement can come in degrees)



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trichotomy: egoicity/desire/fear

- egoicity $\leftrightarrow \neg$ estrangement
- estrangement \leftrightarrow (desire \lor fear)
- egoicity \leftrightarrow (\neg desire $\land \neg$ fear)

logically describing trichotomies: the (classical) logical hexagon

it makes explicit all the logical relations





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Complex sensations in Brouwer's theory

- complex sensation: partly egoic, partly desired, partly feared
- egoicity + desire + fear = 100% (like a pie-chart)
- when properties behave like this: fuzzy logical hexagon



What I discovered

I was curious about other meaningful conceptual decorations of the fuzzy logical hexagon, and I tried this decoration:



After the discovery of the "Fuzzy Gender Hexagon"

- I found out about Plumwood's work
- I found out that the opposition of fuzzy contrariety in the FGH fits her criteria for a feminist logic (a feminist differentiation between the gender categories):
- 1. no relational definition
 - percentage of femaleness cannot be defined by the percentage of maleness

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- 2. no radical exclusion
 - femaleness and maleness can mix
- 3. no homogenization
 - many different ways of being non-male

Plumwood's work provided a (feminist) context of justification

How the discovery had (not) come about

- my discovery was fairly accidental
- 1. I wasn't (consciously) guided by feminist values
 - unless a recognition of non-traditional gender identities constitutes a feminist value
 - Plumwood, on the other hand, was (it seems) guided by feminist values – the idea that we should (logically) dismantle rigid conceptual dualisms (Russell 2024)
- 2. I didn't occupy a feminist standpoint
 - my idea did not come from a critical reflection/discussions on gender (achievement thesis)
 - I wasn't aware of the literature (achievement thesis)
 - I don't have lived experience of having a non-traditional gender identity (epistemic privilege thesis)

- i. a logic can be feminist (in Plumwood's sense) and have a non-feminist context of discovery
- ii. all we may need is that there be feminist justification
- somewhat ironically, this is similar to the traditionalist view about the context of discovery – it doesn't matter

in my view: it does not have to matter

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