

On Irigaray's and Wittgenstein's Critiques of Formal Logic

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Abstract

Luce Irigaray and Ludwig Wittgenstein are both critics of formal logic. Irigaray speaks of the desire for uniformity, while Wittgenstein refers to the craving for generality—tendencies that hinder our ability to attend to the nuances of life and language. In Irigaray's case, her critique is intimately connected to the task of revealing and articulating the Feminine. For Wittgenstein, it is closely related to his philosophy of mathematics. Both thinkers direct their critiques not only at the specific details of formal logic but also at its overarching use and influence. In this paper, I will use Marjorie Hass's essay 'Fluid Thinking: Irigaray's Critique of Formal Logic' (Hass 2002) as a starting point to explore Irigaray's objections to formal logic alongside Wittgenstein's. Methodologically, the paper is an interwoven commentary on Hass's paper, informed by Rush Rhees's understanding of Wittgenstein's philosophy of mathematics and directly by the Remarks on the Foundations of Mathematics.

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Irigaray and Wittgenstein have numerous interpreters, with varying perspectives on their work. However, I propose that a comparative analysis of their critiques of formal logic can deepen our understanding of both thinkers. In this paper, I will use Marjorie Hass's essay 'Fluid Thinking: Irigaray's Critique of Formal Logic' (2002) as a starting point to explore Irigaray's objections to formal logic alongside Wittgenstein's. My own understanding of Wittgenstein's philosophy of mathematics is primarily based on Rush Rhees's interpretation. Methodologically, the paper is an interwoven commentary on Hass's paper, informed by Rhees's understanding of Wittgenstein's philosophy of mathematics and directly by RFM (by RFM, I shall henceforth refer to the 1978 edition).

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Marjorie Hass notes the following: “Irigaray’s critique of logic has received less attention than the challenges she makes to law and language. Yet it is in many ways her most important” (Hass 2002: 71). Something similar could be said about Wittgenstein’s thinking about the philosophy of mathematics and its relation to mathematical logic: although it was central to Wittgenstein, it has received much less attention than other parts of his philosophy, as the editors of RFM were well aware of (Solin 2023). Perhaps the root causes are the same for both the reception of Irigaray and of Wittgenstein, something similar to what Hass writes: “Logic is the symbolic structure that we hold up as the most neutral of all, as essentially definitionally neutral. It serves as an exemplar of neutrality itself. [To] unmask logic is to call the very possibility of neutrality into question. But for this very reason, the case against logic is also the hardest to make plausible” (Hass 2002:71). Hass notes that “Irigaray’s approach to logic is the most theoretical and associative of her treatments of formal systems, requiring her to use her full range of philosophical techniques.” (Hass 2002: 71-72). I think that something similar could be said about Wittgenstein’s approach to the philosophy of mathematics, and his critique of mathematical logic. He attacks our thinking where it seems almost impossible and uses a whole battery of different techniques.

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Many have been perplexed by what Wittgenstein is actually up to in the RFM. Rush Rhees writes the following in a letter to Georg Henrik von Wright (kept at the von Wright and Wittgenstein Archives in Helsinki):

Wittgenstein was not pretending to do mathematics. He was describing [something] which could be mathematics. (In this way it is similar to his construction eines Sprachspiels or of the Lebensweise eines Stammes, whose grammar differed in important ways from ours, for whom 'intelligibility' and 'understanding' were different from the intelligibility and understanding we seek; and so on. And this could illuminate, or separate certain features of our speech and questions and reasonings.) Wittgenstein is not suggesting that any mathematical problem would be solved through the development of [these] ways of calculating.

What he does suggest, I think, is that if one pays attention to the possibility of a variable so conceived [...] then one may be less prone to 'mythological' or 'fantastic' interpretations of the forms of calculation mathematicians do use. (Rhees to von Wright, 4 April 1973)

So Wittgenstein is not doing mathematics himself, but only trying to make us think about it differently. To make us see what we are actually doing more clearly. It seems to me that it is a similar thing that Irigaray is doing, as described by Hass:

She acts as both prophet and muse urging us to a land just slightly out of reach, just beyond the next horizon. And it is in just this mode that Irigaray returns again and again to the logic of negation, identity, and generality to illustrate the monosexuality of our theoretical paradigms, to gesture toward new paradigms, and to reconstruct relationships. (Hass 2002: 72)

This gesturing towards new paradigms seems to me akin to Wittgenstein's use approach as understood by Rush Rhees. Wittgenstein wants us, according to Rhees, to find a new way of doing philosophy of mathematics and a new way of viewing what we do as mathematicians (Solin 2023).

For sure, much of what Irigaray says about formal logic might also strike one as incomprehensible if one has started out as a logician. As Hass notes, "[a]pproaching formal logic through this lens is unusual and, from the perspective of traditional philosophy of logic, perhaps impossible" (Hass 2002: 73). But I believe that reading Irigaray and Wittgenstein in tandem might make it easier to understand both philosophers. Their immediate aims are different, in that Irigaray's main goal is to articulate sexuate difference, but their methods and their striving to clarity about differences, as it were, seem related to me. Irigaray, just like Wittgenstein, insists on "the fundamentality of difference, particularly sexual difference, and [...] that genuine difference is ignored even when we think we are focusing on it" (Hass 2002: 72).

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Here's Hass again:

In Irigaray's work, a variety of supposedly neutral structures, then, are revealed as expressions of a cultural desire for sameness. A desire that must be revealed and interpreted before difference can be thought. (73)

Recall that Wittgenstein in the Blue Book pointed out that our "craving for generality" is related to many philosophical confusions and to a "contempt for the particular case" (BBB: 17; see also Stenlund 2002).

And as one can see from RFM, Irigaray and Wittgenstein share the following:

When Irigaray confronts logical theory, then, she is looking for at least two things: the elements of logical reality that exceed formal logic's representational capacity and the desires revealed by the marginalization of these elements. (Hass 2002: 74)

Wittgenstein, too, wants to show that mathematical reality exceeds mathematical logic, as seen in for example the following remark:

"The disastrous invasion" of mathematics by logic. [...] The harmful thing about logical technique is that it makes us forget the special mathematical technique. (RFM: 281, § 24)

And Wittgenstein wants to understand why we are driven by these desires, or at least to make it clear to us that we are (Rhees 2006: 263; Solin 2013: 33-34).

Wittgenstein and Irigaray are similar in this dual critique of formal logic: they simultaneously consider the technical details *and* the existential leanings driving us towards formal logic. Especially that latter, the existential aspects, are too easy to forget when it comes to Wittgenstein on mathematics and formal systems (Floyd & Mühlhölzer 2020; Solin 2021).

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So consider then the following by Hass:

While logicians focused their attention exclusively on the formal properties of logical concepts, Irigaray's psychoanalytic perspective *includes* (my emphasis) the Imaginary meaning of logical connectives. In other words, while she is interested in the literal meaning of, for example, the negation symbol, she is also attentive to the associative, symbolic function of contradiction and, at a

deeper level, the way that negation functions in the cultural Imaginary. (Hass 2002: 74)

And related to this:

The conception of limit that Irigaray formulates cannot be directly articulated in the language of formal logic. ... in one sense then, the relationship that Irigaray describes is *nonlogical*. But this is not to say that it is unreasonable or irrational. At the center of Irigaray's work it's the task of drawing our attention to an as yet unsymbolized possibility. She uses a variety of techniques for expanding our thinking, for drawing us just enough beyond our current representations that we can begin to create a new representational possibility. ... As I suggested earlier Irigaray is interested in the symbolic associations binding culturally significant concepts. In the case of negation, for example, the logical rules that given the negation operator, carry with them a force that goes beyond the framework of formal logic per se. Logic and its operations come to represent rationality, meaning, and sense of themselves. (Hass 2002: 78)

It is a similar thing, I think, that Wittgenstein does in his remarks on negation (RFM: 102 ff.) Not only is he making remarks to the point of nuancing our understanding of negation, creating new representations ("ne"), but just like Irigaray he includes making us aware of how negation functions in what above was described as the cultural Imaginary. For example, in a striking parentheses he later talks about "[t]he superstitious dread and veneration by mathematicians in face of contradiction" (RFM: 122). Indeed, already in his war diaries Wittgenstein was concerned with unifying, on the one hand, his existential inquiries, with, on the other hand, his more technical, logical work (see Jareño Alarcón 2023).

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Let us now consider, then, the law of identity, that is that for every x , x is equal to itself, or in symbols $(\forall x)(x=x)$. Hass argues that the law is enabled by differences specified within the law itself (Hass 79 ff.). To represent an object's identity, two instances (or tokens) are needed. Identity is never complete; there is always a leftover difference, a residue. Irigaray's views on identity have garnered significant attention, particularly her claim that the law of

identity does not apply to women. While others, like Heidegger and Deleuze, acknowledge the persistent difference beyond the law of identity, Irigaray's analysis is focused on sexual difference. She highlights the link between this residual difference and femininity. In the context of the law of identity, where diversity is both shown and overlooked, femininity represents what cannot be fully defined. Irigaray's critical readings of Western rationality reveal that femininity symbolizes excess, a concept also evident in everyday portrayals of femininity.

One can compare this to Wittgenstein when he writes the following about the law of identity:

Frege calls it 'a law about what men take for true' that 'It is impossible for human beings ... to recognize an object as different from itself'. – When I think of this as impossible for me, then I think of *trying* to do it. So I look at my lamp and say: "This lamp is different from itself". (But nothing stirs.) It is not that I see it is as false, I can't do anything with it at all. (Except when the lamp shimmers in sunlight; then I can quite well use the sentence to express that). One can even get oneself into a thinking-cramp, in which one *does* someone trying to think the impossible and not succeeding. Just as one can also *do* someone trying (vainly) to draw an object to himself from a distance by mere willing (in doing this one makes e.g. certain faces, as if one were trying, by one's expression, to give the thing to understand that it should come here.) (RFM: 89, § 132)

Wittgenstein's remark can be related to Irigaray in two ways. On the one hand, one could say that Irigaray is trying to think the impossible. On the other hand, one could say that Irigaray is talking about identity in a way that Wittgenstein says makes sense when talking about the shimmering light. I think it is the latter that would be the correct reading of Irigaray: when she says the law of identity does not apply to women, this should be understood as her wanting to make us see something like the lamp in sunlight, she wants us to pay attention to aspects of what it is to be a woman that have not been articulated. And, perhaps, it has not been articulated partly because we have been too concerned with the law of identity in the typical formal sense.

But the excess and the residue here still seems to me to be a contentious issue: why is it associated with femininity? On this point, I suspect Wittgenstein and Irigaray would differ, although they both recognize that there *is* a residue, and that this residue is important, neglected and yet meaning-giving.

Wittgenstein remarks that:

The propositions of logic are 'laws of thought', 'because they bring out the essence of human thinking'— to put it more correctly: because they bring out, or shew, the essence, the technique, of thinking. They shew what thinking is and also shew kinds of thinking. (RFM: 90, §§ 133-134)

Consider in relation to this the following from Hass:

Margaret Whitford writes, "the practical value of these principles, without which rationality would be inconceivable, is so evident that it appears unquestionable. The logic of identity is the prerequisite of any language or society at all. However, the point is that there will always be a residue which exceeds the categories, and this excess is conceptualised as female". [...] Irigaray has identified a sense, then, in which the law of identity does not "apply" to women. Femininity represents the excess that surrounds the very possibility of self-substituting identity. [...] Without their own specific form of identity, women cannot function as a limit to the male sex, they cannot resist the totalizing impulse of the logical structure of negation and identity. (Hass 2002: 80-82)

And perhaps one could argue, even from Wittgenstein's perspective, that Irigaray tries to show us a different "kind of thinking". And that the thinking which falls under the feminine has been concealed, also in the case of logic.

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Let us return to Hass:

Irigaray's work calls the neutrality of logic into question, arguing that the standard formalism is capable of expressing only distorted and partial interpretations of negation identity and generality. ... Thinking of difference,

identity, and generality in the new ways that Irigaray asks of us requires that we expand on the representational possibilities offered to us by the standard formalism. (Hass 2002: 84)

This can be understood so that those interested in standard formal structures can ignore Irigaray's critique as long as they don't apply it to sexuate difference. Or that they can try to conceive of new formal structures, related to standard ones, for expressing sexuate difference. But Irigaray's and Wittgenstein's critiques do not end there. Hass writes:

Irigaray, however, insists that there can be no new formalism, that the problems she has identified are problems *with formalism itself*. (Hass 2002: 85)

And this is completely in tune with Wittgenstein's critique of mathematical logic:

The curse of the invasion of mathematics by mathematical logic is that now any proposition can be represented in a mathematical symbolism, and this makes us feel obliged to understand it. Although of course this method of writing is nothing but the translation of vague ordinary prose. [...] Mathematical logic has completely deformed the thinking of mathematicians and of philosophers, by setting up a superficial interpretation of the forms of our everyday language as an analysis of the structures of facts. Of course in this it has only continued to build on the Aristotelian logic. (RFM: 299-300)

This is one reason why Wittgenstein in the PI (§ 124) can say that no discovery in mathematical logic can advance philosophy. And, could one not, perhaps, say that no discovery in formal logic really advances our understanding of sexuate difference?

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Famously, Wittgenstein wrote that:

Work on philosophy – like work in architecture in many respects – is really more work on oneself. On one's own conception. On how one sees things. (And what one expects of them). (CV: 24)

And this is precisely what Irigaray asks of us when it comes to formal logic:

Irigaray asks the logician to interrogate his own desire for closed logical system. Given that language and experience overflow the boundaries of logic, what pleasures are found in the narrowing and restricting of attention that formal logic demands? Asking into this level of desire is fundamentally foreign to the logician who focuses on instrumental ends and deemphasises even the aesthetic pleasures associated with an elegant proof or a spectacular technical solution. The relationship between desire and logic has already been opened by Wittgenstein in his *Investigations*. One open question, then, is the extent to which Irigaray has provided a sexed basis for this relationship, showing that the deep pleasures, desires, and frustrations that give rise to our pursuit of formal logic are the same ones that structure our sense of masculinity: closure, unity, and solidity. (Hass 2002: 85)

Note that this is the only reference to Wittgenstein in Hass's text, but the PI is not in the references and Wittgenstein is not in the index of names of the volume. It seems out of place to me, and I'm not certain what parts of PI she is referring to; the request of a reviewer, perhaps. But one can certainly agree with her, and as I hope to have already shown, this relationship is even more visible in RFM. However that may be, just like Hass notices and as I said above, the contentious issue is how and whether the perspective opened up by Wittgenstein and Irigaray relates to the feminine and to the masculine.

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Hass quotes Rosi Braidotti:

Irigaray defends the notion of 'difference' in a conditional mode. This means that woman does not yet exist and that she will be unable to come into being without woman's collective efforts. ... Sexual difference that's the difference that women make has to be constructed, and, for Irigaray, it is the task of the women's movement to set the conditions of possibility for this becoming. (Braidotti 1994: 250, as quoted by Hass 2002: 72)

And comments:

For Irigaray, sexual difference – indeed, difference itself – has yet to be thought at the deepest and fullest sense in Western culture; it has yet to enter into the symbolic constructions that constitute our culture. Moreover, thinking

sexual difference is not simply a matter of adding women into the existing constructions. The structures themselves resist these additions since they are in fact constituted to resist difference. (Hass 2002: 72-73)

In RFM, Wittgenstein makes a related remark:

The sickness of a time is cured by an alteration in the mode of life of human beings, and it was possible for the sickness of philosophical problems to get cured only through a changed mode of thought and of life, not through a medicine invented by an individual. [...] Think of the use of the motor-car producing or encouraging certain sicknesses, and mankind being plagued by such sickness until, from some cause or other, as the result of some development or other, it abandons the habit of driving. (RFM: 132)

Both emphasise that we need to change the way we live, for certain things to even become comprehensible. Irigaray's project can be described as utopian, as slowly working towards a non-totalising relation between the sexes that, acknowledging the irreducible two, would not allow one to dominate the other. This, in turn, would foster a humility crucial for a common humanity (Hass 2002: 82; Irigaray 1996: 106-107). (Does the Irigarayan perspective represent a "regressive biological essentialism" (Hass 2002: 81)? I think that would be a very simplistic reading of Irigaray, but that is the topic of another paper (see, however, Hass 2002: 81 ff.).)

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In this paper I have shown, by close commentary, that there are similarities between Irigaray's and Wittgenstein's discussions of formal logic. I have focused on their general approach and emphasized that they both consider the technical aspects as well as the more existential aspects of formal logic. I think that developing this outline further would be rewarding for Irigaray studies and Wittgenstein's studies, respectively, and that one can compare Irigaray and Wittgenstein on negation, identity and generality in much more detail. I hope to have the opportunity to do so in future work.

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