

Selected investigations into egg logic: a personal perspective

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somewhere in Katarokwi-Kingston,
unless she's somewhere else

\today

Content note

This paper discusses *egg logics*, which are known to the State of California to exacerbate denial of one's gender.

This paper also discusses personal health issues, street harassment, uses a disputed term because it was literally used in an employment equity survey but also because I get to use that term occasionally (as a treat), and contains possibly unhealthy amounts of self-deprecation.

1 A judgmental reconstruction of my egg logic

Ashley (2019) defines *transitude*¹ as “the fact of being trans”. The traditional judgment form of *transitude* asserts that a particular individual is trans. Examples:

1. Jana is trans
2. Jana is extremely trans

1.1 Syllogism of self-deprecation

By deploying probabilistic denial, I obtained (Dunfield 2005) a classic syllogism of *judgmental non-refinement*:

- | | | |
|------------|----------------------------------|------------------------------|
| (1a) | Only 1 in 1000 people are trans. | (major premise) |
| (1b) | Being unusual is interesting. | (minor premise) |
| (1selfdep) | I am not interesting. | (self-deprecation condition) |
| (1m) | Therefore, I am not trans. | (motivated conclusion) |

First, let us observe that the major premise is false. (I will not dignify the 2021 Canadian census by citing it properly, but it did show that even the subset of trans people who are willing to directly

¹*Transness* is synonymous, but way less fun to write.

inform a national government that they are trans, possibly also outing themselves to their entire household, is much greater than 0.1%.)

Now consider the self-deprecation condition, the *sine qua non* of the syllogism. Why did she² assume she couldn't be interesting? Because she wasn't sure she existed. If I barely existed, how could I be interesting?

By this specious reasoning, admissible in egg logic, I obtained the motivated conclusion.

1.2 Bayes' rule, or, how did I pass Machine Learning on the first try?

Let us aggravate the underestimation of trans people (cf. (1a) above), by supposing that only 1 in 1000000 people are trans. The structure of the judgmental refinement syllogism does not change; we may add "extremely", "very", etc., obtaining e.g. "Being extremely unusual is very interesting".

The logic remains: not many people are trans, so the probability that I am trans is low.

Similarly, extremely few people are me. By egg logic, the probability that I am me is one in several billion. But the actual probability that I am me *given that I am me* is 1.

The probability that I am trans *given that I am trans* is 1.

1.3 Syllogism of self-preservation

- (2a) Pittsburgh in 2005 is not the safest place and time for transitude. (major premise)
- (2b) I am living in Pittsburgh in 2005. (minor premise)
- (2c) I would not be safe. (conclusion)

Unlike the syllogism of self-deprecation, this syllogism has some legitimate structure. However, I failed to elaborate an implicit assumption:

- (2no) Being trans is not important. (central fallacy)

I don't know if I would have been able to *do* anything about being trans in 2005. But I wish I'd known.

1.4 Egg induction and dream logic

Eventually, I accepted that the main proposition (*Hauptsatz*) of transitude, "I am trans", was true or at least plausible. In egg logic, however, the mere acceptance of this proposition does not entail *doing* anything (for example: saying any actual words to anyone) about one's transitude.³ Instead, egg logic admits the following deduction:

- (3a) I have survived so far without doing anything about my gender. (previous states premise)
- (3b) I do not need to do anything about my gender. (pseudo-induction)

I occasionally dream that I am late for an exam. In my dream logic, the mere fact that I am not taking classes is usually insufficient to refute the possibility of being late for an exam. For example, if the putative exam is for undergrad calculus, not taking classes is insufficient. Even having already received an undergrad degree is not sufficient. No, my dream logic requires even more refutation:

²She gets to be herself.

³Use a hypothesis? In *this* economy?

I tell myself that I have a PhD, which is gatekept by having received an undergrad degree, so it is triply impossible that I could be missing an undergrad calculus exam.

In egg logic, the hypothesis of being cis (Reed 2012) must be refuted again and again and again: by a new pair of jeans and a flight attendant and a guest at breakfast, and by shouting into the void of a zero-follower social media account until I almost heard myself.

All that wasn't enough. I had to get within spitting distance of my own mortality to realize the one thing I couldn't bear: the idea of dying and being remembered as a man.

1.5 Author's ongoing self-deprecation

One of my several current forms of self-deprecation is that I often think that being trans is the only interesting thing about me.

Hey, I'm trying.

2 Sequents

It is the 1990s. Puberty happens. Puberty, I am told, is no fun for anyone. It's not fun for me, but I don't understand why. I'm homeschooled, and I am very rarely harassed or bullied, but I can count my friends on one finger. I very carefully ask myself if I'm gay, but I don't feel attracted to men so I conclude that I'm not. I read a bunch of feminist SF; I don't remember why.

I survive.

It is 1998. I put a quote from Le Guin's *Introducing Myself* on the door of my dorm room.⁴ I hear about a panel where a bunch of trans people are going to speak. I don't go.⁵ Later that month, I visit my parents. I go for a walk. Some dude in a pickup truck yells a homophobic slur at me. Two and a half hours later, I send an email to myself, criticizing Truck Dude for his faulty gaydar. I sign the email "-j.", as I always did.

It is 1999 and I won't get into all of that here but I write things in private text files like "There was more to this story, but it doesn't need telling now."⁶

It is the 2000s. I don't know who I am, but I'm not trans, because I did an egg logic with my super PL brain and I'm not trans.

It is 201X. I almost check out *Whipping Girl* (Serano 2007) from the UBC library, but I am afraid that someone will notice even though the library has self-checkout and I have my own office. Or so I tell myself. A friend makes a relevant and accurate observation about how other people perceive my gender, and I blow up, but he made the observation in email so I'm spared him having to see me blow up.⁷ I shouldn't be offended at the suggestion that I'm gender non-conforming. There's nothing wrong with being gender non-conforming. There wouldn't be anything wrong with being trans, it's just that I'm

⁴It was the part about the fish stick. There is no pattern here. Do not look in Section 3 for a pattern.

⁵I extracted my class schedule from the Internet Archive's copy of my undergrad institution's website and I didn't have any classes during it.

⁶I desperately wish I could go back in time—not to let her in on the trans thing, just to tell her to be less cryptic.

⁷I remembered stewing for hours or probably days about this before I could reply to him. I actually replied in under an hour. It only felt like days.

It is 2017. I play *Undertale* and become emotionally invested in fan debates over whether the player character is canonically nonbinary. And now it's 2018. Am I nonbinary? That feels less off, but not *good*. Am I a trans woman?

Oh shit

It is still 2018. I shorten my first name to an initial in the page header of a paper.⁸ I probably have cancer. I have surgery. It's not a big deal, because I'm probably not here. I definitely have cancer. I have surgery again.

It is, somehow, still 2018. I drink radioactive iodine. I get up to pee. I think I'm real.

It is 2019. I write "Jana" in the sand at Cascais and it's swept away. I start telling people.⁹ I start an email draft called "epistemic logic" to keep track of who I've come out to.

It is 2020. The "epistemic logic" draft has 67 names on it. I come out at work¹⁰ and have nightmares but it's actually pretty okay.

It is 2021. The pandemic careens on. The state careens on (Gill-Peterson 2021).

It is 2024. The Canadian state stirs and careens towards careening.

I am real and I'm singing with my friends.

3 Related work

The closest I've come to submitting to SIGBOVIK was around 2013 when I started to write something arguing (mostly seriously) that we shouldn't use "guys" to refer to mathematical abstractions. The throwaway joke in the author block was a parenthetical "(is a guy)", attached to my name.

I'm not sure that was a funny joke, but it's funny that I thought it was a joke.

4 Future work

Possible future work includes the focusing logic of bureaucracy. For example, when you are told that it's hard to change the name on your PhD thesis because your thesis is a legal document, you might be tempted to use conventional deduction to argue that a thesis is no more a legal document than your algorithms homework was, or to argue that your PhD-granting institution is located in a jurisdiction in which legal names aren't a thing (Baker and Green 2021). However, experience (Bohrer 2023) demonstrates that the use of a hypothesis is admissible in bureaucratic logic only when the hypothesis is useful to the bureaucracy.

⁸When ACM eventually got around to manually editing PDFs to update my name, they didn't really need to change those headers. Saved you some work, ACM. You're welcome, ACM.

⁹"I'm more frightened and more happy than I've been in a long time. . . . I've been asking myself, 'Is this worth turning your life upside down?' But maybe my life isn't the right way up now."

¹⁰Out of some regrettable desire to improve my employer's diversity stats, or as a bid for reassurance and official recognition, or maybe as a gesture towards the effacement of my previous existence, I went to the trouble of *re*-filling out my employer's employment equity survey. That instrument included a bracing variety of transititudinous options, including "transsexual". Why not, I thought? It was only while writing this footnote that it struck me: if someone hasn't already made a graph of the number of self-identified transsexuals employed here over time, there is enough data to make one.

Acknowledgments¹¹

I thank my past self, despite everything.

I thank my trans friends; I still took a while, but that's okay. Blame is for PL nerds, right?

I thank all my friends.

Even if you're not my friend, you're getting thanked too. You're reading this.

References

Florence Ashley. Gatekeeping hormone replacement therapy for transgender patients is dehumanising. *Journal of Medical Ethics*, 45(7):480–482, 2019. doi: 10.1136/medethics-2018-105293. URL <https://jme.bmj.com/content/45/7/480>.

Austin A. Baker and J. Remy Green. There is no such thing as a “legal name”. *Columbia Human Rights Law Review*, 53(1):129–188, 2021. URL <https://hrlr.law.columbia.edu/hrlr/there-is-no-such-thing-as-a-legal-name/>.

Rose Bohrer. Screen-sharing concurrency. In *Proceedings of SIGBOVIK 0x2023*, pages 220–225. Association for Computational Heresy, 2023.

Jana Dunfield. Literally what was I thinking. Personal communication. From herself, 2005. Year approximate.

Jules Gill-Peterson. The Cis State, April 2021. <https://sadbrowngirl.substack.com/p/the-cis-state>.

Natalie Reed. The Null HypotheCis, April 2012. <https://freethoughtblogs.com/nataliereed/2012/04/17/the-null-hypotheCis/>.

Julia Serano. *Whipping Girl: a transsexual woman on sexism and the scapegoating of femininity*. Seal Press, 2007.

¹¹<https://tex.stackexchange.com/questions/571314/make-a-color-box-with-the-trans-pride-flag>