

ARTICLE

Normative Inference Tickets

Jen Foster^{1†} and Jonathan Ichikawa^{2†} (D)



¹University of Southern California, Los Angeles, CA, USA and ²University of British Columbia, Vancouver, BC, Canada

Corresponding author: Jonathan Ichikawa; Email: ichikawa@gmail.com

(Received 21 March 2023; revised 9 July 2023; accepted 20 July 2023)

Abstract

We argue that stereotypes associated with concepts like HE-SAID-SHE-SAID, CONSPIRACY THEORY, SEXUAL HARASSMENT, and those expressed by paradigmatic slurs provide "normative inference tickets": conceptual permissions to automatic, largely unreflective normative conclusions. These "mental shortcuts" are underwritten by associated stereotypes. Because stereotypes admit of exceptions, normative inference tickets are highly flexible and productive, but also liable to create serious epistemic and moral harms. Epistemically, many are unreliable, yielding false beliefs which resist counterexample; morally, many perpetuate bigotry and oppression. Still, some normative inference tickets, like some activated by SEXUAL HARASSMENT, constitute genuine moral and hermeneutical advances. For example, our framework helps explain Miranda Fricker's notion of "hermeneutical lacunae": what early victims of "sexual harassment" - as well as their harassers - lacked before the term was coined was a communal normative inference ticket - one that could take us, collectively, from "this is happening" to "this is wrong."

Keywords: stereotypes; concepts; inference; slurs; conspiracy theory; rape culture; he-said-she-said; sexual harassment; hermeneutical injustice

1. Introduction

One of us - we won't say which - gets very cranky sleepy after 10:00pm.

Our Dungeons & Dragons group has learned this well. "10:00pm," we know, means we ought really to say goodbye - and "J" (we'll say) really ought to go to bed. What our group has learned, over many evenings playing together, is that 10:00pm is I's bedtime. And with our shared j's BEDTIME associations in tow, we need only glance at the clock to know that I ought to go to bed: from "it's 10:00pm," the mental ride via j's bedtime to the normative conclusion is virtually uninterrupted.

Compare more pernicious cases: consider the mental ride from a woman's having five cats to her being unmarried and undesirable (via the concept CAT LADY). Likewise from uses cannabis to is a burnout (via STONER); from is a romantic comedy to isn't worth watching (via CHICK FLICK); and from posits a conspiracy to is obviously irrational (via CONSPIRACY THEORY). We'll argue that stereotypes attached to and activated by

[†]These authors contributed equally.

[©] The Author(s), 2023. Published by Cambridge University Press. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution and reproduction, provided the original article is properly cited.

such concepts provide *normative inference tickets*. Just as a train ticket licenses its holder to ride the train from one station to another, an "inference ticket" provides permission for certain transitions in thought. And normative inference tickets, as we'll use the phrase, provide automatic "shortcuts" to conclusions with normative significance – whether they are explicitly normative (and so involve concepts like SHOULD and WRONG), or otherwise feed obviously into outstanding evaluative frameworks. They take us not just to certain descriptive conclusions like "Eddy is a cat," but to conclusions about what is good, what is bad, what matters (or does not matter!), what does or does not "make sense," and what we ought or ought not to do.

Prior (1960) discussed inference tickets involving putative analytic inferences; our focus is on a broader category of inferences. Inference tickets need not be analytic, but we insist that there's an important sense in which they are robust. While their "import" and "output" conditions may be defeasible, they are far from conceptually arbitrary, and are often hard to resist. We're particularly interested in *communal* inference tickets, which exist and play important roles at the social, rather than the individual, level. We'll focus especially on inference tickets associated with concepts like SEXUAL HARASSMENT, HE-SAID—SHE-SAID, CONSPIRACY THEORY, and paradigmatic slurs. As we'll argue, these communal normative inference tickets are hermeneutical goldmines, in the good cases, and ethical landmines, in the bad ones.

We begin in Section 2 by clarifying what we do, and do not, mean by interference tickets "involving" or "being attached" to concepts. In Section 3 we will make this a bit sharper, by explaining how we think certain inferential roles are "conceptually" privileged, and so give rise to our key notion of normative inference tickets. This helps us situate our project in the context of recent work in conceptual ethics and conceptual engineering. Section 4 connects and relates our notion of inference tickets to Prior's (1960) discussion of TONK.

Following Prior, we understand inference tickets as a matter of licensed inferential connections – *input* connections identify the circumstances under which one may reason *to* a thought involving a given concept, and *output* connections, specifying how one may reason *from* such thoughts. And following Dummett (1973), we think something important happens when there isn't the right match between input and output rules. But, as we explain in Section 5, our idea of normative inference tickets is different from theirs in important respects, especially in that we allow them to permit exceptions. Section 6 works through several case studies of harmful inference tickets, and the barriers to reforming them, including a discussion of the stereotypes attached to HE-SAID-SHE-SAID, CONSPIRACY THEORY, and paradigmatic slurs. In Section 7 we apply our framework to Miranda Fricker's notion of hermeneutical injustice to show how communal normative inference tickets can constitute hermeneutical resources.

2. Stereotypes and "conceptual" connections

We'll have a lot to say in this paper about various "conceptual" connections. Certain "concepts," we think, tend to activate certain stereotypical connections, leading to

¹As far as we can tell, the phrase 'inference ticket' was coined in Ryle (1949: 105). (Ryle himself seems to be developing an existing locomotive metaphor connecting rail to inference, perhaps due to Wittgenstein.) Ryle's "inference tickets" contrast with factual statements; he emphasizes the distinctions between commitments to particular matters of fact, and conditional commitments to draw certain conclusions in certain circumstances. (He is focused primarily on understanding laws and dispositions.) The phrase today is best-known from the title of A. N. Prior's influential (1960) "The Runabout Inference Ticket" – probably a deliberate (but uncited) allusion to Ryle.

inferential patterns we think are interesting. We'd like to clarify at the outset, however, that we are not intending an intervention in the vast and abstruse philosophical literature on concepts. We take no stand on whether concepts literally are mental representations or Platonic abstracta,² or whether they are structured or simple,³ whether they are innate or learned,⁴ or even whether strictly speaking there are any such things as concepts.⁵

Our use of "concept" and "conceptual" is intended in a largely colloquial and pretheoretic way. When we say later this section that there is a tight "conceptual" connection between dogs and barking, this will be in part to emphasize that inferential patterns at issue exist at the level of thought, and have centrally to do with what's involved in thinking about dogs and barking. Depending on your theory of concepts, you may or may not think it is literally true that the connection *is part of* the concepts dog and barking. Our interest is in the stereotypical connections and the inferences they tend to license, not in the nature of concepts.

What is important to us is that inference tickets are tied to *stereotypes*, where stereotypes are conceptual (in some sense) associations, which can be more or less *tight* vis-à-vis a given constituent of thought (e.g., the mental object CAT LADY). They can also be made more or less *salient* by corresponding linguistic expressions (e.g., the phrase 'cat lady').

There has been significant work in social and cognitive psychology on the role of stereotypes in categorization and inference.⁷ Following this literature, we will understand stereotypes as mental representations of characteristic features, like *x* is athletic or *x* has four legs, corresponding to (perceived) instances of the relevant category or concept. (Note that we are not using "stereotype" in a pejorative sense – some stereotypes are generally accurate and unobjectionable, like the stereotype associating having four legs with CHAIR. Others, of course, are more problematic.)

The more prototypical of a category or concept a given stereotype is perceived to be, the more likely it is to be activated by occasions of relevant linguistic expressions or salient candidate instances, and employed in determinations of category membership. Many psychologists, and some philosophers, have accordingly proposed *prototype theories*, on which concepts and lexical meanings themselves *just are* structured relations of more-or-less prototypical representations. 9

As we said above, we do not wish to commit to any theory of concepts. But regardless of whether concepts or word meanings *are* structured relations of prototypical representations, it is obvious that many concepts and words are conceptually *associated*

²See, e.g., Peacocke (1992); Margolis and Laurence (2007).

³See, e.g., Freund (2020); Coleman and Kay (1981); Fodor (1998); Fodor and Lepore (1998); Fodor (2008)

⁴See, e.g., Prinz (2002), Fodor (1981), Margolis and Laurence (2013).

⁵See, e.g., Machery (2009), Weiskopf (2010).

⁶We have our own ideas about the structure of concepts, but we think there are good theoretical reasons to prefer a level of explanation that abstracts from theories of concepts. In addition to being more ecumenical, we think our story, given in terms of stereotypes, has greater explanatory power than any particular explanation given in terms of a particular theory of concepts would be. (Compare Hilary Putnam's (1975) discussion of psychological vs. physical explanations – and of geometrical vs. molecular ones. Echoing one of Putnam's arguments, our normative inference tickets framework might well give a unified explanation in two possible worlds – a world where atomism is correct and a world where the prototype theory is correct, so long as the stereotypical associations in each world are the same. See also Scheman (2000) on similar themes.)

⁷See, e.g., Rosch and Mervis (1975), Rosch (1978), Hamilton and Sherman (1994), Bordalo *et al.* (2016), among others.

⁸Rosch (1978).

⁹See, e.g., Coleman and Kay (1981); Freund (2020).

4 Jen Foster and Jonathan Ichikawa

with a series of stereotypical connections. These stereotypical connections will play central roles in our paper.

Figure 1 is an illustration exhibiting a possible stereotypical structure associated with the concept DOG.

The concept DOG is associated with many stereotypes.¹⁰ Some stereotypes are closer to the core of the stereotype map. The closer to the core a feature is, the more salient it will be made upon activation of the concept. So too, we will suggest, the more easily it will underwrite an inference ticket.

Not all inferences connected to stereotypes are natural. By default, the inference from *Rover is a dog* to *Rover isn't allowed in apartments* is a wacky inference. The mental connection between being a dog and not being allowed in apartments is a weak and non-central one. (We represented this by including that property in small typeface and far off to the left of the center of the figure.) Without a significant amount of background context (say, a conversation about apartment hunting, or the reasoner's being a real-estate agent), it would be strange for someone to reason directly and automatically from *Rover is a dog* to the conclusion that *Rover isn't allowed in apartments*.

Similarly, though the generic sentence

(1) Dogs are pets.

is fine, the generic sentence

(2) Dogs are not allowed in apartments.

is questionable at best, and to most ears (perhaps excepting real estate agents or land-lords) probably even false. By contrast, the direct inference from *Rover is a dog* to *Rover is a pet* seems far less wacky by comparison. This inference, though not deductively valid, has a *general* reasonability underwriting it. The connection between DOG and PET is much tighter and more robust. Under many ordinary circumstances, one might reasonably infer, perhaps even come to know, that Rover is a pet, by inferring it from his being a dog. ¹¹

Generic sentences like the ones above are often useful for getting a sense of the phenomenon we're interested in. But inference tickets are not simply a special case

¹⁰A prototype theorist of concepts might identify the concept DOG with such a structured network of stereotypical associations. But proponents of competing theories of concepts should also allow that there are such structured associations of prototypes, even if they do not identify them with concepts. On Jerry Fodor's atomism, for example, concepts themselves don't encode stereotypical associations, but the approach does posit "mental files" associated with the unstructured concepts, and these files encode the features and representations that, on the prototype theories, are actually part of the concept. See, e.g., Fodor (1998); Fodor and Lepore (1998); Fodor (2008); Margolis and Laurence (2007). On a Fodorian story, the general strategy we find plausible would be to recreate the centrality of certain stereotypes – which, on the prototype theory, is literally a fact about the structure of the concept – within the "mental file" attached to the atomic concept on the Fodorian view. For empirical adequacy, the Fodorian must agree that the mental file has a hierarchy of salience and automaticity; some information recorded in it will be very conspicuous, upon activation of the concept, while some information would require deliberate thought to recover. The more central information in the file, on this view, corresponds to the stronger associations within the concept, on the prototype view. One can tell a very similar story about normative inference tickets at the level of mental files instead of at the level of concepts, if one prefers to do so.

¹¹These sorts of default inference patterns have been explored via non-monotonic "default" logics; we'll discuss such logics in Section 3.

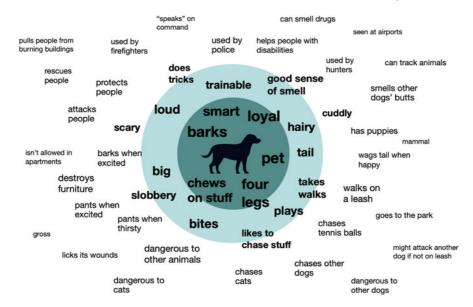


Figure 1. Dense core model of DOG stereotypes.

of generics, for at least three reasons. First, generics are typically characterized linguistically – they are a particular kind of sentence. Our inference tickets exist most fundamentally at the level of thought. Second, some generics do not seem to license the corresponding inference tickets. 'Mosquitoes carry the West Nile Virus', for example, is often characterized as a true generic sentence, but we do not automatically judge that something carries the West Nile Virus upon calling it a mosquito. Third, not all normative inference tickets seem closely connected to *any* generic construction. What generic encodes the inference from 'it's 10:00' to 'it's J's bedtime'? 'J's bedtime is 10:00' is not a generic sentence – unlike 'children's bedtimes are before 10:00', it is specific to J.

We do think there is an interesting relationship between inference tickets and generics. Sarah-Jane Leslie (2017) in particular has highlighted the way that generics, in entrenching and perpetuating stereotypes, can have important normative implications. The correct semantic theory of generics should help explain why sentences of that kind often tend to be associated with the patterns of thought that interest us. But the project of providing such a semantic theory – the main focus of the philosophical literature on generics – is quite different from our project about automatic normative inferences. Reasoning with stereotypes does not always involve reasoning with generics.

Inference tickets exploit connections close to the stereotypical core. They can also bring stereotypes that might not be close to the core otherwise, closer. For example, suppose it's 2016 and you hear that *Ghostbusters* is being remade, but you don't know further details. Since you saw the original *Ghostbusters*, your (inchoate) concept of the new *Ghostbusters* movie already has some stereotypes attached to it – e.g., being a movie, being funny, being about guys fighting ghosts. Probably not associated at all, or certainly not near the core, are the stereotypes being a chick flick and (assuming you liked the original) being bad.

But now you learn that the leads of the Ghostbusters remake are all women. Your stereotypical representation of the new Ghostbusters movie includes a new feature being a movie with female leads, which brings along the feature being a chick flick. And if you are like many YouTube commentators in 2016, these new associations may suddenly "make it make sense" to conclude that the new Ghostbusters, being a chick flick, is uncool, emasculating, not worth seeing, etc. The stereotype is a movie with female leads, we claim, underwrites an automatic and largely unreflective inference ticket to is a chick flick; and is a chick flick, for a very significant population of speakers, is a shortcut to is not worth seeing.¹²

Inference tickets, therefore, influence thought in profound ways. To change an inference ticket would be to change which patterns of thought one treats as automatic. In the normative cases we're interested in, they also represent a mode of normative valence shifting. Thus we also get inference tickets from posits a conspiracy to should be dismissed out-of-hand and is a woman with five cats to is romantically undesirable.

This is part of why we are especially interested in *normative* inference tickets. Such tickets license conclusions with normative import. Changing these licenses changes patterns of normative thought.¹³

3. Stereotypes and inference tickets

Anyone who knows that Clifford is a big red dog probably knows other things about Clifford too. They probably know, for instance, that Clifford is not tiny. If they thought he was tiny - or even that he might be - it's hard to see how they could know that he is a big red dog. Likewise if they were agnostic as to whether he is black.

This is more about the thought x is a big red dog than it is about Clifford, or about knowledge. If someone believes (whether or not they know) that Fifi is a big red dog, one expects them to believe that Fifi is not tiny. If one daydreams about any big red dog, they daydream about something that is not black. There are central inferential connections between the feature x is a big red dog and the features x is tiny and x is black. These can be represented thus:

$$\frac{x \text{ is a big red dog}}{x \text{ is not black}}$$

$$\frac{x \text{ is a big red dog}}{x \text{ is not tiny}}$$

These inferences are not brute; the prototypical route from x is a big red dog to x is not tiny runs via x is big; hence the name "inference ticket" (Figure 2).

This type of input-output diagram, like the dense core model given for DOG in Figure 1, is a useful way for characterizing some of the inferential connections activated

¹²This example is from Foster (forthcoming). Not everyone will find this inference tempting - many people like chick flicks! As we'll discuss below, inference tickets are often specific to particular subcultures. ¹³This is why so-called "conceptual ethics" has normative significance. See, e.g., Burgess and Plunkett (2013, 2020). One could think of our project as a kind of "conceptual engineering," especially on a broad notion of that category that includes emphasis on the evaluation of concepts and terms. See, e.g., Chalmers (2020: 3).

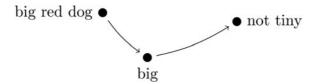


Figure 2. Input and output inferences for is big.

by a given thought or concept. Our input-output diagrams, unlike dense core models, only include more central prototypical elements involved in the relevant concepts, not more distant ones. (The small font in Figure 1 wouldn't show up in a diagram like this.) They also convey stereotypical *directionality* in a way not emphasized in dense core models. A dense core model for BIG stereotypes would include associations with Mt. Everest and with not being tiny, but a standard diagram would not indicate, as this one does, that there are privileged inferential directions corresponding to those prototypical connections.

In the case just mentioned, the stereotypes associated with *x* is big provide an inference ticket that licenses one to move from *x* is a big red dog to *x* is not tiny. The ticket lets one get from the first thought to the second. Think of them as "mental shortcuts" – direct inferential paths to conclusions that would otherwise take a longer, more circuitous "route" to access.

Positing inference tickets involves privileging particular inferential patterns. One possible rather strong way to implement this idea would treat dispositions to particular inferential patterns as (at least partly) constitutive of entertaining the contents in question. ¹⁴ This is one way to characterize *analytic* inference. ¹⁵ Standard examples of putatively analytic inferential connections are particularly clear examples of our category, but not all inference tickets are analytic, at least according to traditional notions of analyticity. We think, for instance, that the concept <code>DOG</code> is associated with a set of stereotypical connections that underwrites this inference ticket:

$\frac{x \text{ is a dog}}{x \text{ barks when excited}}$

The point isn't that most people happen to know that dogs bark when excited, and so can use that knowledge in the form of an inference. The inference is much more automatic than that – it corresponds to stereotypes close to the core.

This inference is not valid – it is not guaranteed to be truth-preserving whenever used. But it does, we think, have important commonalities with the inferences above: it's an inference most people familiar with dogs will make, at least quite often, absent special reason to withhold it. *Ceteris paribus*, x's status as a dog is a perfectly good reason to think x will bark when excited; this is a reliable stereotype. In suitable circumstances, this inference ticket will give knowledge. Other inference tickets are less benign

¹⁴No competent subject, the thought goes, could genuinely, non-deferentially possess the concept *x* is big without being disposed to infer to it from *x* is a big red dog, and from it to *x* is not tiny. As we have emphasized, however, we remain neutral on theories of concepts in this paper, so we do not commit to such an approach.

¹⁵See, e.g., Peacocke (1992, 2003), Boghossian (2003), or Wedgwood (2007: 164-65).

- they correspond to stereotypes we have good reason to resist. The stereotypes associated with CAT LADY and CHICK FLICK, for instance, both perpetuate sexist associations.

One can think of the relation we're describing as a kind of weakening of deductive entailment. It isn't actual entailment – it's perfectly possible to be a dog that doesn't bark – but it's a relatively core part of our conception of dogs that *most* dogs – and certainly the most *typical* dogs – bark. There is a *default* connection available.

Not all default inferences are *a priori*; clearly their rationality is often shaped by experience. ¹⁶ Moreover, because they are shaped by particular patterns of experience, as well as by broad memes like stories and stereotypes in the cultural imagination, the availability of an inference ticket will often be specific to a given culture or subculture, as in the case of J's bedtime.

So-called "default logics" are designed to systematize reasoning of this kind. ¹⁷ Classical logic and other monotonic logics capture only entailment; the most they can say about the inference from *x* is a dog to *x* barks when excited is that it is invalid. Non-monotonic logics seek to capture the sense in which inferences like this are good. On non-monotonic logics, whether an inference is licensed doesn't depend only on whether there are premises that adequately support it; a given set of premises might support a conclusion typically, but fail to do so given additional information.

Consider these inferences:

$$\frac{x \text{ is a bird}}{x \text{ flies}} \quad \frac{x \text{ is a bird}, \ x \text{ is a penguin}}{x \text{ flies}}$$

The first is typically good, but the second isn't: in the presence of additional information, the shared premise does not license the conclusion. ¹⁸ The non-monotonic feature of defeasible inference makes its systematization challenging. But logicians are motivated to develop such projects because they reflect what clearly is a critical feature of human reasoning. Our own interests are not formal, but they are motivated by the same psychological and epistemic phenomena.

One upshot of the complexity and contingency of inference tickets is that their availability is not a fixed matter. They can be modified, improved, rejected, augmented, or replaced. As we'll go on to emphasize, this places them within the realm of morality and practical reasoning. We can, and should, critically consider what inference tickets we *ought* to use.

4. Input and output conditions

The "inference ticket" label was made famous by Prior's (1960) *Analysis* article, "The Runabout Inference-Ticket." Prior noticed that an attractive approach to logical connectives, if unrestricted, has implausible results. Logical connectives, Prior observed, have characteristic inferential *inputs*, and also characteristic *outputs*. For example, the propositional connective AND is closely tied to these three inferential forms – the first is an input condition, describing when one may infer *to* an AND claim; the latter two describe

 $^{^{16}}$ Some approaches to the *a priori* allow that empirically informed concepts can rationalize beliefs *a priori* – see, e.g., Jenkins (2008). On a view like Jenkins's, where concepts themselves encode rich empirically informed information, there might be a closer connection between inference tickets, apriority, and conceptual representation.

¹⁷See, e.g., Reiter (1980), Horty (2012).

¹⁸This example is from Horty (2012: 16).

output conditions, which are about what one may infer from an AND claim:

$$\frac{P, \ Q}{P \text{ and } Q} \quad \frac{P \text{ and } Q}{P} \quad \frac{P \text{ and } Q}{Q}$$

Prior's observation was that if one is free to specify input and output rules for concepts as one pleases, one can articulate concepts that provide undesirable inference tickets. He posits the propositional connective TONK, which is stipulated to be characterized by these inference rules:

$$\frac{P}{P \text{ tonk } Q} \quad \frac{P \text{ tonk } Q}{Q}$$

Such a connective is a "runabout inference ticket" – it permits one to get anywhere from anywhere. Let *P* be wherever one starts, and *Q* be wherever one wishes to get; one may infer: *P*, so *P tonk Q*, so *Q*.

A standard moral drawn from Prior's paper is that a concept's input and output rules must match up in a certain way: adding TONK, and the associated inferences characterized above, to one's conceptual repertoire, would legitimate new inferences. As Michael Dummett puts it, the input and output rules for a new term must be *harmonious* – by which he means they must result in a *conservative extension* of one's previous language. Pephrased into our terminology, Dummett's idea is that inference tickets should at most provide *redundant routes*; they must not provide genuinely new access.

To illustrate, assume an initial language in which one may infer from *A* to *B*, but not from *A* to *C*, as in Figure 3a. If one introduces a new term *D*, which one reaches via *A*, but which does not provide access to *C*, as in Figure 3b, nothing expressible in the first language will be true in the second language unless it is true in the first language as well. So *D*'s inferential roles are *harmonious* in Dummett's sense.

But in Figure 3c, we contemplate different rules for D – one may infer from A to D, and from D to C. D thus provides an inference ticket from A to C, where no such route was initially available. This unharmonious extension, according to Dummett, uses a term with inadmissible inferential roles.

This framework is our starting place, but our interests are distinct from the logical ones Prior and Dummett focused on. As we have already indicated, we do not think the relevant connections need always be deductive, even when they are proper. (So we cannot agree that the problem with TONK is that it allows invalid inferences.²⁰) And we are not particularly interested in terms that are introduced via stipulated inferential relations; the inference tickets we are concerned with form important parts of our social and practical realities. It's not just a matter of what inferences are *available* to *individuals* – it is a question of epistemological, moral, and political significance, which inferences are natural and automatic at a broader social level.

5. Making things more explicit

We're now in a position to describe the BEDTIME example from our Introduction in more detail. Our friends, you may remember, know that J needs to go to bed by 10:00 – 10:00

¹⁹Dummett (1973: 396–97). Dummett focuses at the linguistic level on questions about the inferential roles for terms in a language. It is standard to interpret his ideas as applicable to concepts and thoughts as well.

²⁰On these two points we are in agreement with Brandom (1994: 126-27).

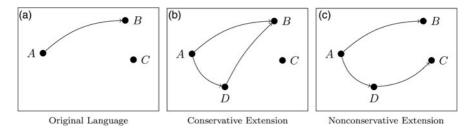


Figure 3. Redundant and non-redundant extensions.

is J's bedtime. In our framework, the concept J's BEDTIME is associated with a network of stereotypical connections that provide an inference ticket from *it's after 10:00* to *J should be in bed*. These are plausible input and output rules:

$$\frac{\text{it's after 10:00}}{\text{it's past J's bedtime}} \quad \frac{\text{it's past J's bedtime}}{\text{J should be in bed}}$$

When we say that J's BEDTIME is associated with an inference ticket licensing these rules, we certainly do not mean to suggest that concepts are typically associated one-to-one with privileged input-output rule pairs. A dense core model of the J's BEDTIME stereotypes would reveal many other central associations (as well as many more peripheral ones). We think there are many other inference tickets that are *also* associated with J's BEDTIME. For example, one needn't consider its being *past* J's bedtime as in any sense conceptually fundamental. One might wish to focus on inference tickets that focus on what happens *before* bedtime – if it is close to bedtime, for instance, one should avoid caffeine or exercise. The inference ticket characterized above isn't the only one available; it's just the one we've selected for illustration.

The output rule we articulated might actually be both analytic and entailing – plausibly, 10:00 wouldn't count as J's bedtime if J weren't supposed to be in bed then. But the input rule is clearly conventional and contingent. Still, we think both inferences are welcome; the new routes they provide are useful ones. ²¹

In other words, the advantages of useful inference tickets need not consist in their ability to get us places we couldn't get before. It's also useful to be able to travel existing paths more easily, efficiently, and automatically. Our $D \not e D$ group converged on the J's bedtime ticket gradually – but now that we have it, it's only a matter of checking the time to know that we should wrap up. These inference tickets are also importantly *communal* – they're not merely available to individuals thinking alone, but to social groups engaged in collective coordination and decision-making. They are *productive*, in the sense that they help facilitate social organization, and prescribe particular behaviors.²²

Our group could have reasoned our way to the conclusions in question without such an inference ticket. We might eventually have noticed the negative correlation between the late hour and J's social contributions, and so abductively confirmed a hypothesis to the effect that *if it's after 10:00pm*, *J should go to bed*. On any given

²¹Compare Brandom's (1994) discussion of non-conservative but useful concepts in science.

 $^{^{22}}$ Such inference tickets therefore play a coordinating role in what Haslanger (2019: 13) calls "cultural techne."

night, we could have performed that abductive inference. But we have more fully internalized the thought; we are not coming to a decision about whether to end the evening on a given night by generalizing on our past experience via abductive inference – our past knowledge has given us a concept that lets us infer this directly. The shortcut is available and automatic. (It can be resisted – someone might ask, "do we really need to stop just because it's 10:10?" This would trigger a slower deliberation about whether to follow this inferential pattern in this instance. This might or might not be helpful, depending on the circumstances.)

In both deductive and non-deductive cases, the automaticity of learned inference tickets can provide helpful shortcuts. Consider one of De Morgan's laws:

 $\frac{\text{not both } P \text{ and } Q}{\text{not } P \text{ or not } Q}$

If you have studied logic you might find this inference immediately obvious; but imagine a student who does not. When initially considering whether *not both P and Q* implies *not P or not Q*, our student has no immediate intuitive reaction. But they do have the logical sophistication to work it out. They could draw the relevant truth tables, for instance, and observe that on no interpretation is the negated conjunction true, while the disjunction is false. Or they can derive the *reductio* proof of the entailment. In this sense, the inference pattern described above is available, but it would need to be worked out.

Something interesting happens when students learn De Morgan's laws. It's not that more inferential destinations become available – the rules represent a conservative extension of the previous rules. But they do learn new routes. De Morgan's laws let you move directly from a sentence, once you recognize it as the negation of a conjunction, to a disjunction of the negated conjuncts. In a natural deduction system they are literal shortcuts – they provide inference tickets that let you skip checkpoints you would have otherwise had to pass through. The resulting inferences are largely reflexive, highly intuitive, and, as far as cognitive processing power goes, efficient.

But not everything efficient is good – as Dummett emphasized, some inference rules license undesirable patterns of reasoning. Although we reject Dummett's requirement that a good inference ticket must be conservative, the restriction was motivated: there are bad inference tickets. We mentioned some in our Introduction; the next sections describe others in detail. Conceptual shortcuts, like most things, can be used for good or for ill. And when undesirable associations are conceptually privileged, resisting bad inferences will be much more difficult.

6. Harmful inference tickets

Here are some case studies involving harmful normative inference tickets.

6.1. He-said-she-said

Suppose you've received conflicting testimony on some matter, from the two individuals well-positioned to know what happened. X tells you that p, and Y tells you that not-p. What should you think happened? Obviously, it depends: if X is sufficiently credible, and Y's testimony comes with good reasons to doubt it, you should believe that p; if the reverse, you should believe that not-p. In other circumstances, you should

investigate further, to try to seek out more information about whom to believe. The final possibility is that you should submit to agnosticism – neither believing nor investigating, you might decide there's just going to be no way to find out.

Invoking the HE-SAID—SHE-SAID concept emphasizes that final possibility to the exclusion of the others. It tends to activate an inference ticket from conflicting testimony to skepticism:

X said p, Y said not-p, no one else was there it's a he-said-she-said situation with respect to p

it's a he-said–she-said situation with respect to pwe should suspend judgment about whether p

The import rule for a he-said–she-said situation can feel close to analytic, especially if it conforms to the stereotype, with *X* as female, *Y* as male, and *p* a description of inappropriate conduct by *Y* toward *X*. While it wouldn't be impossible, it would be conceptually and conversationally difficult to maintain that *X* and *Y* are giving contradictory reports about a situation in which they were the only witnesses, while denying that it is a he-said–she-said situation.

But the output rule is also extremely natural. Upon admitting that something is a he-said-she-said situation, one activates a tight set of stereotypical connections that tend to steer one toward the conclusion that one must suspend judgment. The thought will be reflexive – it will barely feel like an inferential step at all. The label strongly suggests a balance of reasons that prohibits belief, on pain of irrationality.

The point isn't that, if one possesses a concept of this form, one is committed to inevitable skepticism in all cases of conflicting testimony. Again, the connections inference tickets license don't have to be deductive. But it would require special pleading to suppose that this is an example of a he-said-she-said situation where one ought to accept her testimony and reject his. One would need conflicting reasons to avoid the skeptical result, or a defeater that undermines the generic inference as applied to this specific case.²³ The inference ticket provides a conceptual shortcut from conflicting testimony to skepticism; only in exceptional circumstances will resisting it feel plausible.

The pattern of reasoning above is not the only inference ticket supplied by the stereotypical connections involved with the concept HE-SAID—SHE-SAID. We think it's a particularly central one, but there are others. Figure 4 shows a possible dense core model for the stereotypes someone might associate with HE-SAID—SHE-SAID. (The particular stereotypical associations will vary between individuals; in this case, they are likely to vary significantly by political affiliation. We have constructed one possible dense core model for illustration.)

Although the exact network of stereotypes attached to a concept can vary from person to person, commonalities between people within a culture give rise to *communal* inference tickets. Consequently, their effects extend well beyond any individual's thoughts. Unlike in the case of j's BEDTIME, where the community in question was a relatively small social circle, the reach of the HE-SAID-SHE-SAID inference ticket extends to society at large. In individual or collective deliberation, it will take one *from* conflicting

²³For a more detailed discussion of conflicting reasons and defeaters in default reasoning, see Horty (2012: 47–49).

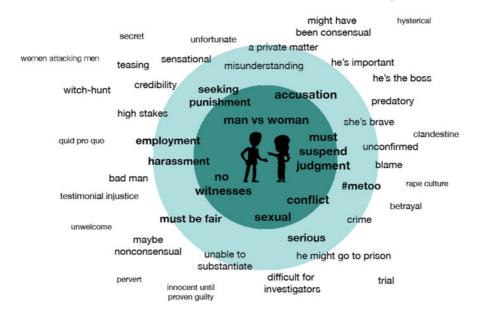


Figure 4. Possible dense core model of HE-SAID-SHE-SAID stereotypes.

testimony, especially involving alleged wrongdoing by man Y against woman X, to skepticism. The stereotypes associated with the concept HE-SAID-SHE-SAID prime people – indeed, whole cultures – to ignore the other possibilities: believing X, believing Y, and undertaking further investigation to decide what to believe.

Indeed, that seems to be its point. As Leigh Gilmore puts it in her book *Tainted Witness*, "[w]hen their stories conflict, the shorthand judgment 'he said/she said' misrepresents a cultural bias against women's testimony as the false equality of rational skepticism and objectivity. He said/she said represents the creation of a false pairing of culpability in the face of unequal harm, action, and exposure to risk" Gilmore (2017: 45).²⁴

The problem with this inference ticket is not merely that it misleads. It does mislead, when testimonial knowledge is possible. But a communal tendency toward skepticism in "he-said–she-said" cases also results in social harms. In particular, it will perpetuate rape culture by facilitating the dismissal of sexual assault complaints, thus preventing accountability for perpetrators and reinforcing conditions for further wrongdoing. ²⁵ Bad inference tickets can contribute to moral harms, as well as epistemic ones.

6.2. Slurs

Dummett applied his approach to unharmonious concepts to slurs: the problem, he said, is that they provide inferential routes that would be unavailable without them. Dummett's example of a slur is the slang term 'boche', to refer pejoratively to Germans. It is a shortening of 'alboche', a French portmanteau of 'allemand'

²⁴The phrase 'he-said-she-said' came into widespread use in 1991, in connection to the Clarence Thomas Supreme Court confirmation hearings; see Safire (1998).

²⁵See Crewe and Ichikawa (2021: 259), Ichikawa (forthcoming: Section 7.5).

14 Jen Foster and Jonathan Ichikawa

('German') and 'caboche' ('cabbage'). 'Alboche', it seems, carried roughly the connotation of 'German numbskull' during the early twentieth century.²⁶ Dummett describes 'boche' thus:

The condition for applying the term to someone is that he is of German nationality; the consequences of its application are that he is barbarous and more prone to cruelty than other Europeans. We should envisage the connections in both directions as sufficiently tight as to be involved in the very meaning of the word: neither could be severed without altering its meaning. Someone who rejects the word does so because he does not want to permit a transition from the grounds for applying the term to the consequences of doing so. The addition of the term "Boche" to a language which did not previously contain it would be to produce a nonconservative extension, i.e. one in which certain statements which did not contain the term were inferrable from other statements not containing it which were not previously inferrable. (Dummett 1973: 454)

We ourselves are not fluent with 'boche'. This is reason for caution; there are good reasons to be methodologically suspicious of theorizing about expressions one doesn't use. ²⁷ Nevertheless, we take it Dummett intends the point generally; and we are sufficiently familiar with the broader operation of pejoratives to critically evaluate it.

We reject Dummett's explanation for the badness of 'boche' in terms of its non-conservative extension of a pre-'boche' language. We also are not convinced that inferentialism is the best theory of the *meanings* of slurs. We do agree, however, that one harmful feature of slurs is that they tend to activate undesirable inferential routes.

Dummett's discussion of 'boche' suggests these inferential roles:

$$\frac{x \text{ is German}}{x \text{ is boche}}$$
 $\frac{x \text{ is boche}}{x \text{ is cruel}}$

So BOCHE stereotypes provide inference tickets from someone's being German to someone's being cruel. We agree with Dummett that this is an undesirable route to have open. But this is not because it wasn't open in a pre-'boche' language; rather, it's because it would have a tendency to further a harmful stereotype in a post-war world. It's bad in at least two ways: it is unreliable, and so conducive to false beliefs; it is also morally objectionable, insofar as it perpetuates bigotry.

Dummett focuses on deductive inferences – he treats the inferential forms above as exceptionless. Consider the input rule:

$$\frac{x \text{ is German}}{x \text{ is boche}}$$

Understood as a deductive entailment, this inference corresponds to what remains a very widespread assumption in the philosophical literature on slurs; namely, that slurs have non-slur "neutral counterparts," equivalent in extension, but stripped of their pejorative force. It follows from this assumption that 'Boche' and 'German' are

²⁶See Buffum (1916).

²⁷See Foster (forthcoming: Section 8).

extensionally equivalent; and were this so, then of course Dummett would be right that the inference from *x* is German to *x* is boche would be deductive.

Foster (forthcoming) challenges this assumption, ²⁸ arguing that the systematic relationship between slurs and their so-called "neutral counterparts," rather than extensional equivalence, involves substantial *overlap* in extension (or at least a presumption to that effect by competent users), underwritten by substantial overlap in associated stereotypes. While we do not take a stand on the actual semantics of slurs and "neutral counterpart" terms here, ²⁹ we agree with Foster that the ordinary bigotry associated with slurs is systematically *exception-granting* with respect to input rules like the one above. And, as she also emphasizes that this is part of why it can be so pernicious. ³⁰

It is not difficult to imagine a fluent user of 'boche' – an interwar English World War I veteran, say – who has developed strong, bigoted associations between Germans and cruelty, but who nevertheless allows that there can be "exceptions to the rule." He might develop a friendship with a German gardener, whom he fully recognizes to be German, but does not consider to be "boche." His friend, he thinks, is German, but isn't "boche" (and isn't cruel). If our veteran is like ordinary users of more familiar slurs, this possibility will seem to him just as mundane as the possibility that Dino is a dog who doesn't bark, even when excited. One needn't think that *all* Germans are "boche," to be a "prototypical" user of the term. (Nor for that matter that all "boche" people are German!)

Understanding the stereotypical connections associated with slurs as involving automatic but defeasible normative inference tickets helps make sense of Foster's observations about slur use.

6.3. Genocidal language games

In her (2012) "Genocidal Language Games," Lynne Tirrell argues that linguistic practices like the use of particular ethnic slurs contributed in important ways to the 1994 genocide in Rwanda. Our approach to inference tickets can help illustrate how this was possible. We will be brief, as Tirrell herself draws many of the connections between her cases and conceptual inferential roles.³¹ Our aim is to illustrate how her observations fit into our pattern.

Tirrell focuses particularly on the Kinyarwandan words 'inyenzi' (cockroach) and 'inzoka' (snake). Both were used as labels for Tutsi people as ethnic hate speech; both, Tirrell argues, contributed to the willingness of Hutu to participate in atrocities. She describes both input and output rules for *x* is inyenzi. The input rule establishes that Tusi are inyenzi; the output rules are explicitly normative: inyenzi are threatening,

²⁸For other challenges to this assumption, see Croom (2015), Ashwell (2016), Neufeld (2019), or DiFranco (2015).

²⁹Inferentialism about slurs – the idea that their meaning is constituted by particular kinds of pejorative inferences – may seem like the natural semantic choice for explaining the associated normative inference tickets. See Tirrell (2012). But inferentialism is only one of many approaches to slurs defended in the philosophical literature. We take it to be a constraint on the empirical adequacy of any view of slurs that it be consistent with automatic stereotypical normative connections; this is all we need to get our project off the ground. We'll discuss this further in Section 6.3.

³⁰Compare Begby (2013).

³¹See especially Tirrell (2012: 188, 196, and 201).

lacking in humanity, and to be killed.32

$$\frac{x \text{ is Tutsi}}{x \text{ is inyenzi}}$$
 $\frac{x \text{ is inyenzi}}{x \text{ should be eliminated}}$

These inferential rules provide a straightforward inference ticket from an ethnicity to a call to murder. "Woe betide those whose identity cards bore the word 'Tutsi," André Sibomana told Laure Guilbert and Hervé Deguine. "Those five letters amounted to a death sentence, with immediate execution." ³³

Tirrell's discussion is part of a theoretical project that involves a particular inferentialist approach to *inyenzi*, and to derogatory terms in general.³⁴ As we indicated in Section 6.2, we do not commit to such inferentialism. Whatever one's theory of slurs and other derogatory expressions, it is obvious that they have a tendency to activate tight negative stereotypical associations. One doesn't have to be an inferentialist to recognize that calling members of a marginalized ethnic group cockroaches tends to activate negative stereotypes, and associated harmful inference tickets.

We won't rehearse Tirrell's discussion of the causal influence of these inferential patterns in the Rwandan genocide; our brief discussion of it here is intended simply as an illustration of the breadth of applications of our framework. We recommend Tirrell's paper for further analysis, including discussion of the ways in which inferential roles change over use and time.

The harmful inference tickets we've been discussing so far involve cases where the negative normative import is obvious: rape culture, bigotry, and genocide are uncontroversially harmful. There are also examples of pernicious inference tickets, where the harms in question tend to fly under the radar. We turn to one now.

6.4. Conspiracy theories

In a recent paper, Charles Pigden has argued that the phrase 'conspiracy theory' is a "tonkish" term. Like 'tonk', Pigden suggests, 'conspiracy theory' is characterized by inferential roles that can sometimes lead from truth to falsehood. Pigden (2023: 430) posits this pair of rules:

$$\frac{x \text{ is a theory which posits a conspiracy}}{x \text{ is a conspiracy theory}} \frac{x \text{ is a conspiracy theory}}{x \text{ is false, crazy, or unbelievable}}$$

(Pigden's discussion is given explicitly in terms of *terms*. Because throughout this paper, we're interested in the role of stereotypical connections in thought, we will also consider the conceptual analogue of Pigden's suggestion, which would associate these inference rules with the concept CONSPIRACY THEORY.)

As Pigden points out, these rules are not conservative – they permit inferential connections that would be unavailable without them. Moreover, many of those connections would introduce epistemic errors, since there are, as Pigden has emphasized in some of

 $^{^{32}}$ Tirrell (2012: 196). As Tirrell also remarks (201), the association provides a variety of related possible permitted inferences, corresponding to various stereotypes attached to cockroaches: x's are difficult to eradicate: etc.

³³Sibomana et al. (1999: 87), quoted in Tirrell (2012: 202).

³⁴See especially Tirrell (2012: 187–93).

his previous work, in fact many theories which posit conspiracies, but which are not false, crazy, or unbelievable. Consider for example the widely-accepted "theory" that the 9/11 attack on the World Trade Tower in 2001 was the result of an al-Qaeda conspiracy (Pigden 2006: 157–58).

We think Pigden is onto something important here, but that there are some respects in which he may overstate his case. He doesn't say exactly what it takes to count as a "tonkish" term or concept – his paper includes an explanation of Prior's (1960) TONK similar to ours above, then just says that Conspiracy theory is similarly problematic for allowing inferential routes from truth to falsehood. But there are some important respects in which the case Pigden makes for Conspiracy theory is quite unlike the case of Tonk.

First and most obviously, Prior gave TONK a stipulative definition in terms of its unharmonious inference rules. 'Conspiracy theory' is a natural language label that is learned in the ordinary way, primarily by exposure to other competent users' use of the term. Second, no doubt relatedly, the inferential connections Pigden posits for CONSPIRACY THEORY leave considerable room for debate. (And indeed, there is considerable philosophical debate on just this question, as we'll discuss below.) One might wish to deny, for instance, that there really is a good inference from positing a conspiracy to being a conspiracy theory. The case of well-established historical conspiracies makes this avenue particularly plausible. Would any ordinary speaker really be inclined to describe the idea that 9/11 was the result of a clandestine organization's evil plans as a conspiracy theory? Even though we think there is something accurate about Pigden's description of the inferential roles given above, the connection between them and the idea of a conspiracy theory is weaker in important ways than that for tonk and its inference rules.

As Prior (1960) observed, if one employed a concept like TONK with its stipulated inferential roles, one would literally have to hold that every proposition is true. Pigden's proposed CONSPIRACY THEORY rules are not quite so explosive as that, but Pigden is right that they are deeply problematic, from an epistemic perspective: they imply that literally every theory that posits a conspiracy is false, crazy, or unbelievable. Consequently, however, Pigden's proposal renders it somewhat mysterious why it is that are many people who are fluent in "conspiracy theory" discourse who think there are some perfectly reasonable theories that posit conspiracies.

We think that the better way to implement Pigden's insight is via our notion of normative inference tickets. Conspiracy theory isn't literally tonkish in the sense that it licenses inconsistent meaning-constitutive inferences. But we are convinced by what we take to be Pigden's main point: that the label 'conspiracy theory' has a tendency to activate and strengthen automatic stereotypical associations along the lines he describes. Competent users of the term need not treat these inferences as exceptionless and analytic – one can hold that some conspiracy theories, like the 9/11 hijacker theory, are rational. But conspiracy theory does tend to activate a network of strong "conceptual" connections between positing conspiracies and irrationality. To deny the output

³⁵Cf. Hauswald (2023: 498): "[I]n ordinary language and public discourse, the term does not simply denote any theory that explains an event by assuming a conspiracy. For example, the assumption that 9/11 was an inside job is usually considered a 'conspiracy theory,' whereas the official account is not labelled so; although it also explains the events by referring to a conspiracy by a small group of Islamists." Pigden seems to recognize some of these choice points, positing multiple non-equivalent options for CONSPIRACY THEORY inference rules in his paper.

inference ticket would be to say that it is not even true *ceteris paribus* that conspiracy theories are irrational. The connection doesn't need to be exceptionless to be robust. The field is tilted against someone who wishes to hold, *contra* the output rule, that a particular conspiracy theory is worth taking seriously.³⁶ That is why the presence of this inference ticket is a barrier to the uptake of ideas involving conspiracies – even ones that deserve to be taken seriously.

Likewise with the input rule. It's not impossible to posit a conspiracy while disclaiming the label 'conspiracy theory', but doing so, we think, would require special pleading. One might attempt to define 'conspiracy theory' by building irrationality in by definition – effectively attempting to deny the input rule above, insisting that one can only describe something as a conspiracy theory if it is an *unsubstantiated* theory positing a conspiracy.³⁷ But many dictionaries actually encode the simpler definition; here is *Merriam-Webster*'s: "a theory that explains an event or set of circumstances as the result of a secret plot by usually powerful conspirators."³⁸

We see similarly tight conceptual connections along these lines in colloquial discussions involving conspiracy theories. To take but one recent example, on January 18, 2021, a *National Public Radio* segment about "the psychology behind conspiracies," motivated primarily by discussions of QAnon, repeatedly demonstrated the assumption that accepting a "conspiracy" *ipso facto* amounts to conspiracy theory and its associated irrationality.³⁹ For example, it featured an interview with a self-described former conspiracy theorist; the interviewer introduced him by pointing out that he "used to believe in some conspiracies," then asked what had changed. Later in the program, the host asked listeners "if any of you know anyone who believed in a conspiracy." No one called in describing the al-Qaeda's conspiracy that led to 9/11, or the American revolutionaries' conspiracy that led to the Declaration of Independence!

The mismatch between input and output rules Pigden is emphasizing has motivated some theorists to a kind of conceptual engineering project, whereby the pejorative CONSPIRACY THEORY is separated from a more "purely descriptive" notion. M. Giulia Napolitano and Kevin Reuter, for example, suggest introducing a neutral term 'conspiratorial explanation' to refer to "the descriptive concept," distinguishing it from the existing pejorative one. ⁴⁰

We are reminded of the attempts to identify so-called "neutral counterparts" for slurs, discussed in Section 6.2. We agree that "conspiracy theory" and CONSPIRACY

³⁶See Napolitano and Reuter (2021) for detailed empirical arguments that the primary use of 'conspiracy theory' is a negative evaluative one.

³⁷We find another suggestion in this spirit in one of the alternate inferential roles Pigden also considers for CONSPIRACY THEORY in his paper. His "Tonkish Rules 3" involves an input rule that encodes an indexical sensitivity to the thinker: "from 'This is a theory that posits a conspiracy to which I (or the epistemic authorities I respect) do not subscribe' infer (that is, it is okay to infer) 'This is a conspiracy theory.'" (Pigden 2023: 431). We do not prefer this approach for the same reason discussed in the main text; we don't think it adequately represents the generality of the stereotypical connections between conspiracies and irrationality.

³⁸"Conspiracy theory." *Merriam-Webster.com Dictionary*, https://www.merriam-webster.com/dictionary/conspiracy%20theory. Accessed February 6, 2021. See also Coady (2019) for the same point in the context of psychiatric uses. Philosophers who have defended similar accounts of conspiracy theories – ones which do not build a negative evaluation into the meaning of the term – include Keeley (1999: 116) and Coady (2003: 199). See Keeley (2023: 414) for discussion.

³⁹https://thela.org/segments/conspiracy-theories-qanon-insurrection/.

⁴⁰Napolitano and Reuter (2021: 2058).

THEORY, like other pejorative expressions and the concepts they express, tend to activate strong stereotypical connections. But, also as in the case of other pejoratives, we are convinced by Foster (forthcoming) that the stereotypes associated with the pejorative 'conspiracy theory' will only *mostly overlap* with those associated with any candidate "neutral" notion along the lines of Napolitano and Reuter's 'conspiratorial explanation', or 'theory positing a conspiracy'. We've seen already that not all such theories tend to inspire the 'conspiracy theory' label; there also seem to be exceptions to the converse generalization, whereby one applies 'conspiracy theory' to an idea despite its not actually invoking a conspiracy. This, we think, is exactly analogous to the operation of ordinary slurs. 42

David Coady (2012: 126) argues against using the phrase 'conspiracy theory', on the grounds that we should not presume that an idea should be rejected simply because it involves positing a conspiracy. As Matthew Shields (2023) and Rico Hauswald (2023) both point out, the phrase is often used in epistemically and politically harmful ways. We feel the force of Coady's suggestion; we are sympathetic to the idea that the phrase 'conspiracy theory' has a tendency to activate substantive normative stereotypical associations that there may well be good epistemological and political reason to challenge. Although many people believe unreasonable and even dangerous things, we are not convinced that 'conspiracy theory' is a helpful label for illuminating them. Like 'he-said-she said', the 'conspiracy theory' label tends to activate the stereotypical connections constitutive of this inference ticket, and those connections create epistemic barriers to the uptake of certain ideas that may deserve to be taken seriously. Our framework can explain how this worry makes sense.

6.5. Epistemic and moral harms

Inference tickets can be bad in two ways. One is epistemic: a bad inference ticket can lead thinkers astray, yielding false beliefs. This represents an epistemic error, but the moral harms are quite conspicuous as well. Inference tickets can also be morally objectionable without being generally unreliable. ⁴⁴ Consider, for example, the connection between *x* is *y*'s mother and *y* should call *x* on Mother's Day. At least in our communities,

⁴¹A significant function of the label seems to be to denigrate ideas and exclude them from consideration. For more on this idea, see Walker (2018), Keeley (2023: 414), Hauswald (2023: 498), or Shields (2023).

⁴²Compare for example the use of the slur in "I always wanted a lesbian friend, lesbian not a dyke," and "Not all dykes are lesbians. I got a cousin who's a dyke but she has a husband," both cited in Foster (forthcoming).

⁴³But neither Shields nor Hauswald advocates ceasing use of the phrase. Hauswald suggests that the "dismissive conversational exercitives" characteristic of much "conspiracy" discourse are sometimes legitimate, and sometimes illegitimate (Hauswald 2023: 499–500). Shields advocates linguistic reform, suggesting that people should use the term in a more neutral sense, without any pejorative connotation (Shields 2023: 472–73). For our part, we are skeptical about the plausibility of such a project of reform.

⁴⁴An inference ticket's reliability might sometimes be derived from the very source of its harm. We have in mind inference tickets that may reflect bad ideologies that mold the world to fit them. Cf. Langton (2009: 300) on "maker's knowledge" and self-fulfilling representations. Perhaps these are additional respects in which bad ideologies "make themselves true" – see Haslanger (2017: 15, 2019: 22). One stereotype of a professor, for example, involves an inference ticket from *x* is a professor to *x* is bad at administrative work. The prevalence of this communal inference ticket might well lead many professors to disvalue careful administrative work, thus contributing to harm while also rendering the inference more reliable. In the main text, however, we focus on morally troublesome inference tickets whose reliability is explained by the more conventional world-to-mind direction of fit.

there is a strong conceptual association here that amounts to an inference ticket. It is at least pretty reliable: if y is x's mother, it will quite often be the case that x should call y on Mother's Day. Maybe one can reasonably infer the latter on the basis of the former. But we also think there are moral concerns about the automaticity of this inference.

There are people who have no obligation to call their mothers on Mother's Day – many survivors of maternal child abuse, for instance, depend for their well-being on distance from their mothers (and similarly for many on Father's Day). This inference ticket would marginalize such people. For one thing, it will create a tendency for people to mistakenly think that they should call their mothers (and perhaps that they would be blameworthy not to). This will lead either to social approbation, if they flout the perceived norm, or potential psychological distress from engagement with their mothers, if they abide by it.

The inference is not inevitable; since it is defeasible, people might recognize a child abuse victim as an exception to the rule. But it is nevertheless potentially alienating to be conceptualized as exceptional in such contexts. Such an inference rule marginalizes its exceptions. This is among the costs that weigh against the advantages – the automaticity of the recognition, for others, that they should phone their mothers. Whether the cost is ultimately worth paying, or whether we would be better off as a society if people individually reasoned their way to conclusions about whether to phone their mothers on Mother's Day, we'll remain neutral on. The point of this discussion was simply to draw out the distinction between epistemic and moral harms of bad inference tickets.

Whether they're epistemically bad, morally bad, or both, whenever there are bad inference tickets, there is reason to pursue ameliorative projects to alter the associated stereotypes, replacing the bad inference tickets with good ones. But such reform is never easy; the exception-granting nature of stereotypical associations makes them resistant to counterexample. Even among people who recognize their harmful nature, they cannot simply be dismissed; their automatic character makes them difficult to "unlearn." Such resilience and automaticity are characteristic features of inference tickets, and they have clear advantages in the good cases – but in the case of bad inference tickets, they reinforce profound harms.

7. Hermeneutical injustice

We return now to good inference tickets. Sometimes – and by the same mechanisms at play in the bad cases – such shortcuts can be genuine moral and hermeneutical *advances*. Indeed, we believe that normative inference tickets can make more concrete Miranda Fricker's (2007) notion of "hermeneutical lacunae," and why filling those lacunae could make such an important difference to moral and political life.

One of Fricker's central examples highlights the hermeneutical advantages attached to coining the term 'sexual harassment'. Fricker contends that women who experienced sexual harassment before the concept SEXUAL HARASSMENT was socially available to them "suffered (among other things) an acute cognitive disadvantage from a gap in the collective hermeneutical resource" (2007: 151). Moreover, she says, the gap does not only affect victims of harassment; it renders their experience unintelligible to harassers as well. We think our notion of "inference tickets" helps illuminate the relevant sense in which concepts are "resources" – tools to make our epistemic and moral lives easier – to in turn explain why, exactly, a "lacuna" in such resources can be so bad.

A common interpretation of Fricker's hermeneutical injustice holds that that it primarily or exclusively involves gaps in hermeneutical resources, and that the resources in

question are concepts.⁴⁵ We do not identify the problem Fricker focuses on in terms of missing concepts. It may be that some hermeneutical injustices derive from a lack of important concepts like SEXUAL HARASSMENT, but whether this is so depends on the complex and substantive questions about the nature of concepts about which we (and, we presume, Fricker) prefer to remain neutral. On nativist approaches to concepts, for instance, there is literally no such thing as a missing concept. And by anybody's lights, the women Fricker writes about in her discussion of sexual harassment clearly had *some* concept they used to think and talk about the experiences they were having. Whether this could be "the" concept SEXUAL HARASSMENT depends on notoriously thorny questions about concept individuation over time and between individuals. But we think the concepts employed by the women in question enjoyed an important continuity with a concept that we would now recognize as SEXUAL HARASSMENT. This may well be a likely candidate for contributing to sameness of concept type.⁴⁶

Some philosophers have complained that Fricker's discussion erases the cognitive achievements of sexual harassment victims – especially women of color – who were able to think about the misconduct they were suffering, arguing that Fricker doesn't allow for diverse sets of hermeneutical resources in different communities. While we agree that this is an important dynamic that doesn't receive emphasis in Fricker's book, we do that think Fricker is right that some important hermeneutical resources were missing. We think those resources were normative inference tickets.

Whether or not there was a missing concept, early sexual harassment victims certainly suffered from a deficiency in the collective hermeneutical resources. In particular, their society did not include tight stereotypical connections encouraging automatic, reflexive mental shortcuts that would prompt inference – not just in their own heads but in their discussions with each other, and among the public level at large – from this is happening to this is wrong. 48

Insofar as inference tickets make inferences *easy and automatic*, the hermeneutical advantage of such a ticket in this instance is profound. It is of course true that, even in the absence of the concept SEXUAL HARASSMENT, the inference

 $\frac{x \text{ is repeatedly asking their co-worker } y \text{ on a date}}{x \text{ is sexually harassing } y}$

is available. Notably, though, getting there requires cognitive effort, and a significant amount of social knowledge and moral imagination. An established inference ticket makes it much easier:

 $\frac{x \text{ is repeatedly asking their co-worker } y \text{ on a date}}{x \text{ is sexually harassing } y} \frac{x \text{ is sexually harassing } y}{x \text{ is doing wrong}}$

⁴⁵We note that this requirement is not built into Fricker's own (2007: 158) definition, although she did commit to it in her later Fricker (2016: 170) – but see Crerar (2016: 198). Jenkins (2017) describes rape myths as "unusual" hermeneutical injustices, because the problem isn't the lack of a concept of CONSENT. Falbo (2022) points out that the assumption that "hermeneutical injustice requires *a lacuna* in the stock of hermeneutical resources used to interpret socially significant experiences" is widely accepted in discussions of hermeneutical injustice. Mason (2021) argues against this approach to hermeneutical injustice.

⁴⁶Compare the approach of Burge (1989) or Sawyer (2018).

⁴⁷E.g., Dotson (2012: 31), Medina (2013: 101-3). Compare Mason (2011).

⁴⁸See Pohlhaus (2012: 723–24) on the particular importance of the communal nature of this resource.

These inferences, we think, are central to the stereotypes attached to sexual harassment; a community with such stereotypes in it will be one in which certain social knowledge – like the fact that it's wrong to repeatedly ask your co-worker on dates – will be much easier to obtain. Indeed, it will feel close to tautological.

Inference tickets can be specific to local social contexts (as in the case of J'S BEDTIME) or in wide public currency (as in the case of CONSPIRACY THEORIES). Consciousness-raising can be a way of developing inference tickets within a small community, as in the feminist groups described in Fricker's discussion; but when the hermeneutical resources become firmly enough established there, they can be brought into the broader culture as well. (The sexual harassment inference tickets are now quite secure, even outside feminist spaces.⁴⁹) This is an important component to epistemic justice.

We mentioned two widespread assumptions about hermeneutical injustice: that it always involves hermeneutical lacunae, and that the missing hermeneutical resources are concepts. We think both assumptions are questionable. We've been discussing reasons to resist the identification of hermeneutical lacunae with missing concepts – one might have the concept, but suffer the hermeneutical injustice due to a lack in the communal inference ticket. (Indeed, in her initial (2007) presentation of hermeneutical injustice, Fricker herself does not identify them; the word "concept" does not appear in her chapter on hermeneutical injustice.)

But we also think there can be hermeneutical injustices that aren't best explained by a *lack* in hermeneutical resources at all. Some of Fricker's cases – the sexual harassment case and her postpartum depression case – seem plausibly to involve hermeneutical gaps, but we don't think all of her cases can reasonably be read that way. Fricker's discussion of a male stalking victim (156–58), for instance, or of a gay man gripped by homophobic stereotypes (164), do not, we think, involve missing concepts or missing inference tickets. Instead the problem is the *presence* of harmful inference tickets.

Our analysis here has important points in common with that given in a recent paper by Mason (2021). Mason argues, as we do, that hermeneutical injustice doesn't always involve missing concepts, opting instead of a disjunctive approach to hermeneutical injustice, according to which it is sometimes the result of missing concepts, and sometimes the result of "distortion" in the collective hermeneutical resource. Mason's discussion of distorted hermeneutical resources has many points of commonality with our discussion of inference tickets, including an emphasis on collectively shared networks of stereotypical connections. We think Mason is quite right to emphasize these features of the collective hermeneutical resources. Unlike us, however, Mason limits her discussion of these inferential connections to hermeneutical injustices that obviously do not involve missing labels or concepts, which is what gives her approach to hermeneutical injustice a disjunctive character. Our story is more general: it is always inference tickets, rather than concepts, that play the central roles. Note that if a community did have the concept SEXUAL HARASSMENT, but lacked the tendency to infer according to the inference tickets we describe, this would do little to alleviate the hermeneutical injustice victims of sexual harassment suffered.⁵⁰ We think existing bad inference tickets are sometimes at the root of hermeneutical injustice.

⁴⁹Readers of a certain age may remember widely aired public service announcements in the 1980s and 1990s, featuring a woman chastising her male boss: "that's sexual harassment. And I *don't* have to take it." They were easy to laugh at then, and even easier now, but they did, we think, play a successful role in the dramatic expansion of the community that shared the SEXUAL HARASSMENT inference ticket.

⁵⁰It is controversial whether it is possible to possess that concept without those inference tickets – once again, this depends on the nature and individuation conditions of concepts – but Mason's discussion

For example, harmful sexist and homophobic associations can activate pernicious inference tickets that constitute hermeneutical injustices.⁵¹ Indeed, in a passage Fricker quotes from Edmund White's novel *A Boy's Own Story*, the gay narrator explicitly casts his worries in inferential terms: "Perhaps I became so vague, so exhilarated with vagueness, precisely in order to forestall a recognition of the final term of the syllogism that begins: If one man loves another he is a homosexual; I love a man..." The problem isn't a missing inference ticket; it's a bad one that is shaping his thoughts in undesirable ways.

Homophobic ideas about homosexuality might license an input route from *x* is a man who loves a man to *x* is homosexual, alongside an output route from *x* is homosexual to, as Fricker puts it, the "various powerful bogeymen constructions of The Homosexual" (164).

Some of the observations we made in Section 6.4 about bad CONSPIRACY THEORY inference tickets fit well into this framework. Shields (2023: 473) argues that the pejorative sense of 'conspiracy theory' "is a tool for stigmatizing and further marginalizing those already outside of the relevant halls of power and in turn treating the halls themselves as avatars of rationality," and that therefore its use ought to be resisted and discontinued. If Shields is right, this concept may contribute to hermeneutical injustice by contributing noxious stereotypical connections – by infecting the collective hermeneutical resources with harmful inference tickets.

Bad inference tickets poison the public hermeneutical well; good ones fortify it.

8. Conclusion

None of the case studies we've explored in this paper *requires* the notion of a normative inference ticket to explain. One can discuss the cultural harm of proclaiming ignorance about "he-said—she-said" situations, or the oppressive effects of stereotypical associations, or the hermeneutical advantages of SEXUAL HARASSMENT, without invoking our label. But while the concept NORMATIVE INFERENCE TICKET may not be strictly *indispensable*, we do think it can illuminate many important phenomena. We close by sketching a few more examples.

One of the points of emphasis in Jenkins's (2019, 2021) recent work on romantic love is the social significance of LOVE, and the way that it can reinforce and perpetuate harmful norms. We can explain some of Jenkins's ideas by invoking inference tickets; core stereotypes attached to LOVE connect certain kinds of monogamous, heterosexual, family oriented relationships to social approbation. Heterodox relationships are liable to trigger automatic inferences to the conclusion that they are *unserious* or *unworthy of respect.* ⁵³ As Jenkins (2019: 72) says, discourse about love is "laden with personal, emotional, practical, political, and/or ethical significance."

clearly assumes that concepts can be possessed without their associated inference tickets, since that's what she thinks is going wrong in her examples of distorted hermeneutical resources.

⁵¹So we agree with Crerar (2016), Falbo (2022), and Mason (2021) that the focus on hermeneutical *lacunae* in particular has ignored significant aspects of hermeneutical injustice.

⁵²White (1982: 104–5), quoted (from a different edition) in Fricker (2007: 164). Trailing ellipses in original. Mason (2021: 252) also cites this example as a reason to deny that hermeneutical injustice needs to involve missing concepts.

⁵³Jenkins also connects this role of LOVE to TONK – see Jenkins (2019: 76). But her treatment of what we call bad inference tickets is different from ours; following Jenkins (2008), she focuses on the *inaccuracy* of concepts.

In a similar way, Barnes (2016: 179) invokes a "normatively laden" conception of disability, according to which BEING DISABLED automatically involves "[suffering] a loss, lack, or unfortunate departure from normalcy." As Barnes emphasizes, the naturalness of this inference is due not to its following analytically from the meaning of 'disability', but to the strength of the associations of ableist stereotypes. Mole (2017: 1130) likewise explores the moral and hermeneutical difficulties of debating whether autism is "a disease," where doing so ties the experiences of autistic people to *sickness* and *need for a cure*. In all of these cases, the simultaneous "strength" and "defeasibility" of the harmful associations make discourse about these topics extremely vexed, and impose serious hermeneutical burdens on those whose experiences are being labeled, discussed, and debated.

We hope we have illustrated many of the benefits of considering these diverse cases alongside one another, emphasizing the similarities between the various conceptual associations at play. Naming the category of normative inference tickets, and centering them as an object of study, helps make some of their features more obviously and immediately recognizable; it also gives a useful framework for adjudicating whether a set of privileged and automatic stereotypical inferential roles should be welcomed. Inference tickets are useful to the extent we want connections between various ideas to be drawn in quick and reflexive ways.

A fluent user of our term, we think, will leave this paper with the ability to recognize inference tickets quickly and automatically. That is to say, one can internalize the input rules for inference ticket, and infer, from something's being a licensing of a privileged inferential form for the application of a given concept, that it is an inference ticket. And, by applying the framework of comparing input to output inferences to evaluate inference tickets as desirable or undesirable, one may also employ useful output rules for inference ticket, drawing the immediate and straightforward conclusions from something's being an inference ticket.

To put it another way, this paper is only partly about the examples. It also, we hope, has given you a valuable set of inference ticket inference tickets, which may help guide the development of local or broader hermeneutical resources.⁵⁴

References

Ashwell L. (2016). 'Gendered Slurs.' Social Theory and Practice 42, 228–39.

Barnes E. (2016). The Minority Body: A Theory of Disability. Oxford: Oxford University Press.

Begby E. (2013). 'The Epistemology of Prejudice.' Thought: A Journal of Philosophy 2, 90–99.

⁵⁴Work on this paper was funded in part by an SSHRC Insight Grant on positive epistemic norms. For helpful conversations about this material, we are grateful to Dominic Alford-Duguid, Fatema Amijee, Mike Barnes, Matt Bedke, Sasha Blickhan, Annie Bosse, Taylor Brice Coles, Liam Kofi Bright, T. J. Broy, Matthew Cull, Michelle Dyke, Nikki Ernst, Cam Gilbert, Lewis Gordon, Bruno Guindon, Rebecca Harrison, Samia Hesni, Avram Hiller, A. G. Holdier, Catherine Hundleby, Ahmad Jabbar, Carrie Jenkins, Daniel Kaplan, Anna Klieber, Quill Kukla, Mira Kuroyadov, Lauren Leydon-Hardy, William Lycan, Michael Lynch, Hane Maung, Eric Margolis, Sally McConnell-Ginet, Katie Monk, George Grun, Aidan McGlynn, Chris Mole, Devin Morse, Dan Pallies, Sumeet Patwardhan, Cat Prueitt, Greg Restall, Chelsea Rosenthal, Charlotte Sabourin, Henry Schiller, Mark Schroeder, Julian Schlöder, Chris Stephens, Taylor Tate, Lynne Tirrell, Adriel Trott, Kelsey Vicars, Alnica Visser, Nevina Warsito, Emilia Wilson, Audrey Yap, Seunghyun Angela Yeo, and an anonymous referee. We presented a draft of this material at a UBC/SFU work in progress seminar and a Words Workshop meeting in 2021, and a University of Connecticut Colloquium presentation and the APA Eastern and Central in 2022; thanks to the audiences there. Thanks also to the editors of the American Philosophical Association blog, who invited us to share some of the ideas in this paper in a June 2021 post there. Many of the ideas in this paper were also workshopped via Philosophy Twitter, whom we also thank.

- Boghossian P. (2003). 'Blind Reasoning.' Proceedings of the Aristotelian Society, Supplementary Volumes 77, 225–93.
- Bordalo P., Coffman K., Gennaioli N. and Shleifer A. (2016). 'Stereotypes.' The Quarterly Journal of Economics 131, 1753-94.
- **Brandom R. B.** (1994). Making It Explicit: Reasoning, Representing, and Discursive Commitment. Cambridge, MA: Harvard University Press.
- Buffum D. L. (1916). 'Origin of the Word "Boche".' Current History 4, 525.
- Burge T. (1989). 'Wherein is Language Social?' In A. George (ed.), Reflections on Chomsky, pp. 175–91. Malden, MA: Blackwell.
- Burgess A. and Plunkett D. (2013). 'Conceptual Ethics I.' Philosophy Compass 8, 1091–101. https://doi.org/10.1111/phc3.12086.
- Burgess A. and Plunkett D. (2020). 'On the Relation between Conceptual Engineering and Conceptual Ethics.' *Ratio* 33, 281–94. doi:10.1111/rati.12265.
- Chalmers D. (2020). 'What is Conceptual Engineering and What Should It Be?' Inquiry: An Interdisciplinary Journal of Philosophy. https://doi.org/10.1080/0020174x.2020.1817141.
- Coady D. (2003). 'Conspiracy Theories and Official Stories.' International Journal of Applied Philosophy 17, 197–209. doi:10.5840/ijap200317210.
- Coady D. (2012). What to Believe Now: Applying Epistemology to Contemporary Issues. Malden, MA: Wiley-Blackwell.
- Coady D. (2019). 'Psychology and Conspiracy Theories.' In D. Coady and J. Chase (eds), *The Routledge Handbook of Applied Epistemology*, pp. 166–75. New York: Taylor & Francis.
- Coleman L. and Kay P. (1981). 'Prototype Semantics: The English Word Lie.' Language 57, 26-44.
- Crerar C. (2016). 'Taboo, Hermeneutical Injustice, and Expressively Free Environments.' *Episteme* 13, 195–207. doi:10.1017/epi.2015.35.
- Crewe B. and Ichikawa J. J. (2021). 'Rape Culture and Epistemology.' In J. Lackey (ed.), *Applied Epistemology*, pp. 253–82. Oxford: Oxford University Press.
- Croom A. M. (2015). 'The Semantics of Slurs: A Refutation of Coreferentialism.' Ampersand 2, 30-38.
- DiFranco R. (2015). 'Do Racists Speak Truly? On the Truth-Conditional Content of Slurs.' *Thought:* A Journal of Philosophy 4, 28–37. https://doi.org/10.1002/tht3.154.
- **Dotson K.** (2012). 'A Cautionary Tale: On Limiting Epistemic Oppression.' Frontiers: A Journal of Women Studies 33, 24–47.
- Dummett M. (1973). Frege: Philosophy of Language. London: Duckworth.
- Falbo A. (2022). 'Hermeneutical Injustice: Distortion and Conceptual Aptness.' *Hypatia* 37, 343–63. doi:10.1017/hyp.2022.4.
- Fodor J. A. (1981). 'The Present Status of the Innateness Controversy.' In J. Fodor (ed.), Representations: Philosophical Essays on the Foundations of Cognitive Science, pp. 257–316. Cambridge, MA: MIT Press.
- Fodor J. A. (1998). Concepts: Where Cognitive Science Went Wrong. Oxford: Oxford University Press.
- Fodor J. A. (2008). Lot 2: The Language of Thought Revisited. Oxford: Oxford University Press.
- Fodor J. and Lepore E. (1998). 'The Emptiness of the Lexicon: Critical Reflections on J. Pustejovsky's the Generative Lexicon.' *Linguistic Inquiry* **29**, 269–88.
- Foster J. (forthcoming). 'Busting the Ghost of Neutral Counterparts.' Ergo.
- Freund M. (2020). 'Ordered Models for Concept Representation.' Journal of Logic and Computation 30, 1143–81.
- Fricker M. (2007). Epistemic Injustice: Power and the Ethics of Knowing. Oxford: Oxford University Press.
- Fricker M. (2016). 'Epistemic Injustice and the Preservation of Ignorance'. In R. Peels and M. Blaauw (eds), The Epistemic Dimensions of Ignorance, pp. 144–159. Cambridge: Cambridge University Press.
- **Gilmore L.** (2017). Tainted Witness: Why We Doubt What Women Say about Their Lives. New York: Columbia University Press.
- Hamilton D. L. and Sherman J. W. (1994). 'Stereotypes.' In R. S. Wyer and T. K. Srull (eds), Handbook of Social Cognition, Vol. 2, pp. 1–68. Hillsdale, NJ: Lawrence Erlbaum.
- Haslanger S. (2017). Critical Theory and Practice. Amsterdam: Spinoza Lectures. Koninklijke van Gorcum.
 Haslanger S. (2019). 'Cognition as a Social Skill.' Australasian Philosophical Review 3, 5–25. doi:10.1080/24740500.2019.1705229.

- Hauswald R. (2023). "That's Just a Conspiracy Theory!": Relevant Alternatives, Dismissive Conversational Exercitives, and the Problem of Premature Conclusions.' Social Epistemology 37, 494–509. doi:10.1080/ 02691728.2023.2172699.
- Horty J. (2012). Reasons as Defaults. New York: Oxford University Press.
- Ichikawa J. (forthcoming). Epistemic Courage. Oxford: Oxford University Press.
- Jenkins C. S. I. (2008). Grounding Concepts: An Empirical Basis for Arithmetic Knowledge. Oxford: Oxford University Press.
- Jenkins K. (2017). 'Rape Myths and Domestic Abuse Myths as Hermeneutical Injustices.' Journal of Applied Philosophy 34, 191–205. https://doi.org/10.1111/japp.12174.
- Jenkins C. S. I. (2019). 'All Hearts in Love Use Their Own Tongues: Concepts, Verbal Disputes, and Disagreeing about Love.' In A. M. Martin (ed.), Routledge Handbook of Love in Philosophy, pp. 72–82. New York: Taylor & Francis.
- Jenkins C. S. I. (2021). 'When Love Stinks, Call a Conceptual Plumber.' In E. Vintiadis (ed.), Philosophy by Women: 22 Philosophers Reflect on Philosophy and Its Value, pp. 44–53. London: Routledge.
- Keeley B. L. (1999). 'Of Conspiracy Theories.' Journal of Philosophy 96, 109-26. doi:10.2139/ssrn.1084585.
- Keeley B. L. (2023). 'Conspiracy Theory and (or as) Folk Psychology.' Social Epistemology 37, 413–22. doi:10.1080/02691728.2023.2191290.
- Langton R. (2009). 'Speaker's Freedom and Maker's Knowledge.' In R. Langton (ed.), Sexual Solipsism: Philosophical Essays on Pornography and Objectification, pp. 289–310. Oxford: Oxford University Press.
- Leslie S.-J. (2017). 'The Original Sin of Cognition: Fear Prejudice, and Generalization.' Journal of Philosophy 114, 393–421. doi:10.5840/jphil2017114828.
- Machery E. (2009). Doing Without Concepts. New York: Oxford University Press.
- Margolis E. and Laurence S. (2007). "The Ontology of Concepts Abstract Objects or Mental Representations?" *Noûs* 41, 561–93. https://doi.org/10.1111/j.1468-0068.2007.00663.x.
- Margolis E. and Laurence S. (2013). 'In Defense of Nativism.' Philosophical Studies 165, 693–718. doi:10.1007/s11098-012-9972-x.
- Mason R. (2011). 'Two Kinds of Unknowing.' *Hypatia* 26, 294–307. https://doi.org/10.1111/j.1527-2001. 2011.01175.x.
- Mason R. (2021). 'Hermeneutical Injustice.' In J. Khoo and R. Sterken (eds), Routledge Handbook of Social and Political Philosophy of Language, pp. 247–258. New York: Routledge.
- Medina J. (2013). The Epistemology of Resistance: Gender and Racial Oppression, Epistemic Injustice, and Resistant Imaginations. New York: Oxford University Press.
- Mole C. (2017). 'Autism and "Disease": The Semantics of an Ill-Posed Question.' Philosophical Psychology 30, 1126–40. doi:10.1080/09515089.2017.1338341.
- Napolitano M. G. and Reuter K. (2021). 'What is a Conspiracy Theory?' Erkenntnis 88, 2035–62. doi:10.1007/s10670-021-00441-6.
- Neufeld E. (2019). 'An Essentialist Theory of the Meaning of Slurs.' Philosophers' Imprint 19, 1-29.
- Peacocke C. (1992). A Study of Concepts. Cambridge, MA: MIT Press.
- Peacocke C. (2003). 'Implicit Conceptions, Understanding, and Rationality.' In M. Hahn and B. Ramberg (eds), *Philosophical Issues*, pp. 43–88. Cambridge, MA: MIT Press.
- Pigden C. (2006). 'Complots of Mischief.' In D. Coady (ed.), Conspiracy Theories: The Philosophical Debate, pp. 139–66. Farnham: Ashgate.
- **Pigden C.** (2023). "Conspiracy Theory" as a Tonkish Term: Some Runabout Inference-Tickets from Truth to Falsehood.' *Social Epistemology* **37**, 423–37. doi:10.1080/02691728.2023.2212379.
- **Pohlhaus G.** (2012). 'Relational Knowing and Epistemic Injustice: Toward a Theory of Willful Hermeneutical Ignorance.' *Hypatia* **27**, 715–35.
- Prinz J. J. (2002). Furnishing the Mind: Concepts and Their Perceptual Basis. Cambridge, MA: MIT Press. Prior A. N. (1960). 'The Runabout Inference Ticket.' Analysis 21, 38–39.
- Putnam H. (1975). 'Philosophy and Our Mental Life.' In H. Putnam (ed.), Mind, Language, and Reality, pp. 291–303. New York: Cambridge University Press.
- Reiter R. (1980). 'A Logic for Default Reasoning.' Artificial Intelligence 13, 81–132. https://doi.org/10.1016/ 0004-3702(80)90014-4. Special Issue on Non-Monotonic Logic.
- Rosch E. (1978). 'Principles of Categorization.' In E. Rosch and B. B. Lloyd (eds), Cognition and Categorization, pp. 28–49. Hillsdale, NJ: Lawrence Erlbaum.

Rosch E. and Mervis C. B. (1975). 'Family Resemblances: Studies in the Internal Structure of Categories.'
Cognitive Psychology 7, 573–605.

Ryle G. (1949). The Concept of Mind. New York: Routledge.

Safire W. (1998). 'On Language; He-Said, She-Said.' The New York Times Magazine 18.

Sawyer S. (2018). 'The Importance of Concepts.' Proceedings of the Aristotelian Society 118, 127–47. doi:10.1093/arisoc/aoy008.

Scheman N. (2000). 'Feminism in Philosophy of Mind: Against Physicalism.' In M. Fricker and J. Hornsby (eds), *The Cambridge Companion to Feminism in Philosophy*, pp. 49–67. Cambridge: Cambridge University Press.

Shields M. (2023). 'Conceptual Engineering, Conceptual Domination, and the Case of Conspiracy Theories.' Social Epistemology 37, 464–80. doi:10.1080/02691728.2023.2172696.

Sibomana A., Guilbert L. and Deguine H. (1999). Hope for Rwanda: Conversations with Laure Guilbert and Hervé Deguine. London: Pluto Press (UK).

Tirrell L. (2012). 'Genocidal Language Games.' In I. Maitra and M. K. McGowan (eds), *Speech and Harm: Controversies Over Free Speech*, pp. 174–221. Oxford: Oxford University Press.

Walker J. (2018). 'What We Mean When We Say "Conspiracy Theory". In Joseph E. Uscinski (ed.), Conspiracy Theories and the People Who Believe Them, pp. 53–61. New York: Oxford University Press. ISBN 9780190844073. doi:10.1093/oso/9780190844073.003.0003.

Wedgwood R. (2007). The Nature of Normativity. Oxford: Oxford University Press.

Weiskopf D. A. (2010). 'The Theoretical Indispensability of Concepts.' *Behavioral and Brain Sciences* 33, 228–29. doi:10.1017/s0140525×10000506.

White E. (1982). A Boy's Own Story. London: Penguin.

Jen Foster is a doctoral candidate in philosophy at the University of Southern California. Her research bridges epistemology, social–political philosophy, and philosophy of language.

Jonathan Ichikawa is a professor of philosophy at the University of British Columbia. He writes about epistemology, feminist philosophy, philosophy of language, and other topics, with a special interest in the connection points between abstract philosophical theorizing and matters of public importance.

Cite this article: Foster J, Ichikawa J (2023). Normative Inference Tickets. *Episteme* 1–27. https://doi.org/10.1017/epi.2023.43