1 MOTIVATION & BACKGROUND

PROBLEM 1 GENERICS  e.g. Birds lay eggs = logic talks are boring = Mosquitoes transmit Ross River Fever (RRF) = Cows are food = Men are aggressive = Muslims are terrorists

Generic judgements, of the form Fs are Gs, are pervasive, are basic and behave very strangely.

What do generic judgements mean? What does it mean to say mosquitoes transmit RRF? All mosquitoes transmit RRF — some don’t. Some mosquitoes transmit RRF — true, but some mosquitoes don’t, and we don’t also say “mosquitoes don’t transmit RRF.” Most mosquitoes transmit RRF — Most don’t. Normal mosquitoes transmit RRF — Male mosquitoes don’t. They aren’t normal! Also, mosquitoes from outside Oceania don’t carry RRF. Mosquitoes are the kind of thing that transmit RRF. They’re also the kind of thing that doesn’t—e.g. males, or those in Africa.

BACKGROUND 1: “INFERENTIALISM,” BROADLY CONSTRUED Inferentialism: an approach to semantics that takes meaning to centre on norms of inference [1, 2]. Normative Pragmatics: an approach to semantics that takes semantics to centre on norms of use (perhaps including inference, perhaps not) [6, 8, 12]. My recent research concentrates on the connections between normative pragmatics and logic, via proof theory [15, 16].

PROBLEM 2: PEJORATIVES An inferentialist analysis of pejorative predicates:

\[
\begin{align*}
x \text{ is German} & \quad x \text{ is Boche} \\
x \text{ is Boche} & \quad x \text{ is cruel}
\end{align*}
\]

Using Boche in this way encodes a substantial connection between being German, and being cruel. What does Boche mean, when it’s used like this? This isn’t restricted to pejorative expressions. People can use standard expressions pejoratively, too.

\[
\begin{align*}
x \text{ is a talk on proof theory} & \quad x \text{ is a logic talk} \\
x \text{ is a logic talk} & \quad x \text{ is boring}
\end{align*}
\]

2 GENERICS & INFERENCE

TRUTH CONDITIONS? There are many accounts of the truth conditions of the generic Ks are F. Any adequate account is very complicated [10, page 43].

Though there may be a further refinement or two needed, we can describe the circumstances under which a generic of the form ‘Ks are F’ is true as follows:

- The counterinstances are negative, and:
  - If F lies along a characteristic dimension for the Ks, then some Ks are F, unless K is an artifact or social kind, in which case F is the function or purpose of the kind K;
  - If F is striking, then some Ks are F and the others are disposed to be F;
- Otherwise, almost all Ks are F.

There is something right about these accounts, though it is very hard to see how it gives the correct truth conditions for generics like tall people with back injuries find it difficult to drive small cars. Many generics generalise on complex terms.¹

THE APPROACH I’LL EXPLORE We don’t understand a generic by first grasping its truth conditions. We learn to use generics by learning norms for how to use them. I take it that this sort of account makes sense of how we understand modal terms like possibly and necessarily. “Possibly p” and “Necessarily p” have truth conditions expressed in terms of possible worlds, but we don’t learn the concepts of possibility and necessity by way of some prior access to possible worlds [16].

“To say that a state of affairs obtains is just to say that something is the case; to say that something is a possible state of affairs is just to say that something could be the case; and to say that something is the case ‘in a’ possible state of affairs is just to say that the thing in question would necessarily be the case if that state of affairs obtained, i.e. if something else were the case... We understand ‘truth in states of affairs’ because we understand ‘necessarily’; not vice versa.” — Arthur Prior [14].

¹I think it follows from this that the connection between the use of generics and the propensity to essentialise categories is quite subtle, and worth more reflection [4, 5, 11]. Notice that the analysis of generics given here is completely orthogonal to the question of whether generics in any way essentialise. The questions become: whether and when—and how—do inference and explanation essentialise?
So, is a bird.

Tweety is a penguin feasible inference is also not to be identified with offering a deductively before making it Explicit when we infer or explain? I won’t commit myself to any particular analysis of the norms governing inference and explanation.

cf. (Brandon, in Making it Explicit [1], and his view of the relationship between inference, commitment and entitlement.) These are speech acts, like assertion. (I can infer B from A despite believing B before believing A. Inferring, in this sense, isn’t believing on the basis of. The same goes for explaining or justifying.) Making an inference is also not to be identified with offering a deductively valid argument, or taking yourself to do so. Reason giving is defeasible, or non-monotonic. Tweety is a bird. So, Tweety flies. Tweety is a bird. So, Tweety flies.

WHY INFERENCE? Why (do we/should we) care about how our claims relate to one another? Why not just care about whether A and B are true, and ignore whether A is a reason for B? (Or, why do children ask why instead of just asking whether?) Why attempt to keep track of how claims relate to one another?

PLANNING AND CONTINGENCY THEORISING AND UNCERTAINTY

If we find a zebra... Is this a zebra?
Suppose that had been a zebra
Options for action
Subjective “Metaphysical”

If we find a zebra... Is this a zebra?
Suppose that’s actually a zebra
Options for belief
Indicative “Epistemic”

It is hard to see how we could act on the basis of shared views without some kind of reason-giving practice [7].

CLAIM 1: GENERICS MAKE INFERENCE TRANSITIONS EXPLICIT

Tweety is a bird. So, Tweety flies. — Birds fly.
She’s a zebra. So, she has stripes. — Zebras have stripes.
She has stripes. So, she’s a zebra. — Striped things are zebras.
— Striped horses are zebras.

I can make explicit my preparedness to infer Gx from Fx or to explain Gx by way of Fx by saying Fs are Gs.

THIS MEANS MANY OF THE DISTINCTIVE FEATURES OF GENERICS

Exceptions: Birds fly. (Yes! Despite penguins.) Tweety is a bird is a good reason for Tweety flies, even if this does not apply to all birds.

Failure of weakening of the consequent: Birds lay eggs. (Yes!) Birds are female. (No!) Does Tweety lay eggs? Yes, Tweety is a bird. (Good!) Is Tweety a female? Yes, Tweety is a bird. (???) Or, Tweety lays eggs since Tweety is a bird. (Good!) Tweety is female since Tweety is a bird. (???)

Low rate generics with striking properties: Mosquitoes transmit RRF. Given that reason giving does admit exceptions, in the case of striking/dangerous properties, it is much better to err on the side of false positives than false negatives. At the very least, we are happy to explain this transmits RRF by granting this is a mosquito.

WHY THE FORM? We can infer from any A to any B. Why are generics, of the form Fs are Gs, so prevalent? In dialogue or in planning, the focus of inquiry is often fixed. So, inferences of the from suitable for explication by a generic (from Fx to Gx) are widespread.

WHY MAKE INFERENCE EXPLICIT? To teach and to refine.

We communicate and coordinate on inferences: if you’ve learned that birds fly, you’ll accept “x is a bird” as a reason to conclude “x flies,” or to explain “x flies” by appeal to “x is a bird.” The information conveyed can be local. Consider a zoo enclosure with a range of horse-like creatures: I might say “striped ones are zebras”.

You can object to my inference Fa. So, Ga. in three different (related) ways: (1) Deny Fa. (2) Deny Ga. (3) Deny the So. We have words for (1) and (2). How do you voice objection (3)? Making inferences explicit gives us a way to argue about them. What is it to deny that birds fly? Birds don’t fly? Fs are non-Gs; not (Fs are Gs). The grammar of generics makes denying them difficult. We often move to more explicit quantification: many birds don’t fly, or not all birds fly.

Resting the inference from Fx to Gx does not, by itself, offer an alternative inference. Neither does it make much of a claim at all, by itself. We’ll return to this topic in §5.

3 ACCOMMODATION & INFERENCE

COMMON GROUND “The common ground of a conversation at any given time is the set of propositions that the participants in that conversation at that time mutually assume to be taken for granted and not subject to (further) discussion … When uttered assertively, sentences are meant to update the common ground. If a sentence is accepted by the participants, the proposition it expresses is added to the common ground.”

— Kai von Fintel [3]

ACCOMMODATION If there are drinks after the seminar, my son will come. When I say this, the proposition that I have a son (and perhaps that I have only one son) is added to the common ground. This phenomenon is called presupposition accommodation. (The details of how—and which—presuppositions are accommodated is a matter of debate and active research.) Rae Langton explores the ethical contours of accommodation phenomena in Accommodating Injustice [9]. Sometimes we find ourselves committed to substantial claims we never explicitly considered. We have accommodated them.

CLAIM 2: INFERENCE AND THE COMMON GROUND If you make the inference Fa, therefore Ga, and you meet with no objection, then not only are Fa and Ga added to the common ground, but so is the generic: Fs are Gs. Of course, this could be highly local. Recall: She has stripes, so she’s a zebra—and striped things (here) are zebras.

This isn’t presupposition accommodation. The speech act of inference is explicit. It can be rejected, just as an assertion can. I
can reject the inference Fa, so Ga, while accepting Fa and Ga. Whether the inference is accepted or rejected should make some difference in the common ground. If the inference is made explicit by a generic, this can do the job.

CONSEQUENCES This commitment (Fs are Gs) goes beyond the explicit subject matter (the object a) under discussion. Since generics are generic, they can persist, even after the details fade from attention. We can find ourselves accepting generics (and believing them) without ever having explicitly considered them.

4 THE SEMANTICS OF PEJORATIVES

PEJORATIVE INFERENECE PAIRS Consider the inference pairs characteristic of pejorative expressions and pejorative uses of expressions:

\[
\begin{array}{ccc}
  x \text{ is German} & x \text{ is Boche} & x \text{ is cruel} \\
  x \text{ is a talk on proof theory} & x \text{ is a logic talk} & x \text{ is a boring}
\end{array}
\]

I make no claim about whether these inferences are somehow central to the meanings of the terms “Boche” or “logic talk”. Though it seems that someone who uses “logic talk” pejoratively can talk with someone who doesn’t without necessarily being at cross purposes.

PEJORATIVES AND GENERICS Pejoratives straightforwardly give rise to generics: Germans are Boche. * Logic talks are boring.

STRIKING PROPERTIES AND GENERICS Mosquitos transmit RRF. * Logic talks are boring. * Muslims are terrorists. These are hard to uphold, or to argue against. Responses like these — Not all mosquitos; Not all logic talks; Not all Muslims — aren’t enough to uphold or undercut them.

5 OPTIONS FOR CRITIQUE & REFORM

HOW TO DENY A GENERIC To reject or deny Fs are Gs, you need to undercut the inference from Fa to Ga and the practice of explaining Ga in terms of Fa.

In a controlled environment, we can undercut the generic by being more specific, by moving to explicitly stated quantifiers. Are all Fs Gs? Are most? How many? This can work, but it is hard to resist forming generic judgements. Syntactic discipline takes work.

When G is a striking property, it’s not enough to say that many or most Fs are not Gs. After all, most mosquitos don’t carry RRF. One way to undercut the inference from Fa to Ga is to institute a practice in which the question of whether something is G or not doesn’t arise.

When we care about the property G, we won’t want to revise the concept away. So another approach is to find an alternate explanation for Ga, other than Fa. If not all species or genus of mosquito carry RRF, then we could refine our generic to the more specific one, that Mosquitos of genus Culex carry RRF, while agreeing that mosquitos outside that genus don’t carry RRF. Explanations of this shape might undercut the generic Muslims are terrorists, by replacing them with better explanations—such as research showing that domestic violence is a much stronger predictor of involvement in terrorism and mass killing [13].

In any case, denying a generic requires changing not only our explicit theory, but our dispositions to infer. These dispositions are expressed not just in the claims we make. They are revealed in how we string those claims together.

THE UPSHOT The strange behaviour of generic judgements can be explained by their grounding in our inferential and explanatory practice. This helps us understand the difficulties and some of the possibilities for reforming and revising those practices and the views they represent.

REFERENCES