

# Generics: Inference & Accommodation

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*My aim:* To give an account of norms governing our uses of *generics*, and our *inferring*, showing how phenomena of *accommodation* can help explain the behaviour of generic judgements and what we can do with (and to) them. ¶ This is a part of a collaborative research project *Constructing Social Hierarchy*, exploring anti-individualist approaches to mind, language and action, aiming to understand how we construct and maintain social hierarchies, so that we can better remedy social injustice. ¶ The team: *Sally Haslanger, Karen Jones, Laura Schroeter, François Schroeter*, and me.

## I. MOTIVATION & BACKGROUND

**PROBLEM 1 GENERICS** e.g. Birds lay eggs \* Logic talks are boring \* Mosquitos 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 mosquitos transmit RRF? ¶ **All** mosquitos transmit RRF — some don't. ¶ **Some** mosquitos transmit RRF — true, but some mosquitos *don't*, and we don't also say “mosquitos *don't* transmit RRF.” ¶ **Most** mosquitos transmit RRF — Most don't. ¶ **Normal** mosquitos transmit RRF — Male mosquitos don't. They aren't normal? Also, mosquitos from outside Oceania don't carry RRF. ¶ Mosquitos **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: “INFERENCEALISM,” 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:

x is German	x is Boche
x is Boche	x is cruel

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.

x is a talk on proof theory	x is a logic talk
x is a logic talk	x is boring

Are these inferences a part of the *meaning* of the pejorative expression?

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**BACKGROUND 2: SEMANTICS, METASEMANTICS & PRACTICE** *Semantics*: accounts of the meanings of particular expressions. ¶ *Metasemantics*: an account of the space of possible meanings, and the different *ways* expressions can get their meanings. ¶ *Practice*: Metasemantics, in particular, can be a partner for *clarificatory* and *emancipatory* possibilities for revising our *languages* and *practices*.

## 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].

circumstances in which generics are true or false. 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.

I would suggest that these worldly truth specifications—these descriptions of how the world must be for the sentence to be true—should not be mistaken for semantically derived truth conditions, however. To illus-

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.<sup>1</sup>

**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].

**INFERRING IS AN ACTION** Consider the difference: *Tweety is a bird. Tweety flies*. ¶ *Tweety is a bird. So, Tweety flies*. ¶ There is a difference between making two assertions, and making one assertion to give

<sup>1</sup>I 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?

a reason for another. ¶ Reason giving appears in *question answering*. ABELARD: Does Tweety fly? ELOISE: Yes, she's a bird. \* ABELARD: Is this food? ELOISE: Yes, it's beef. ¶ Reason giving can go in both directions. ABELARD: Does she have stripes? ELOISE: Yes, she's a zebra. \* ABELARD: Is she a zebra? ELOISE: Yes, she has stripes. \* Each direction can make sense, given an appropriate context. ¶ So can *explanation*. ELOISE: She has stripes. ABELARD: Why? ELOISE: She's a zebra. \* ELOISE: She's a zebra. ABELARD: Why? ELOISE: She has stripes. \* Each direction can make sense, given an appropriate context. ¶ What *is* inference? Or rather, what are we *doing* when we infer or explain? I won't commit myself to any particular analysis of the norms governing inference and explanation. (c.f. Brandom, 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. Tweety is a penguin. So, Tweety flies.

**WHY INFER?** 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 <i>had been</i> a zebra	Suppose that's <i>actually</i> a zebra
Options for action	Options for belief
Subjunctive	Indicative
"Metaphysical"	"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**.

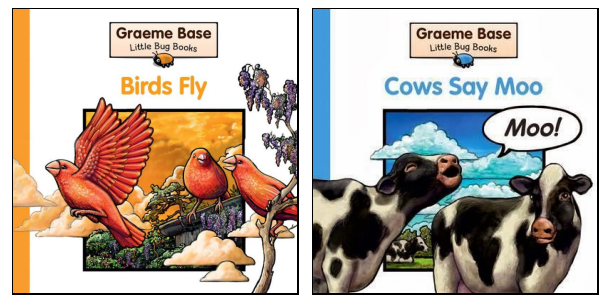
**THIS EXPLAINS MANY OF THE DISTINCTIVE FEATURES OF GENERICS** *Exceptions: Birds fly.* (Yes! Despite penguins.) ¶ **Tweety is a bird** is a good reason for **Tweety flies**, even if this does not apply to all birds.

*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 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: Mosquitos 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 THIS 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 form 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*.

Resisting 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. OPTIONS FOR CRITIQUE & REFORM

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

**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. ¶ Atter 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.

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