

Accommodation, Inference, Generics & Pejoratives

Greg Restall



THE UNIVERSITY OF
MELBOURNE

MELBOURNE SOCIAL ONTOLOGY WORKSHOP · 12 OCTOBER 2018

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 pejorative uses of expressions.

The Wider Setting

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, me.*

Thanks to the Australian Research Council, for funding supporting this research (DP180103687).

Motivation & Background

Generics & Inference

Accommodation & Inference

The Semantics of Pejoratives

Options for Critique & Reform

MOTIVATION & BACKGROUND

Problem 1: Generics

Birds lay eggs.

Problem 1: Generics

Birds lay eggs.

Logic talks are boring.

Problem 1: Generics

Birds lay eggs.

Logic talks are boring.

Mosquitos transmit Ross River Fever.

Problem 1: Generics

Birds lay eggs.

Logic talks are boring.

Mosquitos transmit Ross River Fever.

Cows are food.

Problem 1: Generics

Birds lay eggs.

Logic talks are boring.

Mosquitos transmit Ross River Fever.

Cows are food.

Men are aggressive.

Problem 1: Generics

Birds lay eggs.

Logic talks are boring.

Mosquitos transmit Ross River Fever.

Cows are food.

Men are aggressive.

Muslims are terrorists.

Generic judgements...

Fs are Gs

Generic judgements...

Fs are Gs

... are *pervasive*.

Generic judgements...

Fs are Gs

... are *pervasive*.

... are *basic*.

Generic judgements...

Fs are Gs

... are *pervasive*.

... are *basic*.

... behave *very strangely*.

Mosquitos transmit RRF — what does this mean?

Mosquitos transmit RRF — what does this mean?

All mosquitos transmit RRF.

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

Some mosquitos transmit RRF.

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

~~**Some** mosquitos transmit RRF.~~

True, but some mosquitos *don't*, and we won't say “Mosquitos *don't* transmit RRF.”

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

~~**Some** mosquitos transmit RRF.~~

True, but some mosquitos *don't*, and we won't say “Mosquitos *don't* transmit RRF.”

Most mosquitos transmit RRF.

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

~~**Some** mosquitos transmit RRF.~~

True, but some mosquitos *don't*, and we won't say “Mosquitos *don't* transmit RRF.”

~~**Most** mosquitos transmit RRF.~~

Most don't.

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

~~**Some** mosquitos transmit RRF.~~

True, but some mosquitos *don't*, and we won't say “Mosquitos *don't* transmit RRF.”

~~**Most** mosquitos transmit RRF.~~

Most don't.

Normal mosquitos transmit RRF.

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

~~**Some** mosquitos transmit RRF.~~

True, but some mosquitos *don't*, and we won't 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?

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

~~**Some** mosquitos transmit RRF.~~

True, but some mosquitos *don't*, and we won't 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?

Mosquitos ***are the kind of thing
that*** transmit RRF.

Mosquitos transmit RRF — what does this mean?

~~**All** mosquitos transmit RRF.~~

Some don't.

~~**Some** mosquitos transmit RRF.~~

True, but some mosquitos *don't*, and we won't 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?

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: “Inferentialism”, broadly construed

Background 1: “Inferentialism”, broadly construed

- ▶ **INFERENTIALISM**: an approach to semantics that takes meaning to centre on *norms of inference*.

Background 1: “Inferentialism”, broadly construed

- ▶ **INFERENTIALISM**: an approach to semantics that takes meaning to centre on *norms of inference*.
- ▶ **NORMATIVE PRAGMATICS**: an approach to semantics that takes semantics to centre on *norms of use* (perhaps including inference, perhaps not).

Background 1: “Inferentialism”, broadly construed

- ▶ **INFERENTIALISM**: an approach to semantics that takes meaning to centre on *norms of inference*.
- ▶ **NORMATIVE PRAGMATICS**: an approach to semantics that takes semantics to centre on *norms of use* (perhaps including inference, perhaps not).
- ▶ My recent research concentrates on the connections between *normative pragmatics* and logic, via *proof theory*.

Problem 2: Pejoratives

An inferentialist analysis of pejorative predicates:

Problem 2: Pejoratives

An inferentialist analysis of pejorative predicates:

x is German

x is *Boche*

Problem 2: Pejoratives

An inferentialist analysis of pejorative predicates:

$$\frac{x \text{ is German}}{x \text{ is } \textit{Boche}}$$
$$\frac{x \text{ is } \textit{Boche}}{x \text{ is cruel}}$$

Problem 2: Pejoratives

An inferentialist analysis of pejorative predicates:

$$\frac{x \text{ is German}}{x \text{ is } \textit{Boche}}$$
$$\frac{x \text{ is } \textit{Boche}}{x \text{ is cruel}}$$

Using *Boche* in this way encodes a substantial connection between being German, and being cruel.

Problem 2: Pejoratives

An inferentialist analysis of pejorative predicates:

$$\frac{x \text{ is German}}{x \text{ is } \textit{Boche}}$$
$$\frac{x \text{ is } \textit{Boche}}{x \text{ is cruel}}$$

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.

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

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?

- ▶ **SEMANTICS:** accounts of the meanings of particular expressions.

- ▶ **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.

- ▶ 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 our *practices*.

GENERICS & INFERENCE

There are *many* accounts of
the truth conditions of the generic

Ks are F

Truth Conditions?

There are *many* accounts of
the truth conditions of the generic

Ks are F

Any adequate account is *very* complicated.

An example, from Sarah-Jane Leslie

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.

Sarah-Jane Leslie “Generics: Cognition and Acquisition,”
Philosophical Review 117:1 (2008), 1–47 — page 43.

The Approach I'll Explore

We don't *understand* a generic by first grasping its truth conditions.

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*.

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.

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,
Worlds, Times and Selves (1969)



But what *do* they mean?

The problem remains:

What are the norms governing generics?

How do we understand them?

Let's change tack for a moment.

Inferring is an action

Inferring is an action

Consider the difference:

Inferring is an action

Consider the difference:

Tweety is a bird. Tweety flies.

Inferring is an action

Consider the difference:

Tweety is a bird. Tweety flies.

Tweety is a bird. *So*, Tweety flies.

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 a reason* for another.

Reason giving appears in question answering

Tweety is a bird. So, Tweety flies.

Tweety is a bird. So, Tweety flies.

ABELARD: Does Tweety fly?

ELOISE: Yes, she's a bird.

Tweety is a bird. So, Tweety flies.

ABELARD: Does Tweety fly?

ELOISE: Yes, she's a bird.

This is beef. So, this is food.

Tweety is a bird. So, Tweety flies.

ABELARD: Does Tweety fly?

ELOISE: Yes, she's a bird.

This is beef. So, this is food.

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.

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.

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.

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.

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?

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*, and his view of the relationship between inference, commitment and entitlement.)

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*, 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.)

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*, 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.

What is inference? (Cont.)

Reason giving is *defeasible*, or *non-monotonic*:

Tweety is a bird. So, Tweety flies.

What is inference? (Cont.)

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 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?

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 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?

Two reasons for having practices of inferring and explaining

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

THEORISING AND UNCERTAINTY

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

THEORISING AND UNCERTAINTY

If we find a zebra...

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

THEORISING AND UNCERTAINTY

Is this a zebra?

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

THEORISING AND UNCERTAINTY

Is this a zebra?

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

THEORISING AND UNCERTAINTY

Is this a zebra?

Suppose that's *actually* a zebra

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

Options for action

THEORISING AND UNCERTAINTY

Is this a zebra?

Suppose that's *actually* a zebra

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

Options for action

THEORISING AND UNCERTAINTY

Is this a zebra?

Suppose that's *actually* a zebra

Options for belief

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

Options for action

Subjunctive

THEORISING AND UNCERTAINTY

Is this a zebra?

Suppose that's *actually* a zebra

Options for belief

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

Options for action

Subjunctive

THEORISING AND UNCERTAINTY

Is this a zebra?

Suppose that's *actually* a zebra

Options for belief

Indicative

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

Options for action

Subjunctive

“Metaphysical”

THEORISING AND UNCERTAINTY

Is this a zebra?

Suppose that's *actually* a zebra

Options for belief

Indicative

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

Options for action

Subjunctive

“Metaphysical”

THEORISING AND UNCERTAINTY

Is this a zebra?

Suppose that’s *actually* a zebra

Options for belief

Indicative

“Epistemic”

Two reasons for having practices of inferring and explaining

PLANNING AND CONTINGENCY

If we find a zebra...

Suppose that *had been* a zebra

Options for action

Subjunctive

“Metaphysical”

THEORISING AND UNCERTAINTY

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.

Claim 1: *Generics make inferential transitions explicit*

Tweety is a bird. So, Tweety flies.

Claim 1: *Generics make inferential transitions explicit*

Tweety is a bird. So, Tweety flies.

— **Birds fly.**

Claim 1: *Generics make inferential transitions explicit*

Tweety is a bird. So, Tweety flies.

— **Birds fly.**

She's a zebra. So, she has stripes.

Claim 1: *Generics make inferential transitions explicit*

Tweety is a bird. So, Tweety flies.

— **Birds fly.**

She's a zebra. So, she has stripes.

— **Zebras have stripes.**

Claim 1: *Generics make inferential 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.

Claim 1: *Generics make inferential 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.**

Claim 1: *Generics make inferential 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.**

Making inference explicit

I can *make explicit* my preparedness
to infer Gx from Fx
by saying

Fs are Gs .

Making inference explicit

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.)

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.

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!)

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!)

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.** (???)

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.** (???)

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.***

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*.

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?

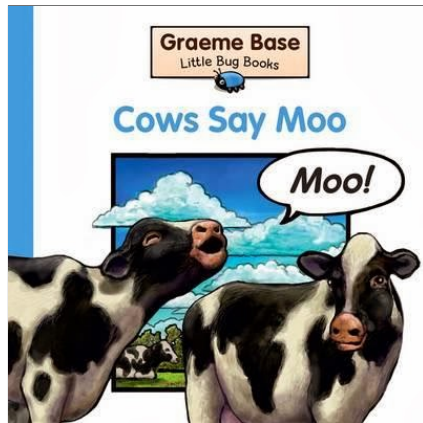
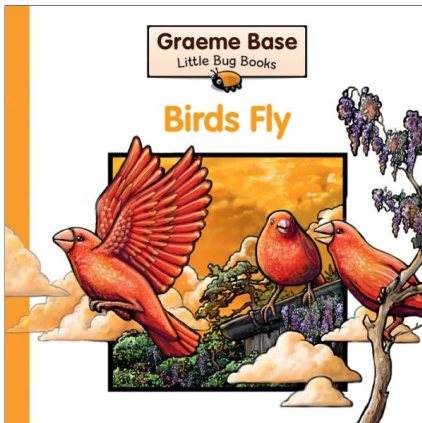
Why *this* form?

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.

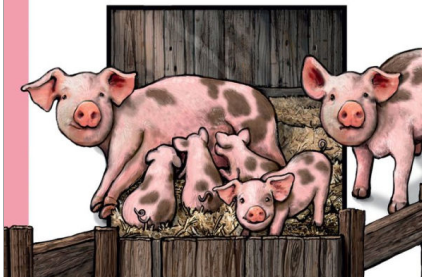


Graeme Base

Little Bug Books



Pigs Have Piglets

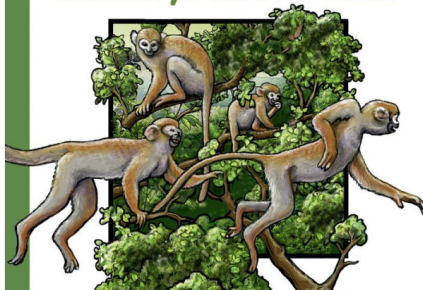


Graeme Base

Little Bug Books



Monkeys Live in Trees



Why make inference explicit?

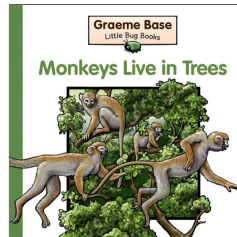
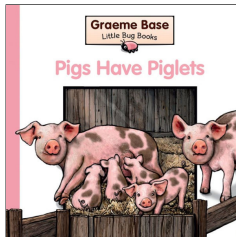
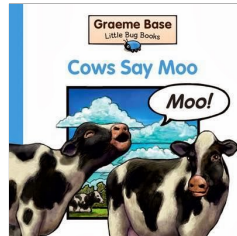
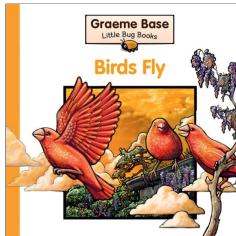
Why make inference explicit?

To teach ...

Why make inference explicit?

To teach ...
... and to *refine*.

Training for Inference



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:

Refining Inference

You can object to my inference

Fa. So, Ga.

in three different (related) ways:

- (1) Deny Fa. (2) Deny Ga. (3) Deny the So.

Refining Inference

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)?

Refining Inference

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.

This is subtle

What is it to *deny* that birds fly?

This is subtle

What is it to *deny* that birds fly?

Birds *don't* fly?

This is subtle

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.

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.

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 later.

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.

— Kai von Fintel
“What is Presupposition Accommodation, Again?”
Philosophical Perspectives, 2008.

One way to enter the common ground

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
“What is Presupposition Accommodation, Again?”
Philosophical Perspectives, 2008.

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.

Another way to enter the common ground

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*.

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*.

Rae Langton explores the ethical contours
of accommodation phenomena
in *Accommodating Injustice*.

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 ,

Claim 2: Inference and the Common Ground

If you make the inference
 Fa , *therefore* Ga ,
and you meet with no objection,

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,

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 .

This could be highly *local*.

Recall: *she has stripes*, so *she's a zebra*.

This could be highly *local*.

Recall: *she has stripes*, so *she's a zebra*.

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.

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 $Fa, \text{ so } Ga$,
while *accepting* Fa and Ga .

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 $Fa, \text{ so } Ga$,
while *accepting* Fa and Ga .

Whether the inference is
accepted or rejected should make
some difference in the common ground.

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 α) under discussion.

Consequences

- ▶ This commitment (Fs are Gs) goes beyond the explicit subject matter (the object α) under discussion.
- ▶ Since generics are *generic*, they can persist, even after the details fade from attention.

Consequences

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

PEJORATIVES

Pejorative Inference Pairs

x is German

x is *Boche*

Pejorative Inference Pairs

x is German

x is *Boche*

x is *Boche*

x is cruel

Pejorative Inference Pairs

x is German

x is *Boche*

x is *Boche*

x is cruel

x is a talk on proof theory

x is a *logic* talk

x is a *logic* talk

x is boring

I make no claim about whether these inferences
are somehow central to the meanings
of the terms “*Boche*” or “*logic talk*”.

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 straightforwardly give rise to generics.

Germans are *Boche*. *Logic* talks are boring.

Mosquitos transmit RRF.

Logic talks are boring.

Striking properties and generics

Mosquitos transmit RRF.

Logic talks are boring.

Muslims are terrorists.

Striking properties and generics

Mosquitos transmit RRF.

Logic talks are boring.

Muslims are terrorists.

These are hard to uproot,
or to argue against.

Striking properties and generics

Mosquitos transmit RRF.

Logic talks are boring.

Muslims are terrorists.

These are hard to uproot,
or to argue against.

Not *all* mosquitos.

Not *all* logic talks.

Not *all* Muslims.

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.

How to deny a generic

- ▶ In a controlled environment, we can undercut the generic by being more *specific*, by moving to explicitly stated quantifiers.

How to deny a generic

- ▶ 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?

How to deny a generic

- ▶ 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.

How to deny a generic

- ▶ When G is a striking property, it's not enough to say that many or most Fs are not Gs.

How to deny a generic

- ▶ 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.)

How to deny a generic

- ▶ 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*.

How to deny a generic

- ▶ 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 .

How to deny a generic

- ▶ 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 $G\alpha$, other than $F\alpha$.
 - ▶ 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.

How to deny a generic

- ▶ 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.

How to deny a generic

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

The strange behaviour of generic judgements
can be explained by their grounding
in our inferential practice.

This helps us understand the difficulties
and some of the possibilities for
reforming and revising those practices
and the views they represent.

THANK YOU!

Thank you!

SLIDES: <http://consequently.org/presentation/>

FEEDBACK: @consequently on *Twitter*,
or *email* at restall@unimelb.edu.au