

Generic Guidance

Bernhard Nickel · Harvard Philosophy

bnickel@fas.harvard.edu

March 1, 2025 — Central APA

1 Introduction

- (1) Ravens are black.
- (2) Lions have manes.
- (3) Mosquitos transmit malaria.

generics exhibit **incidence variability**: variability with respect to the incidence of the property predicated among members of the kind at issue.

The Problem: Given incidence variability, if an agent is told a generic *As are F*, nothing in particular follows about how many *As* are *F*. And yet, many decision problems turn on precisely this type of information about the frequency with which the property of being *F* is present in a population.

[REPELLENT] Tanya is about to leave for the day to see the sights. She has to decide whether to put on insect repellent. The repellent is somewhat unpleasant, and she isn't concerned about mosquito bites *per se*. However, she is concerned about contracting malaria and other serious tropical diseases.

The adviser has conveyed statistical information to Tanya, at least including the information that the prevalence of malaria-carriers among mosquitos is high enough to warrant putting on repellent. Yet given incidence variability, there is no straightforward account of how exactly the adviser has managed to convey this information.

2 The Target Views

2.1 *Leslie on Dangerous Properties*

Leslie's view is very well-known in the literature on generics. Crucially for our purposes, Leslie suggests that different generics have different worldly truth-makers (Leslie, 2008, 43).

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*.

Leslie's well-known examples (4)–(7) all are covered by the clause about striking properties.

- (4) Mosquitos carry the West Nile Virus.

- (5) Sharks attack bathers.
- (6) Tigers eat people.
- (7) Rottweilers maul children.

This account embodies a certain conception of how generics work in giving advice: because the property predicated is dangerous, simply telling the advisee that some members of the kind have the property at issue is sufficient to make the advice well-placed.

2.2 *Hesni on Generics as Instructions*

Hesni (2021) has recently argued that we should think of generic sentences (at least in the present tense) as having a meaning that gives uses of these sentences a distinctive illocutionary force.

we should think that the illocutionary act associated with a generic “Fs are Gs” is the indirect instruction: **treat most Fs as though they are G**. The felicity conditions for instructions are (i) the context is one in which the instruction is actionable; (ii) the speaker (or instruction giver) has the requisite authority to give the instruction; and (3) there is some expectation or assumption on the part of the speaker that the hearer has an interest in following the instruction.¹

3 The Basic Problem

[REPELLENT] Tanya is about to leave for the day to see the sights. She has to decide whether to put on insect repellent. The repellent is somewhat unpleasant, and she isn’t concerned about mosquito bites *per se*. However, she is concerned about contracting malaria and other serious tropical diseases.

[INDOORS] Tanya is still in the same locale but now, she is facing the choice of going out without repellent, or not going out at all. Staying in is a high-cost option, since it involves being bored in her hotel room and missing out on seeing the sights. Everything else is as before: she’s not worried about mosquito bites *per se*, but she still wants to avoid serious tropical diseases.

- In both situations, the question Tanya faces is whether the cost incurred by taking preventative action is worth the reduced risk of contracting malaria.
- In the two situations, the adviser commits themselves to different propositions.

3.1 *Context-Sensitive Accounts of Generics*

Nguyen (2020) and Sterken (2015): on these views, incidence variability is a feature of generics as a type of sentence. But because generics are context-sensitive, they can and usually do express much more determinate propositions on a particular occasion of use, and for that reason, generics on an occasion of use do not exhibit incidence variability, and the account of how context is used to fix the proposition conveyed is *ipso facto* an account of how a speaker incurs the relevant commitment.

- (8) Supreme Court Justices have even social security numbers.
 - a. Most actual Supreme Court Justices have even social security numbers.
 - b. All Supreme Court Justices in the actual world, and all Supreme Court Justices in nearby possible worlds, have even social security numbers.

¹Hesni (2021, 12589).

Assume that the prevalence of malaria carriers is too low to bear out the advice given in INDOORS. So while the incidence would have to be 10% to make it reasonable for Tanya to stay indoors, let's assume that it is actually 5%.

- (9) a. (Tanya:) Should I stay inside?
b. (Adviser:) Mosquitos transmit malaria.
c. (Knowledgeable third participant:) # That's false./No they don't.
d. (Knowledgeable third participant:) You're being overly cautious.

A contextualist semantic treatment of what's going on in REPELLENT and INDOOR is inappropriate.

3.2 *The Pragmatic Alternative*

I'll offer a basically Gricean relevance-based account.

- A hypothesis about the semantics of the sentence being asserted: a privileged subset interpretation of generics. A speaker who asserts (3) thus asserts the proposition that all or most members of the privileged subset have the property at issue.
- The problem: since there are no semantic constraints on the relationship between the size of the privileged subset and the class of members of the kind as a whole, the adviser has not said anything about the latter. And yet the agent who is being given advice crucially requires information about precisely that.
- Why use the generic? The generic signals that the advice is supposed to be reliable regardless of the situation.

4 Hesni

The contrast between the two cases of REPELLENT and INDOORS poses a *prima facie* problem for Hesni's account.

A more sophisticated version: the world might need to be apt for the advice.

- (10) The actual prevalence of the property predicated in the generic among all members of the kind is sufficiently high to make the course of action that requires that prevalence to be above a certain threshold reasonable.

If we elaborate Hesni's account along these lines, the actual instruction that is the content of the speech act becomes otiose. There is no need for the agent to act on the instruction to treat most mosquitos as transmitting malaria.

This point comes into view even more sharply if we consider a situation where the threshold imposed by the felicity condition is higher than just the majority implied by the content of the instruction.

5 Leslie

Cimpian, Brandone and Gelman conducted three experiments. In each of the experiments, subjects were placed in one of two conditions, and no subject was placed in both.

[STATISTICS → GENERIC] The subject was given a prevalence estimate about a novel property about a novel kind (e.g., lorches, having silver feathers), and the subject had to ask whether the corresponding generic is true. The task was manipulated to have different prevalence levels (10%, 20%, ..., 80%, etc.)

[GENERIC → STATISTICS] The subject was given a generic and asked what the statistical prevalence of the feature was.

In the first experiment, they used generics about harmless but plausibly characteristic features of novel categories, such as having feathers of a certain color. In the second, they used generics about transitory features such as having a broken leg. In the third, they used generics about dangerous properties—more on these shortly.

The basic findings were that in the first experiment, subjects were willing to accept the generic on the basis of roughly a 70% prevalence rate, but inferred that the prevalence was about 95% on the basis of being given the generic. In the second experiment, subjects across the board rejected the generics—this experiment was to ensure that subjects treated generics not simply as statistical claims. In the third experiment, subjects accepted the generic on the basis of significantly lower prevalences, sometimes as low as 20%, and continued to infer very high prevalences on the basis of the generic.

5.1 Critical Evaluation

(11) if F is striking, then some Ks are F and the others are disposed to be F.

This fact has an immediate implication for the sorts of predicates that can feature in generics to which the clause (11) applies. These predicates need to be the sort where it makes sense to say that members of the kind that do not manifest the feature have the disposition to do so. To take a particular example, (12) would be predicted to be false if its truth was determined by the application of (11).

(12) Snakes are poisonous.

(13) if F lies along a characteristic dimension for the Ks, then some Ks are F.

That means that their experiment in fact provides no reason in favor of Leslie's truth-conditions that carve out a special place for dangerous or otherwise striking properties.

A Broader Question...

The basic question a subject in the condition where they are given information about prevalence and have to decide whether to accept the generic is: *is the feature the characteristic one on this dimension?*

It would be not at all surprising that they are willing to answer this question affirmatively once they hear that 70% of members of the kind conform. While far from universal, it makes it likely that the relatively low prevalence is the result of a momentary aberration.

This immediately suggests why subjects in the opposite condition, where they are given a generic and they have to estimate the prevalence, tend to give a very high prevalence estimate: they assume that they are not in such an aberrant situation.

This same hypothesis can be extended to account for the much lower prevalence at which generics about dangerous properties are accepted. If a subject were to think roughly that dangerous (powerful) forms of attack or defense, such as being poisonous, are never the result of an accident and always the result of responding to evolutionary pressures, then even very low prevalence shows that the property is characteristic.

References

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