Genericity sans Gen

John Collins

Abstract

Generics are exception-admitting generalisations, which find expression in apparently diverse linguistic forms. A standard claim is that there is a hidden linguistic unity to genericity in the form of a covert operator, *Gen*. The paper surveys and rejects a range of considerations that purport to show *Gen* to be syntactically essential to the explanation of a range of linguistic phenomena connected with genericity. The conclusion reached is that genericity is not a specifically linguistic property insofar as it does not supervene upon any especial linguistic device; rather, it supervenes on broader cognitive competencies within linguistic constraints.

Note for foot of first page: My thanks go to an anonymous referee for numerous suggestions and criticisms that have greatly improved the paper. I also thank Gennaro Chierchia, Dave Liebesman, Paul Pietroski, Matt Teichman, Rachel Sterken, Tonia Bleam, Bernhard Nickel, Jeff Lidz, and Michael Glanzberg.

Address for correspondence: School of Politics, Philosophy, Language, and Communication, University of East Anglia, Norwich, NR4 7TJ, UK

Email: john.collins@uea.ac.uk

1. Introduction

So-called 'generics' are statements that say something about what generally or typically or usually or normally holds for members of kinds and other categories, such as social groups, artefacts, and so on. Correlatively, when not an explicit kind statement (e.g., *Dodos are extinct*), generics characteristically admit exceptions, in the sense that, say, the generic *Grizzly bears are brown* is deemed to be true even in the face of albino grizzlies. Thus,

generics are unlike quantificational generalisations as expressed by the determiners every, some, most; three, et al., which make no allowance for what merely generally holds. Although the linguistic properties of generics have been well-documented, accounts of genericity remain varied (for overviews, see Krifka et al. 1995; Pelletier and Asher, 1997; Mari et al., 2013). Still, if any position bids fair to be consensual, it is that genericity involves a covert operator (Gen) that encodes the exception-admitting generalisation characteristic of generics. My present aim is not so much to offer yet another account of genericity, but to argue that genericity as a linguistic phenomenon does not require any peculiar device for its expression beyond the syntactic and semantic resources otherwise found in natural language. That is to say, genericity does not involve a special Gen operator. I shall finish by suggesting that genericity is an irreducibly complex phenomenon involving lexical coercion and pragmatic reasoning. It will be seen that just such a position flows naturally from my principal negative claim that a special device for the expression of genericity is otiose. Of course, I must be selective, for a wide range of phenomena fall under the notion of genericity; in particular, I neglect the fascinating properties of the indefinite, save to make some remarks about its scope behaviour. I trust such gaps will not prejudice the positions to be discussed one way or another.

The foil for my arguments will be Leslie (2015), who usefully collects a number of standard considerations that appear to constitute a compelling case for *Gen* (other considerations will also be discussed). Leslie is responding to Liebesman (2011), who argues for a 'simple' account according to which predication to a singular kind term is the primitive case of genericity; apparent non-kind generic predication ('characterising statements') are explained as just another form of kind predication save that the property attributed to the kind is one the kind inherits from some selection of its members having the property. On this

hyper-simple model, the logical form for the generic *Dogs bark*, say, is simply F(k).1 Crucially, for Liebesman, the relation of inheritance that renders the simple logical form apt to express something apparently more complex—an exception-admitting generalisation, no less—is unsystematic, not amenable to a formal or compositional treatment. As on my advertised account, Liebesman does without a special linguistic device to express genericity. I shall suggest, though, that the 'simple' kind model is unable to account for scope phenomena, which Leslie neglects to discuss. Still, none of the considerations Leslie does present, nor other considerations to be discussed, directly militates for *Gen*; that is, the relevant phenomena are otherwise explicable without *Gen*, or remain troublesome even with *Gen* in service. My general conclusion, therefore, is one that accords with Liebesman's negative judgement as regards *Gen*; but genericity is not, *pace* Liebesman, really simplified, for the complexity of the phenomena remain to be explained, and genericity remains under linguistic constraints not accommodated by a 'simple' logical form.

Before beginning in earnest, let me be clear that my concern is for *Gen* as a putative syntactically realised operator, rather than as a mere descriptive device or as an ingredient of a semantic representation lacking any syntactic correlate.

2. The Linguistic Properties of Generics

'Generic' is a term of art covering a wide variety of constructions. In order to fix ideas, consider the cases in (1):

(1)a Polar bears are white [bare plural]

¹ Carlson (1977a, b) and Chierchia (1998) also endorse a kind-referring model for generics, but Carlson restricts his account to bare plurals to the exclusion of indefinites, and Chierchia posits a number of operators to type-shift expressions (see §2).

b The computer is the key invention of the 20th century [singular definite]

- c The Catholics object to contraception [plural definite]
- d A swan can break your arm [singular indefinite]
- e Gold sells well in a financial crisis [mass]
- f Dinosaurs are extinct [kind-selecting predicate]

What all these cases share is that under a normal, out-of-the-blue reading, their truth conditions concern not how things are for a given specific number of individuals (every polar bear or computer, etc.), but how things are in some looser generic sense for bears, computers, and so on. Crucially, the generalisations admit exceptions, unless the predicate is kind-selecting or definitional in some sense. Thus, a dual approach to genericity is standard, where, on the one hand, there is explicit kind predication, with the subject treated as akin to a singular term that picks out an abstract entity, and, on the other hand, there are non-kind generalisations ('characterising statements') with differences of opinion, as to be mentioned presently, between how best to implement *Gen* with respect to such predications as bare plurals and other constructions (see Krifka *et al.*, 1995; Pelletier and Asher, 1997; Mari *et al.*, 2013).

Two clear conceptual problems, then, are how to account for the kind/non-kind distinction, and how to understand the notion of an exception-admitting generalisation. Different positions on the problems may be discerned. One approach is to posit a basic form that is subject to type-shifting operations that deliver other predicative relations. Thus, one might take kinds to be basic and seek to define property-predications over them (Carlson, 1977a, b; Longobardi, 1994; Chierchia, 1998; Cohen, 1999, 2013). According to Chierchia (1998), for example, given that bare plurals are kind-referring, existential or episodic readings of bare plurals (*Dogs are barking*) are explained by way of the following rule of *Derived Kind Predication*:

(DKP) If *P* applies to ordinary individuals, and *k* denotes a kind, then $P(k) = \exists x [\forall k(x) \land P(x)]$. This rules maps a kind predication (P(k)) to an existential structure with the content that some things instantiate the kind and have the relevant property, with *k* type-shifted by the 'up operator' from a kind to a property content. For so-called 'characterising sentences', where instances of the kind possess the relevant property with potential exceptions, the operator applies with *Gen* ranging over instances of the kind. So, for *Dogs bark*, we have:

(2)
$$(Gen x, s)[\cup \cap dog(x) \land C(x, s)][bark(x, s)]$$

Here, the 'down' operator (\cap P) maps the primitive kind designation of *dog* onto a maximisation (supremum) of the property of being a dog, as triggered by the predication of *bark* that cannot apply to kinds; the 'up' operator applies to the result, mapping the maximisation onto the kind, as triggered by the generic operator.

Contra-wise, Krifka (2003) takes properties to be basic for bare plural designation, with kind generalisations derived via type-shifting. Whichever type-shifting option is taken, the shared goal is to accommodate the fact that the construal of the subject of a generic construction can shift with distinct predications, a point first noted by Carlson, i.e., a subject DP construed as kind-referring in one linguistic context need not be a kind term intrinsically, for it may show up in other constructions as denoting a singular abstract individual or a plurality. Another approach is to acknowledge a divergence of linguistic forms and simply treat the relevant DPs as ambiguous (Diesing, 1992).

All of the approaches share a central feature: the accounts appeal to *Gen* as a covert operator (a silent quantificational adverb) that expresses a generic predicational relation holding between the subject and the predicate in 'characterising statements', i.e., that

instances of the subject referent generally/typically/usually (thus admitting exceptions) have the property expressed by the predicate. So, *Gen* is pressed into service in order to capture the fact that various linguistic forms are apt to express generalisations that are insensitive to precise cardinalities, and so be ones that admit exceptions. Before looking at the complex pattern of exceptions, we need to consider kind statements as a special class of generics.

As mentioned, Chierchia (1998) and many other theorists take kinds to the basic semantic values for bare plurals (*inter alia*), which are type-shifted to produce non-kind statements. My present concern, however, is for the identification of kind statements as such, i.e., those with predicates that induce a kind construal. With or without a metaphysical account of what a kind is, it seems clear that some predicates select a kind-term argument or otherwise coerce their arguments to be read as kind terms. Let K-S partly characterise a kind-selecting predicate in the relevant sense:

K-S: A predicate 'F' is kind-selecting only if: 'Gs are F' not only does not entail, but renders incoherent, ' $(\exists x)[Gx \land Fx]$ '

The basic import of K-S is that the predicates of kind statements do not distribute over instances of the kind, or even admit a coherent instance, but say something about the kind itself, in some sense. To see how K-S operates, consider so-called dispositionals, which are non-kind predications. Imagine a new-fangled type of machine that peels bananas—the banana peeler. *The/A banana peeler peels bananas* and *Banana peelers peel bananas* are true enough, but it doesn't follow that any particular banana peeler has or even will peel any bananas; a dispositional statement says something about what a thing is disposed or supposed to do, not what it actually does do. Other dispositionals, though do license an existential inference. If it is true that Americans drive Fords or Jim smokes, then at least one American must drive a Ford, and Jim must have smoked on at least one occasion. Regardless of this

difference, though, the existential inferences are clearly coherent in both cases, and so dispositionals are not deemed to be kind statements by the lights of K-S. That is, K-S does not merely say that one cannot validly infer the existential generalisation from the kind statement, but that any such inference is incoherent. In contrast, consider, for example, *extinct* in (1f). It satisfies K-S because from *Dinosaurs are extinct* it does not follow that there is something that is both a dinosaur and extinct, for that thought is incoherent: dinosaurs *in toto* might be extinct, but no individual dinosaur can be.

All by itself, however, K-S fails to specify uniquely the notion of a kind statement, for pluralities or collections that demand collective predicates also satisfy K-S (K-S merely offers a necessary condition). Koslicki (1999), indeed, has argued that kind terms as featured in generics just are terms of plurality; after all, collective predications, much like *surround*, *meet*, and *gather* in the verbal domain, do not admit a singular existential inference, unlike their distributive counterparts, on pain of incoherence. Koslicki's position also has the benefit of not multiplying our ontology, and arguably getting the intuitive truth conditions of many cases correct; that is, K-S predicates, such as quantificational predicates *widespread*, *rare*, etc., *appear* to apply to the relevant pluralities as collective predicates, not to the kinds, i.e., a kind itself cannot be widespread or rare, but a collection can be. Impressions can be misleading, however.

To say bees are widespread/rare is not to say something about bees as a collective whole, but to say something about the distribution of bees (normally relative to a location), which is perhaps most felicitously rendered as instances of the kind being widespread/rare.² So, while

² Quantificational predicates might be kind-selecting of restricted kinds, such as tigers in a particular locale, in a way *extinct*, say, is not (cp., Cohen, 1999, pp. 92-4). At any rate, the predicates clearly do not allow for a coherent existential inference.

plural predications do satisfy K-S, we should not be tempted to think of kind-selection as just plurality-selection, for the relevant predicates appear not to select collections/pluralities, but instances of kinds. That is, the logical form for such statements appears to involve neither a plural predication nor a predication to a singular kind term, but a generalisation over instances of a kind (cp., Chierchia, 1998).

Of course, it might be protested that instances of collections, not instances of kinds, are selected. One consideration in favour of that idea is that quantificational predicates admit arbitrary collections (*Bees with one wing are rare/widespread*). It is unfortunate that such quantificational predicates are so often used as paradigms for kind-selecting predicates, because K-S predicates such as *evolve* or *extinct* behave differently: they are predicates neither of a collection *nor* of *instances* of a kind or a collection. The notion of a collection evolving or becoming extinct is predicated on *every* member of the collection being of a kind, i.e., not any old collection can evolve or become extinct, and no exceptions are possible. Thus, if one says that the large carnivores that roamed the Scottish Highlands are now extinct, one is not merely saying that such animals are now no more, but that the kinds to which they belong no longer have members (or something approximating that). Likewise, *Bees with one wing are extinct* is anomalous, unless one thinks of the subject as picking out a particular kind of bee; it is not made true by, say, all the single-winged bees now being dead (a new one could come along tomorrow).

The precise demarcation of kinds from collections, though, may be profitably side-lined when discussing the virtues and vices of *Gen*, which remain to be settled, even if one eschews kind-selection as a semantic feature. K-S does serve to specify one kind of predication that blocks an existential inference, whether through kind-selection or some other form of selection. Thus, my present concern is not so much for what a kind is or what a property of a kind might be, but only for whether a predicate licenses an existential inference as coherent

or not. Hence, I have simply presented a necessary condition for a predicate to be kindselecting in terms of its lacking a coherent existential generalisation.

Regardless of the correct way of analysing kinds and predications to them, K-S does not characterise genericity in general, for many generic predications precisely do license existential inferences, and, most significantly, admit exceptions, such as (1a, c, d). These are so-called 'characterising statements' for which *Gen* appears indispensable.

The pattern of exceptions is quite complex:

(3)a Grizzlies are brown [majority characteristic]

b Mosquitoes carry malaria [minority characteristic]

- c Ducks lay eggs [minority characteristic]
- d Books are paperback [majority characteristic]
- e Bees collect pollen [minority characteristic]
- f Bees are workers [minority characteristic]
- g Sharks attack surfers [Striking]
- h Plastic bags suffocate children [Striking]

The salient feature here is that our truth-value intuitions about these claims appears to be independent of the facts relating the incidence of the property attributed to the individuals picked out by the subject. Thus, we are happy to grant the truth of (3a), and ignore the albino bears (or the shaved ones), but the licence for this exception can't rest merely upon the recognised fact that the vast majority of grizzlies are brown, for generics are judged to be true where the predicated characteristic is had only by a minority ((3b, c)). So, the attributed property being had by a majority of individuals is not necessary for the generic statement to be judged true, and nor does it suffice, as (3d) witnesses: normal speakers judge (3d) to be false, even though the vast majority of books are paperback. The situation is most clear with cases such as (3e, f), borrowed from Cohen, where worker bees just are the bees that collect pollen, but there is a natural difference between the likely truth-value judgements between the

two predications ((3e) would be judged true, whereas (3f) would be judged false). We also find intuitive truth-value judgements to be sensitive to whether the property attributed is somehow striking. Many speakers would naturally reckon (3g, h) to be true, but that judgement appears to turn on the attributed property being highly threatening.

Trivially, then, the relevant generalisation involved in genericity does not distil to the familiar universal form:

$$(4) (\forall x) [Fx \to Gx]$$

Instances of (4) brook no exceptions. One might imagine that generics are formed via some species of domain restriction on a structure akin to (4) (for discussion, see, for example, Schubert and Pelletier, 1987; Declerck, 1991; Krifka, 1995; Pelletier and Asher, 1997; Cohen, 1999; Greenberg, 2007; Nickel, 2008; Leslie, 2008; Asher and Pelletier, 2012; and Sterken, 2015). It is clear, though, that genericity as such is not *mere* domain restriction as applied to (4); besides, the linguistic status of domain restriction remains very much up in the air, as much in the air as genericity itself.

Substituting *most* or *many* for *all* will not do either, for genericity is not equivalent to a majority characteristic, as just observed. It does not follow, of course, that non-K-S generics lack a quantificational form. Minimally, all that is required for such a form is a tripartite structure of a clause-level operator, a restriction on the operator (what it ranges over), and a scope, which realises the property holding over the members of the restriction under the operator. Thus:

$$(5) (Qx_1, ..., x_n)[Fx_1, ..., x_n]((\exists y)[Gy_1, ..., y_n; x_1, ..., x_n])$$

This kind of structure was developed by Kamp (1981) and Heim (1982) (cp., Diesing, 1992). The bare plural and indefinite introduce a predicate and do not carry any independent existential force. The variable of the predicate is either existentially closed (sooner or later), bound by a higher operator, such as an adverb of quantification, or default generically bound by Gen (an instance of 'Q'). The binding is said to be 'unselective' in the sense that the binding operator can bind over distinct variable types, such as individual, situation, and event variables. The operator is dvadic in that it relates the elements that satisfy the restriction to those that satisfy the scope such that, sometimes, rarely, always, typically, usually, often, etc., the former are the latter. Effectively, then, to posit *Gen* is just to let Q be realised by a generic adverbial, which has the interpretive effect of rendering the predication as one that holds normally or generally, although it is perhaps best read as always, given the relevant situation, which involves an introduction of situational variables bound by Gen, i.e., the quantificational force is separated from the DP. The Gen operator is thus distinct from Carlson's (1977a, b) predicate modifier, Gn. The former is a clause-level adverb that modifies the event or situation the whole clause expresses, whereas the latter just modifies the predicate. In general, the approach distinguishes quantificational force (universal) from what is being quantified over.³ Thus, to say that grizzlies are brown is to say that, generally, things that are grizzlies are things that are brown; or, alternatively, that, generally, situations that feature things that are grizzlies are ones in which the grizzlies are brown. For the purposes of the present paper, the precise construal of Gen and what it quantifiers over will not be crucial; it suffices that Gen is a covert adverbial quantifier that affects the

³ Here we recognise Partee's (1995) distinction between D(eterminer)- and A(dverbial)quantification, for this distinction really just pertains to the relation between explicit syntax and the semantic structure, i.e., with adverbial (A-) quantification, pragmatic information from the context or speaker is often required to fix the restriction under which so and so *always, often, occasionally* (etc.) occurs, much as such information is required for modality on the 'standard view' (Kratzer, 2012; von Fintel and Gillies, 2007).

interpretation of its host predicative structure in the sense of admitting exceptions to the predicate holding over the instances of the subject.

There is, then, a clear semantic rationale for *Gen*. The operator all by itself does not inform us why generics should have such varied exception-admitting properties, but it does accommodate the basic property of admitting exceptions. There is, however, only questionable evidence, or so I shall argue, for *Gen* being a syntactically projected operator. If, then, the operative notion of logical form is one that is encoded by the relevant syntax, or at least severely constrained by syntax, *Gen* should not be posited on the available evidence.

3. Questioning Gen

Henceforth, as described just above, let us take *Gen* to be a scope-taking operator within a classic tripartite structure of operator (here *Gen*), restriction, and scope. Following Carlson (1989) and others, Leslie (2015), in response to Liebesman (2011), usefully details some narrow linguistic phenomena (matters of syntax or structural construal) she takes to be best explained by a tripartite structure, although she curiously neglects the issue of scope. She also offers an account of copredication phenomena that Liebesman thinks militates in favour of a uniform simple kind account. Leslie is certainly correct that the phenomena she specifies offer a *prima facie* case against a uniform account that renders generic logical form to be simply and uniformly F(k). Such phenomena, though, do not significantly support the tripartite analysis; that is, all of the phenomena are explicable without assuming the analysis. Furthermore, the tripartite account of copredication is inadequate (at least as presented by Leslie). I shall also consider and dispute an argument from Cohen (2004a) that, he claims, 'proves conclusively' that both adjectival and verbal generics feature *Gen*. The upshot, then, is *not* that Liebesman's maximally simple account of the logical form of genericity is correct, but only that there is little linguistic evidence for *Gen* as a special covert operator. The

natural corollary, therefore, is that genericity is not a linguistic property at all, associated with a precise semantico-syntactic form. Some brief comments on this issue will close the paper.

Before considering the empirical phenomena that have been taken to support the presence of *Gen*, a brief conceptual reflection might be useful on the very idea of *Gen* as a covert adverbial quantifier.

Gen is supposed to be an adverb of quantification, much like usually, generally, normally, et al. The only difference is that Gen is covert, i.e., it contributes to the content a generic utterance is apt to express, but is not phonologically realised in the utterance. We should be perfectly willing to admit covert items that have significant syntactic and semantic features—such are the stock-in-trade of contemporary syntactic and semantic theory. Indeed, Diesing (1992) and Chierchia (1995), if not others, are concerned to give Gen a proper syntactic location and to specify a mapping principle from syntax to the semantic tripartite quantificational structure. My present concern is not so much to refute any such syntactic proposal, but to question whether the phenomena that are often cited in fact support the Gen hypothesis, even if the notion is not syntactically incoherent.4 Equally, though, any covert

⁴ Diesing (1992) and Chierchia (1995) provide similar accounts according to which, at LF, material from the VP is mapped to the nuclear scope and material from the TP (sentence level) is mapped to the restrictor. Diesing simply assumes the availability of *Gen*, whereas Chierchia suggests that its presence is triggered or not by the relevant predicative material. For Diesing, where existential readings apply, the surface subject is lowered into the VPinternal position at LF, so as to be mapped to the nuclear scope of the closure operator that applies as earlier as possible. This analysis depends upon peculiar assumptions about argument positions within the syntactic projection, including lowering into VP-internal positions, whereas the now common wisdom is the opposite: subjects raise from the internal position, although can be construed low under reconstruction, depending on the verb. posit needs to earn its explanatory keep and meet whatever conditions we place on linguistically covert structure in general. In particular, if Gen is conceived to be a syntactic item, then it should be syntactically plausible, enjoying independent corroboration. This is so notwithstanding any explanatory advantages that *might* accrue from positing it. Similarly, if Gen is conceived as merely an aspect of the semantic representation of generics, its covertness should be explicable. As it is, Gen is a peculiar beast. Generally, adverbials are adjuncts, which provide additional information to the core semantic structure, and are strictly optional as regards interpretability.5 The very idea of a covert adjunct is thus somewhat odd, for since the information an adjunct provides is optional, a speaker, merely by dint of linguistic competence, will not communicate the content of a putative covert adjunct, and so a hearer will not, *mutatis mutandis*, pick up the content in the absence of pragmatic reasoning (cp., Cohen, 2013). In contradistinction, phonologically null syntactic items are invariably posited so as to make a fixed and determinate contribution to the interpretability of their host structures; such, in part, is why the items are considered to be 'real'. Be that as it may, we should consider Gen on its own terms and see if its explanatory advantages outweigh the oddity of the notion.

4. Scope of Quantifiers

As mentioned above, Leslie (2015) curiously neglects a clear problem for a uniform kind account of the form offered by Liebesman (2011): generics may be subject to scope ambiguity, which would not be possible, if the generic subject were a kind term that always takes wide scope (Carlson, 1989). (6) offers two examples of generic scope ambiguity, where a generic bare plural interacts with another phrase:

⁵ The notion of an obligatory adjunct is not incoherent, but the notion has a very narrow range of *overt* applications (see Grimshaw and Vikner, 1993; Baker, 2003).

(6)a Hurricanes arise in this part of the Pacific

b Storks have a favourite nesting area

Recall that our working assumption is that *Gen* is a covert adverb of quantification. The ambiguity of (6a), therefore, turns on what we take the restriction of *Gen* to be, hurricanes or a specific part of the Pacific, say:

(7)a (Gen x, s)[hurricanes(x) \land in(x, s)](($\exists y$)[part-of-the-Pacific(y) \land arise(x, y) \land part-of(y,

s)])

b (Gen *y*, *s*)[($\exists x$)part-of-the-Pacific(*x*) \land in(*x*, *s*)](hurricanes(*y*) \land arise(*y*, *x*) \land part-of(*y*, *s*)) *Mutatis mutandis* for (6b).

Such scope phenomena appear to be a serious worry for Liebesman's uniform kindreferring account of generics. 6 The phenomena do not, however, militate for a general treatment of bare plural genericity in terms of quantificational *Gen*. To be sure, such ambiguities can be expressed in terms of divergent restrictions on *Gen* as a covert quantificational adverb (assuming the tripartite structure described above). One might think, therefore, that the explanation *Gen* affords for the relevant ambiguity phenomena amounts to an argument from the best explanation to the syntactic reality of *Gen*. The presence of *Gen* certainly *would* explain the ambiguity data in terms of a difference in the restriction of *Gen qua* (covert) quantificational adverb, but it is unnecessary to make such an assumption. A more economical account is possible.

⁶ Liebesman (2011, p. 425) does suggest that the bare plurals in cases such as (6) have an existential reading as well as a generic reading, and so one of the available readings of the ambiguities in (6) is not genuinely generic (or a kind predication by his account), but existential; for example, the wide scope reading of *this part of the Pacific* in (6a) is claimed to be existential, not generic. The outstanding problem for Liebesman is how a kind term, on his account, is rendered as an existential. He nods towards a 'pragmatic' effect.

First, let us accept the hypothesis that all DPs, including bare plurals, project an operator within their host structure that selects an NP. There are two general facts in support of this hypothesis: (i) nominals have the same general distribution, such as being able to be arguments of the same verb, entering into agreement relations, and being substitutable with pro-forms, and (ii) all nominals are subject to movement and so reconstruction effects, in raising and tough-movement constructions, as well familiar scope ambiguities as exhibited in (6). It would be nice, then, if the behaviour of bare plurals in particular fell into line with other scope-taking nominals, such as quantifier DPs. Ideally, all possible scope positions should be grammatically possible for a DP (cp., Reinhart, 2006; Szabolcsi, 2010). Of course, we do not find this; for names, pronouns, and kind terms are construed wide, and other DPs, such as definites, arguably lack relative scope (see Glanzberg, 2007). It seems, however, that the common factor here is a uniqueness construal, which impedes relative scope, even though the DPs may readily move where such uniqueness is not belied, as in raising and tough constructions. From this perspective, the generic ambiguity phenomena might pertain to DP scope-taking and have nothing specifically to do with genericity, i.e., the ambiguity of the cases in (6) is predicted by the nature of the DPs without any recourse to a special Gen operator. So, even though no-one supposes that scope phenomena such as (6) can *directly* militate for syntactic Gen, since Gen is an adverbial and so does not fall under general syntactic mechanisms of scope-taking, such as QR, if my suggestion is sound, the indirect 'best explanation' argument for syntactic Gen is still spiked, for there is a syntactic account of the phenomena sans Gen.7

⁷ I assume some form of QR that scopes quantifier DPs as a matter of core syntax (May, 1977; Chomsky, 1981). This is not to exclude other mechanisms of a more pragmatic flavour, such as choice functions (Reinhart, 1997). Also, I leave to one side the apparent strict locality of

For example, following Hicks (2009; cp., Hornstein, 2001), we might model the structure of the nominal as follows (with irrelevant branching elided):

(8) [_{DP} D [_{NP} OP DP]].

The embedded DP is what shows up at the surface as a nominal (*Bill, hurricanes, everyone*, etc. with their particular interpretations) and OP is a covert operator subject to movement, where the raised item includes an operator interpretation over the launch site construed in effect as a variable. On this basis, the scope interaction of a bare plural is predicted, since it harbours an operator structure that can stand in lower or higher positions relative to other such structures, which explains its general movement options; that is, a bare plural need not always take wide scope, because it is not a name. In particular, we may take nominals, including the relevant bare plurals, to be able to move to SPEC positions of covert Topic projections, which establishes what the given statement as expressed by the sentence is about.⁸ Thus, (6a) can either be about hurricanes or a specified part of the Pacific, and (6b) can either be about storks or a particular nesting area (my back garden). So much, as yet, does not produce the generic reading. It might now be wondered, then, whether our OP is just *Gen* after all. Not at all.

First, OP is not an adverbial triggered to occur given the choice of predicate in the construction, or else 'parachuted in'; rather, it is a uniform component of the nominal projection generally. Secondly, OP does not have any definite interpretation; rather, its role is QR, which does not specifically bear on the generic phenomena one way or another; indeed, the locality of QR is questionable both in terms of acceptability judgements and acquisition

(Syrett and Lidz, 2011).

⁸ I assume that a Topic projection is available as general feature of the so-called left periphery of a clause (Rizzi, 1997; Haegeman, 2012).

fulfilled by allowing nominals to enter into variable-binding relations by moving or copying up a structure with the launch site construed as a variable. Thus, the nominal can take on different interpretations relative to its position within a structure and what predicates it is an argument of, such as in *tough*-constructions and reconstruction effects. In particular, as is familiar, a subject bare plural can be existentially or generically construed, depending on its predicate (Bees are in the garden/Bees are pollinators). My present claim is that, rather than think that such a difference is due to the presence of an adverbial operator *Gen* triggered by the individual-level predicate are pollinators and otherwise required for scope taking (Diesing, 1992; Chierchia, 1995), the difference is due simply to the co-construal of the predicate with the subject (see §§8-9), for *Gen* is not required for bare plural scope-taking on general grounds. So, the individual-level predicate does trigger or coerce a generic reading of the bare plural, insofar as such a predicate attributes a property to the class of entities the bare plural picks out rather than any precise cardinality of such entities or any situated members of the class in space or time, as with stage-level predicates. In itself, such a construal does not license a *Gen* operator, which is independently otiose for scope-taking, if OP is present in the nominal projection.

If the above is on the right lines, then one should find bare plural scope ambiguity in the absence of generic construal. This is so. Consider the cases in (9), which are scopally ambiguous, but episodic non-generics:

(9)a Hurricanes destroyed every barn

b Storks chased every boy

With *hurricanes* taking wide scope, (9a) says that some collection of hurricanes destroyed every barn, with at least one hurricane hitting each barn. With *every barn* taking wide scope, each of the barns was destroyed by all of the hurricanes in the collection. Similar remarks

apply to (9b), where each boy is chased by all of the relevant storks, with *every boy* widescoping, or else, with *every boy* low, each of the boys is chased by perhaps just one stork. In effect, bare plurals can behave as existential plurals with an indefinite cardinality (cp., Moltmann, 2016, on definite plurality). We don't need to imagine, however, that there is a covert quantifier; rather, OP permits movement, which creates the relevant readings given an operator-variable dependence.

The most general explanation of generic scopal ambiguity, therefore, might not devolve onto any bespoke device with a special interpretation, but pattern with DP scope-taking even in non-generic cases. If this is a live option, as I think it is, the scope-taking phenomena of generics do not compellingly militate for any special linguistic genericity feature such as *Gen*, even though the phenomena do demonstrate that generic arguments have a certain scopal freedom as DPs, which contradicts, without further ado, a uniform kind account.

Wide-scope readings for bare plurals are apparently harder for some cases, such as the ones that initially evidenced Carlson's (1977b) narrow scope hypothesis:

(10)a I didn't see a spot on the floor $[\neg > \exists/\exists > \neg]$

b I didn't see spots on the floor $[\neg > \exists/*\exists > \neg]$

c Bill wants to meet a movie star [*wants* > \exists/\exists > *wants*]

d Bill wants to meet movie stars [*wants* > $\exists/*\exists$ > *wants*]

I think these judgements are not clear-cut. The contrast between (10a) and (10b) seems clear, but the perceptual verb interferes with the scope judgement insofar as *see spots* is most easily read as recording the percept of perception rather than the distal object (compare: *I didn't see pink elephants*). A change of example allows for a wide scope reading:

(11) I didn't sell cars $[\neg > \exists/\exists > \neg]$

Imagine that you have an option to sell a parking lot of cars or a parking lot of boats (you are, oddly enough, a contestant on *The Apprentice*). In this scenario, a wide-scope reading of the

bare plural is natural. As for (10d), it admits a namely rider (*namely, Tom Cruise, Robert DeNiro,* ...), which enforces a wide-scope reading (similar remarks hold for intermediate-scope readings). Interestingly, Le Bruyn *et al.* (2013) have conducted some experiments on this issue controlling for various factors, including the wide-scope entailment of the narrow-scope readings, by isolating just negation+plural interaction, which blocks the entailment. They find that bare plurals can readily wide-scope, the preference otherwise being based in pragmatics rather than semantics or syntax, a conclusion that supports the principled line that scope should be a structural condition that is equal for all DPs, but may be subject to pragmatic interference (cp., Reinhart, 2006).

Cohen (2001) complicates the general picture somewhat by claiming that indefinite subjects of generics always wide-scope, which is part of a general argument that generic indefinites are not quantificational generalisations encoded by *Gen*, but instead have a rule-based semantics governing probabilistic reasoning. Consider the following pairs:

(12)a Storks have a favourite nesting area

- b A stork has a favourite nesting area
- c Manned space missions consist of three brave astronauts
- d A manned space mission consists of three brave astronauts

Cohen claims that bare plural cases, (12a, c), are scopally ambiguous, whereas the indefinite cases, (12b, d), are not; they only have the readings where the indefinite subject scopes over the object DP. Cohen takes these judgements to be clear and only offers a single consideration in their favour, which really just unpacks the claim. We are supposed to judge that (12a) can be continued by either (13a) or (13b), whereas (12b) can only be continued by (13a), and that (12c) can, and (12d) cannot, be continued by (13c):

(13)a ... which other storks try to capture

- b ... which is in my backyard
- c ... namely Neil, Buzz, and Michael

These data are unconvincing. What effect there is appears to be due to indefinites preferring to wide-scope, and the contrasting arguments being indefinites in these cases. Generally, it is straightforward to have an indefinite generic subject scoped over by an argument DP with genericity retained. Consider (14), with relevant continuations provided:

(14)a A lion has a favourite prey (namely, the gazelle)9

b A manned space mission consists of three brave astronauts (namely, a pilot, a co-pilot,

and an engineer)

I should perhaps say that the scopal behaviour of indefinites is as fraught an issue as any in semantics. It is a tricky matter, therefore, to evaluate claims about genericity on the basis of claims about the scope of indefinites. As it is, the data appear to show that the usual systematicity of scope-taking holds across the piece here independent of genericity. Indeed, even if it were to be the case that the kind of narrow-scope readings offered in (14) are illicit, the reason for that would not clearly turn on genericity, but would more likely be an effect of indefinites generally being construed high.

Other scope interactions also appear to militate for *Gen* or at least a special mechanism to account for the scopal peculiarities of generics. Carlson (1977a) suggested that generics do not scope out of opaque contexts. Cohen (2013, p. 338) summarises as follows: 'Generics

⁹ The relational adjective *favourite* interferes with the high reading, but the namely rider secures the non-dependent reading.

exhibit scope ambiguities, except in opaque contexts'. The putative phenomenon can be doubted.

The narrow scope of generics relative to opaque operators/verbs is apparently evidenced by the following kind of case:

(15)a The King believes that every enemy spy is loyal to him

b The King believes that, for all x, if x is an enemy spy, then x is loyal to him (bel $> \forall$)

c For all x, if x is an enemy spy, then the King believes that x is loyal to him ($\forall >$ bel)

The surface reading in (15b) is available but implausible (the king must be quite foolish or else running double agents), whereas the inverse reading in (15c) is perfectly fine and most plausible, if the spies are doing their job well. Thus, the quantifier DP *every enemy spy* can easily scope out of the opaque context created by *believe*. Now consider (16):

(16)a The King believes that enemy spies are loyal to him

b The King believes that, generally, if x is an enemy spy, then x is loyal to him (bel >

Gen)

c Generally, if x is an enemy spy, then the King believes that x is loyal to him (Gen > bel)

Cohen's (2013, p. 337) judgement, after Carlson (1977a), is that (16c) is not a possible reading of (16a), i.e., *Gen*, unlike other operators, does not scope out of opaque contexts; it is as if the scope of the intensional verb is an island to the generically construed DP. Cohen (2013) offers an explanation of this would-be phenomenon, but the phenomenon itself can be doubted.

Cohen (2013) postulates a pragmatically triggered mechanism of 'predicate transfer' construal as opposed to a type-shifting mechanism triggered by a type-mismatch (Nunberg, 1995). Let 'Tg' denote the generic transfer operator that can apply to any predicate:

(Pred-T) $Tg(P) =_{df} \lambda x. Gen_y[C(y, x)][P(y)]$

If we assume, as Cohen does, that bare plurals are primitively kind-referring, then predicate transfer has the effect of changing the construal of 'P' from a predicate of a kind to a predicate of generic instances of the kind, where 'C(y, x)' expresses 'y being a representative of the kind x'. Significantly, predicate transfer appears not to scope out of opaque contexts; so if genericity is a species of predicate transfer, then, perforce, a generically construed predicate will not scope out of an opaque context. It remains unclear, however, why predicate transfer should be restricted in the way Cohen claims. Cohen (ibid., p. 347) does suggest that in order to be applied, a speaker must recognise the intension of the predicate, not just its extension. He offers the cases in (17):

(17) Every enemy spy is in the CIA files

The pragmatically felicitous reading, of course, is the transferred one where for x to be in the CIA files means merely that information about x is in the CIA files. Now consider (18):

(18) Bill believes that every enemy spy is in the CIA files

The thought is that the \forall > bel reading is disallowed, for otherwise predicate transfer could not apply and it would be as if Bill believes of spies that they are literally in CIA files sat in a filing cabinet. This strikes me as a theory-driven intuition based on how predicate transfer is defined. The supposedly disallowed reading is perfectly available and does not interfere with predicate transfer at all—predicate transfer may apply to whatever the predicate applies to. So, consider the reading (19):

(19) For all x, if x is an enemy spy then Bill believes that x is in the CIA files

That reading is available, but doesn't credit an absurd belief to Bill, but only the belief expressed in (20):

(20) For all x, if x is an enemy spy then Bill believes that x's records are in the CIA files It is the predicate that remains transferred, but in a way that is insensitive to whether the argument position is quantified into or not. At any rate, that is consistent with the data. Furthermore, substituting a DP that likes to scope high meets with no problem:

(21) Bill believes that an enemy spy is in the CIA files (if only he could identify him)

(21) has a construal where a particular spy is at issue, but that construal does not credit Bill with absurd beliefs.

In general, if my claims about DPs are correct, then, in the absence of any semantically interfering feature, DPs should be able to scope out of opaque contexts, which are not syntactic islands, and so be apt to take on a generic construal. Returning to (16), then, we can recognise the bare plural *enemy spies* as wide-scoping given the acceptability of a namely rider (i.e., one can list the enemy spies the King thinks are loyal to him). So there is no syntactic or semantic barrier to wide-scoping with an existential construal. A generic construal should also be available, then, if I am right that scope-taking is enabled by a general syntactically specified OP, independent of interpretation. Imagine the following set up:

(22) The King is tremendously gullible and takes very bad advice. From the information provided to us by a treacherous advisor to the king, we know that his security has been generally penetrated by all of his many enemies. It is now fair to say that the King believes that enemy spies are loyal to him.

The last sentence here clearly expresses the thought encoded in (16c), where we don't have in mind some definite set of spies, but spies who are generally enemies of the king. To be sure, the inverse reading is off-the-bat dispreferred, but so is (15b). So, while Cohen's general take on *Gen* as a pragmatically triggered effect is attractive insofar as *Gen* otherwise lacks a clear

syntactic or semantic signature, the hypothesis appears not to gain decisive support from scope phenomena, which casts general doubt on the utility of *Gen*.

In sum, then, considerations of scope-taking clearly militate against a uniform kind account insofar as kind terms construed as singular terms do not variably scope. Scope considerations, however, fail to militate decisively for the presence of *Gen. Gen* is posited as a covert quantificational adverb so does not fall under general syntactic conditions for scope-taking, such as QR. Still, the scope phenomena surveyed pattern with the general scope behaviour of DPs, which is quite complex independent of genericity. So, there is no clear basis here to posit a special linguistically encoded *Gen* operator. Of course, one can specify an intended construal at a level of the representation of content by positing a relevant operator, but, as regards scope at least, there appear to be no linguistic phenomena that require *Gen* for their explanation; other explanations are available that cohere with independent syntactic principles.

5. Anaphora

Leslie (2015, pp. 34-5) notes, after Carlson (1977b), that anaphora phenomena pose a *prima facie* problem for a uniform simple kind analysis. Carlson (1977a, b) initially thought of bare plurals (but not indefinites) as uniformly kind-referring, and accounted for anaphora via a unary predicate-modifier operator *Gn* (which roughly transforms the predicate from holding of the kind to generally holding over members of the kind). Later, Carlson (1989) observed the scope ambiguity of the kind of cases discussed above and endorsed a dual account, with anaphora being supported as a matter of variable binding, which *Gn* does not support. The moral, or at least the moral Leslie draws, is that a uniform kind-referring account cannot explain anaphora phenomena, and so a *Gen*-based account is, to that extent, corroborated (cp., Sterken, 2015, 2016). Consider:

(23) Cats lick themselves

The natural reading of (23) is one where self-licking is generically attributed to individual cats. A necessary condition for its truth is that at least some cat lick itself. It is difficult to read (23) as saying merely that cats lick cats, which would be true even if no individual cat licked itself; the preferred expression for that thought would be *Cats lick each other*. Leslie claims, however, that only a *Gen* operator captures the relevant reading, i.e., treating (23) as a kind predication to *Felis catus* only captures an unavailable reading. Thus:

(24)a (Gen x)[cats(x); lick(x, x)]

b lick-themselves(Felis catus)

The problem with this line of reasoning as an argument for the 'reality' of *Gen* is that the facts of reflexive interpretation are independent of genericity and do not rely upon variable binding of the kind *Gen* entails. It is true enough that (23) lacks the reading encoded in (24b), but that reading is not encoded reflexively at all. If one wants a reciprocal reading for (23), then one needs a reciprocal phrase, such as *each other*, regardless of whether bare plurals are kind terms or not. In general, the acceptability of a reflexive direct object follows number agreement, with reflexivity only pertaining to singular individuals or individuals collectively, not kind terms:

(25)a #Felis catus licks itself

- b **Felis catus* licks themselves
- c A/The cat licks itself
- d *A/the cat licks themselves

Thus, although *a/the cat* is obligatorily singular *vis-à-vis* reflexive number agreement, as witnessed in (25d), the semantics is not essentially singular in the sense that (25c) need not be about a specific cat; on the contrary, it has a ready generic construal saying that cats in general are self-lickers. The interpretation of (23), therefore, really tells us nothing about the syntactic plausibility of *Gen*. The acceptability of the reflexive simply follows from number agreement, and the unacceptable reciprocal reading is ruled out generally for independent reasons: a reflexive predicate attributes a property to an individual or individuals as members of a plurality, even with a generic construal as in (25c).

A referee suggested that (26a) has a reciprocal reading, notwithstanding its reflexive object:

(26)a After the goal, the players congratulated themselves

b After the goal, Sally and Jane congratulated themselves Such a reading is not obvious to me. The reciprocal effect that is present might be due to the nature of congratulation, where members of a group might congratulate themselves either in isolation, as it were, or *qua* members of a group, which is normal in sports: players can congratulate themselves as part of a collective, without congratulating each other (cp., *The scientists persuaded themselves that the new results were sound*, which doesn't entail that the scientists persuaded each other). Hence, (26b) has no suggestion of a reciprocal reading because Sally and Jane are specified independently. Whatever reciprocal sense (26a) harbours, it is not a general feature of the reflexive, as a change of verb makes clear. *Wash* admits reciprocal and reflexive objects, but is naturally read reflexively when an intransitive, even with a plural subject (including conjunctions). Likewise, *kiss* admits reflexive and reciprocal objects, but, in distinction, is naturally read as a reciprocal when an intransitive; indeed, intransitive *kiss* with a singular subject is somewhat anomalous, unless the object position is read as elliptical for some salient recipient, and with a plural subject (including conjunctions) the VP is read reciprocally. One might think, therefore, that *kiss* with a reflexive object should be readable as a reciprocal, context willing. This is not so:

(27)a After the game, the players washed/themselves [reflexive]

b ... the players kissed [reciprocal]

c ... the players kissed themselves [reflexive]

I suppose it is not implausible for players to wash and kiss each other after a game (I really wouldn't know), but (27a, c) only mean that each player washed/kissed herself/himself. Likewise, obligatory reciprocal predicates do not admit reflexive objects:

(28)a The men met each other/#themselves

b The women resemble each other/#themselves

Plurals as antecedents of reflexives do give rise to a distributive/collective ambiguity:

(29) The warriors surrounded themselves with shields

Here, each warrior might be, oddly enough, surrounded by shields, or only the collective might be so surrounded. To get the reciprocal reading, which means something different, one needs a reciprocal phrase, not a reflexive.

So, (23) has the reflexive reading (as opposed to the reciprocal reading) simply because it cannot have any other reading given the semantics of reflexivity, which by itself neither entails nor presupposes *Gen*. To be sure, (24a) does capture the intended reading, but so much does not militate for a *Gen*-based account, for all relevant facts pertaining to reflexivity are independently explicable. Thus, other anaphora (non-reflexive) cases pattern much the same way.

Consider (30):

(30) Sailors like everyone who likes them

Again, construing the subject as a kind term appears to preclude the natural reading, where each sailor is such that s/he likes everyone who likes the sailor himself/herself. If *sailors* is a kind term, however, we have the following interpretation:

(31) $\lambda x(x \text{ likes everyone likes } x)(\text{sailors})$,

which does not entail that each individual sailor likes all those who like him or her in particular. As it is, however, (30) is ambiguous even with *them* being anaphoric; it also has a reading where, generally, each individual sailor likes all of those people who like sailors in general. Imagine that a poll is conducted among a population about their favourite professions, and the people who rank sailors highly are identified. In such a case, it is fine to utter (30) as an expression of the attitude of sailors towards the identified people, without the entailment that such people like the individual sailors, i.e., (30) has a reading equivalent to *Sailors like everyone who likes sailors*. The two readings, then, appear to be available because of the ambiguity of *them* picking up on each individual sailor or the collection or kind (in fact, this ambiguity is probably a copredicative phenomenon). The use of *them*, therefore, simply reflects number agreement rather than the exclusion of a kind or collective reading as exhibited. Thus, (32) is unacceptable on the independent grounds of agreement:

(32) *Sailors_i like everyone who likes him_i/her_{i.10}

10 There are also copredication cases such as (i):

(i) Martians will talk themselves into extinction

(cp., Krifka, 2003; Rooth, 1985). I take copredication in general to be an unresolved problem for a dual account (see §8). Such cases as (i), however, do not add to the argument presented, but are merely further cases to the same effect, i.e., mere number agreement suffices. This is clearly so, because although the quasi-resultative predicate selects for kinds, *themselves* is supported by mere number agreement. Leslie offers further reasoning to the same intended conclusion *vis-à-vis donkey* anaphora. Such anaphora raises many complexities, which I have not the space to cover in due detail. I think, however, that the judgement reached above hold here too: a simple uniform kind account fails to explain the phenomena, but a *Gen*-based account is not thereby buttressed, for its resources are otiose for the explanation of the present phenomena.

Consider:

(33) Children who grow a new tooth_i show it_i off

The 'donkey' problem is how to understand the coreferential reading between the antecedent DP (*a new tooth*) and the pronoun (*it*) of the predicate (as indicated by the indexes), given that the antecedent is part of a relative clause embedded in the wider DP subject. There are various approaches to this puzzle. Assume, however, that a so-called E-type analysis is most hospitable to a simple kind approach. On this account, the pronoun is construed as if the relevant antecedent substitutes it, creating the informal gloss of (34):

(34) Children who grow a new tooth show off the new tooth they have grown.

To arrive at this construal, however, the predicate of (33) must be saturated by the whole subject:

(35) λx (x shows off the new tooth x has grown) (children-who-grow-a-new-tooth),

which is equivalent to:

(36) Children-who-grow-a-new-tooth show off the new tooth that children-who-growa-new-tooth have grown.

This structure fails to entail the intended reading of (33) that the children who grow a new tooth show off that very tooth of theirs, as opposed to some other tooth another child has grown.

What this argument shows is that complex DPs standing in the relevant antecedent positions cannot be construed as simple kind terms. It doesn't show that *Gen* is required as a binder for variables across the subject and predicate (cp., Carlson, 1977a).

6. Weak Crossover

The so-called 'weak crossover effect' is the unacceptability of a reading of a sentence that involves a binding relation between a moved operator, its trace/copy, and an overt pronoun that (i) intervenes between the operator and its trace/copy and (ii) does not c-command the position of the trace/copy. So, consider (37a):

(37)a *Who_i does his_i brother love $\langle who \rangle_i$

b Which person x is such that x's brother loves x

On the indicated construal, *who* has moved out of object position of *love* and crossed over the pronoun *his*, which does not c-command the launch site. (37b) spells out the unacceptable construal. Interestingly, the injunction against the relevant construal also appears to apply where the movement of an operator/quantifier is covert.

(38)a *His_i brother loves everyone_i

b Every person x is such that x's brother loves x

As with the overt *wh* case, it here seems as if the moved item *everyone* cannot simultaneously (covertly) scope over and bind *his*, even on the assumption that quantifier DPs always move out of argument position. Of course, disjoint readings are perfectly OK in both cases. For present purposes, let us simply assume that the weak crossover injunction is sound and that it has a syntactic explanation, or is at least diagnostic of syntactic structure.

Leslie (2015, p. 40) asks us to consider the pair:

(39)a Mostly, boys_i are loved by their_i mothers

b *Mostly, their_i mothers love boys_i

The indexes mark the intended construal. The important point is that (39b) lacks a coreferential reading (more precisely, a referential dependent reading) just as (37a) and (38a) do. Leslie assumes that such a pattern establishes all three cases as weak crossover effects (a point to which I shall return). She goes on to argue as follows. Consider (39) *sans* the adverb *mostly*:

(40)a Boys_i are loved by their_i mothers

b *Their_i mothers love boys_i

The available readings have not altered. Leslie contends, however, that

on the simple view [i.e., Liebesman's view], removing "mostly" from the pair should make a notable difference... that is, "boys", with no adverb of quantification around, should pattern more like "John" with respect to the test [i.e., a weak-cross-over violation] (ibid., p. 40).

On the other hand, if 'bare plurals contain variables to be bound by a *Gen*-operator, then removing "mostly" should not affect the acceptability' (*op cit*.) of the cases in (39). '[T]he important point', Leslie continues, 'is that the simple view actually predicts that [(39b)] should be completely unacceptable while [(40b)] should be at least borderline acceptable' (*op cit*.). The crucial thought here is that if *boys* is just a kind term, then it should pattern like any other referential term, such as *John*. This appears not to be the case:

(41)a John_i is loved by his_i mother

b ?Hisi mother loves Johni

Leslie judges (41b) to be borderline whereas (40b) is outright unacceptable, but the 'simple view' that does without *Gen* predicts an equivalent status for the two because both, *ex hypothesi*, involve singular terms. No such of false prediction arises for the *Gen*-operator view, under which *boys* is not treated as a kind term but as contributing an open formula to logical form (or a *Gen* quantification over instances of the kind). Leslie's reasoning is dubious throughout.

First, the issue Leslie raises has nothing whatsoever to do with weak crossover effects. (37a) and (38a) exhibit weak crossover effects because they involve a pronoun intervening (hence 'crossed over') between a variable-binding operator and the launch site of the operator, or its scope site, if one prefers (where the pronoun does not c-command the site). On the other hand, (39)-(41) do not involve weak crossover at all, but simply reflect Principle C effects, the principle being an interdiction against the binding of a referential term. Thus, so the traditional story goes, (39b) and (41b) are unacceptable or at least marginal because referential terms in both cases are putatively bound. The interesting contrast is between (40b) and (41b), which I shall discuss shortly. Nothing I argue here will turn on any precise formulation of Principle C or some substitute binding notion; the only important point is that the witnessed phenomena pertain to binding and only tangentially relate to quantification. Socalled 'strong crossover', where the pronoun *does* c-command the trace/copy of the moved operator, is reducible to a Principle C violation, if we assume that a trace/copy is a referential term, but that is another matter. As things stand, therefore, an advocate of the 'simple kind view' could appeal to Principle C to explain the relevant phenomena; nothing in the 'simple view' predicts the falsity of Principle C. The view does predict the lack of a contrast, though.

Secondly, the crucial contrast does not exist, and if it did, it would be irrelevant. Both cases strike me as bad, if straight-up, but ameliorable. Here are the cases again, with Leslie's judgements indicated:

(40)b *Their_i mothers love boys_i

(41)b ?Hisi mother loves Johni

It is pretty pointless banging intuitions together. I shall settle for two points. First, if there were a contrast, it would remain inexplicable on current grounds, for both the weak crossover injunction and Principle C would not apply, the former being irrelevant, the latter not recognising any contrast, for *boys* and *John* are equally 'referential' as regards Principle C. Furthermore, the contrast is *not* predicted by the *Gen*-operator view, which offers no interdiction free of Principle C against (40b). The important point here, therefore, is that it is perfectly OK for Liebesman or whoever to accept the 'simple view' of generics and endorse the putative contrast between the cases, but hold out for an independent explanation of it: perhaps proper names have an indexical element, which aids a co-referential construal, or the effect might be wholly discourse-based. Since the would-be phenomenon is not explained by either account, neither should gainsay independent explanations. Of course, I think this is academic, because there is no strong contrast.

Secondly, if the contrast were substantive, one should expect it to be robust. It strikes me as patently not being. Both cases can be somewhat rescued if situated in the right discourse:

(42) A: No-one loves boys

B: Well, I am sure their mothers love boys11

(43) A: No-one loves John

B: Well, I am sure his mother loves John

¹¹ It is more felicitous to render B's statement as elliptical: *Well, I am sure their mothers do*. The full sentences are not bad, though.

Such cases, it bears noting, do not so much refute principle C, as indicate that the interdiction of the principle can be obviated in favour of a co-referential reading, given a context that makes available a co-referential reading (see Reinhart, 1983, 2006, and Safir, 2004, for proposals along these lines). So, an account of generics that entails, in line with Principle C, no contrast between bare plurals and names as regards binding, is not in essential disrepair; on the contrary, that is probably exactly the prediction one wants.

Thirdly, Leslie's presentation of the dialectic is unclear. She concedes that the intuitions might be subtle, and so, perhaps, unreliable. The crux of her reasoning, however, does not rest on overly subtle intuitions:

Saying one finds the intuitions hard to generate here is not responsive to the argument. The point is that the simple view implies that there will be a clear difference between [(39b)] and [(40b)] (ibid., p. 41).

That is, the simple view, *apparently*, entails that removing *mostly* from unacceptable *Mostly*, *their mothers love boys* (on the relevant reading) will make a difference to acceptability, hence it is that the sentence shorn of its adverb should be at least borderline. The basis for this attribution, I imagine, is that Leslie takes herself and any potential interlocutor to agree that in (39b) 'the plural "boys" is quantified by the adverb "mostly" (ibid., p. 40). Thus, on the simple view, the removal of the adverb must make a difference, for it would amount to transforming *boys* from a predicate quantified over by *mostly* into a kind-referring singular term. Two problems arise with this reasoning.

First, it is unclear what commitments an advocate of the simple view must have hereabouts. I take it that Leslie is simply assuming that *mostly* quantifies over *boys*, with the relevant structure being something approximate to

(44) (Most x, y)[mother-of(y, x) \land boy(x)](love(y, x))

But this is not so clear at all. The intended meaning is clear enough: Most mothers of boys love those children. There is no need for quantification into *boys*, however. (39b) does not even purport to say anything about most boys, either most boys as such or most boys had by given mothers. Views on what (unselective) adverbial quantification may range over differ (individuals, times, situations, events, etc.), depending on the adverb. In the present case, however, it seems OK to take the adverb only to quantify over situations of some sort, not the instances of the predicates (see Heim, 1990; von Fintel, 2004).¹² Thus, the structure would approximate (45):

(45) (Most s)[$(\exists y)(\exists x)$ (mother-of(y, x, s) \land boy(x))](love(y, x, s))

That is: Most situations are such that where there is a mother of a boy, the mother loves the boy, which is more or less the same as the paraphrase offered above. Further, if one wished to render *boys* explicitly as a kind-referring term, one could easily do so (sets are sufficiently like kinds for present purposes):

(46) (Most s)[
$$(\exists y)(\exists x)$$
(mother-of(y, x, s) $\land x \in \{x: x \in BOY\}$)](love(y, x, s))

Again, there is no generic quantification over boys. As things stand, therefore, an advocate of the simple view of generics is, as far as I can see, free to accept the *standard* picture of adverbial quantification that does *not* quantify over instances of the predicate terms. It remains opaque what precise view of quantificational structure Leslie has in mind. The simple theorist, at any rate, is not obliged to think that deleting an adverb of quantification must change the acceptability status of a construction, for he is free to think that the adverb

¹² It is still OK to take the bare plurals to introduce a free variable so long as it is bound by *some* operator, even if not the adverb.
does not quantify into a predicate term, which may thus remain invariant in its semantic significance between the presence and absence of the adverb. Thus, the theorist need not think that there is a difference in acceptability between (39b) and (40b).

The second dialectical difficulty with Leslie's discussion of adverbial quantification is that it is difficult to see why the *Gen*-operator theorist is supposed to be better off than the simple theorist. The only germane comment Leslie (2015, p. 40) makes is that since 'bare plurals contain variables to be bound by a *Gen*-operator,... removing "mostly" should not affect the acceptability ([of (39b)]'. The thought seems to be that in both constructions *boys* is a predicate that contains a free variable to be bound; so, since it makes the same logicosemantic contribution to both constructions, a change of acceptability across the cases cannot turn on the predicate, which is why the account does not predict any change. This strikes me as confused. If, as Leslie assumes, *mostly* quantifies into *boys* in (39b), then its deletion in (40b) *necessarily* changes the logico-semantic structure of the sentence, unless Leslie assumes that *mostly* is simply equivalent to *Gen*, which I presume she does not intend.

7. Scope of Disjunction

Cohen (2004a) offers a consideration that, in his judgement, 'proves conclusively' that adjectival and verbal generics share a *Gen* logical form. Cohen is concerned to show that while *Gen* is uniform across cases like *Bees are workers* (adjectival and judged to be false) and *Bees collect pollen* (verbal and judged to be true), the difference between the two is explained pragmatically in terms of the homogeneity of the domains, i.e., bees are not homogeneously workers across bee subsets (Queens and drones aren't), whereas bees do homogeneously collect pollen in the sense that members of the sets of the different kinds of bees uniformly do or don't collect pollen (Cohen, 2004a, p. 538). I think Cohen is right insofar as homogeneity is a broader psychological factor that effects generic truth-value

judgements, but this fact is quite independent of the *Gen* hypothesis, i.e., rejecting *Gen* does not involve rejecting the significance of the homogeneity factor. Anyway, Cohen's (ibid., pp. 540-1) case concerns scope availability. Consider:

(47)a Whales are mammals or fish

b Whales are mammals or whales are fish

Following Schubert and Pelletier (1987), Cohen claims that (47a) is most naturally read as (47b), with disjunction taking wide scope over the subject *whales* (imagine teaching taxonomy to a little child, where you want her to make a choice). On the other hand, disjunction can also most naturally take narrow scope with respect to a bare plural in a generic:

(48)a Pets are cats or dogs

b In general, if x is a pet, x is a cat or x is a dog.

So, bare plural generic subjects admit scope ambiguities. However, according to Cohen (ibid., p. 540), '[i]f nominal predication generics do not involve quantification, they should not exhibit scope ambiguities'; in particular, if bare plural generics really do occur as kind terms, then they should be as scopally indifferent as proper names, which is transparently not the case. This line of reasoning is open to doubt.

It is pretty clear that kind terms, or at least terms no-one would otherwise consider to be quantificational, admit precisely the kind of ambiguity Cohen highlights. Thus, the ambiguity all by itself should not count as a sufficient condition for a term not being kind-referring, or as quantificational, or subject to quantification. Take *water*.

(49) Water is H_20 or 2H_2O

(49) strikes me as ambiguous with respect to the scope of disjunction. A wide reading is true where water has one or the other compound structure (a matter of an isotope), but not both (imagine a child trying to recall a lesson). A narrow reading is true where we take water to be realised by both compounds, and perhaps others. Similar reasoning holds for any kind term one likes.

8: Copredication

Throughout the previous discussions, we have been assuming that genericity comes in two forms: kind-selecting predication, not involving a generalisation at the level of logical form, and a *Gen*-based generalisation. For our purposes, as explained, the significant difference is that the former type of predication precludes, whereas the latter type licenses, an existential inference. An apparent major problem for such a dual proposal is the possibility of *copredication* as witnessed in (50):

(50)a Mosquitoes are widespread

- b Mosquitoes are irritating
- c Mosquitoes are widespread and irritating

Copredication covers a range of complex phenomena (see Schubert and Pellitier, 1987, for an early discussion pertaining to genericity). Presently, the problem is that if the difference between kind-selecting and generic predication is structurally encoded to cater for the difference between (50a) and (50b), then (50c) should be gibberish, its subject being both kind-referring, thanks to the predicate *widespread*, and generically quantified over (a restrictor for *Gen*), thanks to the predicate *irritating*. ¹³ No such problem arises for 13 If one wants to classify *widespread* as a quantificational predicate instead of a kind-selecting one, then the argument may still proceed simply by changing the example

Liebesman's (2011) account that subsumes the difference between (50a) and (50b) under a uniform kind predication (in particular, what it takes for the kind *Culicidae* to support a predication of being irritating is not structurally encoded), which is not to say that Liebesman's own positive account of the phenomena is adequate. Leslie (2015) offers a *Gen*-based solution to this problem of copredication.

She argues that copredication cases such as those in (50c) are to be analysed as involving a conjunction of two clauses: one kind-predicating, the other type-lowered from a kind predication to an individual predication. For example:

(51) λx [widespread(x)](mosquitoes) \wedge Gen y [(ψ (mosquitoes))(y)](irritating(y))

For present purposes, I am happy to accept a mechanism of type-shifting and to leave it open whether it is exclusively lexical/semantic, as in the seminal account of Partee and Rooth (1983) and most theorists thereafter, or else somehow pragmatically triggered, as suggested $\overline{(Mosquitoes are now extinct, but were very irritating)}$. Even without this wrinkle, the copredication problem remains of how to classify the relevant subjects. Taking them to be plural terms does appear to ameliorate the problem, for plural terms can take conjunctions of collective and distributive predicates:

(i) The men gathered and drank a beer

How to read (i) is not obvious, however, for it appears to involve some coercion to arrive at the natural reading where the men did not share a single beer, so the construal of the subject *the men* is relative to the predicates, so is as copredicational as any other case. It is not obvious, therefore, whether the plural term proposal advances on Liebesman's claim that kind terms can take categorically distinct predicates. Regardless, even if we were to think of pluralities as both collections and what is collected, we would have no steer on how to accommodate genuinely kind-selecting predicates.

by Cohen (1999, 2004b). Similarly, I shall assume that type-shifting, if applicable, will apply equally, to subject and object positions. This assumption is not innocent, as it divides, say, Chierchia (1998) and Cohen and Erteschik-Shir (2002), with the former assuming that existentially construed object bare plurals are kind-referring, so subject to type-shifting on an existential construal, whereas the latter assume an incorporation mechanism that shifts the type of the verb (not its arguments), if taking a bare plural object, so as to take a monadic property as argument whose argument position is existentially bound, i.e., the existence of something satisfying the property is lexically entailed (according to the account, it is the structure of topic and focus that fixes the interpretation of a nominal as generic or existential, respectively). Whatever the case, I take type-shifting to be a 'last resort' mechanism that enables an interpretation of an otherwise (relevantly) unacceptable construction.

Leslie assumes that treating bare plural *mosquitoes* as default kind-referring is OK (cp., Chierchia, 1998; Cohen, 1999, 2001, 2004b, 2013). Leslie, though, fudges the issue of whether *Gen* is triggered by a type mismatch or pragmatic incoherence, the latter being Cohen's model. The mechanisms are distinct as one targets a lexical or categorical inconsistency arising from the grammar whereas the other targets a predicate's construal to save plausible truth conditions. Cohen has always favoured a pragmatic explanation, and has latterly adopted a 'predicate transfer model' in distinction to a type-shifting device (Cohen, 2013) (see §4). For present purposes, though, the issue is academic. Cohen's original claim to which Leslie appeals is that *Gen* is triggered or accommodated as a response by the hearer to the unacceptability of a predication to a bare plural construed as a kind predication. So, Cohen takes cases such as (52a) to be type-mismatches (leaving it open how best to construe the mismatch) given that (52b) is OK as it stands. Explicit copredications are easily formulatable:

(52)a Pandas eat bamboo shoots

b Pandas are an endangered species

c Pandas eat bamboo shoots and are an endangered species

Thus, the hearer responds to the mismatch by taking the kind term argument of the predicate to be a predicative restrictor of a *Gen* operator:

(53) (Gen x)[C(x, Panda); eat-bamboo-shoots(x)],

Where 'C(x, y)' expresses 'x is a representative of the kind y'. The problem with all of this as a hypothesis about logical form is that the account is wholly run on pragmatic rather than syntactic lines, i.e., the grammar licenses both (52a) under a simple monadic form (F(k)) and (53) (Cohen and Erteschik-Shir, 2002, pp. 149-50). Thus, a hearer posits Gen in order to rescue an utterance from obvious falsehood (and a speaker somehow implicitly intends such an understanding to be achieved), but that just means that the bare grammatical acceptability of the construction is established prior to Gen, and the construction is also interpreted independently of Gen, viz., as a false kind predication. In particular, then, there is no linguistic evidence to suggest the presence of Gen that would explain the readings; on the contrary, Gen is here explained on the basis of the hearer's interpretation of the sentence being in conflict with the intended interpretation of the speaker the hearer is supposed to recognise. Cohen (2004b, p. 165) does appeal to discourse ellipsis as a case analogous to the positing of covert Gen, but the analogy is not sound. With ellipsis (discourse or not), the antecedent is provided, so the speaker need not infer a structure in order to rescue a content, but merely needs to adhere to a parallel principle of some sort, i.e., the interpretation is syntactically fixed. In the hypothesised case of (52), the hearer infers a recategorisation in order to arrive at a true reading rather than any reading at all; that is, the structure is already grammatical and interpretable prior to the positing of Gen, i.e., prior to Gen having any interpretive effect on the linguistic content of the utterance.

I should say that the spirit of what Cohen proposes seems perfectly right in the sense that it is the predicate that induces or *coerces* the subject to have one reading or another. This can be achieved, however, without the assumption of a covert *Gen* operator. As already remarked upon (see §4), Cohen (2013) is quite explicit about this kind of hearer-centric approach to *Gen*. In this latter paper, Cohen explicitly takes *Gen* to be triggered not by type-shifting but by 'predicate transfer', which does not affect the subject construal, but shifts the construal of the predicates.

However the details of type-shifting might be settled, assume that the structure in (51) gets the intended reading of (50c) right, and avoids the problem of copredication, for which Partee and Rooth's (1983) and Partee's (1987) classic account of type-shifting was partly designed. They were concerned with type-mismatches rather than straight copredication; their principle cases were the conjunction of names and quantifier DPs (*Bill and every woman...*) and extensional and intensional transitives (... *needed but didn't buy a coat*). Equally, predicate transfer in the different styles of Nunberg (1995) and Cohen (2013), whether type-shifting or pragmatically triggered, will not account for copredication, since the transfer keeps the reference constant, whereas copredication precisely involves divergent construals of the argument of a predicate (cp., Asher, 2011).14 Leslie's proposal, however, helps itself to the virtues of type-shifting on the back of a stipulation: trivially, if, in the underlying structure, there are in fact two tokens of *mosquitos*, then one may be a kind term and take the kind-selecting predicate and the other may be a predicate bound by *Gen* along with the individual-level predicate. For present purposes, it doesn't make a difference if we take the

(i) Everyone is parked out back

(ii) #Everyone is parked out back and cost over £20000

¹⁴ For example, (i) is fine, with a transfer of *everyone* from drivers to the cars driven:

But even if all the relevant cars cost over £20000, (ii) is utterly out:

nominal type to be ambiguous across the tokens or subject to type-shifting. The crucial point is that the positing of two tokens such as exhibited in (51) is a stipulation; there is no obvious linguistic licence to treat the predication of (50c) as clausal conjunction featuring two tokens of *mosquitoes*. The analysis stipulates what needs to be explained; here, copredication is *too easily* resolved. One may venture certain syntactic analyses that render the proposal less stipulative.¹⁵ Indeed, if (50c) were the only relevant case, then the stipulation might be a hypothesis worth considering, but copredication occurs both within a DP, in the shape of modifiers, and across anaphora. So much tells us that stipulating additional occurrences of terms in order to meet the divergent demands of each predicate cannot resolve the underlying problem. Consider:

(54)a Widespread irritating mosquitoes prove to be a pain to the tourists

b Widespread mosquitoes are irritating, but a good repellent works on them

The dual modification in (54a) is not reducible to a pair of distinct predications, for the irritating mosquitoes *are* the widespread ones; where the predication is conjunctive, the reference of the subject might be divided by the predicates, but can't be with adnominal 15 For example, one might think of (50c) as involving something akin to *across the board* (ATB) movement, as found in *wh*-movement:

(i)a Who stole the car and damaged the door?

b (which person *x*)[*x* stole the car \land *x* damaged the door]

A standard movement account does allow for the kind of analysis Leslie proposes, where the lower copy or trace of *mosquitoes* would be type-shifted independently of the higher copy. Not all treatments of ATB-movement are so accommodating. For example, multidominance approaches to ATB and similar phenomena posit a *single* item that is situated in otherwise independent phrasal structures (Citko, 2011).

modification. Besides, again, there is no clear syntactic rationale for a conjunctive analysis involving two tokens of *mosquitos*. A referee suggested an analysis that avoids this problem: first form the kind term *irritating mosquitoes*, and then modify it with *widespread*. Such an analysis is implausible, I think. A bare plural in-itself does not determinately contribute a kind or a property to its host construction, but only one or the other given a choice of predicate or some concomitant operation. So, the suggestion at hand *would* work if *irritating* selects for a kind, but it does not, for *irritating mosquitoes* is not a kind term by itself, as witnessed by its taking stage-level predicates (*Irritating mosquitoes filled the bedroom*), and its failing to satisfy the K-S condition. Hence, it is the predication of *widespread* that produces the K-S satisfying term (**Widespread (irritating) mosquitoes filled the bedroom*), with irritating mosquitoes being widespread rather than just mosquitoes. As it stands, then, *mosquitoes* supports both K-S and non-K-S predicates in adnominal positions, and so, *pace* Leslie, the co-predication cannot be resolved via two copies of the nominal.

The problem with (54b) is analogous. What are irritating are the widespread mosquitos, so there cannot be distinct notions of mosquitos, the widespread ones and the irritating ones. Also, the anaphoric *them* is dependent on *widespread mosquitoes*, so no type lowering is available for just *mosquitoes* as a construal of *them*. Similar remarks hold for relative clauses and other copredicational forms (see below).

Sterken (2016, pp. 523-4) mounts an argument against Liebesman's take on copredication that *officially* does not involve two copies of the relevant nominal. If her reasoning is sound, then the above objection to Leslie's rescuing of *Gen* in the face of copredication is void. Sterken correctly points out that an overt adverbial may modify the relevant non-K-S predicate in a copredication construction. Thus:

(55)a Mosquitoes are widespread and generally irritating

b Mosquitoes, who are normally irritating, are widespread

From such data, she argues that the overt adverbials are semantically non-redundant and, in particular, give rise to quantificational structure. So, such structure is overtly compatible with putative kind-referring nominals that serve as the subject of K-S predicates such as *widespread*. Therefore, in the absence of a reason why covert adverbials should differ from their overt siblings, we may conclude that copredication phenomena are perfectly compatible with *Gen*.

While we may agree with Sterken that, all by itself, copredication is not a counterexample to Gen (it does not demonstrate the absence of Gen), Sterken's reasoning offers no positive suggestion about how a Gen-theorist might deal with copredication. That is, the mere acceptability of (55) does not entail that the featured overt adverbials scope over the relevant nominals, Gen-like, rather than modify the predicate, Gn-like. Thus, the cases in (55) do not show that the overt adverbials are quantificational in the way Gen is assumed to be. This poses a dilemma. If the would-be quantificational adverbials do scope over the nominals, then the nominals must introduce bindable variables, but this is in conflict with the assumption that the nominals are kind terms, an assumption made in order to support the putative compatibility of kind terms and Gen. In short, variable-binding Gen belies the very point of the examples. If, on the other hand, we let mosquitoes remain a kind term outside of the scope of the overt adverbial, then the adverbial must scope over some covert copy of the nominal that is represented as an open predicate; otherwise, it is just a predicate modifier (this holds for (55a); (55b) poses complications concerning how to read the relative clause, but essentially the same problem arises). So, in order for the examples to show what is intended, two copies of mosquitoes must be in play, with one serving as the subject of the kind predicate and another as a restriction on Gen. This returns us back to the problems that beset Leslie's proposal, i.e., the stipulation of two copies of the nominal. The problem of copredication remains.

It is also worth noting that overt adverbials are happy with K-S predicates, *qua* predicates that block an existential inference, but not those K-S predicates that can only apply to kinds: (56)a Mosquitoes are generally widespread

b # Dodos are generally extinct

Thus, arguing from properties of the overt case to properties of the covert case is somewhat unsafe; in particular, the adverbial in (56a) modifies the predicate, rather than scopes over the nominal (i.e., being generally widespread is not a property individual mosquitoes may generally have).

The problem for Leslie's account of copredication does not adversely affect the very idea of type-shifting either as endorsed by Chierchia (1998) or Cohen (1999, 2001, 2013). *Some* form of type-shifting or coercion appears essential to account for copredication and related phenomena. The problem is that copredication cannot be resolved in general by multiplying tokens or clauses in the way Leslie proposes. So, the hypothesis that a generic DP is either kind or property designating remains stumped by copredication. The moral of copredication is that the DP may be construed to be both.

Genericity appears to be a matter of *coercion*; that is, the predicate coerces the nominal to be kind-referring or a plurality whose instances have the property predicated. The nominal, by itself, is not determinately one or the other, at least as it contributes to the content of its host. Whether the host statement is kind or characterising is a matter of the construal of the subject relative to the predicate. If I am right, *Gen* has no part to play in this. We await a settled view of coercion, but the phenomenon itself seems clear enough (cp., Pustejovsky, 1995; Borer, 2005; Asher, 2011): a lexical item or phrase has a coerced reading where the reading depends upon what predicate hosts the item/phrase or what modifier adjoins to it. I leave it open whether the relevant item or phrase by itself (i) has an independent fixed reading that is 'shifted' or 'transferred', or (ii) no specific reading at all, or (iii) has a

restricted number of optional readings. So, coercion is not necessarily type-shifting or a species of predicate transfer as endorsed by Cohen (2013), if understood as 'last resort' mechanisms (Partee and Rooth, 1983; Partee, 1987); instead, coercion might be a perfectly common way of arriving at any content whatsoever, not just a mechanism to rescue a coherent content for an otherwise unacceptable construction (cp., Borer, 2005). Thus, compare:

(57)a Bees are going extinct

b Bees are in the garden

The difference in predicate affects the construal of the subject in that *bees* by itself is simply a plural term that is happy with either kind of predicate. The case is somewhat different where the predicate isn't a K-S one. Compare:

(58)a The/A bee is black and yellow

b The/A car is black and yellow

Unlike *extinct* (etc.), the subject of *black and yellow* need not be construed as a kind, so the content of the predicate alone cannot coerce the generic reading. In such cases, one may think of the coercion as being triggered by extra-linguistic factors. Indeed, this *must* be the case, for (58a) is perfectly usable to talk of some particular bee, just as (58b) is normally construed as being about a particular car, although it too supports a generic reading. The cases in (58) are on a par; the only difference is a preference for truth or informativeness, *viz.*, construed generically, (58a) is true and (58b) is false, whereas construed singularly, (58a) appears trivial (unless one has reason to expect bees to be abnormal), and (58b) properly informative. Such differences, however, are not linguistically encoded; the general accessibility of such diversity of readings is a pragmatic matter. None of this is banal, of course, because coercion

is linguistically constrained. For example, quantifier DPs cannot be coerced into kind terms given a kind-selecting predicate. On the other hand, bare plurals are rendered generically when they take individual-level predicates, but not with stage-level ones (see §4). The difference here is that the quantifier but not the bare plural DPs have a strict cardinality interpretation. Such an intrinsic linguistic feature permits and precludes the relevant interpretations (e.g., extinction can only happen to a kind, not to some definite members of the kind, and an individual-level predicate such as being orange will be read generically if no specific number of members of the class is specified to which being orange is predicated).

Copredication smoothly falls into line on a coercive account. Consider again the case of the mosquitoes:

(59)a Mosquitoes are widespread and irritating [predicational]

b Irritating mosquitoes are widespread [adnominal + predicational]

c Mosquitoes, which are widespread, are irritating [relative clause + predicational]

Copredication poses a profound problem, of course, to any and every view that takes a single argument to have a uniform significance across varied lexical predicates. In effect, copredication just is the *prima facie* refutation of such a uniformity doctrine. A coercive account is one that essentially ties the construal of an argument with its predicate or modifier; thus, coercion predicts copredicational structures. Of course, so much is not to say how coercion operates, and why it is constrained. Asher (2011) presents a highly developed account, but the bottom line for present purposes is that an argument-taking item may coerce a reading of an argument independently of what other coercion is operating on the argument. This is an odd state of affairs from the perspective of a traditional semantic account that insists upon ontologically weighty truth conditions, but copredication is a standing refutation

of such accounts, anyway, in the sense that no *thing* can be the uniform value of the subject of copredication. The moral for our thinking about generics is that genericity can be localised as the effect of a general linguistic mechanism in co-operation with wider cognitive representations. Genericity ceases to be a uniform phenomenon or a linguistic phenomenon at all, but is instead an interaction effect between language and wider cognition.

In sum, Leslie offers no plausible analysis of copredication involving generics, and so, without further ado, the copredication problem remains for any account that involves a semantico-syntactic duality between kind predication and 'characterising' predication.

9. Concluding Remarks

If there is indeed no linguistic evidence for *Gen*, then it appears as if *Gen* is merely a way of labelling the relevant phenomena. I think this is so. Of course, a label that demarcates some clear phenomena and a mechanism of interpretation for them is not to be sniffed at. Genericity, though, remains to be explained, and it might be, as just suggested above, that an adequate explanation will fragment genericity between a range of accounts of how exception-tolerating generalisation are coercively realisable across certain linguistic structures but not others, with syntax remaining constant. Without further ado, an explanation along these lines will eschew *Gen*.

An alternative disunity claim has recently been made by Sterken (2015, 2016), who renders *Gen* as a covert indexical: the disunity of genericity arises from the variation in context that fixes divergent values for *Gen*. If my general orientation is on the right lines, however, then there is no good reason to posit *Gen* in the first place. In effect, Sterken assumes *Gen*, and then seeks to show how the construal of genericity may potentially differ from case to case. The *real* disunity of genericity on the view I am advocating is that there is no univocal linguistic feature that supports it, and we should not assume that any semantic feature must find a home at logical form, even if as an indexical. If logical form is to be a

linguistic form, and not a mere theoretical artefact, then it needs to be realised in syntax, or at least constrained by it. That is precisely what is lacking as regards *Gen*. Genericity remains to be explained, then, but not as a unitary phenomenon, and not just by linguistic theory either. The remaining linguistic question is an interface question for the interface of independent syntactic forms with the wider cognitive structures that support generic generalisations.

Approaching genericity as an interface effect is not entirely novel, of course. Curiously, though, thinkers like Leslie (2008) and Cohen (2004a, 2004b), who endorse a psychological explanation of genericity phenomena, also endorse *Gen* as a special linguistic device. I think that this approach is unstable insofar as *Gen*, *qua* a special linguistic device whose interpretation induces genericity, is rendered otiose.

It seems that both Leslie and Cohen operate with a notion of logical form as a receptacle for whatever the right account of the semantics/content of generic statements turns out to be. Of course, people are entitled to be interested in different things, but if *Gen* is meant to be a specifically linguistic item as a component of logical form, rather than a general psychological representation, then specifically linguistic evidence is required, and if there is no such good evidence, then the operator should not be posited, if the phenomena can otherwise be explained, which is potentially so in the present case. In other words, on Leslie and Cohen's account, *Gen* is posited simply to reflect readings whose nature and pattern are otherwise explained psychologically. If *Gen* is to be genuinely explanatory, one would want independent evidence for it (syntactic, lexical, etc.), such that the corroborated independent hypothesis of *Gen* best explained the relevant phenomena. For Cohen (2013), at least, *Gen* ought to be downgraded to a hearer-centric pragmatic device, a stance in accord with the preceding admonishment. Leslie's position is less clear.

Leslie (2007, p. 379; cp., 2008) writes:

[G]enerics are in no sense quantificational. The generic operator *Gen* is a variablebinding operator that is used to express generalisations, and yet is not a quantifier.

The thought is that genericity expresses only a primitive, pre-linguistic mode of generalisation, which default applies. On this conception, *Gen* constitutes a curious linguistic item of an exceptional status, i.e., it has a variable-binding logical form but expresses a nonquantificational primitive generalisation. Of course, Leslie is not being inconsistent: it could be that genericity is quantificational, albeit of a unique kind, unlike other quantificational determiners and adverbs. The problem is that such an account is at odds with an explanation of genericity as a pre-linguistic, hence non-quantificational, primitive mode of generalisation; on the contrary, genericity would be as complex as any other quantificational form qua variable binding. In short, if genericity is a default, pre-linguistic means of generalisation, then why should it recruit the peculiar, variable-binding structure of Gen, but somehow remain non-quantificational?16 Of course, such worries are somewhat academic, since I have argued that we should reject Gen as a linguistic device. The point holds, therefore: if genericity is a primitive mode of generalisation, then we have a ready explanation for why it does not have a definite linguistic signature, but shows up, rather, across diverse forms and is sensitive to extra-linguistic factors. The unity of genericity, if you will, arises from psychology, with no especial linguistic encoding.

References

¹⁶ Leslie (2008, p. 28) does offer the following argument: all variables must be bound at logical form; so, in the absence of another operator, *Gen* serves to bind the otherwise free variables of the restrictor nominals of generics. The premise here seems true, but if there is no independent reason to posit a relevant variable-binding operator, the premise equally serves as an argument against the projection of the relevant variables at LF.

- Asher, N. 2011: *Lexical Meaning in Context: A Web of Words*. Cambridge: Cambridge University Press.
- Asher, N. and Pelletier, J. 2012: More truths about generic truth. In A. Mari, C. Beyssade, and F. D. Prete (eds.), *Genericity* (pp. 312-33). Oxford: Oxford University Press.
- Baker, M. 2003: *Lexical Categories: Verbs, Nouns and Adjectives*. Cambridge: Cambridge University Press.
- Borer, H. 2005: *Structuring Sense, Volume I: In Name Only*. Oxford: Oxford University Press.
- Carlson, G. 1977a: *Reference to Kinds in English*. Ph.D. diss., University of Massachusetts at Amherst.
- Carlson, G. 1977b: A unified analysis of the bare plural. *Linguistics and Philosophy*, 1, 413-57.
- Carlson, G. 1989: The semantic composition of English generic sentences. In G. Chierchia, B.
 Partee, and R. Turner (eds.), *Properties, Types, and Meanings. Volume II: Semantic Issues* (pp. 167-91). Dordrecht: Kluwer.
- Chierchia, G. 1995: Individual level predicates as inherent generics. In G. Carlson and F. Pelletier (eds.), *The Generic Book* (pp. 176-223). Chicago: University of Chicago Press.
- Chierchia, G. 1998: Reference to kinds across languages. *Natural Language Semantics*, 6, 339-405.
- Chomsky, N. 1981: Lectures on Government and Binding: The Pisa Lectures. Dordrecht: Foris.
- Citko, B. 2011: *Symmetry in Syntax: Merge, Move, and Labels*. Cambridge: Cambridge University Press.
- Cohen, A. 1999: *Think Generic! The Meaning and Use of Generic Sentences*. Chicago: CSLI Press.

- Cohen, A. 2001: On the generic use of indefinite singulars. *Journal of Semantics*, 18, 183-209.
- Cohen, A. 2004a: Generics and mental representations. *Linguistics and Philosophy*, 27, 529-56.
- Cohen, A. 2004b: Existential generics. Linguistics and Philosophy, 27, 137-68.
- Cohen, A. 2013: No quantification without reinterprtation. In A. Mari, C. Beyssade, and F.D. Prete (eds.), *Genericity* (pp. 334-51). Oxford: Oxford University Press.
- Cohen, A. and Erteschik-Shir, N. 2002: Topic, focus, and the interpretation of bare plurals. *Natural Language Semantics*, 10, 125-65.
- Declerck, R. 1991: The origins of genericty. Lingua, 68, 149-188.
- Diesing, M. 1992: Indefinites. Cambridge, MA: MIT Press.
- von Fintel, K. 2004: A minimal theory of adverbial quantification. In B. Partee and H. Kamp (eds.), *Context Dependence in the Analysis of Linguistic Meaning* (pp. 137-57). Amsterdam: Elsevier.
- von Fintel, K. and Gillies, A. 2007: An opinionated guide to epistemic modality. In T.
 Gendler and J. Hawthorne (eds.), *Oxford Studies in Epistemology, Volume 2* (pp. 32-62).
 Oxford: Oxford University Press.
- Glanzberg, M. 2007: Definite descriptions and quantifier scope: some Mates cases reconsidered. *European Journal of Analytic Philosophy*, 3, 133-58.
- Greenberg, Y. 2007: Exceptions to generics: where vagueness, context dependence and modality interact. *Journal of Semantics*, 24, 131-67.
- Grimshaw, J. and Vikner, S. 1993: Obligatory adjuncts and the structure of events. In E.
 Reuland and W. Abraham (eds.), *Knowledge and Language II: Lexical and Conceptual Structure* (pp. 143-55). Dordrecht: Kluwer.

Haegeman, L. 2012: Adverbial Clauses, Main Clause Phenomena, and Composition of the

Left Periphery: The Cartography of Syntactic Structures, Volume 8. Oxford: Oxford University Press.

- Heim, I. 1982: *The Semantics of Definite and Indefinite Noun Phrases*. Ph.D. diss., University of Massachusetts at Amherst.
- Heim, I. 1990: E-type pronouns and donkey anaphora. *Linguistics and Philosophy*, 13, 137-77.
- Hicks, G. 2009: Tough-constructions and their derivation. Linguistic Inquiry, 40, 535-66.

Hornstein, N. 2001: Move! A Minimalist Theory of Construal. Oxford: Basil Blackwell.

- Kamp, H. 1981/84: A theory of truth and semantic representation. In J. Groenendijk, T. Janssen, and M. Stokhof (eds.), *Truth, Interpretation, and Information* (pp. 1-41).Doredrecht: Foris.
- Koslicki, K. 1999: Genericity and logical form. Mind and Language, 14, 441-67.
- Kratzer, A. 2012: Modals and Conditionals. Oxford: Oxford University Press.
- Krifka, M. 2003: Bare NPs: kind-referring, indefinites, both, or neither? R. B. Young and Y. Zhou (eds.), *Proceedings of Semantics and Linguistic Theory (SALT) XIII* (pp. 180-203). Cornell: CLC Publications.
- Krifka, M., Pelletier, J. F., Carlson, G., ter Meulen, A., Chierchia, G., and Link, G. 1995:Genericity: an introduction. In G. Carlson and F. J. Pelletier (eds.), *The Generic Book* (pp. 1-124). Chicago: Chicago University Press.
- Le Bruyn, B., Que, M., and de Swart, H. 2013: The scope of bare nominals. In In A. Mari, C. Beyssade, and F. Del Prete (eds.), *Genericity* (pp. 116-39). Oxford; Oxford University Press.
- Leslie, S-J. 2007: Generics and the structure of the mind. *Philosophical Perspectives*, 22, 375-403.
- Leslie, S-J. 2008: Generics: cognition and acquisition. Philosophical Review, 117, 1-47.

Leslie, S-J. 2015: Generics oversimplified. Noûs, 47, 28-54

- Liebesman, D. 2011: Simple generics. Noûs, 45, 409-42.
- Longobardi, G. 1994: Reference and proper names: a theory of N-movement in syntax and logical form. *Linguistic Inquiry*, 25, 609-65.
- Mari, A., Beyssade, C., and Del Prete, F. 2013: Introduction. In A. Mari, C. Beyssade, and F. Del Prete (eds.), *Genericity* (pp. 1-92). Oxford: Oxford University Press.

May, R. 1977: The Grammar of Quantification. Ph.D. diss., MIT.

- Moltmann, F. 2016: Plural reference and reference to a plurality: linguistic facts and semantic analyses. In M. Carrara, A. Araquinis, and F. Moltmann (eds.), *Unity and Plurality: Philosophy, Logic, and Semantics* (pp. 93-120). Oxford: Oxford University Press.
- Nickel, B. 2008: Generics and the ways of normality. *Linguistics and Philosophy*, 31, 629-48
- Nunberg, J. 1995: Transfers of meaning. Journal of Semantics, 12, 109-132.
- Partee, B. H. and Rooth, M. 1983: Generalized Conjunction and Type Ambiguity. In R.
 Bäuerle, C. Schwarze, and A. von Stechow (eds.), *Meaning, Use, and interpretation of Language* (pp. 361–83). Berlin: de Gruyter.
- Partee, B. 1987: Noun phrase interpretation and type-shifting principles. In J. Groenendijk, D. de Jongh, and M. Stokhof (eds.), *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers* (pp. 115-43). Dordrecht: Foris.
- Partee, B. 1995: Quantificational structures and compositionality. In E. Bach, E. Jelinek, A. Kratzer, and B. Partee (eds.), *Quantification in Natural Languages* (pp. 541–601).
 Dordrecht: Kluwer.
- Pelletier, F. J. and Asher, N. 1997: Generics and defaults. In J. van Bentham and A. ter Meulen (eds.), *Handbook of Logic and Language* (pp. 1125-77). Amsterdam: North Holland.

- Pustejovsky, J. 1995: The Generative Lexicon. Cambridge, MA: MIT Press.
- Reinhart, T. 1983: *Anaphora and Semantic Interpretation*. Chicago: University of Chicago press.
- Reinhart, T. 1997: Quantifier scope: how labor is divided between QR and choice functions. *Linguistics and Philosophy*, 20, 335-97.
- Reinhart, T. 2006: *Interface Strategies: Optimal and Costly Computations*. Cambridge, MA: MIT Press.
- Rizzi, L. 1997: The fine structure of the left periphery. In L. Haegeman (ed.) *Elements of Grammar* (pp. 281-337). Dordrecht: Kluwer.
- Rooth, M. 1985: Association with Focus. Ph.D. diss, University of Massachusetts at Amherst.
- Safir, K. 2004: Syntax of Anaphora. Oxford: Oxford University Press.
- Sterken, R. 2015: Generics in context. Philosophers' Imprint, 15, 1-30.
- Sterken, R. 2016: Generics, covert structure, and logical form. *Mind and Language*, 31, 503-29.
- Schubert, L. and Pelletier, F. J. 1987: Problems in the representation of the logical form of generics, plurals, and mass nouns. In E. Lepore (ed.), *New Directions in Semantics* (pp. 385-451). New York: Academic Press.
- Syrett, K. and Lidz, J. 2011: Competence, performance, and the locality of quantifier raising: evidence from 4-year-old children. *Linguistic Inquiry*, 42, 305-37.

Szabolcsi, A. 2010: Quantification. Cambridge: Cambridge University Press.

School of Politics, Philosophy, Language and Communication

University of East Anglia