



Lions, flowers and the Romans: exception management with generic and other count plurals

Laure Gardelle

► To cite this version:

Laure Gardelle. Lions, flowers and the Romans: exception management with generic and other count plurals. Reference: from Conventions to Pragmatics, 228, John Benjamins Publishing Company, pp.71-87, 2023, Studies in Language Companion Series, 9789027212948. <10.1075/slcs.228.04gar>. <hal-03973347>

HAL Id: hal-03973347

<https://hal.science/hal-03973347v1>

Submitted on 4 Feb 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



HAL Authorization

Lions, flowers and the Romans:

exception management with generic and other count plurals

Laure GARDELLE

Université Grenoble Alpes, LIDILEM

Abstract

Research on generic bare plurals has frequently pointed out that even though they refer to the whole class, in characterizing sentences (e.g. *birds fly*) they commonly license exceptions (Krifka et al. 1995). While quantification and probability models have failed to account for all uses, the present chapter argues that the “generics-as-default” approach of psychologists (e.g. Leslie 2007) provides a more convincing frame. It further argues that generalization does not concern just generic plurals, but also specific ones: plurals convey “homogenization.” The study introduces the key notion of “negligibility” for exception management. Analyses of examples in context show the role of speaker knowledge and beliefs, as well as contextual perspective, in establishing what is negligible or not.

Key words: generics, generalizations, number, count plurals, exceptions

1. Introduction

A well-established fact about generic bare plurals (e.g. *birds*) is that although they “refer to the whole class” (Biber et al. 1999: 284), in characterizing sentences they commonly allow for exceptions (Carlson 1977: 414, Krifka et al. 1995: 2-3).¹ Characterizing sentences, such as *Birds fly*, are sentences that make a generalization about a class, a general claim about its members (Krifka et al. 1995, Nickel 2008). Among generics, they differ from direct references to a kind, such as *dodos have died out*, for which any exception would falsify the statement (Krifka et al. 1995: 2).

Exceptions range from a few to a majority. *Birds fly* excludes a few birds, such as penguins; an apparent paradox is that the same speakers accept *penguins do not fly* and *penguins are birds* (Asher & Pelletier 2012). *Mammals bear live young* is only true, technically, of a large minority – females of young-bearing age (Schubert & Pelletier 1987). As for *mosquitoes carry the West Nile virus*, it is commonly regarded as true even though only 1% of mosquitoes actually do carry the virus (Leslie 2007).

While such imperfect generalizations pose no problems to speakers, finding a theoretical explanation for exception management has proved extremely difficult (Krifka et al. 1995, Leslie 2007). The generic quantifier approach has failed (e.g. Pelletier & Asher 1997, Asher & Pelletier 2012;

¹ Such exceptions also concern generalizations over events, rather than kinds. For example, *John smokes cigars after dinner* is regarded as true even if from time to time, John does not smoke after dinner (Krifka et al. 1995: 4, Mari et al. 2012).

Radden 2009), as has Cohen's (1996, 2004) probabilistic model. The aim of this chapter is to understand why these approaches have failed, and to try and provide a better account.

I will show that the reason for these failures is that plurals are not about proportion or probability, but about generalization, more specifically homogenization. I will borrow the "generics-as-default" approach of psychologists (e.g. Leslie 2007, 2008; Brandone et al. 2012), backed up by cognitive scientists (Mari 2012: 5), which regards generics as the result of "the most primitive, default generalizations" of the brain. This low-level faculty for generalization appears years before quantifiers are acquired (Brandone et al. 2012). I will further introduce the notion of "negligibility," arguing that with plurals, exceptions are regarded as negligible, which is not the case for quantifiers – so that *birds fly* is not an equivalent of *most birds fly*, although most birds do fly.

I will further argue that homogenization holds not just for generic bare plurals, but for all plurals. The existence of exceptions for specific plurals is occasionally mentioned in passing in linguistic studies, but has not been integrated into a theory of plurals. Examples include *the Romans defeated the Carthaginians in 202 BC* (many Romans did not fight, Link 1983), *the boys touched the ceiling* (true even if just one of them did, Landmann 2000: 165), or *the children ate lunch* (rephrased as "every, or almost every" by Abbott 2010: 62, see also Huddleston & Pullum 2002: 515).

The proposal will require a definition of what makes an exception “negligible.” I will suggest that a shortcoming of quantifier and probabilistic approaches is that they analyze statements out of context and in terms of truth-conditionality, which misses the crucial fact that plurals are only the perspective of a speaker (with their own limited knowledge, and beliefs) in a given discourse context (making a particular point), and possibly adjusting to an addressee. Pragmatics is therefore a key component of acceptability judgments, and central in deciding whether an exception is negligible.

Section 2 will expose the shortcomings of existing accounts of exception management with plurals (quantification, probability) and introduce instead the notions of low-level generalization, homogenization and negligibility. Section 3 will illustrate how these concepts apply to specific plurals, and show that the moment a count plural is used, there is room for negligible exceptions if the context is right. This holds whether the predicate is distributive or collective. Section 4 will then extend these analyses to characterizing sentences, again taking different kinds of predicates into account.

2. Shortcomings of existing proportion and probability accounts of exception management with plurals

It would be impossible here to do justice to the vast literature on generics. The aim of this section is to consider representative examples of quantificational and probabilistic approaches, to show that the very idea that plurals may be about quantification or probability is flawed.

2.1. Asher & Pelletier (2012): the “normal worlds” approach

To Asher & Pelletier (2012), the (bare plural) generic is a modal quantifier (covert GEN), close to *all* but subordinated to a “normal worlds” condition: the generic statement is held true if for each individual in the plurality, in the most normal worlds for that individual, it is true. This approach aptly deals with the apparent paradox of *Penguins don’t fly* and *Birds fly* mentioned in the introduction. When assessing *Birds fly*, speakers treat penguins as abnormal birds; the statement is not falsified because the property *fly* is evaluated for each individual only in those worlds where the individual is assumed to be a normal example of a bird (Asher & Pelletier 2012).

A number of generics, however, cannot be accounted for using this model, as the authors themselves point out (Asher & Pelletier 2012). One type is comparatives, such as *girls do better in school than boys*, which are not assessed by considering each individual (not all girls do better than any boys); rather, the statement is about averages. Another problem is

statements such as *Ducks lay eggs*, which for Pelletier & Asher (1997) are acceptable because there is a “quantifier domain restriction.” the statement is implicitly about the subkind of female ducks. But then the condition should license *Ducks lay eggs and are females*, which is considered false (Leslie 2007: 376). A third example is *Mosquitoes carry the West Nile virus*: even in the most normal of worlds, very few do, which ought to falsify the statement (Leslie 2007: 376). The major problem with this account, therefore, is that it only relies on universality (*all* individuals in a normal world). Radden (2009)’s Cognitive Grammar approach shows more flexibility, with the notion of “salient proportion.”

2.2. Radden (2009): the “salient proportion” approach

Radden (2009: 295), following Langacker (1995), regards bare plural generics as quantifier phrases of the same paradigm as *all*, *most* and *some*. To him, they denote a “salient proportion” of the reference mass, and are therefore “proportional generics.” Proportional generics (including bare plural generics) stand in contrast to “kind generics” for *the* + *singular*, “representative generics” for *a* + *N* and “delimited generics” for *the* + *plural* (e.g. *the Italians love pasta*).

The reference mass is often the class as a whole, yielding the sense effect “most,” or possibly “all.” For instance, in *Hedgehogs are shy*, the statement

applies to the “norm” (Radden 2009). But as noted by Pelletier & Asher (1997), the context may restrict the reference mass. There, the generic applies to fewer than “most” of the class, but still to a salient proportion in the restricted context. The restriction may apply to sex in reproduction contexts (*Ducks lay eggs*), but also to other domains. For example, to Radden (2009), in *Finns always do well in ski-jumping competitions*, *Finns* stands metonymically for Finnish ski-jumpers; the reference mass is ski-jumpers worldwide, and the statement is true because in international competitions, the proportion of Finns that do well is larger than that of other nationalities.

Issues of quantity (“most”) may be overridden by another motivation for salience: danger (see also Cimpian et al. 2010). This leads speakers to accept a statement such as *Mosquitoes carry the West Nile virus*, which is felt to be closer to *Mosquitoes can carry the West Nile virus* than to *Most mosquitoes (actually) carry the West Nile virus*.

One shortcoming of this salient proportion approach, however, is that very often, bare plural generics are incompatible with “usually,” “typically” or “most,” even when the reference mass is the whole class. For instance, although *most books are paperbacks* and *typically, books are paperbacks* are true, *books are paperbacks* is false (Leslie 2008: 7).

2.3. Cohen (1996, 2004)’s probabilistic approach

To Cohen (1996, 2004), the semantics of generics is based on probability, not quantification: a generic statement is true if the probability of it being true is higher than 50%. Crucial to the framework is the idea that the generic statement is assessed against contextually supplied alternatives, both to the kind and to the property (these form the “domain” of assessment of the generic statement). For instance, *cat* is assessed against other midsized mammals, *lay eggs* against other forms of reproduction, *drive to the department* against the alternatives *walk / bike / take the bus / etc. to the department*. In the case of “absolute generics,” probability is assessed in absolute terms (which means it has to be greater than 50%) within the domain: *Tigers are striped* is true because the probability that an arbitrary tiger be striped (as opposed to spotted and so on) is higher than 50%; so is *Ducks lay eggs*, because among the various forms of reproduction (laying eggs, bearing live young), the probability that an arbitrary duck will lay eggs is again higher than 50%. With “relative generics,” the generic statement is assessed against alternative kinds (e.g. *mosquitoes* vs. other insects), not alternative properties. The generic statement is regarded as true if an arbitrary member of the kind is more likely to have the property than a member of a (contextually supplied) alternative kind. For example, to Cohen (1996), *Mosquitoes carry malaria* (or similarly, *the West Nile virus*) is true because the chances that an arbitrary mosquito should carry the

disease are greater than the chances that another arbitrary insect should carry it. The two kinds of generics are also governed by a “homogeneity condition:” the probabilistic conditions must hold for all salient partitions of the kind.

Despite its flexibility, however, the probabilistic model does not cater for all statements. For example, it cannot predict why *Books are paperbacks* is false: most books are (absolute generic interpretation), and it is difficult to find alternative elements (pads? other?) that would be as or more likely to be paperbacks (relative generic interpretation). The probabilistic model does not readily deal with collective predicates, either (*Ants play a big part in many food webs*, Claybourne 2013): collective predicates do not hold for a single member, so are not based on probabilistic assessment for an arbitrary member of the kind.

2.4. Leslie (2007, 2008)’s generics as default approach: “low-level intuitive deductions”

Leslie (2007, 2008)’s starting-point is that generics are acquired by children more easily and at a much younger age than quantifiers (Gelman 2003, Roeper, Strauss & Pearson 2006). As null realizations are more difficult to acquire than explicit forms, she concludes that generics are not quantifiers. Instead, they exploit a low-level cognitive ability to form category-wide

generalizations on the basis of a few instances. This capacity is found in children as young as 12 months old, and studies show that children aged four (Gelman, Star & Flukes 2002; Hollander, Gelman & Star 2002) or five (Brandone et al. 2012) are aware that generalizations are about kinds, rather than proportion.

Different types of property require different minimal conditions for a statement to be considered true (Leslie 2007: 384-386):

1. for a property that is a “characteristic dimension” for the kind, the species (such as a form of reproduction or a way of nurturing the young, see also Brandone et al. 2012), it is true if *some* members of the kind have the property. For instance, in Ducks lay eggs, the characteristic dimension of gestation must be filled for all kinds (put differently, species descriptions always include reference to gestation), and “lay eggs” is one of the values.
2. for a striking (often horrific or appalling) property, the statement is true if some members of the kind have the property, *and* the other members are disposed to have it (see Leslie 2012 for further evidence from experiments). One example is Sharks bite bathers. In contrast, Accountants are murderers is considered false because the fact that some murderers are accountants is treated as a coincidence, not a disposition of the kind.
3. for other properties, the statement is considered true if the majority of members have the property.

This customised treatment of properties reflects our ability to take advantage of regularities in the world (condition 1.), and yet to deal with information that is particularly striking (condition 2.).

In addition to these, if there are any exceptions, they should just lack the property, rather than have a competing property with a similar degree of “vividness” (this notion would probably require further research). For example, *Peacocks have blue-green tails* is true even though only males do, because the females just lack that property; if females had bright pink tails (an equally vivid property), then the statement would be regarded as false. This criterion explains why *Books are paperbacks* is regarded as false: being a hardback is as vivid a property.

The notion of “characteristic dimension” accounts for many of my examples, explaining why there can be coordination between predicates that apply to the females and others that apply to the whole species, as in: *Did you know that blue whales give birth to the biggest babies in the world, sing across hundreds of miles to keep in touch and [...]?* It also accounts for generalizations such as *Lions have manes* (females just lack the property), as opposed to *Lions are male* (false because *female* is a salient competing value).

The model, however, must be taken further. This is the aim of the remainder of this chapter. First, it is designed for generics used with distributive predicates. For instance, it does not readily deal with collective

or cumulative statements, such as *Trucks come in many shapes or sizes*, or, with the definite article, *The Romans invented concrete, newspapers, books, calendars and central heating*. Secondly, it has to be integrated in a theory of plurals, to account for exception management when the plural has a determiner, and with specific plurals. Thirdly, the relationship to quantifiers must be specified: what difference is there between *birds fly* and *most birds fly*?

2.5. Further proposal: “homogenization” and the notion of negligibility

In this section, I would like to lay out a few theoretical proposals, which I will then apply to specific and generic plurals in more detail.

I suggest that the reason count plurals are not about quantity or probability is that the linguistic contribution of a plural added to a base is not just the well-established value “more than 1 entity” (referenced for instance in Corbett 2000: 20: “[Plural] refers to more than one real-world entity”). A count plural further signals “homogenization:” the speaker disregards individual differences between entities in order to treat those entities as members of the same category. Referring to a peony and a rose as *flowers*, for instance, focuses on a shared nature: the flowers are “homogenized.” Such levelling-out has been particularly pointed out for hypernyms (*flowers* include roses, peonies and so on), but holds for any count noun. In this, *N-s*

differ from conjoined NPs (e.g. *a rose and a peony*), which construe the two entities as being of different natures.

This capacity for homogenization is a major asset to make sense of the world. As noted by Asher & Morreau (1995: 335), “a large part of the significance of generic information is the contribution it makes to intelligent guessing, planning, and decision making.” This statement can be extended to specific events. Saying that *the boys carried the piano upstairs* (example from Landmann 2000: 165), for instance, is a way of making sense of the group of boys as helpers, and thus to grasp what is going on and react appropriately.

Because plurals convey homogenization, I suggest that they further imply that any exceptions are negligible, that is, are regarded as not jeopardizing the generalization. *Birds fly*, as noted by Asher & Pelletier (2012), will be said by someone who regards penguins (and the like) as mere exceptions, abnormal instances of birds, where *Most birds fly* will be said by someone who regards them as relevant subcategories of birds – therefore not negligible, hence an assessment of proportion.

Section 3 now considers these claims about plurals in light of specific contexts.

3. Exception management in specific contexts

3.1. Plurals with distributive predicates

A predicate that gives an essential property (e.g. *These ducks are only birds*) does not license exceptions. Elsewhere, examples in context show that the possibility of negligible exceptions depends on the nature of the event and its participants, in relation to our cultural standards. This is illustrated by a comparison between (1) and (2):

(1) Gabi's mother rushed to put some belongings into a travel bag while her husband took the children to the car. (Taylor 2014)

(2) Marc Moretti took individual pictures of the reunion attendees which have been included in this slideshow. (Ottawa Board of Education, ncf.ca, 2019)

In (1), because the children's welfare is at the root of the action, no exception can be tolerated – if one child were left behind, the parents would not consider the rescue successful. In (2), on the other hand, our encyclopaedic knowledge includes occasional occurrences of people refusing to have their pictures taken, and of organisers respecting that right. As a result, the statement will be held true even if one or two attendees refused to have their pictures taken. These exceptions are treated as

negligible because in the context, what matters is that a slideshow is now available. The same predicate, used in the context of a police investigation (e.g. *the police took individual pictures of the youths*), would not license exceptions, because our encyclopaedic knowledge is that a record is going to be created for each suspect – ignoring one youth would be regarded as lack of professionalism.

As shown from these analyses, with plurals, proportions (or likely proportions) are only contextual inferences – unlike *all* or *most of the reunion attendees*, in which the role of the quantifier is precisely to establish a proportion.

3.2. Collective predicates

When a plural is used as the subject of a collective predicate, homogenization triggers an effect which I will term “collective responsibility.” For example, *The gangsters killed their rivals* (example from Landmann 2000: 165) is true even though it is likely that only a few of the gangsters actually pulled the trigger. What matters with a collective predicate is that there was some form of collective preparation, which licenses the odd negligible exception such as one of the gangsters having a different role in the gang.

Definite bare plurals with specific collective predicates behave in a similar way. For instance, *one theory put forward by investigators [...]* (Parfitt 2012) does not require that all the investigators on the case elaborated the theory (some of them might even have considered it unconvincing), but it is still the result of some form of collective thinking, and most important of all, it is the idea that is put forward in the name of the whole team, so that collective responsibility is involved. Regardless of who actually put the theory forward, the referent of the NP is the plurality as a whole.

This analysis of these examples of collective predicates leads us to two important conclusions. First, the referent of a plural NP is not necessarily just the actual participants in the event; it is the plurality as a whole. This distinction is not always made in the literature when considering exception management. Secondly, with collective predicates, paraphrases in *all*, *most* (or similarly, *on the whole*) are infelicitous, or at best, odd. ??*Most (/All) of the gangsters killed their rivals* would suggest at best that each gangster has a personal rival (distributive interpretation). This is further evidence that plurals are not about proportion, but homogenize groups, allowing for generalizations (just as having a single predicate homogenizes the perspective on the event) and discarding exceptions as negligible.

Let's now extend this homogenization principle to generic statements, more specifically characterizing sentences.

4. Exception management in characterizing sentences

4.1. Preliminaries: understanding characterizing sentences

The literature on generics only considers distributive predicates that ascribe permanent properties to a class (e.g. *ducks lay eggs*, *mosquitoes carry the West Nile virus*). But characterizing sentences cover a broader range of cases.

With characterizations that are unrestricted in time (general truths), distributive predicates are indeed the most common, but there are occasional collective predicates (*Ants play a big part in many food webs*, Claybourne 2013), sometimes with a restriction to a subclass (*The ants in a colony work together to collect food*, *ibid.*).

General claims about a class are not restricted to statements in the present tense, either. The class may no longer exist in the contemporary world (e.g. *The Romans invented concrete*), or the scope of the generalization might be restricted in context. This might be achieved through a sentence-initial framing adverbial (*Until 1920, railroads were the backbone of the American transportation system*) or through other elements, such as *Whitby* in (3),

which restricts the reference² of *Holidaymakers* to those in Whitby, or *florists* in (4), which restricts *flowers* to those in the same cognitive frame – the flowers that florists sell:

(3) Whitby is often seen as the quintessential English seaside destination.

Holidaymakers come from miles around to breathe the sea air, wake up to a view of the crashing waves, or take an evening stroll along the harbour. (whitbyguide.co.uk, 2020)

(4) Apart from floral design, the main task of florists is to ensure that flowers last as long as possible. (Jones 2001)

A statement is considered true or false within the restricted domain of interpretation, and says nothing of validity beyond. For instance, the statement about holidaymakers in (3) is not extendable to holidaymakers in general (Gary-Prieur 1990: 6). Example (3) also shows that knowledge can be cumulative: each of the alternative behaviours mentioned here is valid for only part of the class of holidaymakers in Whitby.

² The concept of reference is sometimes rejected for generic NPs, because they do not give access to specific entities of the extralinguistic world, for which a list could be supplied. In this approach, reference “concerns the ability of linguistic expressions to refer to real-world entities” (Finegan 2008: 192). Along with many other linguists, however, I consider that it is more advantageous to regard reference as “discourse reference” (e.g. Kibrik 2011: 5): an NP is referential if it can be the antecedent of an anaphoric pronoun. A referent is a mental construct, and a referential expression gives access to a discourse representation in the imagined conceptual discourse model of the addressee (Cornish 1999: 150).

The rest of this section considers characterizing sentences in light of this diversity, starting with distributive predicates that denote essential properties.

4.2. Distributive predicates with essential properties

Essential properties are those which seem inherent in the entities, and are thus incompatible with “if you meet an xx, there is a high chance that it will [have that property]” (Galmiche 1985: 22).

When the property ascribed to the members of the class is essential and normally applies to all of them, exceptions are restricted to cases regarded as abnormal – and therefore, negligible. For instance, in chess, *bishops move diagonally* (Carlson 1995: 224) may only license exceptions in an altered game in which the players have decided to change the way the pieces move. Or *potatoes contain vitamin C* only licenses as exceptions potatoes that have been boiled for too long, and so no longer contain vitamin C – but they did prior to boiling (Asher & Morreau 1995: 300). Such exceptions being abnormal, they do not jeopardize the generalization. When the predicate is *be* + hypernym (*whales are mammals*), no exceptions at all can be licensed, because there can be no abnormal entities.

One more complex case, however, is that of “characteristic dimensions,” for which a property is attributed to the class because it is a distinctive

feature in classifications, but is technically applicable only to some of its members (e.g. *Lions have manes*). While studies on generics merely acknowledge this statement as true, a closer look at context on Google (in March 2021) suggests that it may well be used only in contexts of species differentiation (lions *vs.* other big cats or more generally, *vs.* other animals), such as *Why is it that of all the cats, only lions have manes?* (quora.com, 2020) or *Why have lions evolved manes?* (reddit.com, 2019).³ Even in that context, *male lions* is frequent as well; and even when the question, as in these examples, does not have *male*, a full answer does (*male lions have manes [...]*).

These facts point to the context-dependent nature of generalizations, in other words, to the influence of perspective on validity judgments. A further psycholinguistic study with informants would be required to assess the extent of context, but I would tentatively suggest that acceptability of (5) below if “male” were removed would be questionable, at least for a number of speakers. Because the immediate context gives information that is valid for the whole species, and because there is no differentiation context, the mane is not viewed as a characteristic dimension for the species as a whole.

³ In differentiation contexts, Leslie (2007)’s notion of positive value applies. Having a mane is a “vivid” property, whereas females just lack that property. Vividness could at least partly explain why the prototype for the category is the male, as reflected in toddlers’ picture books or on Google pictures.

The search was eventually carried out on Google, rather than in a controlled and stable corpus, because even a general-English corpus such as COCA proved to have very few, or no, generic statements such as “lions have manes” or references to mosquitoes and the West Nile virus.

(5) Lions have five sharp claws on each of their front paws. They have four claws on each of their back paws.

Lions have 30 teeth. Four of them are canines. Lions use these long, sharp teeth to tear meat.

Male lions have manes. This thick hair grows around the face and neck. Manes make male lions appear larger than they really are.

(Holmes 1999: 9)

In addition to the contextual perspective, a theory of generalizations must integrate the dimension of speaker knowledge and beliefs – rather than truth-conditionality. Sometimes, properties are *thought* to be essential by some speakers, but known not to be by others, depending on individual knowledge. This, I suggest, explains an alleged puzzle of research on generics, namely, how speakers can accept *Peacocks lay eggs* (only the females do) *and have fabulous blue-green tails* (only the males do) (cited for instance by Leslie 2007: 390). I suggest that speakers who do accept this statement as true are not aware that only the males have blue-green tails, a property which is commonly passed on in general knowledge as a property of the species (I, for one, confess that I learnt from this example). When transferred to a more familiar species such as lions, as in *Lions have manes* (only the males do) *and give birth to live young* (only the females do),

Google conspicuously returns no hits (except for linguistic studies on generics), not even for the shorter string “lions have manes and give birth (/carry /bear),” despite the numerous resources on lions. I suggest that if the females are temporarily considered negligible in the first predicate, they cannot be the focus of the second, which is coordinated and therefore syntactically and conceptually related to the first.⁴

4.3. *Distributive predicates with non-essential properties*

Non-essential properties are those that license “if you meet an xx, there is a high chance that [it will have that property].” For these, the proportion of exceptions licensed by the predicate is highly variable, depending here again on speaker knowledge and beliefs and on contextual perspective.

A number of generalizations are acquired by hearsay, rather than personal observation. It is the case, among others, of stereotypes (e.g. *French people eat snails*). I suggest that erroneous beliefs are at the root of a statement such as the much-studied *Mosquitoes carry the West Nile virus / malaria*. Leslie (2007: 376) and Radden (2009: 302) conclude that the statement is true even though less than 1% actually do carry the virus, because the property is salient (danger is involved). But an internet search reveals that

⁴ This is different from coordination of a characteristic dimension that applies only to males (or females) with another that holds for the whole species. Such a configuration is common, as in *Did you know that blue whales give birth to the biggest babies in the world, sing across hundreds of miles to keep in touch and [...]?* mentioned earlier in this chapter.

the webpages that show this string never mention the low percentage, and conversely, that those which do mention the low percentage have no such generic statement. This suggests that the speakers who consider the statement true believe the West Nile virus, or malaria, to be rather widespread among mosquitoes. A typical extract is (6) below, in which the idea of a widespread disease is supported by “greater [...] mosquito population,” “not something to mess around with” and “Most people.”

(6) “[They] tend to like the weather when it’s really warm, when there’s a lot of water. Because they need water to breed and they like to breed in irrigation ponds and things like that. So the more water the greater the mosquito population will be,” said Linda Larson, the North Dakota Department of Health field epidemiologist.

Mosquitoes carry the West Nile Virus, which Larson says is not something to mess around with.

“There is no antibiotic for it. Most people will not develop symptoms, but if they do it’s usually a fever, a headache, muscle aches, joint aches and a rash,” said Larson. (Von Behren 2018)

The fact that a dangerous property is involved does explain why, as pointed out by Leslie (2007, 2008), disease-free mosquitoes would still be felt to have a disposition to carry the disease, and be treated as negligible

exceptions. But I would further suggest that the erroneous belief in (6) also stems from a bias in the news: as disease-free mosquitoes will not hit the news, generalization is based on examples of infection, hence an impression of overall frequency – the same applies, I suggest, to *sharks eat bathers*.

Speaker perspective (the point that is being made in context) is also key to understanding generalizations. There may be a rhetorical dimension to a generic statement, as the speaker chooses to present the exceptions as negligible. One obvious illustration is treatment of statistical data – as noted by Radden (2009: 299), after Lawler (1997), plurals are often used for “vague, impressionistic statistics.” For example, the title in (7) sums up the key findings of a survey on students in the form of a characterizing sentence. The generalization is based on “more than half” of students (which turns out further down in the paper to be 59%), but where the author chooses to discard the remaining 41% as negligible, other observers might have concluded that *only a short majority of students* want to be part of a community, and that *nearly half* of them do not value interaction with classmates and instructors.

(7) *They [Online college students] Want to Be Part of a Community.*

More than half of respondents say interaction with classmates and instructors is important to them, and about a quarter say online courses

could be improved by more contact with their instructors and more engagement with classmates. [...] (Learning House 2017)

4.4. Collective responsibility

As with specific NPs, collective predicates used with plurals in characterizing sentences trigger an idea of collective responsibility. As a result, here again the referent does not have to be the actual participants in the event. A typical example is discourse on peoples, as in: *In the sixteenth century the English under Queen Elizabeth brought warfare to north Connacht*. It does not matter who actually went to Connacht; those who are regarded as having brought warfare there (and thus the referent of *the English*) are the people as a whole.

This leads us to reconsider Radden (2009)'s analysis of *Finns always do well in ski-jumping competitions*. I suggest that even though the basis for generalization is, as proposed by Radden, skiers that take part in such competitions – it is from seeing good results from the Finnish team that the generalization is made –, the referent of *Finns* is not “the subset of Finnish ski-jumpers that participate in international competitions” (Radden 2009: 301), but the Finns as a nation. It is a case of metonymy, as suggested by Radden, but with a different association: medal tables list countries, not teams of sportspeople (cf. *Finland always does well...*). Consequently,

although technically, all Finns but a few are exceptions to this statement, this would be the wrong way to consider reference. Rather, this statement does not license any exceptions.

It is this distinction between actual participants and generic referent that also makes generic plurals compatible with cumulative predicates, as in *The Romans [...] invented concrete, newspapers, books, calendars and central heating* (Children’s Radio UK 2021). It does not matter who actually invented concrete or newspapers; the inventions are credited to the Romans as a people, as opposed to other peoples. The same holds when the predicate expresses a total amount, as in *The Romans [...] built loads and loads of roads in the UK, 5,500 miles actually* (ibid.).

4.5. Averages and alternatives

Averages and alternatives, which are often ignored in the literature on generics, do not license any exceptions, either, because the predicates cater for all possibilities. An example of averages is *In Italy, [...] women on average have 1.2 children* (New York Times, 8 March 2001): however many children an Italian woman has (including none), she is included in this calculation. An example of alternative scenarios is *Trucks come in many shapes and sizes*, which through “many” covers all the possible shapes and sizes a truck might have – even the oddest prototype.

Conclusion

The aim of the chapter was to provide a refined understanding of exception management in characterizing sentences, and explain why quantificational and probabilistic models failed to account for all uses. The findings confirmed Leslie (2007, 2008) and Brandone et al. (2012)'s conclusion that characterizing sentences do not make quantificational statements, but are low-level generalizations ("generics-as-default" approach). I added the notion of "negligibility" to this approach, and integrated the generalization process within a broader theory of plurals: I argued that low-level generalization is at work with all count plurals, not just generics, because a count plural conveys not just "more than one," but also homogenization, discarding any exceptions (when some are licensed by the context of the sentence) as negligible.

In contrast, the function of a quantifier is to establish a quantity. A quantifier, with count nouns, is *added* to a plural, which I suggest does not point to a GEN quantifier, but instead to a different function from quantification for the plural. This could explain why the grammar of English has a number system (singular / plural) that is distinct from its quantifier system. As a result, any attempt to theorize generics in terms of

quantification is doomed to fail. This was already suggested by Carlson (1977) when he noted that quantifiers are incompatible with kind predicates: *(*All) koalas are near-extinct in Australia.*

Exception management with plurals, I argued, depends on what is regarded as negligible. A study of examples in context showed that truth-conditionality, as retained by the literature on generics, is the wrong angle. Negligibility is determined by speaker knowledge and beliefs, as well as by speaker perspective in the discourse context (what speakers want addressees to remember). A third influence, as pointed out by Leslie (2007, 2008) and hinted at by Radden (2009), is the type of property.

The study also established a bias, in existing research, towards distributive predicates that ascribe permanent properties. A look at generalizations with collective predicates brought out the concept of “collective responsibility,” with the crucial idea that the referent of a plural NP might not be the actual participants in the event. This distinction between the actual participants and the referent targeted by the referring expression might be of use outside the field of plurals as well, for instance to understand vague reference (such as antecedentless *they* or impersonal pronouns like French *on* ‘one’). The study also considered distributive predicates that denote non-essential properties, cumulative predicates, averages and alternatives.

The aim of this chapter was only to provide evidence against the treatment of generics as quantification or probability, and to emphasize the importance

of pragmatics in the interpretation of characterizing sentences. Many issues require further studies. One is the impact of sources of generalization, which may be direct observation, but also knowledge and beliefs passed on in a community, and accepted as true. As noted by Cimpian et al. (2010), as a result, generalizations require little need for evidence, and have lasting effects on beliefs. More research is needed into how erroneous generalizations get corrected by speakers, and what it takes for them to reject their beliefs. In a pragmatic perspective, reactions to generalizations in interactive contexts would be worth studying as well. Another major issue is how the generalization process described for plurals (homogenization and negligibility of exceptions) compares with other generic forms, namely *a + singular* and *the + singular*. Finally, the study was restricted to NPs in subject position, as in the literature on generics, but further research is needed for other syntactic functions.

References

- Abbott, Barbara. 2010. *Reference*. Oxford: Oxford UP.
- Asher, Nicholas & Morreau, Michael. 1995. What some generic sentences mean. In *The Generic Book*, Greg N. Carlson & Francis Jeffrey Pelletier (eds), 300-339. Chicago: Chicago University Press.

- Asher, Nicholas & Pelletier, Francis Jeffry. 2012. More truths about generic truth. In *Genericity*, Alda Mari, Claire Beyssade & Fabio Del Prete (eds), 312-333. Oxford: Oxford University Press.
- Biber, Douglas E., Johansson, Stig, Leech, Geoffrey, Conrad, Susan & Finegan, Edward. 1999. *Longman Grammar of Spoken and Written English*. Harlow: Pearson Education.
- Brandone, Amanda C., Cimpian, Andrei, Leslie, Sarah-Jane & Gelman, Susan A. 2012. Do lions have manes? For children, generics are about kinds rather than quantities. *Child Development* 83(2): 423-433.
- Carlson, Greg N. 1977. A unified analysis of the English bare plural. *Linguistics and Philosophy* 1(3): 413-456.
- Carlson, Greg N. 1995. Truth conditions of generic sentences: two contrasting views. In *The Generic Book*, Greg N. Carlson & Francis Jeffry Pelletier (eds), 224-299. Chicago: University of Chicago Press.
- Chesterman, Andrew. 1991. *On Definiteness: A Study with Special Reference to English and Finnish*. Cambridge: Cambridge University Press.
- Children's Radio UK. 2021. Top ten facts about the Romans! *Fun Kids*. <
<https://www.funkidslive.com/learn/top-10-facts/top-10-facts-about-the-romans/>>

- Cimpian, Andrei, Brandone, Amanda C. & Gelman, Susan A.. 2010. Generic statements require little evidence for acceptance but have powerful implications. *Cognitive Science* 34(8): 1452-1482.
- Claybourne, Anne. 2013. *A Colony of Ants and Other Insect Groups*. London: Raintree.
- Cohen, Ariel. 1996. *Think Generic: The Meaning and Use of Generic Sentences*. Ph.D. dissertation. Department of Linguistics. Carnegie Mellon University, Pittsburg, PA.
- Cohen, Ariel. 2004. Existential generics. *Linguistics and Philosophy* 27: 137-168.
- Corbett, Greville G. 2000. *Number*. Cambridge: Cambridge University Press.
- Cornish, Francis. 1999. *Anaphora, Discourse, and Understanding: Evidence from English and French*. Oxford: Oxford University Press.
- Finegan, Edward. 2008. *Language: Its Structure and Use*. 5th edition. Boston: Thomson Wadsworth.
- Galmiche, Michel. 1985. Phrases, syntagmes et articles génériques. *Générique et généricité. Langages* 79: 2-39.
- Gary-Prieur, Marie-Noëlle. 1990. Le pluriel des articles : morphologie et sémantique. *L'Information Grammaticale* 45: 3-7.
- Gelman, Susan A. 2003. *The Essential Child*. New York: Oxford University Press.

- Gelman, Susan A., Star, Jon R. & Flukes, Jonathan E. 2002. Children's use of generics in inductive inference. *Journal of Cognition and Development* 3(2): 179-199.
- Hollander, Michelle A., Gelman, Susan A., & Star, Jon R. 2002. Children's interpretation of generic noun phrases. *Developmental Psychology* 38: 883-894.
- Holmes, Kevin J. 1999. *Lions*. Mankato, Minnesota: Bridgestone.
- Huddleston, Rodney & Pullum, Geoffrey K. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Jones, Rod. 2001. *Caring for Cut Flowers*. 2nd edition. Collingwood: Landlinks.
- Kibrik, Andrej A. 2011. *Reference in Discourse*. Oxford: Oxford University Press.
- Krifka, Manfred, Pelletier, Francis Jeffry, Carlson, Gregory N., ter Meulen, Alice, Cherchia, Gennaro, & Link, Godehard. 1995. Genericity: an introduction. In *The Generic Book*, Gregory N. Carlson & Francis Jeffry Pelletier (eds), 1-124. Chicago: University of Chicago Press.
- Landmann, Fred. 2000. *Events and Plurality: The Jerusalem Lectures*. Dordrecht: Kluwer academic publishers.

Langacker, Ronald W. 1995. A constraint in progressive generics. In *Conceptual Structure, Discourse and Language*, Adèle E. Goldberg (ed.), 289-302. Stanford: CSLI Publications.

Lawler, John M. 1997. Re: A question about the generic use of articles. *Ask a Linguist*, May 1997.

<<http://www-personal.umich.edu/~jlawler/000001.html>>

Learning House. 2017. Online college students 2017: comprehensive data on demands and preferences, 24 July 2017.

<<https://www.learninghouse.com/knowledge-center/research-reports/ocs2017/>>

Leslie, Sarah-Jane. 2007. Generics and the structure of the mind. *Philosophical Perspectives* 21: 375-403.

Leslie, Sarah-Jane. 2008. Generics: cognition and acquisition. *Philosophical Review* 117(1):1-47.

Leslie, Sarah-Jane. 2012. Generics Articulate Default Generalizations. *Recherches Linguistiques de Vincennes* 41, *New Perspectives on Genericity at the Interfaces*: 25-44.

Link, Godehard. 1983. "The logical analysis of plurals and mass terms: a lattice theoretical approach." In *Meaning, Use and Interpretation of Language*, Rainer Bäuerle, Christoph Schwarze & Arnim von Stechow (eds), 302-323. Berlin: de Gruyter.

- Mari, Alda. 2012. Introduction. *Recherches Linguistiques de Vincennes* 41, *New Perspectives on Genericity at the Interfaces*: 5-8.
- Mari, Alda, Beyssade, Claire & Del Prete, Fabio (eds). 2012. *Genericity*. Oxford: Oxford UP.
- Nickel, Bernhard. 2008. Generics and the ways of normality. *Linguistics and Philosophy* 31: 629-648.
- Parfitt, Tom. 2012. Boris Nemtsov murder: two held “may be hired hitmen.” *The Telegraph*, 7 March 2015.
<<https://www.telegraph.co.uk/news/worldnews/europe/russia/11456484/Breaking-Two-arrested-over-Nemtsov-murder.html>>
- Pelletier, Francis Jeffrey & Asher, Nicholas. 1997. Generics and defaults. In *Handbook of Logic and Language*, Johan van Benthem & Alice ter Meulen (eds), 1125-1179. Cambridge, Mass.: MIT Press.
- Radden, Günter. 2009. Generic reference in English: A metonymic and conceptual blending analysis. In *Metonymy and Metaphor in Grammar*, Klaus-Uwe Panther, Linda L. Thornburg & Antonio Barcelona (eds), 199-228. Amsterdam: John Benjamins.
- Roeper, Thomas, Strauss, Uri & Pearson, Barbara Zurer. 2006. The acquisition path of the determiner quantifier *every*: Two kinds of spreading. In *Current Issues in First Language Acquisition*, University of Massachusetts Occasional Papers 34, Tanja Heizmann (ed.), 97-129. Amherst, MA: Graduate Linguistic Student Association.

Schubert, Lenhart K. & Pelletier, Francis Jeffry. 1987. Problems in the representation of the logical form of generics, bare plurals, and mass terms. In *New Directions in Semantics*, Ernest LePore (ed.), 387-453. New York: Academic Press.

Taylor, Yvonne. 2014. *The Saffron Connection*. Bloomington: AuthorHouse.

Von Behren, Meghan. 2018. Preparing to protect against mosquitoes. KFYR-TV, 10 July 2018.

<<https://www.kfyrtv.com/content/news/Protecting-against-mosquitoes--487710951.html>>