Chapter 17

In Hülle und Fülle – quantification at a distance in German, Dutch and English

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1 Introduction

Quantifiers are often equated with determiners and pronouns, such as *every* or *everybody*. Occasionally, adverbs of quantification are considered (Lewis 1975; de Swart 1991), or floating quantifiers (Dowty & Brody 1984; Sportiche 1988; Bach et al. 1995; Hoeksema 1996; Doetjes 1997; McCloskey 2000; Bošković 2004) The former are illustrated in (1-2) below, the latter in (3-4):

(1) Polar bears are often dangerous.

(2) Christmas parties are sometimes fun.

(3) The polar bears were all hungry.

(4) The Christmas parties were neither of them any fun.

Both types of expressions are well-known and have been well-studied. As noted by Lewis (1975) and subsequent literature, the sentences in (1-2) are equivalent to those in (5-6) on one of their readings:

(5) Many polar bears are dangerous.

(6) Some Christmas parties are fun.

The sentences in (3-4), in turn, are equivalent to the ones in (7-8):

(7) All the polar bears were hungry.

(8) Neither Christmas party was any fun.

The reader will have noted that the first two examples have indefinite subjects, whereas the second pair has definite subjects. This is typical for the two types of adverbial quantifiers. Adverbs of quantification have an effect on indefinites which they lack for definites. Sentences such as (9) below only have a temporal interpretation, except when they are given a kind-reading ("this kind of polar bear"):

(9) This polar bear is often dangerous.

Recently, Morzycki (2011) called attention to a third type of adverbial quantifier, represented by the English expression *galore*. Like the adverb of quantification *often*, it may express the same quantificational force as *many*, but unlike *often*, it does not have an additional temporal reading. Morzycki (2011) argues that *galore* is a quantifier operating on kinds, in order to account for the fact that it is used mainly in combination with bare noun phrases:

(10) We had polar bears galore on Nova Zembla.

Note that the following variants of (10) are ill-formed:

(11) We saw {*my/*the/*some/*all/*many} polar bears galore.

Morzycki (2011) proposes that *galore* is a stranded determiner, left behind after the NP is moved out of the DP, as follows (where t indicates the original position of the NP polar bears.

(12) We saw [galore polar bears] → We saw [polar bears [galore t]]

Given a ban on double determiners, the ungrammaticality of (11) is accounted for. Note that determiners in general seem to be ruled out, not just definite determiners, or indefinite ones. In this respect, *galore* differs from both floating quantifiers and adverbs of quantification. It appears to form a third class of quantificational adverb. This raises the question whether it is one of a kind, or has counterparts, either in English or in other languages. In Hoeksema (2012), I argued that Dutch *bij de vleet* 'in droves' is in fact such a counterpart, and in the present paper, I will venture to do the same for German *in Hülle und Fülle*. If these claims can be substantiated, they are somewhat problematic for the analysis proposed by Morzycki, since the Dutch and German cases are syntactically prepositional phrases, and not lexical heads.

Before outlining the structure of the paper, let me say a few things about *in Hülle und Fülle* and *bij de vleet*. The rhyming idiom *Hülle und Fülle* consists of a word meaning 'cover, clothing' and another meaning 'filling, food'. Together, they are all one needs to survive. At some point, this developed into the meaning 'plenty'. Dutch *bij de vleet* contains the otherwise obsolete noun *vleet*, meaning fishing net. One might translate it as 'by the net'. Fishermen caught herring *bij de vleet* in large numbers, and so this expression came to mean 'in large numbers, galore'.

In the next section, I compare the distribution of *galore* with that of its proposed Dutch and German counterparts. The distributional data are from electronic corpora of the three languages. Section 3 contains the conclusions.

2 Distributional facts

2.1 The bare noun condition

We saw in the previous section that *galore* requires bare nouns as its associates. I will now show that this finding can be replicated for *in Hülle und Fülle* and *bij de vleet*. First, let's consider a mass noun:

(13) Wir hatten Zeit in Hülle und Fülle
we had.PL time a-plenty
'We had lots of time.'

Adding a determiner to the noun in (13) leads to a degraded result in much the same way as it did in (11) above.

(14) Wir hatten die/diese/einige Zeit in Hülle und Fülle
we had.PL the/this/some time a-plenty
'We had lots of the/this/some time.'

For Dutch, we can show a similar array of judgments:

(15) We hadden geld bij de vleet
we had.PL money a-plenty
'We had money galore.'

(16) We hadden het/zijn geld bij de vleet
we had.PL the/his money a-plenty
'We had the/his money galore.'

Nonetheless, there are several fairly robust and interesting exceptions to this generalization. For starters, the indefinite determiner *zulk* 'such' is acceptable with the associates of *bij de vleet*:

(17) Zulke problemen waren er bij de vleet
such problems were there galore
'Such problems, there were galore.'

This observation is not restricted to Dutch. The Internet provides similar examples for English, e.g.

(18) Humanity has had such problems galore.

as well as for German:

(19) Solche Probleme gab es in Hülle und Fülle
such problems there were galore
'Such problems, there were galore.'

The case of *such* is interesting and not entirely straightforward. Among determiners, it enjoys a rather special status. In some ways it behaves as an adjective, in other ways it looks more like a determiner. To see this, just consider the following paradigm:

(20) a. * the such book
b. * a such book
c. such a book
d. no such book
e. * this such book
f. such nice books
g. every such book

While examples d and g are most compatible with adjectival status, the other data point more into the direction of determiner status. van der Auwera & Kalyanamalini (2015) treat it as a unique element, belonging to a category of its own. Consequently, we need not treat it as a direct counterexample to Morzycki's bare noun generalization.

More problematic are other cases, not discussed by Morzycki, where the associate of *galore* is not a bare NP. Pronouns, for instance, may serve as associates when they refer to a kind. The following is one of many examples to be found on the Internet:

(21) I'm not sure what planet you live on, coz honour killings are very much part of the 'culture' in Pakistan. I did not say religion, but the culture. Open any Pakistani newspaper and you'll find them galore, and the men feel quite proud in admitting to it.

The use of *them* in the above example to refer back to the category of *honour killings* is acceptable, it would seem, precisely because it is a case of common noun anaphora. When *them* is referring to a set of individuals, it does not lend itself to be the associate of *galore* Compare:

(22) Q: Where are the boys?
A: # O, I saw them galore.

Similar cases can be found in German and Dutch, respectively:

(23) Probleme? Die haben wir in Hülle und Fülle
problems those have we galore
'Problems? We have them galore.'

(24) Problemen? Die hebben we bij de vleet
problems those have we galore
'Problems? We have them galore.'

Finally, it would seem that full definite DPs, while clearly exceptional and rare, are not entirely ruled out either, compare the examples in (25, 26) from English, (27) from German and (28) from Dutch. The latter two are not from corpora but were adapted from corpus examples.

(25) It's corroborated across Internet sites by the personal testimonies galore from women. [COCA]

(26) Hallmark has those things galore. [Internet]

(27) Das Geld steht in Hülle und Fülle zur Verfügung
the money stands galore to disposition
'The money is available in abundance.'

(28) De boeken werden bij de vleet verkocht
the books were galore sold
'The books were sold in large numbers.'

We might take this as evidence against the bare noun generalization, but the fact of the matter is that the vast majority of cases involves bare nouns. I collected 100 examples of each of the three items studied here, *galore*, *in Hülle und Fülle* and *bij de vleet*. Examples were taken from the online corpora made available by Mark Davies (at `corpus.byu.edu`, cf. e.g. Davies 2011), the Institut für deutsche Sprache (IDS) in Mannheim (a.k.a. COSMAS II), and the Dutch newspaper corpora at `delpher.nl` and LexisNexis, as well as Google Books. All cases were the items and their associates did not form a full sentence were put aside. This is a very large group, since the three expressions are very popular in titles and section headers, photo captions, names of web shops and websites, etc. A typical example of this usage is seen in the following text, the introduction of a text announcing and advertising a cultural festival in Christchurch, New Zealand:

(29) Culture Galore! All cultures are welcomed and celebrated at this free annual event which features music, dance, food and arts and crafts from more than 80 cultures from around the globe.

The data sets were divided into bare nouns, pronouns (personal, relative, demonstrative), DP (definite and universal noun phrases, including universal pronouns, such as *all*), *such N* (German *solche N*, Dutch *zulke N*), and the category *zero* when there was no overt nominal associate (more about this in section 2.3). The results are given in Table 1.

I assume that the strong preference for bare nouns has a semantic cause. It does not seem to stem from syntactic selection of noun phrases by determiners, a possibility that may seem acceptable for galore, but which lacks plausibility for the PP quantifiers *bij de vleet* and *in Hülle und Fülle*. Morzycki (2011) provides the following interpretation for *galore*, where k is a variable ranging over kinds, and $^{\sqcup}$ is an operator due to Chierchia (1998), sending kinds (in the sense of Carlson 1977) to properties. E.g. it will map mankind to the set of human beings. *Galore* acts as a quantifier comparable to *many/much*, differing from those quantifiers however in not making a

Table 1: Corpus data on type of associate, per language.

associate	English	German	Dutch
bare noun	94	89	88
pronoun	2	4	6
DP	3	6	4
such N	–	1	1
zero	1	–	1

distinction between plural count nouns and mass nouns. Applying the interpretation in (30) to a sentence such as *there were spiders galore* yields the interpretation: there were many instances of the kind spider.

(30) $[\![\text{galore}]\!] = \lambda k \lambda g_{<e,t>}.\exists x[^{\sqcup}k(x) \wedge g(x) \wedge \text{amount}(x) \succ \text{standard}]$

Assuming that pronouns may refer to kinds (Carlson 1977), and that the DPs and such NPs noted in Table 1 may also be viewed as kind-denoting, we could adopt Morzycki's analysis for our purposes. While the bare plural *problems* denotes the kind of problems, the DP *such problems*, one might postulate, denotes the subkind of problems characterized by a given exemplar. To motivate this assumption, I want to argue that a DP such as *those cars* is acceptable as an associate of *galore* only in certain contexts. Compare:

(31) * Donald Trump owned those cars galore.

(32) Donald Trump owned many of those cars.

(33) Cadillacs are pretty rare in Europe, but in the USA we have those cars galore.

In other words, when *those cars* denotes a particular set of cars, such as the set (partially) owned by Trump, *galore* is no good, but when we are talking about a brand/type of car, we may use *galore* to quantify over exemplars of that brand. Note that some other types of generic DPs seem to be ruled out with *galore*, such as *an N* and *the N(s)*:

(34) * The tiger hunts alone galore.

(35) * For lunch, I prefer a light meal galore.

(36) * I am rooting for the Dutch galore.

In the case of generic indefinites such as *a light meal*, we may refer to Krifka et al. (1995), who argue that such indefinites do not refer to kinds. Kind-level predicates such as *extinct* do not apply to them, compare:

(37) The dodo is extinct.

(38) # A dodo is extinct.

Note that there is one reading on which (38) is acceptable, namely when the sentence means that a kind of dodo is extinct. It seems to me that on this particular reading, *galore* should be acceptable:

(39) Mostly, hominins are extinct, but we have one hominin galore: homo sapiens.

How about cases such as (34) and (36)? It seems very likely, that for these sentences, we need to look at the predicates as well. The interaction between predicate type and generic/non-generic DPs is complicated, but crucial (cf. Carlson 1977; Krifka et al. 1995; Oosterhof 2008; Barton, Kolb & Kupisch 2015). In the next section, we take a look at the predicates that show up with *galore*.

2.2 Predicates galore

In Carlson (1977), a three-way distinction is made between kind-level, individual-level and stage-level predicates, exemplified by (40), (41) and (42), respectively:

(40) Rats are not a threatened species.

(41) Rats are smart.

(42) Rats are available for vivisection.

Kind-level predicates are ruled out by the semantics of *galore*. E.g. *rats galore* quantifies over instances of the kind rats, according to Morzycki's analysis. Kind-level predicates apply to kinds, not their instances. The associates of *galore* come in three main groups: subjects, direct objects and objects of prepositions. The category of objects of prepositions is fairly marginal in my data set, except for English, where it accounts for 17 (out of 100) occurrences, hence I will ignore these cases in what follows. Only very rarely, a predicate nominal is accompanied by *galore* ("it will be bargains galore at the fire sale"). When the associate is a subject, the predicate is mostly *there + be*, a passive, or a locative construction. The following table gives an overview of the subject associates for the three languages studied. I treat the "subjects" of existential constructions all the same, although for German *es gibt* one might argue it involves an object (bearing accusative case). However, for the same of comparison, it seems best to treat the functionally equivalent DPs in *there is DP* and *es gibt DP* as the same.

While the table shows some crosslinguistic differences, a number of similarities stand out. Existential and locative sentences account for the majority of cases in each language. Agentive subjects are absent in my material, regardless of which of the three languages one looks at. I do not have an explanation yet for the fact that English has fewer subject associates than either Dutch or German, but we might venture a guess based on the distribution of direct object associates. For this category, I have also made a comparison of the predicates involved. An overview is presented in Table 3. Among the verbs involved, especially *have* (and its counterparts *haben/hebben*) stands out, but I also want to draw your attention to *find (finden/vinden)*. Morzycki (2011) also mentions verbs of creation as an important group of verbs, but in my data

Table 2: Types of predicates with subject associate.

predicate	English	%	German	%	Dutch	%
existential	22	85	32	53	24	51
locative	1	4	12	20	3	6
passive	2	8	4	7	14	30
other	1	4	12	20	6	13
total	26	100	60	100	47	100

set verbs like *make* and *create*, while attested, do not stand out in any of the three languages researched.

Table 3: verbs with object associate.

verb	English	%	German	%	Dutch	%
have	26	48	10	28	7	14
find	1	2	6	17	36	12
other	27	50	20	56	38	75
total	54	100	36	100	51	100

There are deep and well-known connections between *have* and existential constructions involving *be* (see Benveniste 1966; Clark 1978; Partee 1999: inter alii). Many languages, such as French, build existential sentences with *have*, rather than *be*. If we assume that speakers of English, for whatever reason, pick an existential construction with *have* more often than do speakers of Dutch or German, we might have a possible explanation for the lower number of subject associates in English, and the higher number (both absolute and as a percentage) of occurrences with *have*, thereby liking these two observations. Note that the situation is in fact more complicated, since other verbs may also have an existential function (in the loosest sense of the word). Consider *find*. Instead of *There are many windmills in the Netherlands*, one might equally well write *The Netherlands have many windmills*, or *In the Netherlands, you will find many windmills*. Especially with generic subjects, such as *one* or *you, find* has developed an existential use. Of the 13 occurrences of *find/finden/vinden* in my material, 9 had generic subjects. Yet other ways to build an existential statement involve the use of *with*. *Visit the Netherlands with its many windmills! Visit the Netherlands where you will find many windmills. Visit the Netherlands where they have/there are many windmills.* Among the 17 English occurrences of associates of galore that are objects of prepositions, there were 9 introduced by *with*. To put this in perspective, the first 17 prepositions of this paper contain just one example of *with*.

The predicates we see most commonly in sentences with galore are not compatible with generic definites (or indeed definites in general). This might already explain why sentences such as (34) and (36) above are ungrammatical. They contain verbs of the wrong kind, and if they had verbs of the right kind, the definite generics would have been out of place. Of course, for a fuller account, we need to establish this for all verbs involved, including the ones labelled "other" in tables 2 and 3.

2.3 Zero associates

In a few cases, I could not find overt associates for *galore* or *bij de vleet*. Such cases are presumably also possible in German. First, take a look at a Dutch example:

(43) Een buurt waar gekraakt wordt bij de vleet
a neighbourhood were squatted becomes galore
'A neighboorhood where people squat galore.'

This sentence involves an impersonal passive. The relative clause has no subject or object, nor in fact any nominal constituent that could be the associate of *bij de vleet*. The verb *kraken* "to occupy by squatting" is used intransitively here, and has an implicit argument. My intuition is that *bij de vleet* does not quantify over the number of agents involved in the squatting, but over the number of houses or apartments involved. In fact, (43) would still be true if a single person did all the squatting, e.g. by occupying a different house every week. A similar effect can be noted in English with verbs of emission and ingestion, such as *eat, drink, sweat, pee*, etc., which may have implicit objects.

(44) Some people were drinking galore, however my pint of PIMMS lasted me the entire night and did me proud! [Internet]

It may be that this kind of case leads to a new usage for *galore/bij de vleet*, as an adverbial intensifier, comparable to *a lot*. The Internet provides cases that can only be viewed in this light, such as the following (from an old journal, *The Music Trade Review*):

(45) A toast to our Fletcher, who knows how to run
All things of departments; he's bright as the sun!
Impartial and just to the boys on the floor,
We're loyal to him, and we like him galore.

Neither *bij de vleet* nor *in Hülle und Fülle* can be used in this way to the best of my knowledge.

3 Conclusions

The main conclusions of this paper are as follows:

- *galore* is not alone: *bij de vleet* in Dutch and *in Hülle und Fülle* in German share its properties, as does English *aplenty*;
- we must distinguish three types of quantification at a distance: floating quantifiers, adverbs of quantification and *galore*-type quantifiers;
- *galore*-type quantifiers have bare nouns as their preferred associates, but pronouns, definite DPs and DPs introduced by *such* are possible as well, provided they have a kind-denoting reading;
- sentences with *galore* typically introduce new discourse referents and predicates are often existential or verbs of encountering;
- *galore*-type quantifiers are not stranded determiners, but PP modifiers (for Dutch and German the PP nature of the quantifiers is self-evident; *galore* itself comes from an Irish/Gaelic PP *go leor* meaning "in sufficiency, enough").

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