

On plurals and plurality¹

Artemis Alexiadou

Humboldt Universität zu Berlin & Leibniz-ZAS
artemis.alexiadou@hu-berlin.de

Abstract

In this paper, I will revisit cross-linguistic differences in the morpho-syntactic behavior of plurality. It has been argued that certain properties, e.g. the lack of *pluralia tantum* in some languages, differentiate between different types of plurals. This in turn suggests that plurals occupy different positions in the functional spine of the noun phrase. In this paper, I will review this evidence and show how the properties under discussion can receive alternative explanations, pointing to a more uniform approach to the morpho-syntactic representation of plurality than assumed by some researchers. With respect to *pluralia tantum*, I will argue that they indeed instantiate lexical plurality, but their cross-linguistic distribution is not as clear-cut as has been described in the literature.

Keywords: plural, grammatical, lexical, singulative, gender, pluralia tantum

1 Introduction

The category Number has received a lot of attention in the literature. In particular, various researchers focusing on plural marking in particular have pointed out that plurals do not behave alike across languages. Evidence for this split behavior comes from observations on how language fare with respect to the properties listed in (1), see in particular Wiltschko (2008):

¹ Some aspects of the rather complex problem discussed in this paper were presented at the Conference on *Linguistic complexity in the individual and society* in Trondheim in October 2015, at the Workshop on *Syntax and Semantics in the nominal domain* in Frankfurt in February 2016, at the Workshop on the *Semantic contribution of Det and Num* in Barcelona in May 2016, and at the ISTAL 23 Conference in Thessaloniki in March 2017. Many thanks to these audiences for their input. AL 554/8-1 is hereby acknowledged.

- (1) Obligatoriness of plural marking (e.g. with numerals)
 - Availability of agreement in plurality
 - Availability of plural interpretation for singular nouns (general number)
 - Availability of mass vs. count noun distinction
 - Presence vs. absence of *pluralia tantum*

The fact that languages differ with respect to these properties has been taken as supporting analyses, according to which, plural marking does not instantiate the same functional category in the structure of noun phrases across languages. A number of approaches have been put forth to account for this, which I will review in detail in section 2. Specifically, according to one influential view, the lack of identity reflects differences in functional architecture, specifically the status of the plural, and height of merge of the plural, e.g. Mathieu (2014) and Wiltschko (2008).

The absence of form-meaning mismatches is taken as a key property splitting languages into two groups. In particular, languages like English show form-meaning mismatches, e.g. have *pluralia tantum*, *scissors* etc. By contrast, languages such as Halkomelem lack such nouns. The conclusion drawn is that plurals cannot be located in the same functional head, but see Bayirli (2017) for a different approach.

In this paper, I will revisit this discussion and take issue with the idea that plurals occupy a different head in the functional spine of the nominal. I will argue that plural realizes the same head in the morpho-syntax of noun phrases, namely Div in Borer's (2005) system, suggesting that the differences that have been observed must receive an alternative explanation (Alexiadou 2019 for elaboration). By contrast, cases of lexical plurality, which I take *pluralia tantum* to be instances of, suggest that plural can appear in a position lower than Div, and when this happens, the meaning of plural does not correspond to that associated with Div. In my discussion, I will challenge the claim that *pluralia tantum* really split languages into two groups and show that under specific conditions even English may use singular forms of expressions classified as *pluralia tantum*.

The paper is structured as follows. In section 2, I will summarize the arguments for introducing a projection where plurality is realized, and I will revisit Wiltschko's, Mathieu's as well as Bayirli's arguments that plurals are not alike across languages. In

section 3, I will argue against the view that plural can appear in different projections in the nominal spine. In section 4, I will offer some general conclusions.

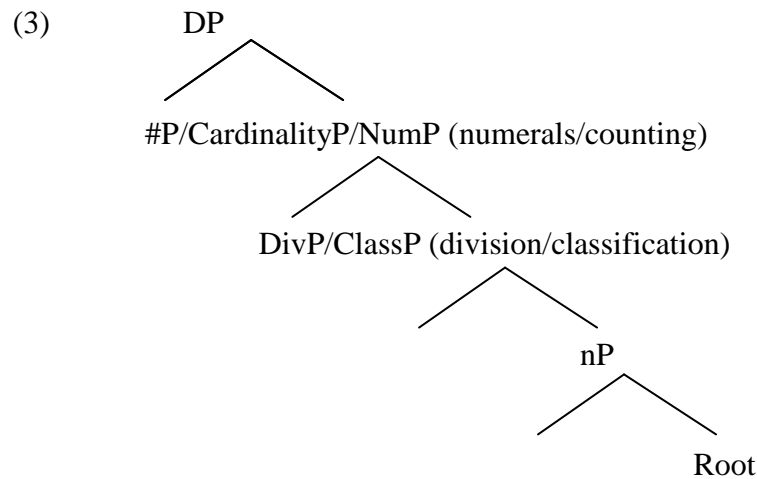
2 The morpho-syntax of plural

2.1 From NumberP to DivP

Ritter (1992) argued that Number is a functional projection in the extended projection of the noun phrases., see (2) The logic of the argumentation was that number morphology is associated with the nominal stem in ways similar to how Tense is associated with the verbal stem. Moreover, Number, like Tense, makes a semantic contribution referring to more than one entity, see Alexiadou et al. (2007) for an overview.

(2) [DP [NumberP [NP]]]

In (2), this head occupies a position between DP and NP, and hosts in addition to plural morphology numerals in its specifier. In later literature, however, this view has been further refined. For instance, Borer (2005) proposed that plurals divide undivided mass, which can then be counted, i.e. embedded under a Quantity Phrase. In her system, plural in English has the same contribution as classifiers in languages such as Chinese, realizing Division in (3), cf. Cheng & Sybesma (1999), and Heycock & Zamparelli (2005). In Borer's system, the division of labor between Quantity and Division is as follows: QuantityP introduces the counting function and hosts numerals. Division introduces the dividing function, and is the input to Quantity, as only divided units can be counted.



An important empirical argument for proposing that plurals are realized in the same projection as classifiers comes from Armenian, where plural morphology and classifiers are in complementary distribution, as shown in (4), from Borer (2005: 94-95):

- (4) a. Cardinal, classifier, no plural *Armenian*
 Yergu had hovanoc unim
 two CL umbrella have 1sg
 I have two umbrellas
- b. Cardinal, no classifier, plural
 Yergu hovanoc-ner unim
 two umbrella-PL have 1sg
 I have two umbrellas
- c. *Yergu had hovanoc-ner unim
 two CL umbrella-PL have 1sg

Borer (2005) further discusses languages such as Hungarian, where plurals do not co-occur with numerals, see (5) from Dékány (2011), and proposes that in Hungarian numerals can be both dividers and counters, while in English, they function only as counters:

- (5) a. hét virág
 seven flower
 seven flowers
- b. *hét virág-ok
 seven flowers

2.2 Root modifier and counting plurals

Wiltschko (2008), comparing Halkomelem to English, takes the unavailability of plural marking in the presence of numerals in the former as a property correlating with a number of other features, listed in (1). While she acknowledges that plural forms in Halkomelem have the same meaning as their English counterparts, she points out that this does not mean that they instantiate the same category. Wiltschko in fact argues that categorial identity is determined by distributional criteria and below I summarize her arguments.

A first environment where the two languages differs is the obligatoriness of plurality. In Halkomelem, plural marking is not obligatory (Wiltschko 2008: 642):

- (6) a. te lhíxw swíweles
 DET three boy
 the three boys
 b. te lhíxw swóweles
 DET three boy.PL
 the three boys

Second, plural nouns in Halkomelem need not agree with the determiners preceding them, while this is the case in English, e.g. *these boys* vs. **this boys*. A third property where English differs from Halkomelem relates to compounds. Plural is not allowed within compounds in English, e.g. while it is in Halkomelem, see (7). Note that in Halkomelem the compound is formed on the basis of a bound root combined with a free root, and the plural attaches to the non-head of the compound. As we will see in the next section, and is discussed in Butler (2012), English does in fact allow plurals inside compounds:

- (7) *teeth-brush vs. tem-qoqo: qo
 time-water.PL water
 high water time

(Wiltschko 2008: 644)

Wiltschko (2008) proposes that plural can be merged either as a head or as modifier in the nominal function spine. Moreover, in view of the structure in (3) it can be merged in different positions, namely, D, Class, n and at the root level and formal and interpretational differences among n-head, Class-head and D-head plurals are expected, see Wiltschko (2008) for further discussion, and Butler (2012) for an elaboration of this typology. In languages where plural merges as a modifier of the root, Wiltschko argues, plural marking is not obligatory, there is no agreement between numerals and nouns, and the languages lack *pluralia tantum*. This set of properties characterize Halkomelem, as Wiltschko shows, and it is argued in Ghaniabadi (2012) that Persian is very similar to Halkomelem.

The lack of *pluralia tantum* is significant, as Wiltschko (2008) argues that root modifier plurals do not allow form-meaning mismatches. Specifically, according to Wiltschko (2008: 663), “the absence of *pluralia tantum* in Halkomelem follows from the modificational character of the plural marker. Since it is not a grammatical category, no mismatches can arise. The presence of a plural modifier must be interpreted. This contrasts with English plural marking which functions as a syntactic head and as such can display form-meaning mismatches.”

The presence vs. lack of *pluralia tantum* is taken as a crucial property distinguishing two types of languages in Bayirli (2017: 123), who puts forth the following correlations:

(8) a. *Pluralia tantum* implies plural concord ($PT \rightarrow PC$)

If a language has *pluralia tantum* nouns, then this language has plural concord.

b. No plural concord implies no *pluralia tantum* ($nPC \rightarrow nPT$)

If a language does not have plural concord, then this language has no *pluralia tantum* nouns.

Bayirli (2017) claims that the reason for this split relates to the nature of NP across languages. Assuming that plural morphology is located in Number, (2), it cannot be associated with the nominal stem in languages which lack *pluralia tantum*. Bayirli argues that in non-concord languages NP is a phase. The phasehood of NP is evidenced by the fact that adjectives cannot move out of out of it, Number is not obligatory, and nominal inflectional elements can be shared by co-ordinated elements.

To explain why in English, adjectives do not agree with the head noun in general and also cannot move out of the NP, Bayirli makes use of the concept *glue-Merge*, according to which two elements are sort of glued together and behave as one element in the derivation. Languages that lack plural concord are general number languages, see (1).

A somewhat different argument is made in Bale & Khanjian (2014), and Mathieu (2014), based on differences in the interpretation of plural. Recall that for Wiltschko identity in interpretation is not a strong argument for categorial identity. Mathieu views identity in interpretation as a pre-requisite for categorial identity. If semantic identity is not present, then plurality must differ. In particular for Mathieu (2014), plural must then instantiate a different category than Div in (3).

It has been pointed out in the literature (Krifka 1989; Sauerland 2003 and others) that we need to distinguish between so called underspecified/semantically unmarked plurality or the inclusive reading of the plural and strict plurality or the exclusive reading of the plural. The former denotes an interpretation *one or more*, (unspecified), while the latter refers to *more than one* (exclusive). The argument in favor of underspecified plurality for English comes from examples such (9):

- (9) Do you have children?
a. Yes, I have one child
b. Yes, I have two children

Krifka (1989) pointed out that the English plural can both refer to a group of individuals and to a single individual; hence it is semantically unmarked.

Bale & Khanjian (2014: 2) suggest that because of this in English *pluralia tantum* “often refer to singular objects even in upward-entailing or non-monotonic contexts”, (10a), which normally figure a plural only interpretation for plural nouns, as illustrated in (10b).

- (10) a. Those scissors are mine (can be used to refer to one paper-cutting tool)
b. These books are mine (refers to more than one book)

In this system, it is expected that if there are languages where the plural only has the exclusive reading, these should lack *pluralia tantum*.

Mathieu (2014), following Wiltschko's (2008) split plurality view, argues that exclusive plurals are counting plurals. Mathieu makes this point on the basis of plurals of singulatives in Arabic. In Arabic, collective nouns can be turned into individuals via the presence of singulative morphology and this form can in turn be pluralized. Importantly, the plural of a singulative is interpreted as *two or more* and cannot refer to one orange, (11). Mathieu points out that the plural form in (11) can no longer refer to the concept of oranges.

(11) ?*hal ʕindik burtogaalaat?

Q have-you orangesFEM-PL

Do you have oranges?

According to Mathieu (2014), singulative morphology is under Div, since it introduces division, while plural of singulatives targets #, i.e. the counting projection. See also Dékány (2011) for an analysis of Hungarian plurals as counting plurals.

We can summarize the above discussion as follows: while for Wiltschko, plurals are potentially semantically alike across languages, this is not viewed as a criterion of categorial identity. The difference in the distribution of plurality is taken as evidence for a different morpho-syntactic representation. For Mathieu (2014), the difference in interpretation is taken as a signal of a different morpho-syntactic representation, namely the counting function. If *pluralia tantum* are an example of a form-meaning mismatch, we expect languages that have either only counting plurals or only modifier plurals to lack such nouns.

By contrast, for Bayirli, syntactic differences relating to the notion of phase yield cross-linguistic distribution. Recall that for Bayirli, English is a concord language, and he appeals to the notion of glue-merge to explain why, adjectives cannot move of the nP in this language. It is not clear to me how this particular analysis of adjectival modification in English can account for the fact that adjectives can be modified by degree modifiers, e.g. *very interesting book*, which arguably do not scope over the whole AN complex.

3 Where is plural?

Let me first point out that clearly the morpho-syntactic behavior of plurality does not correlate with its interpretation, see Ortmann (2000), and Alexiadou (2019) for further discussion. For instance, as Farkas & de Swart (2010) point out, Hungarian is like English in that plural nominals may have inclusive uses. In (12), a positive answer is expected if the addressee even saw a single horse, see also Renans et al. (2017), Yatsushiro et al. (2017a), and Yatsushiro et al. (2017b):

- (12) Láttál valaha lov**ak**at?
 see.past.2sg ever horse.**pl**.acc
 Have you ever seen horses?

As Lisa Matthweson and Henry Davis inform me, the plural in Halkomelem seems to have the inclusive reading of the plural, i.e. it behaves similar to the English plural.

- (13) A: Wá7=lhkacw=ha es-tsmál't
 ipfv=2sg.sbj=ynq stat-children
 Do you have children?
 B: Iy, pápla7=t'u7 ta=n-skúz7=a
 yes one.human=just det=1sg.poss-child=exis
 Yes, I have one child.

Nevertheless, both these languages lack *pluralia tantum* and are general number languages.

I will not discuss the interpretation aspect here any further, rather I will focus on the morpho-syntactic criteria. Let me begin with the distribution of *pluralia tantum*. Greek, as pointed out to me by George Tsoulas, seems to contradict Bayirli's and also Witschko's correlation with respect to *pluralia tantum*. The language has a limited number of *pluralia tantum*, e.g. the form *resta*, 'change', which is the neuter plural from of a nominalized adjective. As is shown in (14), the noun agrees in plurality with the quantifier:

- (14) Posa resta pires
 how many change got-2sg
 How much change did you get back?

Note also that in Greek adjectives cannot move out of the NP and certainly plurality cannot attach to co-ordinated NPs. Moreover, the language is a concord language, as all adjectives agree with the noun they modify, thus providing evidence against (8).

Most English *pluralia tantum* nouns are singular count nouns in Greek. Importantly, however, the language is not a number neutral language, and its plural is very similar to the English plural and unlike the Halkomelem plural. This suggests that absence of *pluralia tantum* does not correlate with the availability of number neutrality nor does it correlate with a different morpho-syntactic representation.

Let us now turn to the other pieces of evidence in favor of a split plurality, discussed in section 2. Recall that one further argument provided by Wiltschko (2008) to support the differences in plurality between English and Halkomelem had to do with the presence of plurals inside compounds. Butler (2012) points out that even in languages such as English, which Wiltschko classifies as having a head type of plural, plural marking is found within compounds, e.g. *sports complex*.

A further point made by Wiltschko has to do with the interpretation of plural on mass nouns. In Halkomelem, this is interpreted as the plural of abundance. Mathieu (2012) argues that the availability of abundance readings of plural mass nouns is not correlated with the type of plural a language has, e.g. inflectional vs. non-inflectional in Wiltschko's proposal. Thus, an abundance plural is available even in languages that have inflectional plural, e.g. Romance and English, as in *waters*. It is even available in Greek, see Alexiadou (2011) and Tsoulas (2006). If the criteria then do not support an analysis of plurals as root modifiers, we can assume that a uniform analysis is to be preferred.

Turning now to counting vs. Div plurals, recall that the evidence for this split provided by Mathieu came from the behavior of singulative morphology. Kramer (2015) presents several arguments against viewing singulative morphology as realizing DivP. An important observation is the fact that cross-linguistically, singulatives are realized with feminine affixes or diminutives. For instance, as pointed out in Mathieu (2012), in Ojibwe the diminutive of a mass noun receives a unit interpretation. In Fox, as detailed in Kramer (2015: 202) “singulatives are denominal

nominalizations (nouns derived from collective/mass nouns) and all have uninterpretable animate gender.” Since gender is a feature associated with *n*, then singulative morphology can be seen as an exponent of *n*. If singulative realizes *n*, then plural can be seen an exponence of *Div* and not *#*. The exclusive reading of plurals of singulatives arises because of the unit interpretation that singulatives have. If this is pluralized, it can only mean more than one unit.

Note here that proposing that number morphology can be realized on *n* suggests a close relation between Gender and Number, and is supported by cases of Gender polarity in found in e.g. Somali, a member of the Cushitic family. In this language, a change in number necessarily involves change in gender. Consider the following Somali examples, from Lecarme (2002):

- (15) a. libáax (-a) (m) ‘lion’ libaaxyó (-á-da) (f) ‘lions’
goól (-sha) (f) ‘lioness’ gooló (-á-ha) (m) ‘lionesses’
b. áqal (-ka) (m) ‘hut’ aqalló (-á-da) (f) ‘huts’
c. qálin (-ka) (m) ‘pencil’ qalimmó (-á-da) (f) ‘pencils’
d. su’áal (-sha) (f) ‘question’ su’alló (-á-ha) (m) ‘questions’

We note that when the noun changes its number, it automatically changes its gender as well. As we can also see both directions are possible, i.e. masculine nouns become feminine in the plural and vice-versa.

As Lecarme points out, in Somali, the gender change that is observed leads one to conclude that the gender value is not an inherent feature of the noun itself but rather comes with the plural affix. This is reminiscent of properties of category-changing and derivational morphology. See also Kramer (2015) on Amharic gender polarity.

A further parameter relating to plurality that has been put forth is the nature of numerals. Borer (2005) argued that numerals can be dividers in some languages but only counters in others. But note that numerals cannot be seen as realizing *Div* in languages such as Hungarian, in view of the fact that while plurals and classifiers are in complementary distribution, numerals may occur with classifiers but **not** with plurals:

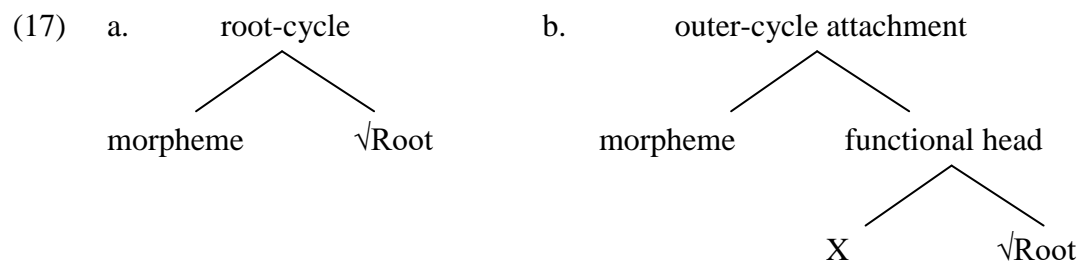
- (16) a. ez-ek a (*rúd) szal ámi-k
this-pl the clstick salami
these sticks of salami

- b. hét szál virág
 seven clthread flower
 seven flowers
- c. hét virág-(*ok)
 seven flower-pl
 seven flowers

See Alexiadou (2019), Farkas & de Swart (2010), Ionin & Matuschansky (2018) and Ortman (2000) for alternative explanations.

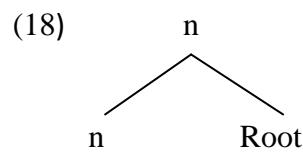
I conclude that there are alternative analyses to the facts presented in the literature arguing for a split into Div and counting plurals. Thus, the remaining issue to be explained is the lack of form-meaning mismatches observed in some languages. In other words, what explains then the availability of *pluralia tantum* in e.g. English and lack thereof in other languages?

Let me begin with a discussion of the morpho-syntactic representation of *pluralia tantum*. In English, *pluralia tantum* denote garments, instruments, tools, and optical devices. As discussed in Acquaviva (2008) and references therein, *pluralia tantum* do not seem to form a uniform grammatical class. He points out that there is no property that puts these forms apart from other cases of lexical plurality. Lexical plurality has been argued to occupy a head different from Div, namely n. This was proposed adopting ideas within the framework of Distributed Morphology, where the distinction between idiosyncratic as opposed to compositional word formation is cast in terms of two distinct domains/levels for word formation, see Arad (2003) and Marantz (2012). On this view, there is a clear separation: idiosyncratic processes are specially marked or rather they result from an operation of affixation at the root level.



Merger with root implies negotiated (apparently idiosyncratic) meaning of the root in the context of the morpheme and apparent semi-productivity (better with some roots than others), while merger above functional heads implies compositional meaning predicted from the meaning of the stem and apparent complete productivity.

From this perspective, lexical plurals are on *n*. Then we expect that, since this is the first cycle of word formation, to find idiosyncrasy in form and meaning and lack of productivity, Crucially plural marking on *n* functions as a nominalizer (Alexiadou 2011; Wiltschko 2008). Alexiadou (2011) argued that this is the correct analysis for the abundance reading of plural mass nouns in Greek:



Acquaviva (2008) and Alexiadou (2011) argue that lexical plurals are realized on a head different from the ones that introduce ‘outer’ plurality. ‘Outer’ plurals, which are situated in Div, are fully compositional. *n* plurals by contrast realize a cyclic head, in the sense of Embick (2010), and hence its presence in the morpho-syntactic architecture of nominals leads to idiosyncrasy in form and interpretation.

Nevertheless, this does not explain why *pluralia tantum* are not found in all languages. Wierzbicka (1988: 544) claims that a characteristic property of *pluralia tantum* is that they are bounded in the sense that they refer to limited quantity and are bounded in place. It is not really clear why some languages have more *pluralia tantum* than others, though see Wierzbicka (2004) for some thoughts on the cross-linguistic availability of these nouns.

Recently, Tuominiemi (2017) carried out an investigation of the British National Corpus and the Corpus of Contemporary American English (COCA) and came to the conclusion that many of the English cases of *pluralia tantum* can be used in the singular form, in both written and spoken English. Often these forms have a non-individual, kind reference, and appear in the context of modifiers, e.g. *the skinny jean* or *the ideal pyjama*. However, it is pointed out that the bare form is not limited to this non-individual interpretation. Consider the following examples, the result of my own COCA searches, where an individual interpretation is possible, e.g. in (19d):

- (19) a. Don't just use a scissor to cut the ribbon (2012, Mad Men and Working Women)
b. Well, this is the pant, if you're going to buy a black pant, these are by Robert Rodriguez, with the pencil pant (2017, NBC)
c. But what we love about it is perfect with that trouser, that cropped trouser we're seeing everywhere this season (2016, SPOK)
d. This handy little binocular surprised the entire panel by delivering a very good image in a small, well-built package (2012, Outdoor life)

In the corpus even the form *a scissors* is attested. Assuming that the indefinite determiner realizes Div, clearly the plural form of *pluralia tantum* cannot be in Div, and must be in n. Importantly, if indeed, singular forms of such nouns are widely used, then it is not clear how English differs from e.g. Halkomelem, suggesting that the presence *pluralia tantum* might provide evidence to distinguish between lexical and grammatical plurals, and that languages are more alike that thought of in Wiltschko (2008) and Bayirli (2017).

4 Conclusion

In this paper, I took issue with the idea that the locus of plural morphology differs across languages. I argued that grammatical plural realizes the same head in the morpho-syntax of noun phrases, namely Div in Borer's (2005) system. I showed that in some cases, the morpho-syntactic criteria do not give a clear dichotomy, e.g. compound formation and plural of abundance. In the case of the singulative, an alternative analysis exists, which does not force us to admit that plurals can be located in other heads in the functional spine of the noun. With respect to *pluralia tantum* the empirical picture seems to be that singular forms do exist in particular contexts even in English and there is no correlation between the type of plural and the availability of *pluralia tantum*. Nevertheless, it cannot be denied that a distinction between grammatical and lexical plurality should be made across languages, and that there are systematic distributional differences among languages, e.g. the presence of plurality with numerals, which I have not discussed in this paper, see Alexiadou (2019), Farkas

& de Swart (2010), Ionin & Matushansky (2018) and Ortmann (2000) for discussion and alternative analyses.

References

- Acquaviva, P. (2008). *Lexical plurals*. Oxford: Oxford University Press.
- Alexiadou, A. (2011). Plural mass nouns and the morpho-syntax of number. In B. Washburn, K. McKinney-Bock, E. Varis, A. Sawyer & B. Tomaszewicz (eds.), *Proceedings of the 28th West Coast Conference in Formal Linguistics (WCCFL 28)*. Somerville, MA: Cascadilla Press, 33-41.
- Alexiadou, A. (2019). Morphological and semantic markedness revisited: The realization of plurality across languages. *Zeitschrift für Sprachwissenschaft* 38: 123-154.
- Alexiadou, A., L. Haegeman & M. Stavrou (2007). *Noun phrase in the generative perspective*. Berlin: Mouton de Gruyter.
- Arad, M. (2003). Locality constraints in the interpretation of roots: The case of Hebrew denominal verbs. *Natural Language and Linguistic Theory* 21: 737-778.
- Bale, A. & H. Khanjian (2014). Syntactic complexity and competition: The singular-plural distinction in Western Armenian. *Linguistic Inquiry* 45: 1-26.
- Bayirli, I.K. (2017). *The universality of concord*. Doctoral dissertation, Massachusetts Institute of Technology.
- Borer, H. (2005). *In name only*. Oxford: Oxford University Press.
- Cheng, L. & R. Sybesma (1999). Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30: 509-542.
- Dékány, E. (2011). *A profile of the Hungarian DP*. Doctoral dissertation, University of Tromsø.
- Embick, D. (2010). *Localism and globalism in morphology and phonology*. Cambridge MA: MIT Press.
- Farkas, D. & H. de Swart (2010). The semantics and pragmatics of plurals. *Semantics and Pragmatics* 3: 1-54.
- Heycock, C. & R. Zamparelli (2005). Friends and colleagues: Plurality, coordination, and the structure of DP. *Natural Language Semantics* 13: 201-270.
- Ionin, T. & O. Matushansky (2018). *Cardinals: The syntax and semantics of cardinal-containing expressions*. Cambridge, MA: MIT Press.
- Kramer, R. (2015). *The morpho-syntax of gender*. Oxford: Oxford University Press.
- Krifka, M. (1989). Nominal reference, temporal constitution and quantification in event semantics. In R. Bartsch, J. van Benthem & P. van Emde Boas (eds.), *Semantics and contextual expression*. Dordrecht: Foris, 75-115.
- Marantz, A. (2012). Locality domains for contextual allomorphy across the Interfaces. In O. Matushansky & A. Marantz (eds.), *Distributed morphology today*. Cambridge, MA.: MIT Press, 95-115.
- Mathieu, E. (2014). Many a plural. In A. Aguilar-Guevara, B. Le Bruyn & J. Zwarts (eds.), *Weak referentiality*. Amsterdam: John Benjamins, 157-182.
- Ortmann, A. (2000). Where plural refuses to agree: Feature unification and morphological economy. *Acta Linguistica Hungarica* 47: 249-288.
- Renans, A., G. Tsoulas, R. Folli, N. Ketz, H. de Vries & J. Romoli (2017). Turkish plural nouns are number-neutral: Experimental data. Paper presented at the *Amsterdam Colloquium 2017*.
- Ritter, E. (1992). Cross-linguistic evidence for number phrase. *Canadian Journal of Linguistics* 37: 197-218.
- Sauerland, U. (2003). A new semantics for number. In R. Young & Y. Zhou (eds.), *Proceedings of the 13th Semantics and Linguistic Theory Conference (SALT 13)*. Ithaca, N.Y: Cornell University CLC Publications, 258-175.
- Tsoulas, G. (2006). Plurality of mass nouns and the grammar of number. Paper presented at the *29th GLOW 29, Barcelona*.
- Tuominiemi, I. (2017). *“The trouser is a more empowering pant”: A corpus-based study on the singular forms of some chiefly plural nouns*. Pro Gradu Thesis, University of Tampere.
- Wierzbicka, A. (1988). *The semantics of grammar*. Amsterdam: John Benjamins.
- Wierzbicka, A. (2004). *Semantics: Primes and universals*. Oxford: Oxford University Press.

- Wiltschko, M. (2008). The syntax of non-inflectional plural marking. *Natural Language and Linguistic Theory* 26: 639-694.
- Yatsushiro, K., A. Alexiadou, V. Geckin, V. Harmati-Pap & U. Sauerland (2017a). The plural is unmarked. Paper presented at the *OASIS Workshop on nominal meaning, Berlin, January 2018*.
- Yatsushiro, K., U. Sauerland & A. Alexiadou (2017b). The unmarkedness of plural: Crosslinguistic data. In M. La Mendola & J. Scott (eds.), *Proceedings of the 41st annual Boston University Conference on Language Development (BUCLD 41)*. Somerville, MA: Cascadia, 753-765.