

# Unmarked Plurals

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## 1 Number Morphology

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Many languages morphologically mark **number** in the nominal domain (nouns and pronouns):<sup>1</sup>

### 1.1 English

English marks **singular** vs. **plural**.

(1)	singular	plural
a.	room	rooms
b.	man	men
c.	child	children
d.	him	them

'Singular' actually might be a misnomer, given that some singular-looking nouns are mass nouns (we'll come back to this).

The default plural marking in English is suffixation to the singular, 'N<sub>sg</sub>+s'. Other crosslinguistically common ways include (cf. Corbett 2000:§5.3):

- Apophony (word-internal sound change): e.g. *goose* vs. *geese*, *mouse* vs. *mice* in English
- Inflectional class: common in Slavic languages, e.g. 'room' in Russian

(2)	singular	plural
Nom	<i>komnat-a</i>	<i>komnat-y</i>
Acc	<i>komnat-u</i>	<i>komnat-y</i>
Gen	<i>komnat-y</i>	<i>komnat</i>
Dat	<i>komnat-e</i>	<i>komnat-am</i>
Inst	<i>komnat-oj</i>	<i>komnat-ami</i>
Loc	<i>komnat-e</i>	<i>komnat-ax</i>

(Russian)

This is different from e.g. Turkic languages where the plural morpheme can be singled out. E.g. *olma* 'apple' in Uzbek:

(3)	singular	plural
Nom	<i>olma</i>	<i>olma-lar</i>
Acc	<i>olma-ni</i>	<i>olma-lar-ni</i>
Gen	<i>olma-niŋ</i>	<i>olma-lar-niŋ</i>
Dat	<i>olma-ga</i>	<i>olma-lar-ga</i>
Abl	<i>olma-dan</i>	<i>olma-lar-dan</i>
Loc	<i>olma-da</i>	<i>olma-lar-da</i>

(Uzbek; Corbett 2000:p. 145)

- Suppletive stems: e.g. *hou[s]* vs. *hou[z]*es in English, *člověk* vs. *lidé* 'person' in Czech

<sup>1</sup>Corbett (2000:§2.4) mentions Pirahã (Mura; Brazil) and Kawi (Old Javanese) as languages that might lack number marking altogether.

- Reduplication: partial reduplication in Ilocano (Austronesian, Philippines)

(4)	singular	plural	
	<i>kaldín</i>	<i>kal-kaldín</i>	'goat'
	<i>púsa</i>	<i>pus-púsa</i>	'cat'
	<i>kláse</i>	<i>klas-kláse</i>	'class'

(Ilocano; Corbett 2000:p. 149)

Sometimes you don't see number marking on the noun itself but elsewhere, e.g. verbal agreement.

- (5) a. The **sheep** drinks from the stream.  
 b. The **sheep** drink from the stream. (Corbett 2000:p. 6)

NB: this does not mean that the noun is number neutral! The subject of (5a) can only refer to a single sheep. More examples of this class: *aircraft, Pokémon* in English, *taksi* 'taxi' in Russian, Some nouns only have plural forms (*pluralia tantum*).

- (6) a. scissors, trousers, headquarters, clothes, dregs,  
 b. cattle, police

## 1.2 Languages with more number distinctions

There are many languages that mark **dual** in addition to singular and plural, e.g. Sanskrit, (certain dialects of) Slovenian, Upper Sorbian, Hawaiian.

In some languages only pronouns have dual forms (I believe Hawaiian is one such language), and in some only nouns do. In Upper Sorbian, both pronouns and nouns have dual forms (and predicates inflect for dual as well).

(7)	singular	dual	plural	
a.	<i>ja</i>	<i>mój</i>	<i>my</i>	1st person pronoun
b.	<i>ty</i>	<i>wój</i>	<i>vy</i>	2nd person pronoun
c.	<i>hród</i>	<i>hrodaj</i>	<i>hrody</i>	'palace, castle'

(Upper Sorbian; Corbett 2000:p. 20)

Some languages mark **trial** (in addition to dual), e.g. Larike (Moluccan, Indonesia) (see Corbett 2000:§2.2.3).

Other languages mark **paucal**, e.g. Yimas (Lower Sepik, Papua New Guinea). According to Corbett (2000:p. 23), a language with a paucal often has a dual, e.g. some Oceanic languages have both dual and paucal.

See Corbett (2000:§2.2.5) for discussion of **quadral**.

Some languages have **greater plural**, which describes an excessive/unusual amount.

(8)	singular	plural	greater plural	
a.	<i>ngesa</i>	<i>gese</i>	<i>geseeli</i>	'field'
b.	<i>wuro</i>	<i>gure</i>	<i>gureeli</i>	'herd'

(Fula: Niger-Kordofanian, West and Central Africa; Corbett 2000:p. 31)

Food for thought: *N after N* in English (e.g. *In English, as in language after language, the default number value is the singular* from Corbett 2000:p.185) has a similar inference but note that it's also

obligatorily distributive.

### 1.3 General number

Japanese is a language with **general number**: unmarked forms are underspecified for number.

- (9) niwa-ni kireina **hana**-ga saitei-ru.  
garden-loc beautiful flower-nom be.in.flower-pres  
'There is a beautiful flower/are beautiful flowers in the garden.' (Japanese)

Note that English has no general number (for count nouns). The unmarked form (for count nouns) is singular. But there are some exceptions in Indo-European languages: *deca* in Bosnian-Serbo-Croatian is grammatically singular but can refer to multiple kids (cf. *dete* 'child'),

There are ways to express number on nouns, e.g. the suffix *-tachi* (Nakanishi & Tomioka 2004) and reduplication (Sudo 2017) express plurality.

- (10) sensee-**tachi**-ga hataraitai-ru.  
teacher-tachi-nom be.working-pres  
'(The) teachers are working.' (Japanese)

- (11) niwa-ni kireina **hana-bana**-ga saitei-ru.  
garden-loc beautiful flower-flower-nom be.in.flower-pres  
'There are beautiful flowers in the garden.' (Japanese)

Side remarks: *-tachi* can only attach to animate nouns and sometimes mean associative plural (see Corbett 2000:§4.3, §6.3) in addition to definite plural (see Nakanishi & Tomioka 2004 for discussion). Reduplicated plurals are unproductive, and might be better described as greater plurals.

There does not seem to be a way to mark singularity on nouns in Japanese (though it can be expressed by a numeral).

Vietnamese, Korean, Mandarin Chinese, Cantonese, etc. are similar to Japanese.

Nouns in Baiso (Cushitic; Ethiopia) have separate forms for general number, singular, paucal and plural.

- (12) 'lion'  
a. *lúban* general number  
b. *lubántiti* singular  
c. *lubanjaa* paucal  
d. *lubanjool* plural (Baiso; Corbett 2000:§2.1)

### 1.4 Universals

#### 1.4.1 Greenberg's Universal 34

- (13) Greenberg's (1963) *Universal 34*  
No language has a trial unless it has a dual. No language has a dual unless it has a plural.<sup>2</sup>

See also Nevins (2011) for the markedness of dual.

<sup>2</sup>Greenberg also says no language has a plural unless it has a singular, but as Corbett (2000:p. 38) argues, there are languages with a plural and general number, rather than a singular, e.g. Japanese.

## 1.4.2 Singulative

Corbett (2000:p. 17) remarks that there is no number marking system in natural language with general number, **singulative** and nothing else. It would be the reverse of Japanese and would look as follows. Suppose *wug* means 'dog':

- (14) a. *wug* is unspecified for number; used to describe one dog or more than one dog.  
b. *wug-a* is singular; used to describe single dogs only.

But there are languages where a small number of nouns have patterns like (14).

(15)

	singulative	general number	
a.	<i>tiis-in</i>	<i>tíse</i>	'maize cob'
b.	<i>lassa-n</i>	<i>lássa</i>	'bread'
c.	<i>nebel-in</i>	<i>nebel</i>	'ostrich'

(Arbore: Cushitic, Ethiopia; Corbett 2000:p. 17)

This type of singular marking should be distinguished from the following type, where the unmarked form is plural (or 'collective'), rather than general number.

(16)

	singulative	collective	
a.	<i>cacyn-en</i>	<i>cacwn</i>	'hornet'
b.	<i>picwn-en</i>	<i>picwn</i>	'bee'
c.	<i>chwann-en</i>	<i>chwain</i>	'flea'
d.	<i>dincod-yn</i>	<i>dincod</i>	'seed'
e.	<i>ceirch-en</i>	<i>ceirch-en</i>	'oat'
f.	<i>chwynn-yn</i>	<i>chwynn</i>	'weed'
g.	<i>cneu-en</i>	<i>cnau</i>	'nut'

(Welsh; Grimm 2012:p. 586)

## 2 Unmarked Plurals

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In a simple sentence like *I have children at home*, the plural noun *children* seems to mean 'more than one' ( $> 1$ ).

But there are several cases where the plural means 'one or more' ( $\geq 1$ ) rather than 'more than one' ( $> 1$ ).<sup>3</sup>

- Plural indefinites in negative sentences

(17) Anna does not have **children**.

This entails that Anna does not have a child. Here, *children* is number neutral. It clearly has a different meaning to (18).

(18) Anna does not have **two or more children**.

The same point can be made with other downward-entailing contexts, e.g.

- (19) a. Everyone who has children stood up.  
b. Everyone who has more than one child stood up.

<sup>3</sup>See Mayr (2015) for why definite plurals always mean more than one (contra Sauerland, Anderssen & Yatsushiro 2005).

- Plural indefinites in conditionals

(20) If you have **coins** in your pocket, put them in a tray.

What if you have exactly one coin? You should put it in a tray. So again, *coins* here is number neutral. It does not mean the same thing as (21).

(21) If you have **two or more coins** in your pocket, put them in a tray.

- Plural indefinites in questions

(22) Do you have **children**?

- Yes, I have one.
- #No, I (only) have one.

Compare:

(23) Do you have **more than one child**?

- #Yes, I have one.
- No, I (only) have one.

- Bound definites

(24) Every farmer who has one or more donkeys beats **them**.

(It should be noted that the judgments are actually not as clear as one might hope.)

- (25) a. Do you have umbrellas in your office?  
b. Do you have umbrellas in your store?

See Bale, Gagnon & Khanjian 2011b, Grimm 2013, Mayr 2015 for some discussion)

These facts led semanticists to say that the plural is actually number-neutral:

$$(26) \llbracket \text{books} \rrbracket^M = \left\{ \begin{array}{ccc} \{a, b, c\}, & \{a, b, c\}, & \\ \{a, b\}, & \{b, c\}, & \{a, c\}, \\ a, & b, & c \end{array} \right\}$$

### Exercise

How can we define the extension of a plural noun 'Ns',  $\llbracket \text{Ns} \rrbracket^M$ , in terms of  $\llbracket \text{N} \rrbracket^M$  in a general way, for any singular count 'N' and any model  $M$ ?

### Excursus: sets all the way down

You might not like to have sets and non-sets in (26). But we could as well represent the same idea in terms of sets only, as in (27) (Scha 1981, Schwarzschild 1996):

(27) a.  $\llbracket \text{book} \rrbracket^M = \{x \mid x \text{ is a book}\} = \{\{a\}, \{b\}, \{c\}\}$

$$\text{b. } \llbracket \text{books} \rrbracket^M = \left\{ \begin{array}{ccc} \{a, b, c\}, & & \\ \{a, b\}, & \{a, c\}, & \{b, c\}, \\ \{a\}, & \{b\}, & \{c\} \end{array} \right\}$$

This way, nouns are always about sets of entities.

You might think that a singular noun doesn't apply to singleton sets like  $\{a\}$  but this is only a matter of perspective, because *the set of entities is isomorphic to the set of singleton sets of entities* via the following map  $\Omega$  (for W. V. O. Quine).

(28) For any entity  $e$ ,  $\Omega(e) = \{e\}$ .

### Exercise

How can we define the extension of a plural noun 'Ns',  $\llbracket Ns \rrbracket^M$ , in terms of  $\llbracket N \rrbracket^M$  in a general way, for any singular count 'N' and any model  $M$ ?

### Exercise

If we want, we can keep the extensions of singular nouns to be sets of entities and those of plural nouns as sets of plural individuals, as in (29) (cf. Bennett 1974, Hausser 1974).

(29) a.  $\llbracket \text{book} \rrbracket^M = \{x \mid x \text{ is a book}\} = \{a, b, c\}$

b.  $\llbracket \text{books} \rrbracket^M = \left\{ \begin{array}{l} \{a, b, c\}, \\ \{a, b\}, \{a, c\}, \{b, c\}, \\ \{a\}, \{b\}, \{c\} \end{array} \right\}$

Under this analysis, how can we describe  $\llbracket Ns \rrbracket$  in terms of  $\llbracket N \rrbracket$ ? What would be the meaning of -s?

## 3 Theories of Unmarked Plural

### 3.1 Plurality inference as an anti-presupposition

If the semantics of a plural noun is number neutral, why is it that (30) entails that there are multiple problems (**plurality/multiplicity inference**)?

(30) The problems are solved.

Sauerland (2003, 2008) and Sauerland et al. (2005) claim that the plurality inference is due to competition with the singular version of the sentence, (31).

(31) The problem is solved.

In particular, they assume that the plurality inference is an **anti-presupposition**, which is of the same nature as the following inferences.

(32) a. Sam thinks that I am Cambodian.  $\rightsquigarrow$  I am not Cambodian.  
 b. Chris invited all of his brothers.  $\rightsquigarrow$  Chris has more than two brothers.

These inferences are attributed to a competition in the domain of presuppositions (Heim 1991, Percus 2006, 2010, Sauerland 2008, Singh 2011, Schlenker 2012, Spector & Sudo 2017). Heim (1991), for example, proposes (33) as the mechanism that is responsible for the above inferences (see the other works cited here for refinements).

(33) *Maximize Presupposition!*:  
 If an utterance of sentence  $\phi$  is infelicitous in context  $c$  if  $\phi$  has an alternative  $\psi$  such that:

- a. the semantic presupposition of  $\psi$  is stronger than the semantic presupposition of  $\phi$ ;
- b.  $\phi$  and  $\psi$  have contextually equivalent assertive content in  $c$ ;
- c. the presupposition of  $\psi$  is satisfied in  $c$ ;

The sentences in (32) have the following sentences as alternatives:

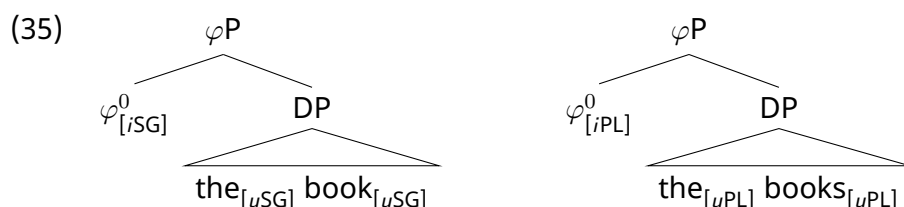
- (34) a. Sam knows that I am Cambodian.  
 b. Chris invited both of his brothers.

By assumption, the first two clauses of the principle are satisfied. Then (32) can only be used in contexts where the presuppositions of (34) are not satisfied.

Sauerland (2003) and Sauerland et al. (2005) propose that (30) only presupposes that there is at least one problem, while (31) presupposes that there is exactly one problem, and this triggers the competition.

Here are some details:

- Sauerland (2008) assumes that the only instance of number feature that is interpreted is on  $\varphi^0$  that is above DP (it hosts other features like gender but we'll ignore them here).



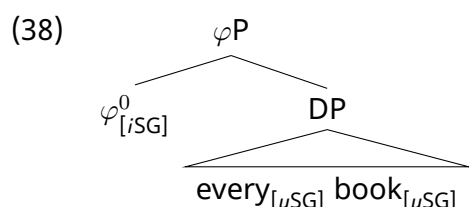
(36)  $\llbracket \text{book}_{[uSG]} \rrbracket = \llbracket \text{books}_{[uPL]} \rrbracket = \{x \mid x \text{ is a book or books} \}$

- The extensions of number features are identity functions.  $[iSG]$  introduces a presupposition, while  $[iPL]$  is semantically vacuous.

(37) a.  $\llbracket [iSG] \rrbracket = \lambda x: x \text{ is an atomic entity. } x$   
 b.  $\llbracket [iPL] \rrbracket = \lambda x. x$

- The definite article *the* triggers an existential presupposition that there's some entity satisfying the NP, and picks out the unique maximal entity that satisfies the NP.
- If the DP denotes a single book, the principle of *Maximize Presupposition!* requires  $[iSG]$  to be used. In all other cases  $[iPL]$  needs to be used.

This account gets complicated with quantificational expressions: there's a type-mismatch, which is assumed to be resolved by QR.



To ensure that  $[SG]$  is used with *every*, Sauerland (2003) assumes that *every NP* quantifies over atomic entities only and universally projects the presupposition of its nuclear scope.

A problem arises with indefinites, which Sauerland (2003) assumes are generalized quantifiers (cf. Spector 2007).

- Sauerland (2003) assumes that existential quantifiers are assumed to project the presupposition in the nuclear scope existentially (Heim 1983, Beaver 2001, Chemla 2009, Sudo 2012).

(39) A sentence of the form  $\exists(R)(S)$  presupposes  $\exists x[R(x) \wedge x \in \text{dom}(S)]$ .

- For a positive sentence, the principle of *Maximize Presupposition!* needs to be computed within the nuclear scope.

(40) I saw unicorns.

- LF:  $[\exists \text{ unicorns}] [\lambda x \text{ I saw } [\text{PL}] x]$
- Presupposition: There is at least one entity that is a unicorn or unicorn-plurality.

(41) I saw a unicorn.

- LF:  $[\text{a unicorn}] [\lambda x \text{ I saw } [\text{SG}] x]$
- Presupposition: There is at least one entity that is a unicorn or unicorn-plurality and is an atomic entity.

Then we get the inference: There is at least one entity that is a unicorn or unicorn plurality and is not an atomic entity.

- But Sauerland et al. (2005) point out, this is problematic for negative sentences, because negation is a ‘presupposition hole’, i.e. does not negate presuppositions, so (42) should have the same presupposition as (41).

(42) I didn’t see a unicorn.

- LF:  $\text{not } [\text{a unicorn}] [\lambda x \text{ I saw } [\text{SG}] x]$
- Presupposition There is at least one unicorn

- Sauerland et al. (2005) instead assume that  $\exists(R)(S)$  has no presupposition and only asserts  $\exists x[R(x) \wedge S(x)]$ . Then, no presupposition projects in (42). But then we lose an explanation for the plurality inference of positive sentences!

### 3.2 Number neutral readings and kind readings

Grimm (2013) pursues the idea that the number-neutral reading is due to a separate reading of plural NPs, namely, the **kind reading**, which is independently attested.<sup>4</sup>

- (43) a. Dinosaurs are extinct.  
b. Cats are carnivore.

Putting all the details aside, his idea is that a plural NP in English is ambiguous between a kind plural, which is number neutral and, and a quantity plural which has ‘more than one’ meaning.

(44) I didn’t see unicorns.

- Kind: I didn’t see any instance of the kind unicorn.
- Quantity: I didn’t see more than one unicorn.

But this ambiguity account runs into some problems.

- Positive sentences will be ambiguous.

(45) I saw unicorns.

- Kind: I saw an instance of the kind unicorn.

<sup>4</sup>Following Krifka (1995), Grimm (2013) calls it the *concept* reading, which is meant to be broader than the *kind* reading, but this distinction is not so important for us.



- b. Quantity: I saw more than one unicorn.

Grimm (2013) seems to assume that episodic contexts prefer the quantity interpretation, but plurality inference is observed even when the kind reading is contextually relevant:

- (46) a. I saw endangered animals in the forest.
- b. I saw an endangered animal in the forest.

- Spector (2007) observes that both readings arise at the same time in non-monotonic contexts.

- (47) Exactly one boy saw unicorns.
- a. One boy saw more than one unicorn.
- b. No other boy saw any unicorn.

The readings that Grimm (2013) predicts are the following, neither of which is (47).

- (48) a. Kind: Exactly one boy saw an instance of the kind unicorn.
- b. Quantity: Exactly one boy saw more than one unicorn.

### 3.3 Plurality inference as a scalar implicature

Spector (2007) claims that the plurality inference is a **scalar implicature**.

One obstacle here is that the two sentences in (49) entail each other, if the plural is number neutral.

- (49) a. I wrote a paper yesterday.
- b. I wrote papers yesterday.

To kick start scalar implicature computation, Spector (2007) resorts to the idea of **higher-order scalar implicature** (see also Zweig 2009, Ivlieva 2013).

- A NP computes with *multiple/several NPs*, so (49a) has a scalar implicature that (50) is false.

- (50) I wrote multiple papers yesterday.

With this implicature, (49a) means I wrote exactly one paper.

- (49b), which is number neutral by assumption, computes with (49a) with the 'exactly one' scalar implicature. As a result (49b) means I wrote at least one paper yesterday and I didn't write exactly one paper yesterday.

Spector's theory is the only one on the market that can deal with the multiplicity inference in non-monotonic contexts, e.g.

- (51) Exactly one boy saw unicorns.

This competes with (52a), which in turn competes with (52b).

- (52) a. Exactly one boy saw a unicorn.
- b. Exactly one boy saw multiple unicorns.

(52a) has a scalar implicature that (52b) is false. Overall, (52a) means that exactly one boy saw exactly one unicorn.

Since this is stronger than what (51) means, (51) has a scalar implicature that it is false.

### 3.4 Morphological vs. Semantic Markedness

All the above accounts of unmarked plurals assume that the plural is semantically less marked than the singular, but there are some problems with this.

- Morphosyntactically the singular is less marked than the plural across languages (Greenberg 1963, Corbett 2000, Farkas & de Swart 2010, Bale et al. 2011b).
- Furthermore, in languages with general number, the overwhelming tendency is that the plural is morphologically marked. We don't seem to find a language where the general number is morphologically more complex than the singular.
- Farkas & de Swart (2010) points out that Hungarian singular nouns are number neutral in certain quantity-related constructions.

(53) három / sok / mindenféle / több / egy pár { gyerek 'child'  
 \*gyerekek 'children'  
 'three / many / all kinds of / more / a couple of children' (Farkas & de Swart 2010:p. 10)

- It is probably not a good idea to encode singularity in [SG], because this feature is used for mass nouns as well.<sup>5</sup> In order to maintain the view that the singular means something, we have to assume two versions of [SG], one for count nouns and one for mass nouns. This is perhaps clearer in Slavic-type languages, e.g. *klubnika* 'strawberry' belongs to the same inflectional class as *kniga* 'book' in Russian but is a mass noun.

(54)	<i>klubnika</i>	<i>knig-</i> singular	plural	
Nom	<i>klubnik-a</i>	<i>knig-a</i>	<i>knig-i</i>	
Acc	<i>klubnik-u</i>	<i>knig-u</i>	<i>knig-i</i>	
Gen	<i>klubnik-i</i>	<i>knig-i</i>	<i>knig</i>	
Dat	<i>klubnik-e</i>	<i>knig-e</i>	<i>knig-am</i>	
Inst	<i>klubnik-øj</i>	<i>knig-øj</i>	<i>knig-ami</i>	
Loc	<i>klubnik-e</i>	<i>knig-e</i>	<i>knig-ax</i>	(Russian)

One might wonder if the following are mass marking, but this paradigm is not productive (Lena Spanish data from Corbett 2000:p. 124). They are not qualitatively different from *relative-relatives-kin* in English.

(55)		singular	plural	mass	
Lena Spanish	<i>pílu</i>	<i>pélos</i>	<i>pélo</i>	<i>'hair'</i>	
Dutch	<i>meubel</i>	<i>meubels</i> (alt.: <i>meubelen</i> )	<i>meubilair</i>	<i>'furniture'</i>	

Given these considerations, Farkas & de Swart (2010) puts forward an alternative account.

- **Morphological markedness:** Singular is semantically number neutral. Plural is ambiguous between an number neutral and 'more than one' meaning.
- **Semantic markedness:** Reference to atomic entities is less semantically marked than reference to plural entities.
- **Markedness alignment:** Morphologically marked forms should express semantically marked meanings.
- **Strongest Meaning:** The ambiguity of the plural is regulated by the Preference for the Strongest Meaning.

<sup>5</sup>See Bale (2009) and Bale et al. (2011b) for a related problem arising with measure nouns like *three pounds of potato*.

This accounts for the basic cases as follows:

- The singular is morphologically unmarked, so the speaker must mean an unmarked meaning, which is referent to atomic entities.

(56) Daniel saw a unicorn.                      ↗ Daniel saw one unicorn

- The plural is morphologically marked, so the speaker must mean a marked meaning, which is reference to plural entities.

(57) Daniel saw unicorns.                      ↗ Daniel saw multiple unicorns

Here, the sentence is ambiguous but the number-neutral meaning is blocked by the stronger meaning.

- In negative contexts, the number-neutral meaning becomes stronger.

(58) Daniel did not see unicorns.

- In the Hungarian examples above, the syntax requires the NP to be singular. Then the plural is simply unavailable and the competition does not happen. Since the singular is number-neutral, the semantics is fine.

There are, however, some unattractive features.

- The plural needs to be semantically ambiguous, in order to account for negative contexts.
- This is an ambiguity based account and fails to explain Spector's (2007) observation about non-monotonic contexts (as Farkas & de Swart 2010:fn. 25 themselves acknowledge).

(59) Exactly one boy saw unicorns.

Notice that neither reading of the plural is stronger than the other here, so both readings should be available.

- (60) a. Number-neutral: One boy saw one or more unicorns and the other boys saw none.  
b. More than one: One boy saw more than one unicorn and the other boys saw none or one.

## 4 Marked Plurals

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Bale & Khanjian (2014) shows that bare nouns ('singular') in Western Armenian are number neutral, while plural nouns always mean 'more than one'.

The number neutrality of *dəgha* 'boy' is shown by the following examples:

(61) Dəgha vaset.

boy ran

'One or more boys ran.'

(Bale & Khanjian 2014:p. 2)

(62) a. John-ə dəgha e.

John-def boy is

'John is a boy.'

b. John-ə yev Brad-ə dəgha en.

John-def and Brad-def boy are

'John and Brad are boys.'

(Bale & Khanjian 2014:p. 3)

Bare nouns are compatible with numeral modification (unlike in Turkish and Hungarian, the plural is also acceptable):

- (63) Yergu dəgha(-ner) vazets(-in).  
two boy(-pl) ran(-3pl)  
'Two boys ran.'

Western Armenian has a productive plural suffix *-(n)er*, and it always gives rise to 'more than one' meaning.

- (64) Dəgha-ner vase-ts-in.  
boy-pl run-past-3pl  
'Two or more boys ran.' (Bale & Khanjian 2014:p. 4)

- (65) a. \*John-ə dəgha-ner e.  
John-def boy-pl is  
b. John-ə yev Brad-ə dəgha-ner en.  
John-def and Brad-def boy-pl are  
'John and Brad are boys.' (Bale & Khanjian 2014:p. 4)

Crucially, this is so in negative contexts too:

- (66) a. Amen mart vor bəzdig uner vodk-i gajnetsav.  
all person that child had foot-dat stood.up  
'Everyone that had one or more children stood up.'  
b. Amen mart vor bəzdig-ner uner vodk-i gajnetsav.  
all person that child-pl had foot-dat stood.up  
'Everyone that had two or more children stood up.' (Bale & Khanjian 2014:p. 4)

Farkas & de Swart (2010) could make two assumptions about differences between Western Armenian and English:

1. The unmarked form (singular) and plural do not compete in Western Armenian
2. The plural is unambiguously 'more than one'.

However, this is not enough, because the unmarked form becomes strictly singular when definite.

- (67) Dəgha-n vazets.  
boy-def ran  
'The boy ran.' (Bale & Khanjian 2014:p. 6)

- (68) a. \*Yergu dəgha-n vazets.  
two boy-def ran  
b. Yergu dəgha-ner-ə vazets-in.  
two boy-pl-def ran-3pl  
'The two boys ran.' (Bale & Khanjian 2014:pp. 6–7)

Bale & Khanjian (2014) put forward a competition-based analysis with certain structural assumptions. For the semantics, they assume that bare nouns in Western Armenian are semantically number neutral, while bare nouns in English are specified for singularity.

This latter point about English is more explicitly made in Bale, Gagnon & Khanjian 2011a, but this is not well motivated, given the problems pointed out above.

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