Do numeral-noun constructions in Finnish exhibit differential subject marking? Exploring effects of semantic and pragmatic factors on verb number

Elsi Kaiser – University of Southern California emkaiser@usc.edu

1 Introduction

Many languages exhibit differential object marking (DOM) and differential subject marking (DSM), typically conditioned on arguments' prominence. It is agreed that arguments' referential status plays a key role in DOM and DSM, including animacy (and agentivity), definiteness, specificity and topicality (e.g. Comrie 1979, Bossong 1985, Aissen 2003, de Hoop & de Swart 2009, von Heusinger & G. Kaiser 2011, von Heusinger & Kornfilt 2017). Various devices (e.g. case, agreement) are used for DOM and DSM. Typically in DOM, high-prominence objects are marked (e.g. Givón 1987, Aissen 2003). Some DSM languages mark low-prominence subjects (e.g. Korean: Lee 2009, Polish: Błaszczak 2009); others mark high-prominence subjects (e.g. Hindi: de Hoop & Narasimhan 2009, Turkish: Kornfilt 2009).

This paper explores unexpected verb number patterns with Finnish numeral-noun constructions with count nouns (e.g. *three birds*) in subject position. Finnish numeral-noun subjects are semantically plural but the noun is spelled out as morphologically *singular*. Numeral-noun subjects typically occur with singular verbs, but sometimes with plural verbs. I explore the possibility that plural verb agreement is associated with particular referential properties, in particular a high level of referential stability (Farkas & von Heusinger 2003), and that plural verb agreement with Finnish numeral-noun subjects could be a type of DSM.

2 Verb number in Finnish

In Finnish, subjects are typically nominative; the verb agrees with the subject in person and number (1). (Existential sentences differ, e.g. Hakulinen & Karlsson 1988, Vilkuna 1996, Sands & Campbell 2001, Huumo 2018). Finnish has no (in)definite articles.¹ In numeral-noun constructions (2), when the numeral is two or more, the noun bears partitive case² and is morphologically *singular* (e.g. Hurford 2003, Danon 2012, Ionin & Matushansky 2018, Lohiniva 2021).³ (Finnish partitive diverges from 'part-whole' partitivity, Tamm 2014). What's relevant is that normally the verb is also singular (Vilkuna 1996, Brattico 2010).

- Linnut istuivat oksalla. Bird-PL.NOM sit-PAST-3PL branch-ADE
 'The birds sat on the branch.'
 Kolme lintua istui oksalla. Three SC bird SC BART sit PAST 2SC branch.
- Three.SG **bird-SG.PART** <u>sit-PAST.3SG</u> branch-ADE 'Three **birds** sat on the branch.'

¹ Abbreviations: NOM nominative, PART partitive, GEN genitive, ADE adessive, ALL allative, ELA elative, ILL illative, SG singular, PL plural, CL clitic, COND conditional, Px possessive suffix, PRES present.

² With *yksi* 'one', the noun is nominative. (With *nolla* 'zero', it is partitive.)

³ Different patterns emerge with *non-subject* noun-numeral constructions but even then, the noun is singular. But if the numeral is pluralized (e.g. *neljät silmät* four-<u>PL</u>.NOM eye-PL.NOM 'four pairs of eyes,' the noun is also plural (e.g. Hurford 2003, Brattico 2010, Lohiniva 2021).

2.1 A puzzle: Plural verbs with numeral-noun constructions

The singular verb is the standard option for numeral-noun subjects (2), but sometimes plural verbs also occur (3, 4) (e.g. Vilkuna 1996, Hakulinen et al. 2004, section 1276, Wexler 1976, Chesterman 1991).⁴

(3)		lintua bird-SG.PART ds sat on the brar	istuivat sit-PAST-3PL nch.'	oksalla. branch-Al	DE
(4)	perämoott outboard.r	notor-ALL equip	1	oat-ALL	Sysmä-ELA

In sum, Finnish numeral-noun subjects are morphologically singular and normally occur with singular verbs but can, unexpectedly, also occur with plural verbs. Below, I explore the distribution of plural verbs with numeral-noun subjects in Standard Finnish (the version of the language used in writing and official settings).⁶ Furthermore, since plural verbs with numeral-noun subjects are (typically) optional, the discussion here concerns *tendencies*, not hard-and-fast rules.

3 When are plural verbs used with numeral-noun subjects?

Let's start by considering (5a–b) from Vilkuna (1996).

(5) a. singular verbNeljäosapuoltapääsisopimukseen.Four.SGparty-SG.PARTreach-PAST.3SGagreement-ILL'Four parties reached an agreement.' (there exist four parties who reached an agreement)

b. plural verbNeljäosapuoltapääsivätsopimukseen.Four.SGparty-SG.PARTreach-PAST-3PLagreement-ILL'Four parties reached an agreement.' (all four parties reached an agreement)

The singular verb (5a) easily allows for an *existential* construal: there exist four parties who reached an agreement. In contrast, the plural verb (5b) favors a *universal* construal: four parties were involved in the negotiations, and all of these parties (all four) reached an agreement (Vilkuna 1996, see also Chesterman 1991, Hakulinen et al. 2014). However, this universal 'all four parties' interpretation does not necessarily entail that each individual set member (here,

⁴ Partitive case alone does not trigger plural verbs: partitive plural count nouns in existential sentences (e.g. Hakulinen & Karlsson 1988, Vilkuna 1996) and mass nouns in subject position (partitive singular) require singular verbs.

⁵ 'www' denotes a naturally-occurring corpus example from the internet.

⁶ I focus specifically on the distribution of *plural* verbs. This is because in many Finnish dialects, third-person plural verbs are rare and singular verbs can be used even with morphologically plural subjects (e.g. Paunonen 1995). This means that the distribution of plural verbs (with numeral-noun subjects) is more informative than the distribution of singular verbs, as plural verbs cannot be attributed to influence from colloquial dialects.

each party) is specific or familiar. Indeed, my corpus searches suggest that when a plural verb is used, although the identity of the set members is sometimes specified in prior discourse, this is not always the case. The meaning difference between (5a–b) is also reflected in (5c–d) (from Wexler 1976 via Chesterman 1991), where the order of the numeral and genitive modifier differs. Due to space limits, I leave a fuller discussion for future work.

(5) c. *singular verb* Neljä Suomen edustajaa <u>menestyi</u> hyvin. four.SG Finland-GEN representative-SG.PART <u>succeed-PAST.3SG</u> well 'Four representatives of Finland did well.' (There exist four Finnish representatives who did well)

d. *plural verb* Suomen neljä edustajaa <u>menestyivät</u> hyvin. Finland-GEN four.SG representative-SG.PART <u>succeed-PAST-3PI</u> well 'Finland's four representatives did well.' (All four Finnish representatives did well)

3.1 Referential stability of the numeral-noun subject

The prior section suggests that plural verbs are triggered by numeral-noun subjects with certain referential properties. While notions like familiarity, specificity and definiteness seem relevant, it's unclear whether they are applicable in all cases. Instead, let's consider the broader notion of *referential stability* (Farkas & von Heusinger 2003; also Farkas 2002, von Heusinger 2019). This term refers to the stability (vs. variability) of the value assignment for the variable introduced by a noun phrase. Proper names are very referentially stable, while the referential stability of definite descriptions is contextually conditioned. Indefinites are non-stable, and partitives (e.g 'one of George's students') are non-stable but contextually constrained to the relevant set. Farkas & von Heusinger propose a scale of referential stability and posit that more referentially stable direct objects are stronger DOM triggers in Romanian.

Could the meaning differences between the plural and singular verbs in examples (2-5) be related to referential stability? It seems reasonable to describe the existential construal (5a) as *less referentially stable* than the universal construal (5b). The existential construal simply commits the speaker to the existence of a certain number of set members, while the universal construal commits the speaker to the existence of a set of referentially stable individuals (even if some aspects of their identity are unknown). If this idea is on the right track, it suggests that *the more referentially-stable a numeral-noun subject is, the more likely it is to trigger use of a plural verb in Finnish* – although the numeral-noun subject itself morphologically spelled out as singular.

3.2 Neutralization by morphosyntax

In line with the ideas sketched out above, when numeral-noun subjects are modified by demonstratives (e.g. *ne* 'those'), they can occur with plural verbs (6). Indeed, Brattico (2010) suggests that in this configuration they *must* occur with plural verbs (but see Section 2.1). The same pattern arises with *eräät* 'certain' (7). Note that these determiners must be plural; the singular (*joku, eräs*) would be ungrammatical here. These examples fit with the idea that referential stability plays a role in the use of plural verbs.

- (6) Nekaksipientäautoaseisoivattiellä.those.NOM.PLtwo.SGsmall-SG.PARcar-SG.PARTstand-PAST-3PLroad-ADE'Those two small carsstoodon the road.'(adjusted from Brattico 2010, ex.14a)
- (7) Siispä oli hyvinkin arvattavaa että eräät kolme
 So-CL be.PAST.3SG very-CL predictable-PART that certain.NOM-PL three.SG suomalaistyttöä hyvin todennäköisesti päätyisivät samalle
 finnish.girl-SG.PART very likely end.up-PAST-COND-3PL same-ALL veneelle.
 boat-ALL
 'So it was quite predictable that certain three Finnish girls would most probably end up

on the same boat.' (www)

However, plural verbs also occur with the indefinite existential *jotkut* 'some-PL' (8). Here, the referent is *not* presented as familiar and can be non-specific. Example (8) suggests that plural verbs can also be triggered by purely morphosyntactic agreement processes. Whatever is the reason for the prenominal determiners being plural could be the same reason that triggers plural verbs.⁷ Indeed, this kind of 'morphosyntactic override' has a precedent: Kornfilt (2009) shows that Turkish DOM and DSM can be neutralized by morphosyntactic factors in certain configurations (also de Hoop & de Swart 2008). Thus, configurations like (8) may simply be a neutralizing context where morphosyntactic factors override DSM.

(8) jos jotkut kaksi järjestelmää eivät juttele
 if some.NOM-PL two.SG system-SG.PART neg-PRES-3PL chat
 keskenään kovin tehokkaasti among-each-other.3PX very efficiently
 'if some two systems don't communicate with each other very efficiently' (www)

4 Conclusions

This paper explores the seemingly unexpected use of plural verbs with numeral-noun subjects in Finnish – plural verb agreement is unexpected since the nouns themselves are morphologically realized as singular. I suggest that plural verbs may be more likely to occur with numeral-noun subjects with relatively high referential stability.⁸ However, further research is needed to test the validity of this idea and to probe what other factors are at play. Potential effects related to discourse prominence also merit investigation (see Chiriacescu & von Heusinger 2010 on Romanian). If we assume that plural agreement is a type of differential subject marking (DSM), one might wonder why the locus of DSM is verbal number and not case. This could stem from the fact that the noun in numeral-noun constructions bears partitive case regardless of subject/object status. Since this case-marking is 'immobile,' it is perhaps not surprising that the verb acts as the locus of DSM.

⁷ Relative pronouns modifying numeral-noun subjects must also be plural in Finnish.

⁸ Kornfilt (1997), Alexiadou (2019) note that occurrence of plural verb agreement patterns with morphologically *plural* nouns in Turkish and Western Armenian is sensitive to factors like definiteness/specificity.

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