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Chapter 5

The null generic subject pronoun in Finnish: A case of incorporation in T

Anders Holmberg

1. Introduction¹

Finnish does not have an overt generic pronoun corresponding to English *one*, French *on*, German *man*, or Italian *si*. The Finnish counterparts to English, German, etc. constructions with a generic pronominal subject have no overt expression of a subject (EXP: expletive).

- (1) a. Tässä istuu mukavasti.
here sits comfortably
'One can sit comfortably here.'
- b. Kesällä herää aikaisin.
summer-ADE wakes.up early
'You wake up early in the summer.'
- c. Sitä ei kannata aina valittaa.
EXP not should always complain
'It's no use always complaining.'

A possible analysis of (1a,b,c) is that they have a null generic pronoun subject. Indeed, scholars who have investigated or commented on the construction have assumed that it contains a syntactically active generic subject pronoun, and have presented arguments to that effect; see Hakulinen & Karttunen 1973, Laitinen 1995, 2006, Vainikka 1989, Vainikka & Levy 1999, Holmberg 2005. In the present paper I will try to determine in as much detail as

possible some of the formal syntactic properties of the Finnish generic pronoun, or G-pronoun, as I will call it. I will name the construction which, by hypothesis, contains this category the *generic subject construction*, or GSC for short. The following questions will be addressed:

- (a) Where does the Finnish GSC fit in the typology of impersonal constructions?
- (b) What are the arguments that the GSC has a subject?
- (c) What features does this subject have? Specifically,
- (d) Does it trigger agreement?
- (e) Does it receive case?
- (f) Why does it not satisfy the EPP?

It will be shown that the pronoun receives case, triggers agreement, binds anaphors, and generally does everything overt subjects do, except that, unlike Finnish definite null subjects, it is unable to satisfy the (Finnish variety of the) EPP. The paper will focus on the explanation of this, in a sense surprising, combination of properties, and consider the theoretical implications of it for a theory of null arguments.

An analysis is considered according to which the Finnish GSC does not have a subject other than the 3SG agreement on the finite verb or auxiliary, which in Finnish would have the properties of a generic pronoun. This analysis is rejected. Instead, building on Roberts's (2007, Chapter 1) theory of incorporation, it is argued that the reason why the G-pronoun is obligatorily null in Finnish, and fails to satisfy the EPP, is that it is a non-head member of an argument chain headed by finite T, and as such is not spelled out and is inaccessible to the EPP.

In the final section it will be shown that the Finnish GSC is characteristic of partial null-subject languages, a type of languages which includes Brazilian Portuguese, Hebrew,

Marathi, and Icelandic, but is different from the GSC of consistent null-subject languages such as Arabic, European Portuguese, Greek, Italian, etc.

2. The Finnish generic pronoun and the typology of impersonal pronouns

In a recent paper on the typology of impersonal pronouns Egerland (2004) distinguishes three distinct readings of the Germanic and Romance impersonal pronouns *man* (Swedish), *on* (French), and *si* (Italian): He dubs them the generic, the arbitrary, and the specific reading.² These are exemplified in (2a,b,c), respectively, with French examples (from Egerland 2004).

(2)a. *On doit travailler jusqu'à l'âge de 65 ans.* (generic)

ON must work until the age of 65 years

b. *On a travaillé pendant deux mois pour résoudre le problème.* (arbitrary)

ON has worked for two months to resolve the problem

c. *Hier soir on a été congédié.* (specific)

Yesterday evening ON was fired

In (2a) the reading of *on* is 'people in general'. In (2b) the intended reading is roughly 'some people', and in (2c) it is 'we'. In English the three readings are encoded by distinct pronouns: The generic reading by *one* or *you*, the arbitrary reading by *they*, and the specific reading by *we*.

In Finnish, the three readings are distributed over two impersonal constructions: The GSC and the passive.³ The GSC only has the generic reading, while the passive has the arbitrary or the specific reading.

(3)a. *Täällä saa työtä jos puhuu saksaa.* (generic)

here gets work if speaks German

‘You get a job here if you speak German.’

b. *Täällä puhutaan saksaa.* (arbitrary)

here speak-PASS German

‘German is spoken here/They speak German here.’

c. *(Me) puhuttiin saksaa.* (specific)

we spoke-PASS German

‘We spoke German.’

Egerland shows that the arbitrary and specific readings of *man*, *on* etc. are closely related, having essentially the same syntactic properties, distinct from the generic reading (see also Cabredo-Hofherr 2004). In Finnish this is reflected in the form of the verb: active 3SG for the generic pronoun, passive non-agreeing for the arbitrary and specific reading. In Finnish the affinity between the arbitrary and specific reading is particularly striking, as it has led to the passive becoming the normal form for expressing 1PL active meaning in colloquial Finnish, with an optionally overt 1PL pronoun subject, as exemplified by (3c) (see Helasvuo 2006).⁴

Egerland’s generic-arbitrary distinction does not, however, draw the line between the reading of the GSC and the reading of the passive construction in Finnish in quite the right

place. The passive can have a generic, quasi-universal reading ‘people in general’, as in (4a,b):

- (4) a. Keskiajalla ei syöty sokeria.
Middle-ages-ADE not ate-PASS sugar
‘They/People didn’t eat sugar in the middle ages.’
- b. Itävallassa puhutaan saksaa.
Austria-INE speak-PASS German
‘They/People speak German in Austria.’

The difference between the GSC and the passive when used with generic meaning, is that the GSC includes the speaker and the addressee in its reference (henceforth called the inclusive generic reading), while the passive is typically used to express a generic reading when the speaker and the addressee are not included (the exclusive generic reading). The difference can be exemplified by (5):

- (5) a. Ranskassa syö hyvin.
France-INE eat-3SG well
‘You eat well in France.’
- b. Ranskassa syödään hyvin.
France-INE eat-PASS well
‘They eat well in France.’

The former implies that the speaker and the addressee also eat well in France, if, for instance, they visit the place. The latter does not have that implication; it is a statement about people in France, with no implication that it would ever be relevant for the speaker and the addressee to eat in France.

The Finnish G-pronoun is therefore a close synonym of impersonal *one* in English, which is also known to have inclusive reference; see Moltmann (2006).^{5 6} Moltmann, in her semantic analysis of generic *one*, argues that it is an indefinite expression introducing a variable in LF, bound by a generic null operator situated in specCP (with the effect that the generic subject always has scope over other quantifiers; Moltmann 2006: 263-264). The operator, then, has a feature [generic], and the pronoun has a corresponding uninterpretable feature [generic] (along the lines of Chomsky's (1995, 2000, 2001) feature theory), which means that it must be bound the generic operator. Moltmann further argues that the variable in question also has an interpretable component responsible for the association with the speaker (a 'first person feature' of a sort). The precise feature composition of the pronoun will become relevant in section 8, and I will return to it there.

3. There is a syntactically projected subject in the GSC

The most obvious argument against postulating a syntactically projected subject in the Finnish GSC is that it has no visible (i.e. audible) subject, and cannot have one; Finnish doesn't have any overt generic pronoun. Furthermore, the EPP is not checked by any covert subject in the GSC, but has to be checked either by an expletive or by moving some other category, such as an object or a locative or temporal adverbial to the preverbal 'EPP-position' (see Holmberg & Nikanne 2002 and section 6 below on the EPP in Finnish) (EX = expletive).

(6)a. *Istuu mukavasti tässä.

sits comfortably here

b. Tässä istuu mukavasti.

here sits comfortably

c. Sitä istuu mukavasti tässä.

EX sits comfortably here

‘One sits comfortably here.’

The most straightforward explanation of this is that the construction has no syntactically represented subject. Nevertheless, scholars who have investigated the GSC (Hakulinen & Karttunen 1973, Laitinen 1995 2006, Vainikka 1989, Vainikka & Levy 1999) have argued that it does contain a covert but syntactically active subject..

One piece of evidence that the GSC contains a syntactically active subject is that it may contain a subject-oriented anaphor (ADE = adessive case, ALL = allative case, PX = possessive reflexive suffix, COM = comparative); see Vainikka 1989: 232f., Laitinen 1995.

(7)a. Shelliasemalla voi pestä auto-nsa.

Shell-station-ADE can-3SG wash car-PX

‘You can wash your car at the Shell station.’

b. Sitä ei kuulu ottaa itseään liian vakavasti.⁷

EX not-3SG should take SELF-PX too seriously

‘One shouldn’t take oneself too seriously.’

The Finnish possessive reflexive suffix is an anaphor falling under Principle A of the Binding Theory (see Kanerva 1987, Vainikka 1989, Trosterud 1993). In (7b) it combines with the reflexive *itse* ‘self’, also an anaphor. The antecedent in (7a,b) is, presumably, the null G-pronoun subject.⁸

Another piece of evidence, put forth in Laitinen 1995, of a generic subject in the GSC is that it may contain an agent-oriented adverbial.

- (8) Sinne ei muuta vapaaehtoisesti.
there not move voluntarily
‘One doesn’t move there voluntarily.’

Furthermore, the GSC may contain an infinitival clause with a PRO subject evidently controlled by a generic subject in the matrix clause.

- (9) a. Sitä voi päättää [PRO muuttaa Lappiin].
EXP can decide move Lapland
‘You can decide to move to Lapland.’
b. Tänne tulee mielellään [PRO ostamaan keramiikkaa].
here comes with-pleasure buy-INF pottery
‘It’s nice to come here to buy pottery.’

Whether we take these as valid arguments for a syntactically projected subject depends on our prior assumptions, though. For example, if an object anaphor can be bound by a verb

which includes a subject argument in its argument structure, as in Williams's (1994) theta-theory, then obviously (7a,b) do not indicate a syntactically projected subject. This also applies in the case of control, as in (10). In section 4, and again in section 9, I will discuss an argument for a syntactically projected subject in the Finnish GSC which is not dependent in this way on prior assumptions about the mapping of argument structure onto syntactic structure.

4. Does the G-pronoun trigger agreement?

Which ϕ -features, if any, does the abstract G-pronoun have? Insofar as the G-pronoun triggers agreement, it should be possible to determine this from the agreeing predicate. The finite verb or auxiliary is inflected for 3SG in the GSC. This could be either because T agrees with a 3SG G-pronoun or it could be the default feature values of T, as seen in weather expressions, for example.

(10) Nyt sataa.

now rain-3SG

Considering that the reference of the G-pronoun is typically semantically plural, often paraphrasable as 'people in general', there is an apparent mismatch between the inflection and the reference which indicates that the 3SG inflection is by default.

As discussed by Vainikka (1989), in Finnish it is actually possible to determine with near-certainty which is the right analysis (see also Laitinen 2006). This is because there is a correlation between subject agreement and object case in Finnish. There are two non-partitive structural object cases in Finnish, morphologically distinct on singular lexical NPs:

nominative and accusative. The nominative is the stem form of the noun, the accusative is marked by a suffix *-n*.⁹ The choice between them depends on the presence in the sentence of a nominative subject triggering agreement on T. If there is one, the object is marked accusative, if not the object is nominative. See Timberlake 1972, Maling 1993, Reime 1993, Kiparsky 2001.

(11)a. Minä osti-n auton / *auto.

I-NOM bought-1SG car-ACC/car-NOM

‘I bought a car.’

b. Minä aion ostaa auton / * auto.

I-NOM intend-1SG buy car-ACC/car-NOM

‘I intend to buy a car.’

c. Minun pitää ostaa auto / *auton.

I-GEN should-3SG buy car-NOM/car-ACC

‘I should buy a car.’

d. Osta auto / *auton!

buy-IMP car-NOM/car-ACC

‘Buy a car!’

e. Siellä ostettiin auto / *auton.

there bought-PASS car-NOM/car-ACC

‘A car was bought there.’

In (11a) the verb agrees with the nominative subject, and the object is accusative. (11b) is a biclausal construction where the embedded verb that takes the object is infinitive, but the matrix verb agrees with a nominative subject, which is sufficient for triggering accusative on

the object. In (11c) the matrix verb assigns genitive, a lexical case, to its subject. The genitive does not trigger agreement on T, which therefore has the default 3SG form. Consequently, the object of the embedded infinitive gets nominative. In (11d) the verb is imperative, a subjectless, non-finite, non-agreeing verb form, so the object gets nominative. In (11e) the verb is in the passive form, which is also a non-agreeing form, so again the object gets nominative.¹⁰

(12) shows that it is not the presence of an overt nominative subject which is the crucial factor triggering assignment of accusative on the object, but presence of subject agreement.

- (12) Me ostetaan auto/*auton.
 we buy-PASS car-NOM/car-ACC
 ‘We’re buying a car.’

(12) exemplifies the use of the passive in construction with a 1PL subject to encode 1PL active meaning. The presence of the overt subject pronoun, which is nominative but does not trigger agreement on the passive verb form, does not affect the form of the object.

Now compare with the GSC:

- (13) Jos ostaa auton/*auto, ...
 if buy-3SG car-ACC/car-NOM
 ‘If you buy a car. ...’

Compare especially (13) and (11c). Both have a 3SG verb, but while the object is nominative in (11c), due to the absence of subject agreement, it is accusative in (13). This shows quite clearly that the 3SG form in (13) is not assigned by default, but is assigned by a subject. That

is to say, there is a subject, a G-pronoun, in the GSC capable of triggering subject agreement. The form of the agreeing verb is 3SG, indicating that the G-pronoun has 3SG value.

Note that VP-internal predicates open to subject agreement are also singular in the GSC, as pointed out by Laitinen (2006) (ESS = essive).¹¹

- (14) Cocktail-kutsuihin ei kuulu mennä nälkäis-e-nä/ *nälkäis-i-nä
Cocktail-party-ILL not should go-INF hungry-SG-ESS/ hungry-PL-ESS
'One shouldn't go hungry to a cocktail-party.'

How come a 3SG pronoun is used to refer to what is a plural entity ('people in general including you and me')? The question obviously applies equally to overt generic pronouns such as English *one*, French *on*, and German *man*. Presumably part of the answer is that 3SG is the least marked form and thus is open to the widest range of reference of all the forms inflected for ϕ -features (although, in this light, it is unexpected that the 2SG form is also very widely used as a G-pronoun).¹² The Finnish G-pronoun is a covert 'one', to put it simply.

An important question is whether the G-pronoun is specified [human] (as claimed for the null arbitrary object pronoun in Italian in Rizzi (1986), and for the Icelandic G-pronoun in Sigurðsson and Egerland (in press)). In fact, it follows from the inclusive property of the null G-pronoun that it has human reference. This suggests that postulating the formal feature [human] is redundant. On the other hand it does not follow from inclusiveness that the G-pronoun could not include inanimate objects along with the speaker in its reference, which, arguably, it cannot. It seems that (15) cannot include, for example, wardrobes in its reference along with people including the speaker.

- (15) Tässä ei voi seistä.

here not can stand

‘One can’t stand here.’

The alternative is that the reference to humans including the speaker follows from other properties of the construction (this seems to be what Laitinen (2006) is arguing). We return to the question of the feature [human] in section 8.

5. Does the G-pronoun have case?

For overt DPs, only those with nominative case can trigger agreement in Finnish. So it is entirely reasonable to take the G-pronoun in, for example, (15) to have nominative case. The G-pronoun may also occur in environments where other cases than nominative are assigned. Consider (16a,b),

(16)a. Sinun kannattaa vuokrata auto / *auton.

you-GEN should-3SG rent car-NOM/car-ACC

‘You would do well to rent a car.’

b. Nyt kannattaa vuokrata auto/*auton.

now should-3SG rent car-NOM/car-ACC

‘It’s good value renting a car now.’

The verb *kannattaa* ‘should, do well to’ along with a host of other necessive predicates (*täytyy* ‘must’, *pitää* ‘should’, *on pakko* literally ‘is obligation’, i.e. ‘must’ etc.) takes a subject with genitive case (see Laitinen & Vilkuna 1993). Consequently no agreement is triggered, the verb has default 3SG form, and the object, if the main verb is transitive, gets nominative case.

In (16b) the subject is the putative covert G-pronoun. The fact that the object in this case, too, has nominative case then strongly indicates that the G-pronoun gets genitive case, hence fails to agree with the verb, causing nominative case to be assigned to the object.

If a predicate which assigns a lexical-semantic case, as the necessive predicates do in Finnish, has to assign its case, then (16b) provides additional evidence that the generic subject is structurally represented, as there is no other recipient of the genitive case (I return to this point in section 7).

Broadly speaking the generalization is that the G-pronoun occurs in any case-environments where overt subjects occur. (17) is an example of a partitive subject, (18) an example of an adessive subject.¹³

(17)a. Kallea ärsyttää kun telkkarista tulee urheilua.

Kalle-PAR irritate-3SG when TV-ELA comes sports

‘It irritates Kalle when they show sports on TV.’

b. Jos ärsyttää kun telkkarista tulee urheilua, voi sammuttaa telkkarin.

if irritate-3SG when TV-ELA come sports can turn-off TV

‘If it irritates you when they show sports on TV, you can turn it off.’

(16)a. Minulla on päänsärky.

I-ADE is-3SG headache

‘I’ve a headache.’

b. Jos on päänsärky se voi johtua nesteen puutteesta.

if is-3SG headache it can derive.from dehydration-ELA

‘If you have a headache, it may be due to dehydration.’

We conclude that the G-pronoun has case, like overt subjects.

6. Why does the G-pronoun not satisfy the EPP?

One clear difference between the covert Finnish G-pronoun and other arguments in Finnish, overt or covert, is that it does not satisfy the EPP. For that reason the preverbal position of a GSC must generally be filled by a non-subject category, often a locative phrase, or the expletive *sitä*. The examples in (6) are repeated here as (19a,b,c).

- (19)a. *Istuu mukavasti tässä.
sits comfortably here
- b. Tässä istuu mukavasti.
here sits comfortably
- c. Sitä istuu mukavasti tässä.
EX sits comfortably here
‘One can sit comfortably here.’

The fact that the G-pronoun is phonetically null is not in itself a sufficient reason for this. Finnish is a partial pro-drop language, where 1st and 2nd person subject pronouns can always be null (more commonly in formal registers) and 3rd person subject pronouns can be null in embedded clauses if they have a close enough antecedent (see Holmberg and Sheehan,

Chapter 3, Holmberg, 2005, Chapter 2). As discussed particularly in Holmberg (2005), these definite null pronouns do satisfy the EPP, and are consequently incompatible with the expletive (as first noted by Hakulinen 1975).¹⁴

(20)a. (Minä) istu-n mukavasti tässä.

I sit-1SG comfortably here

‘I’m sitting comfortably here.’

b. *Sitä istun mukavasti tässä.

EX sit-1SG comfortably here

According to Holmberg & Nikanne (2002) the EPP in Finnish requires a topic in the sentence-initial position here referred to as specTP. A topic is an expression denoting an individual or a group already established in the discourse, about which the predicate says something new; see Kiss 1995. Often the subject is a topic, in which case it occupies that position, but if the subject is focused, or if the subject is missing altogether, some other referential, topic-worthy category may take over filling specTP, for instance the object, as in (21), or a locative adverbial as in (19b). Failing that, the expletive *sitä* is inserted.

(21)a. Aila keitti kahvin.

Aila-NOM made coffee-ACC

‘Aila made the coffee.’

b. Kahvin keitti Aila.

coffee-ACC made Aila-NOM

‘The coffee was made by Aila/The one who made the coffee was Aila.’

Holmberg (2005) proposes the following formulation of the Finnish EPP:¹⁵

(22) If the sentence contains one or more categories which can check the EPP, then one of them must remerge with TP /i.e. move to specTP/, or an expletive be merged with IP.¹⁶

The reason for the conditional clause is that the EPP is suspended if the sentence does not contain a referential category capable of serving as topic. See Holmberg & Nikanne 2002 for discussion. In (23), for example, the word *kiire* is not an argument but a (nominal) part of a complex predicate. In this case the sentence can be verb-initial (although merging the expletive *sitä* is also possible).

(23) Tuli kiire.
came haste
‘There was a rush.’

Conceivably, then, the reason why the G-pronoun cannot check the EPP is that it is not referential in the right way; it cannot be a topic.

It is, however, not true that the EPP can only be checked by referential categories, capable of serving a topic function.

(24)a. Kuka tahansa voi tulla tänne.
who ever can come here
b. Tänne voi tulla kuka tahansa.

here can come who ever

c. *Voi tulla kuka tahansa (tänne).

can come who ever here

Kuka tahansa ‘whoever’ is an indeterminate quantifier, and as such not referential and capable of functioning as topic. In fact, if the EPP strictly called for a topic, we wouldn’t expect an expletive to be able to check the EPP. A closer approximation to the truth is that the subject may check the EPP even if it is not referential, but, for example a quantified NP, while non-subjects have to be referential and interpretable as topics, to check the EPP.¹⁷

(25)a. Aila puhuu kenelle tahansa.

Aila speaks who-ALL ever

Aila speaks to anyone.’

b. *Kenelle tahansa puhuu Aila.

who-ALL ever speaks Aila

So the question then remains, why can’t a G-pronoun satisfy the EPP?

An obvious difference between the null definite pronoun in (20a) and the null generic pronoun in, for example, (19b), is that the former is optionally null, while the latter is obligatorily null: There is no counterpart to (19b) with an overt G-pronoun. The Finnish lexicon does not contain an overt G-pronoun. Is it possible that the EPP just does not see such a radically null category?

Apart from raising problems with regard to the proper formulation of the EPP, this raises the question why the G-pronoun does not have an overt form, in Finnish. Is it just an accidental gap? There are good reasons to think that it is not; As will be discussed in section

9, it seems to be characteristic of partial null-subject languages that they have a null G-pronoun. Consequently, what we want is a theory which explains why the G-pronoun has no overt form, which will also explain why it cannot satisfy the EPP.

In the following I will first sketch a theory which appears initially appealing, as it provides a straightforward explanation of the failure of the G-pronoun to satisfy the EPP. That theory will quickly be discarded, though, as being descriptively inadequate. Instead I will articulate a theory which is descriptively adequate *and* provides a straightforward explanation why the G-pronoun is obligatorily null and fails to satisfy the EPP.

7. An inadequate theory

The following is a hypothesis based on a theory where the finite subject agreement marking in null-subject languages is an interpretable category, basically a pronoun which is morphologically realized as an affix. In a radical version of this theory finite sentences with null subjects actually have no other subject than the subject agreement morpheme; there would be no subject pro. Within such a theory the G-pronoun would not satisfy the EPP because it is a head, an AgrS, which in the absence of a lexical DP subject is able to itself carry the the subject theta-role and absorb the subject case, although it is morphologically realized as a 3SG affix on the finite verb or auxiliary.

Recall that Finnish has 1st and 2nd person null subjects but 3rd person definite null subjects only in restricted circumstances.

(26) (Minä) heräsin.

I awoke-1SG

(Sinä) heräsit.

you	awoke
*(Hän)	heräsi.
he/she	awoke

Within a theory where the person inflection is an interpretable pronominal category AgrS, this would follow if 3rd person AgrS (singular and plural) in Finnish is an interpretable nominal category capable of carrying the subject theta-role, but unspecified for definiteness. A definite subject reading, then, requires merge of a definite pronoun. In the absence of a definite pronoun, 3SG AgrS is still interpretable and able to carry the subject theta-role, but can only be interpreted as generic. In other null-subject languages 3rd person AgrS is, or at least can be, inherently definite, hence a definite reading does not require merging a definite pronoun. This theory is initially appealing because it accounts for the null subject facts in (26) *and* (potentially) explains why the G-pronoun does not satisfy the EPP. Assume that the EPP can, perhaps universally, be satisfied by a definite, pronominal AgrS (as argued by Barbosa 1995 and Alexiadou & Anagnostopoulou 1998) or, at least in some languages including Finnish, by a category, which need not be the subject, merged as a specifier of T-AgrS. Then it follows that the EPP is not satisfied in the GSC unless a phrasal category is moved to specIP/AgrSP, or an expletive pronoun is merged there. The G-pronoun *qua* head cannot satisfy the EPP, while there is no obvious reason why it could not bind an anaphor, control PRO, or support an agent-oriented adverbial, all properties which the G-pronoun was shown to have, in Finnish.

This would provide a straightforward explanation of the generalisation, observed by Holmberg (2005), that languages which have 3rd person definite null subjects do not have a generic null subject, and vice versa, languages which have a generic null subject do not have a 3rd person definite null subject (I will come back to this correlation in section 9).¹⁸

However, the contrast between (11) and (12b), already discussed in sections 4 and 5, and repeated here as (27) and (28), shows that the hypothesis that 3SG AgrS is itself the generic pronoun cannot be maintained.

(27) Jos ostaa auton/*auto, ...
if buy-3SG car-ACC/car-NOM
'If you buy a car. ...'

(28) Nyt kannattaa vuokrata auto/*auton.
now should-3SG rent car-NOM/car-ACC
'It's good value renting a car now.'

As discussed, the contrast as regards object case was due to presence or absence of subject agreement: In terms of the theory expounded in this paper, in (27) the verb agrees with the nominative covert G-pronoun, just as it would with an overt, definite subject. In (28) the verb does not agree, because the covert G-pronoun has genitive case, just as an overt definite subject would. The 3SG form in (28) is the default finite form; the verb *kannattaa* 'should, be worth it', like other necessive verbs, does not occur in any other finite form than 3SG.¹⁹

In a theory where AgrS itself is the G-pronoun the existence of (28) is unexpected. Within this theory it is presumably the presence vs. absence of AgrS (of the interpretable kind, rather than just the default form of a verb) which determines the form of the object: If the sentence contains (interpretable) AgrS, the subject gets nominative and the object accusative case, if not, the object gets nominative case. In (28) there is no (interpretable) AgrS, shown by the nominative form of the object. But if there is no (interpretable) AgrS,

then (28) has no category which could carry the theta-role. We expect the sentence to violate the theta-criterion.

Seen from a different angle, if (28) were sharply ill-formed, this would constitute strong evidence in favour of the theory where there is no other G-pronoun in Finnish than AgrS itself, as under that theory (28) ought to violate the theta-criterion. Correspondingly, since (28) is perfectly well-formed (with the right choice of case), this must be considered evidence against that same theory.

8. An adequate theory

Consider, however, the following alternative: First, we assume a theory of agreement and structural case along the lines of Chomsky (2001). According to this theory, finite T has a complex of unvalued ϕ -features consisting of person, number, and in some languages (but not Finnish) gender. Once merged, T becomes a probe searching its c-command domain for a goal, that is a category which can value its ϕ -features. The first category it encounters which (a) has a set of interpretable, that is inherently valued features matching the unvalued features of T, and (b) has at least one unvalued feature itself which matches an inherently valued feature of T, will be the goal of the probe T. In a transitive construction the goal will be a DP in spec,vP, in an intransitive one, a DP in VP. This DP, unless it is already assigned a Case value (by an adposition, for example), assigns values to T's ϕ -features, and receives nominative Case-value from T. If T also has an EPP-feature, the DP probed by T will move to spec,TP, more precisely, a copy of the DP will merge with TP, thus checking and thereby deleting the EPP-feature.

That is to say, finite T has an inherent nominative (NOM) feature which values the [uCase]-feature of the nominal category probed by T. A more sophisticated version of this

theory is proposed by Pesetsky & Torrego (2001, 2007), who argue that so-called nominative case is an unvalued tense-feature on noun phrases, assigned a value by the valued tense-feature of finite T. I will here assume the less sophisticated version, mainly for reasons of presentation.

The G-pronoun is merged like a regular pronoun with ν P in a transitive sentence, with V in unaccusative sentences, receiving the (subject) theta-role exactly like other pronouns or referential expressions. It consists of nominal features, meaning that it has number (singular), person (3rd), and an unvalued Case-feature (which needs to be assigned a value). It is, however, deficient in that it lacks a D-feature (a property it shares with overt generic pronouns such as English *one*, German generic *man*, etc.). As a pronoun, it also lacks a root: It is a bare ϕ -feature complex. This means that when T probes this pronoun, and has its ϕ -features valued by it, while at the same time valuing the Case-feature of the pronoun, T and the pronoun end up having the same feature values. More precisely, since T may have additional features (tense, and also perhaps mood), the subject pronoun's feature values are a subset of those of T.

(29) $T_{[uNr, uPn, NOM]} \dots [_{\nu P} [SG, 3, uCase] [v \dots]] \rightarrow$

$T_{[SG, 3, NOM]} \dots [_{\nu P} [SG, 3, NOM] [v \dots]]$

Now assume, following Roberts (2007, Chapter 1), that this means that the grammar takes them to be *copies*, forming an argument chain, effectively as if the subject pronoun had moved by head movement to T, except there has only been Agree (mutual feature valuing), no movement. According to Roberts (2007), this is the derivation of what is commonly termed incorporation (of a head into a head): A probe-goal relation is copying the feature

values of the goal onto the matching but unvalued features of the probe, and vice versa. In the special case where the goal's features are a subset of the features of the probe, all the goal's feature values will be represented in the probe as well, and the goal will thus be a copy of the probe. As such, the probe and the goal form a chain. It holds universally for chains that normally only one link of the chain is pronounced (unless there are special reasons to pronounce more than one, say, as a resumptive pronoun). Furthermore, generally the link which is pronounced is the highest one (unless there are special reasons not to pronounce the highest link); see Bobaljik (2002), Landau (2006). Thus we derive the effect of head movement/incorporation as the result of feature copying under Agree. The probe, with features valued by the goal, will be spelled out (i.e. will be assigned phonetic form), the goal will not.

If the goal has features *not* copied by the probe, then the goal will not be a copy of the probe. Then the goal will be the head of a chain, and as such will be spelled out (unless it undergoes other movement, i.e. a second merge in an even higher position).

In the case of (29), the G-pronoun is a copy of T, and they thus form a chain, in fact, an argument chain (A-chain). Consequently, T is spelled out, as an affix on the finite verb or auxiliary, while its copy, the subject G-pronoun in spec,vP is not spelled out (or is spelled out as null).²⁰ This means that there is a principled reason why the G-pronoun is null in Finnish; it is not just an accidental lexical gap. It is null because it is a D-less pronoun probed by finite T.

Pronouns probed by T which have a D-feature, that is definite pronouns, are not copies of T because they have a feature which T does not have, namely D. Instead, they are the highest member of their argument chain, and as such are spelled out, unless they undergo movement to the C-domain (i.e. merge with CP), as in the case of subject wh-pronouns, or if they have a local enough antecedent in a higher clause, which licenses deletion of the pronoun

(see Holmberg, Chapter 2, and Holmberg and Sheehan, Chapter 3; I return to this case below). Lexical subjects, definite or indefinite, are never copies of T as they have a root which is not copied by T. I return below to the question why in some languages all subjects, including G-pronouns, are pronounced.

What about the EPP? The EPP is a feature of T which requires merge of a category with TP. As discussed, in Finnish this category is usually the subject, but if the subject is, for some reason, not available, another category may satisfy the EPP. Formally, by merging with TP the category in question checks and thereby deletes the uninterpretable EPP-feature. One situation when the subject is not available for merge with TP is when it is a chain headed by T, for obvious reasons: Grammatical operations applying to a chain can only apply to the head of the chain, for reasons of locality, so the non-head copy in spec,vP is not accessible, and the head of the chain, T, cannot merge with itself.²¹ Holmberg (2005) showed that the EPP in Finnish cannot be checked by a D-feature, or other nominal features, in T, as has been claimed by Barbosa (1995), Alexiadou & Anagnostopoulou (1998) to be characteristic of null-subject languages; the EPP strictly requires merge of a phrasal category with TP (see also Sheehan, Chapter 6).

Definite subject pronouns are, then, attracted by the EPP, as they do not form a chain with T. They may value the ϕ -features of T and be assigned a case by T, but as they have features not shared with T, they are heads of their own chain, and are thereby accessible to the EPP. This is the case even though language-particular conditions may allow them to end up not pronounced, if they find an antecedent in a higher clause.²²

We have thus achieved the goal of characterising the difference between the ‘lexically null’ G-pronoun (as in (19)) and the optionally null definite pronouns (as in (20)) in such a way that we can also explain why the former cannot check the EPP while the latter can.

The question what the exact feature composition is of the G-pronoun becomes highly relevant in this theory, since in order to be a non-head copy in a chain headed by T, the pronoun must not have any features that are not also represented in T.

As mentioned, it is widely assumed that generic pronouns have a feature [human], on the basis of the observation that they can only refer to humans (Rizzi 1986, Egerland 2004, Sigurðsson and Egerland, in press). Since the feature [human] is a grammatical feature in the pronoun system of Finnish, distinguishing between the 3rd person pronouns *se* (SG) and *ne* (PL), which are unmarked for human, and the pronouns *hän* (SG) and *he*, which are specified [human] (see Helasvuo & Laitinen 2006) this would entail no addition to the grammar of Finnish. However, we then have to assume that T also includes (unvalued) [human] among its unvalued ϕ -features, since only then could a [human]-marked G-pronoun be a copy of T. This does not seem like an implausible extension of the feature matrix of T, even though it is not morphologically reflected (the expectation is that it would be, in some languages).^{23 24}

Recall that Moltmann (2006) argues that *one* also has (a) an uninterpretable feature [generic], which means that it needs to be bound by a generic operator, and (b) an interpretable feature responsible for the ‘first person orientation’ of the pronoun. If we apply Moltmann’s theory of *one* to the Finnish G-pronoun, we are led to assume that T can have an uninterpretable feature [generic]. In that way the [generic]-marked pronoun can be a copy of T, and the chain (T, G-pronoun) can be bound by the generic operator in specCP.²⁵ Similarly in the case of the ‘first person orientation’ property, if we accept Moltmann’s theory, and consider first person orientation, i.e. inclusiveness, as a grammatically represented feature of the Finnish G-pronoun, then we have to assume that this feature has an unvalued counterpart in T. The alternative is to reject the analysis where inclusiveness is encoded as a feature, and derive it instead from other properties of the construction, presumably including the (assumed) fact that the pronoun is a D-less category bound by a generic operator. For

example, the inclusiveness might arise as a default in this situation. I will have to leave this important issue for future research, though.

9. Non-nominative G-pronouns

We still have not got an account of G-pronouns which do not agree with T, and do not get their case from T. In the following I will deal specifically with G-pronouns with genitive case. We saw in section 5 and in (28) that the G-pronoun can be assigned genitive case under certain conditions. The functional heads which are involved in case and agreement with the subject (SUB) and the object (OBJ) are shown in (30):

(30) C ... T ... Voice ...SUB... ν ... OBJ

Following Chomsky (2008) I assume the ϕ -features, the Case-feature and the EPP feature of T derive from C, the head of the CP-phase,²⁶ being ‘passed down’ from C to T. Following Roberts (2007) I assume that the ϕ -features and Case-feature of ν derive from Voice, the head of the vP-phase. Specifically, when Voice has the feature Active, the ϕ -features and the Case-feature of Voice are passed down to ν , the head assigning a theta-role to the subject, which can then probe for the object, have its ϕ -features valued by the object (though with no morphological reflex in Finnish), and assign accusative Case to it. This is shown schematically in (31), the lower line showing the situation after the features of active Voice are passed down to ν , and ν has assigned accusative to the object, and had its ϕ -features valued by the object.²⁷

(31) Voice_[ACT, ACC, u ϕ] ... SUB_[uCase, 1SG] ... ν ... OBJ_[uCase, 3SG] →

Voice_[] ... SUB_[uCase, 1SG] ... V_[ACT, ACC, 3SG] ... OBJ_[ACC, 3SG]

Next, the subject is probed by T, assigns values to T's ϕ -features, has its uCase-feature valued nominative, and is usually attracted by the EPP of T to merge once more with TP. This would be part of the derivation of the sentence (32):

(32) Minä ostin auton.

I-NOM bought car-ACC

'I bought a car.'

In the necessive construction Voice does not have the feature [ACT(ive)] but the feature [NEC(essive)]. This feature does not allow passing the ϕ -features and case-feature of Voice down to v , but instead Voice probes for the closest nominal argument, the subject. The ϕ -features of Voice are valued (with no morphological reflex) and the uCase-feature of the subject is assigned the value Genitive. The head v does not have Case-assigning capacity and T is too far away to probe for the object, so the object is assigned default Nominative value.²⁸

(33) Voice_[NEC, GEN, u ϕ] ... SUB_[uCase, 3SG] ... V ... OBJ_[uCase, 3SG] →

Voice_[NEC, GEN, 3SG] ... SUB_[GEN, 3SG] ... V ... OBJ_[NOM, 3SG]

If the subject is a D-less 3SG pronoun, Voice and the G-pronoun form a chain, and the G-pronoun consequently remains not spelled out, as in (34) (= (28)).

(34) Nyt kannattaa vuokrata auto.

now should-3SG rent car-NOM

‘It’s good value renting a car now.’

If the subject has a D-feature or other features not copied onto Voice, it will be spelled out, and usually be attracted by the EPP-feature of T to move, i.e. merge a second time with TP. This would be (part of) the derivation of (35), for example.

(35) Minun kannattaa vuokrata auto.

I-GEN should rent car-NOM

‘I should rent a car.’

On a descriptive level, the *necessive* verb intervenes between T and the subject, assigning genitive case to the subject, leaving T without a goal to value its ϕ -features. Unlike the situation in many other languages, for example Icelandic; see Sigurdsson (2004a) and the many ergative languages where T agrees with the object. Finnish T is not able to probe the object, either, and so must take recourse to default valueing of its ϕ -features. However, the fact that there is a ‘*necessive GSC*’ shows that the *necessive* verb is more than just a genitive-assigning verb: It is a functional head which, like T, can form a chain with the subject. This is what is formally expressed by the theory articulated above.

Within this theory the prohibition against a null 3rd person pronoun in Finnish cannot be seen as an effect of deficient agreement, as suggested above in connection with the paradigm (24). In the present theory agreement is a set of inherently unvalued ϕ -features which do not affect interpretation. But in fact there is no prohibition. A 3rd person pronoun can be, and often is, null when it has a local enough antecedent in a higher clause, as in (36); see Holmberg (2005, Chapter 2), Holmberg and Sheehan (Chapter 3), Holmberg, Nayudu, and Sheehan (in press).²⁹

(36) Kalle oli iloinen kun (hän) sai vapaapäivän.

Kalle was pleased when he had off-day

‘Kalle was pleased when he had a day off.’

Following Holmberg (2005) and Vainikka & Levy (1999) I assume that the null 1st and 2nd person pronouns in Finnish are, in fact, also null on account of having a local antecedent, the speaker and the addressee. I suggest implementing this idea along the lines of Sigurðsson (2004b) who argues that there is a syntactic representation of the speaker and the addressee as features in the C-domain. These are interpretable features, whose semantic value obviously depends on the speech situation, which can control, or bind, the subject pronoun. As Finnish allows null subjects in principle, it allows leaving a 1st or 2nd person pronoun unpronounced in this situation. There are important differences between licensing 1st/2nd person pronouns and 3rd person pronouns which I ignore in the present context.³⁰

Why do English, French, German, and Mainland Scandinavian not also have a null G-pronoun? The following is an explanation made possible by Roberts’s (2007) theory of incorporation: Assume that a G-pronoun minimally has a number and a person feature. Then consider a language which lacks either an unvalued number or an unvalued person feature in T. In such a language a subject G-pronoun can never be a copy of T, but will be the head of a chain, and as such will be spelled out. This tallies with the observation that languages which have an overt G-pronoun are non-null-subject languages, which typically have a poorly specified agreement paradigm.

But this does not explain why these languages also resist deletion of a subject pronoun in a finite clause when it is controlled by a higher DP. According to the theory articulated here, the (optional) null subject in (36) is a DP, the head of an A-chain which has undergone

movement to specIP, and is deleted under identity with the antecedent DP in the higher clause. As discussed by Holmberg (Chapter 2) and Holmberg and Sheehan (Chapter 3), it is typical of languages which have null G-pronouns that they also allow null subjects derived in this way by deletion, while none of the languages with overt G-pronouns listed above allow this.

Furthermore, although Finnish has a rich subject-verb agreement paradigm, it is not the case across the board that the languages which have a null G-pronoun have agreement paradigms that are richer than the languages which have an overt G-pronoun (see Holmberg, Chapter 2, Holmberg, Nayudu and Sheehan, in press). Both French and German have reasonably well articulated agreement paradigms, distinguishing person as well as number (although not person *and* number for every verb form).

An alternative explanation, following Holmberg (Chapter 2), is that non-null-subject languages have an additional feature in T which triggers pronunciation of specTP (not just spell-out in the sense of assignment of a vocabulary item which can be deleted under appropriate conditions, but pronunciation). More precisely, other properties of the grammar conspire to force movement of the category probed by T to specTP, and then, in some languages, this category must be pronounced in this position. Even a bare, D-less pronoun will therefore invariably be pronounced in, for example, English either as the generic pronoun *one*, or as expletive *it* or *there*, depending on other properties of the construction (including whether the subject has a theta-role or not).

10. Generic non-subjects

Finnish has a null generic direct object as well, with properties similar to the null arbitrary objects in Italian discussed in Rizzi 1986.

- (37) a. Tämä päätös ei ilahduta.
 this decision not happy.make
 ‘This decision doesn’t make one happy.’
- b. Lääkärit kehottavat syömään vähemmän rasvaa.
 doctors urge eat-INF less fat
 ‘Doctors urge people to eat less fat.’

The formal account is the same as for subjects, except that the head of the generic pronoun chain is ν , not T. The direct object is probed by ν (Chomsky 2000, 2001). If the object is a bare, D-less ϕ -pronoun, ν and the object will be copied after Agree, and form a chain headed by ν , with the result that the object will not be pronounced.

One context where the G-pronoun is not possible in Finnish is as possessor of NP. This is a case where the parallelism with generic *one* breaks down. Below, the ungrammatical possessive GSC is compared with the grammatical counterpart with a definite possessive pronoun.

- (38) a. * \emptyset lapsensa tuottaa aina huolia.
 children-PX cause always worries
 Intended reading: ‘One’s children are always a cause of worry.’
- b. Hänen lapsensa tuottaa aina huolia.
 he-GEN children cause always worries
 ‘His children are always a cause of worry.’
- (39) a. *Sitä ei voi ymmärtää että \emptyset lapsensa ovat kasvaneet aikuisiksi.

EXP not can understand that children-PX have grown adults-TRA

Intended: 'One can't understand that one's children have become adults.'

b. Hän ei voi ymmärtää että hänen lapsensa ovat kasvaneet aikuisiksi.

he not can understand that he-GEN children-PX have grown adults-TRA

'He doesn't understand that his children have become adults.'

The Finnish possessive NP with a pronominal possessor consists of a head noun with a possessive suffix (PX) attached plus a possessor pronoun with genitive case. The possessive suffix (*-nsa* in the 3rd person) is an anaphor subject to Principle A. (see Trosterud 1993). 1st and 2nd person possessors are optionally null. A 3rd person (singular or plural) possessor is obligatorily overt. Another way to put it is that a 3rd person possessor is a pronoun subject to Principle B when overt, but an anaphor when null. (40) shows the singular paradigm.

(40) (minun) kirja-ni 'my book'

(sinun) kirja-si 'your book'

*(hänen) kirjansa 'his/her book'

The following is a reasonably plausible analysis of the possessive NP, in the framework of the present theory.

(41) [_{PossP} POSS_[u ϕ , GEN, EPP] [_{NP} [D, 3SG, uCase] N]] \rightarrow

[_{PossP} [D, 3SG, GEN] [_{Poss'} [_{Poss} N POSS_[3SG, GEN, EPP] [_{NP} <[D, 3SG, GEN]> <N>]]]

There is a functional head, here called Poss, with $u\phi$ -features and a GEN case to assign. It receives ϕ -feature values from a possessor DP or D-pronoun. Poss also has an EPP feature

triggering movement, i.e. second-merge of the possessor with PossP. The head noun moves and ends up adjoined to Poss, spelled out as shown in (40). A 1st and 2nd person pronoun can be deleted (left unpronounced), a 3rd person pronoun cannot.

The absence of a generic possessive pronoun cannot be explained in terms of case. As shown in section 4 and 5 a genitive-marked null pronoun can be generic. The absence of a generic possessive pronoun can be explained as an effect of morphological blocking: A D-less, 3rd person possessor will be analyzed as forming a chain with Poss, and will therefore be obligatorily null, but this chain is interpreted as an anaphor, not as a generic pronoun.

(42) Marja kadotti [Ø hattunsa].

Marja lost hat-PX

‘Marja lost her hat.’

The anaphoric interpretation is not possible in (38a) and (39a) because it violates Principle A. The null 3rd person possessive pronoun would effectively be a null counterpart of the possessive reflexive pronoun *sin* in Scandinavian languages.

(43) Marja_i tappade sin_{i/*j} hatt.

Marja lost SIN hat

See, however, Trosterud (1993) for arguments against this type of analysis of possessive NPs, in favour of an analysis where the possessive suffix is itself the anaphoric argument (an analysis corresponding to the analysis of the subject pronoun presented, and rejected, in section 5).

As usual, an explanation of the absence of an interpretation on the basis of avoidance of ambiguity is not quite satisfactory, since ambiguity occurs in many other places in the grammar. We would presumably postulate a feature to distinguish between generic and anaphoric D-less ϕ -complexes. The question is why Finnish grammar does not tolerate a generic-marked null ϕ P, say, in complementary distribution with the anaphoric-marked null ϕ P, in which case (38a) and (39a) would be grammatical precisely because in those contexts the anaphoric reading is ruled out.

11. On the Finnish passive

As mentioned, Finnish has a (so-called) passive construction which covers some of the meanings of impersonals which the GSC does not cover, namely, the arbitrary or quasi-existential meaning and the exclusive generic meaning.

- (44) a. Sinne rakenne-tt-i-in silta.
 there build-PASS-PST-F bridge
 'They built a bridge there/ A bridge was built there.'
- b. Itävallassa puhu-t- a-an saksaa.
 Austria-INE speak-PASS-PRS-F German
 'They speak German in Austria.'

The passive verb form consist of a passive suffix, usually, $-t$, followed by the tense suffix, followed by a suffix $-Vn$, which takes the 'morphological slot' of the subject agreement suffix, but is invariant (except that the vowel copies the features of the preceding vowel).

Holmberg & al. (1993) argue that it is a finiteness suffix (hence the label F); see Helasvuo 2006, Helasvuo & Laitinen 2006..

An interesting question is whether the passive also has a syntactically projected null subject. I will only give the barest sketch of an answer to this question here: see Shore 1988, Blevins 2003, Manninen & Nelson 2004, Helasvuo 2006 for discussion. Applying the same tests as in the case of the GSC, the answer is negative, albeit not unambiguously.

First, the passive does support an agent-oriented adverbial.

(45) Täällä lue-t-a-an ahkerasti kirjoja.

here read-PASS-PRS-F eagerly books

‘Books are read eagerly here.’

The passive also supports, for example, a result clause with a PRO subject apparently controlled by the subject of the passive.

(46) Tänne tul-t-i-in [PRO ostamaan keramiikkaa]

here come-PASS-PST-F buy-INF pottery

‘People came here to buy pottery.’

But the passive does not support a reflexive or other anaphor, for example a possessive suffix (see section 3)..

(47) Shelliasemalla pes-t-ä-än auto (*-nsa).

Shell-station-ADE wash-PASS-PRS-F car PX

Intended: ‘One’s car can be washed at the Shell station.’

Nor does the verb agree with the subject; the passive form does not agree overtly, and the object has nominative case (which is an indication of non-agreement between subject and T).

This can be understood if the construction, in the case of transitive verbs, has an agent as part of its argument structure, supporting an agent-oriented adverbial and an infinitival result clause with a PRO subject, but this agent is not syntactically projected, hence cannot trigger agreement or bind an anaphor.

Furthermore, unlike the GSC, a predicative adjective or secondary predicate have plural form (PAR: partitive, ESS: essive).

(48) a. Kesällä ol-t-i-in ilois-i-a
summer-ADE be-PASS-PST-F happy-PL-PAR

‘In the summer people/we were happy.’

b. Sinne tul-t-i-in nälkäis-i-nä.
there come-PASS-PST-F hungry-PL-ESS

‘People came there hungry.’

Recall that a predicative adjective or secondary predicate in the GSC has singular form, even though the entity referred to is a plural one (roughly ‘people including me’). This is evidence that the construction contains a structurally projected or represented subject with valued grammatical features, namely 3SG, determining the form of the predicate. If so, the fact that the predicates in the passive are plural can be regarded as an indication that the passive does not contain a syntactically projected subject, so that the form of the predicates is determined purely by the semantic properties of the agent.

Finally, the fact that the Finnish passive does not support an agent phrase in the manner of ‘canonical passives’ can be taken as evidence that the construction does not have a structurally projected subject (ABL: ablative).

- (49) Sinne rakennettiin silta (*englantilaisi-lta) (englantilais-ten toimesta)
there build-PASS bridge (English-ABL) (English-GEN action-ABL)
‘A bridge was built there, by the English.’

The ‘natural’ form of an agent phrase would seem to be ablative, but this is completely impossible. The only way to express an agent overtly is by using an expression which literally translates as ‘by the action of x’. On the other hand, Manninen and Nelson (2004) point out that there is no principled reason why a proper agent phrase could not be marked as in Finnish. More generally, it is unclear what conclusions to draw from (49) with regard to the syntactic status of the subject in passives.

I leave the subject of passives with these sketchy remarks.

12. Other languages

Other languages that have a null generic pronoun include Marathi, Hebrew, Icelandic, and Brazilian Portuguese.

- (50) Hya khurchi- war aaramani bushushakto. (Marathi)
this chair -on comfort-with sit-PRES.3SG
‘One can sit comfortably in this chair.’

(51) Yxolim la-ševet be-noxiout ba-kise ha-ze. (Hebrew)

can-3PL to-sit in-comfort in-the-chair the-this

‘One can sit comfortably in this chair.’

(52) Nú má fara að dansa. [Icelandic]

now may go to dance

‘One may begin to dance now.’

(53) Aqui não pode nadar. (Brazilian Portuguese)

here not can swim

‘One can’t swim here.’

What Marathi, Hebrew, Icelandic, Brazilian Portuguese and Finnish have in common is that they are partial null-subject languages: In addition to the null G-pronoun subject, they all have non-referential null subjects (for instance with weather verbs), and, with the exception of Icelandic, they all allow null subjects in finite clauses that are controlled by a c-commanding argument in a higher clause; see Holmberg and Sheehan (Chapter 3). Some of them (Finnish and Hebrew) allow null 1st and 2nd person subject pronouns even without a linguistic antecedent. None of them allows a 3rd person definite null subject in an embedded finite clause without a local linguistic antecedent.³¹

Consistent null-subject languages, somewhat surprisingly, do not have a null generic pronoun, in the strict sense of a null ‘one’ with 3SG or 3PL agreement and no other morphology. Instead they use a variety of other strategies. One is using generic ‘you’, with 2SG agreement, as in (54a,b). Another is using some overt morphology in addition to 3SG or 3PL agreement; Romance languages and (some) Slavic languages make use of (cognates of)

‘One can’t swim here.’

Yet another option is to make use of an overt indefinite quantificational expression meaning something like ‘anyone’, or a noun meaning ‘people’.

(57) Ewaru-aynaa ii kurcii loo sukham gaa kuurcoo waccu. (Telugu)

who even this chair in comfortably sit may

‘One (anyone) can sit comfortably in this chair.’

The reason why consistent null-subject languages do not have a Finnish-style incorporated generic subject is that T in these languages has an unvalued D-feature, [uD], which in the typical null subject construction is valued definite; see Holmberg (Chapter 2) for details of this valuation process. When a D-less ϕ P subject is probed by T, and forms a chain with T, as described above, this chain will be definite (i.e. ‘he’ or ‘she’, if it is 3rd person singular), by virtue of the definite-marked D-feature in T.

One way to get a generic subject interpretation is then to have a proper indefinite QP subject, which values the uD feature, and does not get incorporated (being too complex for incorporation; see Holmberg (Chapter 2)), and gets spelled out as the highest link in its chain. This is clearly the derivation of (57), with an overt QP subject. It is also a possible analysis of (55) and (56): the impersonal pronouns value T’s uD-feature, perhaps as impersonal, neither definite nor indefinite, but have some feature which prevents their incorporation in T. The effect of the passive morphology in (58) is to prevent the passing of unvalued ϕ -features down from Voice to ν (see section 6). The subject will therefore be probed by Voice, not T (as in the case of the necessive construction in Finnish). In this way T’s uD-feature does not affect

the interpretation of the subject (although exactly how the postulated uD-feature is valued or eliminated remains unclear).

13 Conclusions

Finnish has a null generic pronoun (G-pronoun) with formal and semantic properties closely resembling those of English *one*:

- It has unambiguously inclusive reference;
- It is specified 3SG, and as such triggers 3SG agreement on T (if it is probed by T), and singular agreement on secondary predicates;
- It needs a Case value like arguments, and is assigned a Case value like other subjects: nominative, genitive, adessive, or partitive, depending on other properties of the sentence;
- It is a feature complex made up of interpretable ϕ -features (3SG), an unvalued Case feature. We left open the possibility that it also has an uninterpretable generic feature and an inclusiveness feature (following Moltmann 2006);
- The features of the G-pronoun are a subset of the features of T (when probed by T). This entails that the G-pronoun is formally a copy of T as a result of Agree, and consequently T and the subject form an A-chain headed by T.
- As a consequence, the subject is not spelled out, since (normally) only the head of a chain is spelled out.
- Another consequence is that the G-pronoun cannot check the EPP of T, not being the head of a chain;

- In the non-nominative subject case discussed, the necessive construction, the subject G-pronoun is not probed by T but by (necessive) Voice, and receives genitive Case value from it.

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The following less common abbreviations are used: ABL: ablative; ADE: adessive; ALL: allative; CON: conditional; ELA: elative; INE: inessive; PAR: partitive; PRC: participle; PX: Possessive suffix; TRA: translative.

² This terminology differs from that in the seminal work by Cinque (1988). In that paper Egerland's generic and arbitrary readings are referred to as two readings of 'arbitrary pro' (*pro_{arb}*): the quasi-universal reading and the quasi-existential reading, respectively.

³ The proper classification of the Finnish passive is a controversial issue; see Shore 1988, Blevins 2003, Manninen & Nelson 2004, Helasvuo 2006. The issue is whether it is a passive or a form of active impersonal construction. For the present purposes the important property of the Finnish passive is that the understood subject, when not specific (meaning 'we'), has arbitrary reference in Egerland's sense, or, as discussed in the text below, the meaning of generic 'they'. See section 11 for some discussion of the passive.

⁴ See Cinque 1988 for a suggested explanation for the (universal) tendency of the quasi-existential reading of *pro*_{arb} to be interpreted as 1PL. As shown by Löflund 1998 the use of the passive form with specific, active meaning is, in fact, not restricted to the 1PL in Finnish.

⁵ Generic *you* is also typically inclusive (in English, and presumably in other languages making use of this form of generic pronoun). The use of 2SG with generic meaning is also not uncommon in colloquial Finnish (see Laitinen 2006), and the use of 3PL with arbitrary meaning occurs as well.

(i) Sä saat töitä jos sä puhut saksaa.
you.SG get-2SG work if you.SG speak-2SG German
'You get a job if you speak German.'

(ii) Ne puhuu Itävallassa saksaa.
they speak Austria-INE German
'They speak German in Austria.'

⁶ The GSC can be used to refer specifically to the speaker, as in (i), from Laitinen (2006: 212).

(i) Aamulla sai kalaa.
morning-ADE get-PAST.3SG fish
'In the morning I/we got fish.'

Laitinen claims that the null pronoun in (ii) could refer to the addressee only, presumably when uttered by a doctor or nurse to a patient.

(ii) Tuolla tavalla ei parane.
that/ADE way-ADE not-3SG recover
'You won't recover that way.'

Alternatively the sentence meaning is the usual inclusive generic one, and the specific reference to the addressee is an implicature.

⁷ The negation in Finnish is an auxiliary which inflects for subject agreement.

⁸ The passive does not license a subject-oriented anaphor.

(i) Shelliasemalla pestään auto (*-nsa).

Shell-station-ADE wash-PASS car (-PX)

‘A car is being washed at the Shell-station.’

This will be discussed below in section 9.

⁹ In traditional grammar the nominative object form is sometimes referred to as ‘the second accusative’; see also Reime 1993. It differs from the nominative subject case in that it does not trigger agreement. An (other) argument in favour of taking the bare NP object to be a form of accusative is that [+human] pronominal objects do not exhibit the nominative-accusative variation, but have one distinct accusative object form. An additional complication is that the form marked *-n* is homonymous with the genitive. See Vainikka 2003 for discussion.

¹⁰ The imperative provides a challenge for the theory of Finnish object case expounded in the text as it actually agrees with the subject (whether overt or covert).

(i) Osta (sinä) auto.

buy-IMP you.SG car-NOM

(ii) Ostakaa (te) auto.

buy-IMP-PL you.PL car-NOM

The relation between subject agreement and object case seems to be sensitive specifically to finite verb agreement, not to the morphologically distinct agreement found in the imperative.

¹¹ Laitinen’s example sentence (i) is not, in fact, a good example of a G-pronoun triggering singular agreement. The null subject in the embedded clause, which the predicate *pitkä* ‘tall’

agrees with, is a null pronoun controlled by an implicit arbitrary argument, roughly ‘to anyone’, in the main clause.

(i) Joskus on eduksi että on pitkä. (Laitinen 2006: 211)

sometimes is advantage that is tall-SG

‘Sometimes it’s an advantage to be tall.’

¹² See Laitinen (2006) for discussion of these issues.

¹³ There are some subject contexts where the G-pronoun is excluded. For instance, in contrast with (16b), (ii) is preferably read as ‘if you are a dog’, not as ‘if you have a dog’.

(i) Minulla on koira.

I-ADE is dog

‘I have a dog.’

(ii) Jos on koira, ...

if is-3SG dog

Conceivably the reason is that there are two competing derivations in this case, where the one leading to ‘if you are a dog’ wins, perhaps on account of not requiring oblique case on the subject. The following is another case (ABL = ablative):

(iii) Kallesta tulee kapteeni.

Kalle-ABL comes captain

‘Kalle will become a captain

(iv) Jos tulee kapteeni, ...

if comes captain

Here (iv) cannot be read as ‘if one becomes a Captain’, but only as ‘if a Captain comes’. This may, again, be due to the existence of a competing derivation, leading to the same interpretation as (iii), namely (TRA = translative):

(v) Kalle tulee kapteeniksi.

Kalle comes captain-TRA

‘Kalle will become a captain.’

(vi) Jos tulee kapteeniksi, ...

if comes captain-TRA

‘If one becomes a captain, ...’

If so, this has potentially interesting consequences for the role of ‘transderivational constraints’ or competing derivations in the grammar.

¹⁴ A 1st or 2nd person pronoun can co-occur with the expletive if the pronoun is not in specIP, but in a focus position, either a low focus position as in (i) or a high one (specCP), as in (ii); see Holmberg 2005 and Holmberg & Nikanne 2002 (PCL = particle).

(i) Sitä istun minäkin mukavasti tässä.

EXP sit-1SG me-too comfortably here

I, too, can sit comfortably in this chair.’

(ii) Minähän sitä istun aina tässä tuolissa.

I-PCL EXP sit always this chair-INE

‘Me, I always sit in this chair.’

¹⁵ I will follow the convention of assuming just one sentential functional head between v and C, labelled T. In fact there are several good reasons to assume a series of heads in this domain: see Holmberg & al. 1993, Holmberg 2003. The heads undergo movement/incorporation, though, so their features are (typically) combined into one chain. As far as I have been able to determine, the simplification adopted here is not crucial for the argument, but greatly simplifies the presentation.

¹⁶ Expressions such as (13), repeated and slightly modified in (i), look like exceptions to the EPP.

- (i) Jos/kun ostaa auton Saksassa, ...
if/when buy-3SG car-ACC Germany-INE
'If/when you buy a car in Germany, ...'

This is quite general in conditional and temporal clauses. Typically these clauses are embedded in a main clause with a generic subject (but are optionally topicalized).

- (ii) Sitä on oltava hyvin tarkka, jos ostaa auton Saksassa.
EXP is be-PRC very careful if buys car Germany-INE
'You have to be very careful if you buy a car in Germany.'

This would then be a case of an embedded null subject controlled by a matrix subject. As discussed by Holmberg (2005) and Holmberg, Sheehan & Nayudu (to appear), in this case the null subject must be in specTP. But the phenomenon is more general: In (ii) the embedded clause subject cannot be controlled.

- (iii) Tulli ei tuota ongelmia jos ostaa auton Saksassa.
customs not cause problems if buys car Germany-INE
'Customs don't cause problems if you buy a car in Germany.'

I have no explanation for why conditional and temporal clauses look like exceptions to the EPP in Finnish. It should be pointed out that verb or auxiliary-initial GSCs occur in main clauses, too, as in (iv) and (v), from Laitinen (2006):

- (iv) Täytyy harjata hampaat.
must brush teeth
'One/I/you must brush one's/my/your teeth'

- (v) Ei saa tulla sisään kengät jalassa.
not may come in shoes foot-INE

‘You may not come in with shoes on.’

However, minimal pairs (or triplets) like that in (6)/(19) can easily be multiplied, and clearly represent a productive phenomenon in Finnish, so the importance of the EPP of T in Finnish is hardly in doubt.

¹⁷ The problem in (25b) may be that the indeterminate pronoun object is necessarily information focus, which the subject left in situ is as well. If a sentence cannot have two disjoint information foci this is sufficient to rule out (25b).

¹⁸ Under this theory the binder of the possessive reflexive in a GSC would be the 3SG AgrS.

(i) *Siellä voi pestä auto-nsa.*

there can-3SG wash car-PX3

‘You can wash your car there.’

The theory can then explain why the Finnish passive construction does not license a possessive reflexive: The passive finite verb does not show any agreement, i.e. it does not have AgrS (see Holmberg & al. 1993).

(ii) *Siellä pestään auto (*-nsa).*

there wash-PASS car (PX3)

‘A car is being washed there.’

Within this theory, the Finnish passive would be a radically subjectless construction. See section 11.

¹⁹ They may have past tense (*kannatti*) and conditional mood (*kannattaisi*). The necessary verbs *täytyy* ‘must’ and *pitää* ‘should’ do not occur in non-finite form at all, while *kannattaa* may occur in infinitival form, as in (i).

(i) *Nyt voisi kannattaa ostaa auto.*

now could be-worth buy car

‘It might be worth it now to buy a car.’

Kannattaa also occurs with agreement and a nominative subject with the meaning ‘support’.

This, I assume, is a different verb.

²⁰ If Narrow Syntax operates not with full lexical items but with syntactic feature complexes, along the lines of Distributed Morphology (Halle and Marantz 1993), then ‘spell-out’ means ‘vocabulary insertion’. Normally only one copy, the highest copy, in a chain is spelled out, the other copies remain null. Later (in section 9), a crucial distinction is made between ‘spell-out’ and ‘pronunciation’: A chain can be spelled out and not be pronounced.

²¹ Roberts (2007) claims that in order for incorporation to happen the probe must not have an EPP-feature, since the same goal cannot be a copy of the probe and check its EPP feature. However, if the EPP feature in question can be checked by other categories than the goal, perhaps as a last resort when the goal is not available, as seems to be the case with the EPP of T in Finnish and also in other languages, for example Icelandic (see Holmberg 2000), then an EPP feature is compatible with incorporation.

²² According to Holmberg (Chapter 3), Holmberg and Shehan (Chapter 5), and Holmberg, Nayudu & Sheehan (in press), the pronouns which are controlled are also deficient, having an unvalued D-feature, uD. Even an unvalued D-feature is a feature which T cannot copy, triggering movement to specTP.

²³ Moltmann (2006), in fact, argues that ‘human’ is not the right notion for the G-pronoun *one*, but rather something like ‘conscious being’. This is a complication, if it can be shown that this does not hold true of the grammatical feature [human] in general that it distinguishes conscious from unconscious beings.

²⁴ It is possible that [human] as a feature of pronouns is in fact *person*. Only human-referring 3rd person pronouns would actually be 3rd person, while non-human referring pronouns would be personless.

²⁵ Alternatives may be considered, such as postulating an interpretable feature [generic] as a feature of (a variety of) C, which is passed down from C to T along with other formal features, assuming a relation between C and T as in Chomsky (2008); see text below.

²⁶ A phase is a syntactic substructure which, when derived, is spelled out and interpreted. The phases are vP and CP, and arguably also DP and PP (see Svenonius 2004).

²⁷ Rather than ascribing an inherent ACC feature to active Voice, we might assume that accusative case is the nominal counterpart of the feature ACT, by analogy with NOM being the nominal counterpart of tense.

²⁸ Voice with a Passive feature also does not allow passing of the ϕ - and case-feature of Voice down to *v*, with a similar effect as in the necessive construction: T does not agree with the subject or the object, and the latter is assigned default nominative. Viewing [Necessive] as a Voice feature makes sense in that Passive and Necessive have complementary distribution (the inflection on the passive verb form is a morphological finiteness affix, a realization of the category F, according to Holmberg & al (1993)).

(i) Tämä kirja oste-ta-an heti.

this book-NOM buy-PASS-F at.once

‘This book is bought at once.’

(ii) Tämä kirja pitää ostaa / *oste-ta heti.

this book-NOM should buy-INF/ buy-PASS at.once

‘We should buy this book at once/This book should be bought at once.’

²⁹ See Helasvuo & Laitinen (2006) for certain other cases of null 3rd person definite pronouns.

³⁰ Particularly under Sigurdsson's (2004b) theory control of 1st and 2nd person null pronouns is a 'phase-internal' affair, while control of a 3rd person null pronoun is, at least in some cases, an 'extra-phasal' affair. See Holmberg and Sheehan (Chapter 5). It is not a discourse grammar phenomenon, though, as the antecedent has to be found in a higher clause.

³¹ Finnish, unlike the other partial null-subject languages, also allows control into a finite clause under connectivity in specificational predication, similar to control into non-finite clauses: see Holmberg, Nayudu & Sheehan (to appear) and Holmberg & Sheehan (chapter 3).