Null subjects and null possessors in Finnish

Anders Holmberg
Newcastle University

1. Introduction: partial and consistent pro-drop

Finnish is a partial null subject language. Three properties are characteristic of this class of languages, according to Holmberg (2005, 2010a, 2018), Roberts (2010b), Barbosa (2019). They are (a) first and second person subject drop in finite clauses is unrestricted, occurring anywhere, while third person definite subject pronouns can be null only in embedded clauses if they have an antecedent, typically in the next higher clause; (b) pro-drop of definite pronouns is always optional.

(1) a. (Minä) puhu-n ranskaa.
I speak-1SG French

b. (Sinä) puhu-t ranskaa.
you speak-2SG French

c. Puhuuko Aino italiaa? Ei, mutta *(hän) puhu-u ranskaa.
speaks.Q Aino Italian no, but she speak-3SG French
'Does Aino speak Italian?' 'No, but she speaks French.'

d. Aino on pahoillaan että (hän) puhu -u italiaa niin huonosti.
Aino is sorry that she speaks-3SG Italian so badly

In (1c) the antecedent of the pronoun is in a separate sentence, which does not allow pro-drop, but is in the higher clause in (1d), which does allow pro-drop. The third property which is characteristic of partial null-subject languages, according to Holmberg (2005, 2010a,b), Holmberg, Nayudu and Sheehan 2009), is that they have a null generic third person pronoun.

(2) Täällä saa työtä jos puhuu ranskaa.
here get.PRS.3SG job if speak.PRS.3SG French
'One can get a job here if one speaks French.'

This is an inclusive generic pronoun, so called, the reference including the speaker, the addressee and any other people. The inclusive generic pronoun in (2) has no overt counterpart. An obvious alternative analysis is that there is no pronoun in (2) and that the generic interpretation is somehow a consequence of this. There is wide consensus, though, among linguists who have investigated the construction that it has a syntactically active 3rd person subject (Hakulinen & Karttunen 1973, Laitinen 1995, 2006, Vainikka 1989, Vainikka & Levy 1999, Helasvuo & Vilkuna 2008, Holmberg 2010b). A piece of evidence often cited, and which will be important in what follows, is that the null generic subject can bind and thereby license the null possessor constructed with a possessive suffix; see (3a) ('3' stands for third person; the possessive suffix marks the person and number of the possessor, but number is neutralized in the third person).

(3) a. Täällä voi pestä auto-nsa.
here can.PRS.3SG wash.INF car -3
'One can wash one's car here.'

b. Aino voi pestä auto-nsa.
Aino can.PRS.3SG wash.INF car -3
'Aino can wash her car.'

c. *Auto-nsa on tallissa.
car -3 is in.garage

I will assume for now, returning to the issue below, that the object NP/DP in (3a,b,c) has very roughly the structure [$_{DP}$ *pro* auto-nsa], where the possessive suffix marks agreement with *pro* (Nikanne 1989, Brattico & Huhmarniemi 2015). The null possessor needs an antecedent, which it has in (3b), but not in (3c). The fact that (3a) is grammatical can be understood if it has an antecedent binding the null possessor, namely, a null generic subject pronoun. See Holmberg (2010b) for a summary of other arguments that the inclusive generic interpretation is due to a null pronoun with all the properties of an 'ordinary pronoun' except that it is always null.[1]

[1] Free pro-drop of first and second person pronouns as in (1a,b) is characteristic of Standard Finnish, used in more or less formal occasions and when writing, and is prescribed in schools and other educational contexts. In spoken, colloquial Finnish it is used more sporadically (see Holmberg, to appear, for a comment on the

Languages apart from Finnish which belong to the class of partial null-subject languages include Brazilian Portuguese, Hebrew, Marathi and (more controversially) Russian (Barbosa 2019, Bizzarri 2015). They differ from so called consistent null-subject languages, like Arabic, Greek, Italian, and European Portuguese. In those, definite subject pronouns in finite clauses, main or embedded, can be null regardless of person (although there are restrictions on 3rd person null pronouns in these languages, too; Frascarelli 2007). If they can be null they typically have to be, unless they are emphatic. Generic subject pronouns, on the other hand, cannot be null, but are morphologically realized in a variety of ways, depending on the language (see Holmberg 2010a, Barbosa 2019).

Standard Finnish has a null possessor in noun phrases which exhibits a similar pattern to null subjects in clauses.[2] It has a possessive suffix on the noun, combined with a prenominal genitive pronoun which can be freely dropped in the first and second person, but can be dropped in the third person only if it has a local enough, c-commanding antecedent.[3]

(3) a. (Minun) hattu-ni on hyllyllä.
my hat -1SG is on.rack
'My hat is on the rack.'

b. (Sinun) hattu-si on hyllyllä.
your hat -2SG is on.rack
'Your hat is on the rack.'

c. Onko Aino täällä? *(Hänen) hattu-nsa on hyllyllä.
is.Q Aino here her hat-3 is on.rack
'Is Aino here? Her hat is on the rack.'

d. Aino otti (*hänen) hattu-nsa hyllyltä.
Aino took her hat -3 from.rack
'Aino took her hat from the rack.'

sociolinguistic status of 1st and 2nd person subject drop). The generic null subject, by contrast, is used in colloquial as well as Standard Finnish.

[2] In the following *possessor* refers to the argument of a noun which typically, though by no means always, bears the role of possessor. If it is a relational noun, the argument may bear almost any role.

[3] The possessive suffix is set off by a hyphen for ease of exposition; in Finnish spelling there is no hyphen.

There are certain differences, though, between subject pro-drop and possessor pro-drop in Finnish. In this paper I focus on one difference: the absence of a generic reading of the null possessive pronoun.

(4) a. *Lapse -nsa tuotta-vat aina huolia.
children 3 bring -3PL always worries
Intended: 'One's children are always a source of worry.'

b. *Sänky-nsä on kodin tärkein huonekalu.
bed -3 is home.GEN most.important piece.of.furniture
Intended: One's bed is the most important piece of furniture at home.'

There is no obvious explanation why (4a,b) could not be perfectly well formed, as generic counterparts of (5a,b) employing the null generic pronoun.

(5) a. Hänen lapsensa tuottavat aina huolia.
'His children are always a source of worry.'

b. (Meidän) sänkymme on kodin tärkein huonekalu.
'Our bed is the most important piece of furniture at home.'

What I will argue is that a null inclusive generic possessor is ruled out in Finnish for the same reason that a null inclusive generic subject is ruled out in consistent subject-drop languages: They have a definite-referential feature as part of their subject-agreement features and possessor-agreement features, respectively. Among other theoretical consequences, it has consequences for the debate about the status of the possessive suffix (see Brattico & Huhmarniemi 2015 for a summary of the debate). The claim is that the set of features realized as a suffix, in cases where the pronoun is null, is the head of the possessor chain, bound by, and receiving a referential index from an antecedent.

2. Partial and consistent subject-drop

Holmberg (2005) proposes that the crucial difference between consistent and partial subject drop languages/constructions is the following:[4] In consistent subject-drop languages/constructions the functional head T, encoding subject case and agreement in addition to tense, has a feature D, encoding definiteness.[5] The effect is that a null 3rd person pronoun agreeing with T will necessarily be interpreted as definite, ruling out the inclusive generic interpretation.

In the partial subject-drop languages the corresponding functional head T does not have a definite-feature. The effect is that a null 3rd person pronoun will not be interpreted as definite, unless it can find an antecedent binding it in a higher clause, as is the case in (3d). This formal description is slightly revised in Holmberg (2010a), in the light of Grimshaw & Samek-Lodovici (1998), Frascarelli (2007), Cole (2010): The consistent subject-drop languages are taken to have an unvalued D-feature [uD] in T which gets its value, a referential index, from an abstract TOPIC head in the C-domain, linked with a Topic in the context in the case of 3rd person subjects, and, in the case of 1st and 2nd person subjects, from an abstract representation of the speaker and the addressee in the C-domain, following Sigurðsson (2004, 2014), Giorgi (2009), Collins and Postal (2012) Bianchi & Frascarelli (2010). The D-feature needs a referential index, restricting its reference, ruling out the inclusive generic interpretation. The partial subject-drop languages lack the [uD]-feature. Consider the structural representation (7) of the Italian sentence (6).

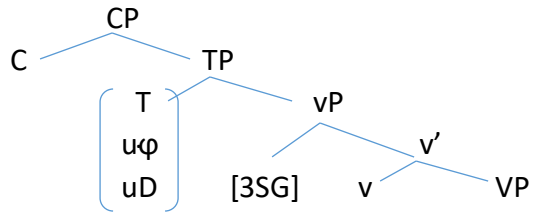
[4] I will employ the notions subject-drop and Possessor-drop throughout the paper, rather than the more general pro-drop, because I will not touch on object-drop (see Roberts 2010a for discussion of object drop within the theory assumed here). There are languages that have pro-drop of subjects and objects with no involvement of agreement, so called Discourse Pro-drop languages, which I have nothing to say about here; see Holmberg (2005)

[5] Throughout this paper I will assume that the functional head T encoding tense also encodes agreement, in all the languages discussed including Finnish. This is for ease of exposition only. There are extremely good reasons to distinguish tense from subject agreement in Finnish (Holmberg et al. (1993), Holmberg & Nikanne 2002). The simplification should not affect the arguments presented here.

(6) Parla italiano. (Italian)

'He speaks Italian.'

(7)



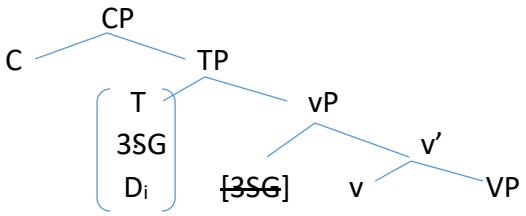
Agreement with a null subject works as follows in consistent subject-drop languages, following Roberts (2010a,b, Holmberg (2010a,b): T has a set of unvalued φ-features looking for a constituent with matching but valued features, whose values it can copy. The subject in the specifier of vP (in the case of transitive verbs) has the required features. The subject pronoun which is spelled out as null is a 'deficient pronoun', consisting of just φ-features (person, number, in some languages gender). In particular, it lacks D. This has the consequence that once the φ-features of T have been valued by the subject pronoun, this pronoun is formally a copy of T, as its features are a proper subset of the features of T. In Roberts's (2010a,b) terms the pronoun is *incorporated* in T. As a copy, the pronoun in NP will be 'deleted', i.e. it will not be pronounced, by the same mechanism that deletes copies derived by movement. The pronoun and T form a chain, derived not by movement but by agreement (more precisely, the operation Agree in Chomsky 2001).

If the pronoun has a focus feature or other feature realized by stress, it will still assign values to T's φ-features, but by virtue of its focus feature it will not be a copy of T, hence has to be pronounced. If the subject is a lexical DP, it will obviously not be a copy of T, and has to be pronounced. The analysis of subject-drop found in consistent pro-drop languages as copy-deletion accounts for why it is obligatory unless the pronoun has additional features; copy-deletion, otherwise seen in connection with movement, is typically obligatory. A lexical subject or spelled out strong pronoun is often realized in preverbal position, that is, given that the finite verb moves to T (Holmberg et al. 1993), in pre-T-position.

Once Agree has taken place and the [uD] of T has received its referential index (by the operations described by Frascarelli 2007, 2018), the distribution of features in the sentence (6) is as in (8). The features of T are morphologically realized as a suffix on the

finite verb. The subject pronoun is deleted by copy-deletion, i.e. is not pronounced, indicated by strikethrough.

(8)



This all can be seen as a version of the idea that the 'agreement is the subject', in null subject sentences in this class of languages (see Holmberg 2005 for discussion). It heads the subject chain and has the referential index. The tail of the subject chain, the subject pronoun, consisting of a set of φ-features only, is still an essential part of the subject chain, as receiver of the theta-role, commensurate with its syntactic position in the predicate.

In partial subject-drop languages, including Finnish, where T lacks the [uD]-feature this mechanism can only yield a D-less chain, which can only be interpreted as inclusive generic. The definite null pronouns in these languages are differently derived: The subject pronoun itself has a [uD]-feature and moves to spec-TP looking for an antecedent to provide it with a referential index. This would be the case in (1d), for example, repeated here as (9):

(9) Aino on pahoillaan että (hän) puhu -u italiaa niin huonosti.
Aino is sorry that she speaks-3SG Italian so badly

The null pronoun in this case is not deleted by virtue of being a copy. It is a bound pronoun, which helps to explain why it is optional in a way that null subjects in consistent subject-drop languages are not.

3. Possessor agreement

As mentioned, Standard Finnish has a null possessor construction. Some of its core properties are exemplified in (10). The possessor can be overt or null. In the first and second person (exemplified by 1SG only) it is optionally null. A 3rd person possessor pronoun can be overt or null. If it is null (written as *pro*) it has to have a local antecedent, as shown by (10b,c,d). In this, possessor drop looks strikingly similar to subject-drop in Finnish.

(10) a. (Minun) hattu-ni on hyllyllä.
my hat -1SG is on.rack
'My hat is on the rack.'

b. Hänen hattu-nsa on hyllyllä.
his/her hat -3 is on.rack

c. Aino$_i$ otti [*pro*$_i$ hattu-nsa hyllyltä].
Aino took hat -3 from.rack
'Aino took her hat from the rack.'

d. Aino$_i$ sanoi että hänen$_i$/*pro$_i$ hattu-nsa on hyllyllä.
Aino said that her hat-3SG is on.rack
'Aino said that her hat was on the rack.'

Comparison of (10d) and (9) shows that the antecedent needs to be more local in the case of the null possessor than in the case of the null subject; it has to be within the minimal CP containing the possessor. This has been taken as evidence that the possessor *pro* is an anaphor, in the sense of the classical Binding Theory, which the suffix agrees with (Nikanne 1989, Steenbergen 1991). Alternatively it has been taken as evidence that the possessive suffix itself is the anaphor (Trosterud 1993) with no need for postulating a null possessor. Various mixed models have been presented as well; see Brattico & Huhmarniemi (2015) for a review of the debate. Brattico & Huhmarniemi (2015) provide some good reasons to think that the construction, also when there is no spelled out possessor, does have a possessor pronoun, which the possessive suffix agrees with. In particular, they show that the antecedent of a null possessor need not always be within the minimal CP containing the possessor. That is to say, the null possessor sometimes behaves like a pronoun, rather than an anaphor.

As mentioned, there is no null inclusive generic possessor. Finite clauses in Finnish do not have a null 3rd person definite pronoun, except if it has a c-commanding antecedent outside the clause, but has a null inclusive generic pronoun. Noun phrases also do not have a null 3rd person definite pronoun unless it has a c-commanding antecedent outside the noun phrase. But neither do they have a null inclusive generic pronoun.

(11) a. *Lapse -nsa tuotta-vat aina huolia.
children 3 bring -3PL always worries
Intended: 'One's children are always a source of worry.'

b. *Sänky-nsä on kodin tärkein huonekalu.
bed -3 is home.GEN most.important piece.of.furniture
Intended: One's bed is the most important piece of furniture at home.'

The intended meaning can be conveyed as in (12a,b):

(12) a. Omat lapset tuottavat aina huolia.
own children bring always worries
'One's children are always a source of worry.'

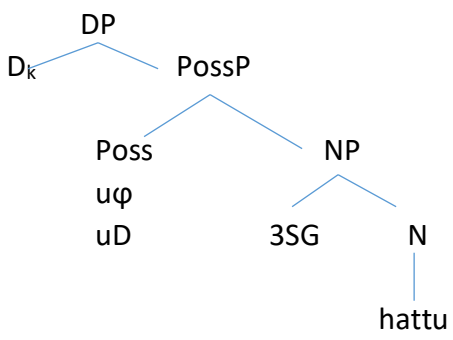
b. Oma sänky on kodin tärkein huonekalu.
own bed is home.GEN most.important piece.of.furniture
'One's bed is the most important piece of furniture at home.'

There is no obvious reason why there could not be a null generic pronoun here, just as well as in (2). It would be a null generic version of (10b). Given that the inclusive generic interpretation is an option for a null subject in partial null-subject languages, why is it not an option for the null possessor in (11a,b)?

4. The structure of noun phrases with a possessor pronoun and suffix

The following is a proposal. The structure of the noun phrase with a 3rd person null possessor and a possessive suffix is

(13)



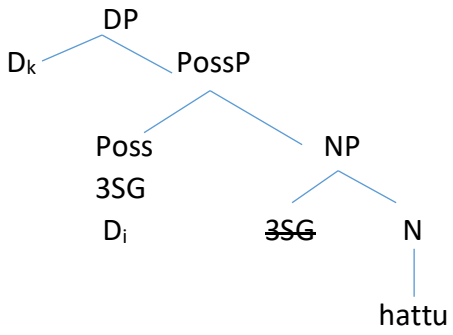
The possessor argument is a constituent of the NP headed by the noun *hattu* 'hat'. The possessor argument may consist of just a set of φ-features, as a deficient pronoun, in the sense of Roberts (2010a), or may have more pronominal features, including [D], or may be a lexical DP. The NP is merged with a functional head, here called Poss, which encodes markers of the relation between the noun and its argument: agreement and case. The head is made up of the φ-features person and number, and the feature which assigns Genitive/Possessive case to the possessor (which we use as label for the category), and, importantly, the feature [uD], same as found in T in the consistent subject-drop languages. These features are eventually realized as a suffix on the noun. PossP is merged with D, the head of the argument noun phrase, encoding the referential potential of the noun phrase, formally a referential index. To distinguish D, the head of the entire noun phrase, from the D-feature of Poss or the possessor, I call the head of the noun phrase D_k, where 'k' is the referential index.[6]

The pronoun comes in two varieties: one made up of just the φ-features, as in (13), the other made up of φ-features, an unvalued Case feature, and a D-feature. Both varieties will enter an Agree-relation with Poss, in Chomsky's (2001) sense, where Poss copies the φ-feature values of the pronoun. In the case where the pronoun has D and Case, it receives Genitive value in return for the φ-feature values (this is Chomsky's 2001 operation Agree). As a result, the deficient, D and Case-less pronoun variety will be a proper subset of the features of Poss, that is it will be a copy of Poss, and as such will be deleted, that is it will be null, not pronounced. The pronoun with Case and D, in addition to φ-features will be pronounced.

The [uD] feature of Poss needs a value, that is a referential index, which it (typically) gets from a c-commanding, local antecedent DP. The distribution of features in the DP with a null possessor after the valuation is completed, including a referential index for the [uD]-feature of Poss, is (14):

[6] It is by no means obvious that (Standard) Finnish, a language without articles, has an abstract D heading nominal arguments. See Bošković 2009, 2012) for a recent contribution to the debate whether all languages have the DPs. Gröndahl (2015) shows that most of the criteria that Bošković proposes to distinguish DP-languages from NP-languages characterise Finnish as a DP-language.

(14)



Why does this not allow the inclusive generic reading in (11a,b)? For the same reason that the consistent subject-drop languages do not allow a generic reading of their null subject, in finite clauses: The [uD] feature of Poss calls for an antecedent to provide it with a referential index. This excludes an inclusive generic interpretation. I assume the formal characterization of this interpretation articulated in Holmberg & Phimsawat (2017), according to which the inclusive generic interpretation is the result of absence of any referential restriction, to yield the most general interpretation there can be, namely, inclusive generic, including as it does the speaker, the addressee, and any other people, within a specified domain (place or time). An alternative, more commonly assumed, is that the generic interpretation is due to an abstract generic operator in the local C-domain (Moltmann 2006). If [uD] strictly requires a referential index restricting its reference to an entity, singular or plural, this, too, may be construed as excluding generic reference.

A possible objection is that the [uD]-feature of Poss can, apparently, be bound by an inclusive generic pronoun, and receive generic interpretation that way, as in (3a), repeated here as (15):

(15) Täällä voi pestä auto-nsa.
here can.3SG wash.INF car -3SG
'One can wash one's car here.'

The structure would be, very roughly (16); there is a generic pronoun in the spec of vP, which appears to bind the postulated [uD] feature in the object DP.

(16) [$_{TP}$ täällä voi [$_{vP}$ *pro* pestä+v … [$_{DP}$ [$_{PossP}$ […uD…] [$_{NP}$ … auto]]]]]

A way to understand this, within the theory of inclusive genericity in Holmberg & Phimsawat (2017), is that the [uD] feature just wants an antecedent, definite or generic. In the absence of an antecedent, the unvalued D-feature makes the derivation crash (in Chomsky's 2001 sense), as it does not allow for the default, referentially unrestricted, inclusive generic interpretation of the possessor.

A similar situation holds in at least some languages which show the signature of consistent subject-drop languages in main causes, with strictly overt inclusive generic pronouns, but can have a bound inclusive generic null pronoun in embedded clauses. Hungarian would be a case in point. The following sentence, from Dalmi (2014), exemplifies how the main clause has, necessarily, an overt generic subject, but binds a null generic subject in the embedded clause (PFX = Prefix). [7]

(17) Az ember nem készül-0 arra, hogy meg-hal-0 pro . (Hungarian)
the man not prepare-PRS.3SG it that PFX-die-PRS.3SG (the man)
'One is not prepared (for it) that one would die.'

There is still a distinction to be made between languages/constructions where a null pronoun can have inclusive generic interpretation, either by default (Holmberg & Phimsawat 2018) or by virtue of a generic operator in the local C-domain, and those where it cannot, although it can have it by virtue of binding.

As discussed by Holmberg (2020), in the derivation of the Phonological Form, PF, Poss moves down to to N. That this is the direction of the morphological merger shows when an adjective or numeral is added: it will precede the noun with the possessive suffix:

(18) Aino otti [uuden hattunsa]/*[hattunsa uuden] hyllyltä.
Marí took new hat.3SG hat.3S new from.the.rack
'Aino took her new hat from the rack.'

Since the attributive adjective is, uncontroversially, adjoined to NP, movement of the noun to Poss would yield the ungrammatical order noun>adjective.

[7] Dalmi (2014) does not agree with the characterization of Hungarian as a consistent subject-drop language, though.

As mentioned, there is a long-standing debate whether the Finnish possessive suffix is itself the anaphor which requires an antecedent, or whether there is a null possessor pronoun which is the anaphor, and which the possessive suffix merely agrees with (see Brattico & Huhmarniemi 2015 for a useful summary of the debate). Under the theory sketched here the possessive suffix is the anaphor in the sense that Poss heads the chain formed by Agree with the possessor pronoun. Poss receives the referential index from outside the DP, while the pronoun receives the theta-role assigned by the noun. Poss is eventually spelled out as a suffix on the noun.

How come the antecedent of the [uD]-feature has to be bound within the minimal CP containing it, as shown by a comparison of (10c,d), repeated here as(19a,b)? This is not the case with null subjects in consistent subject-drop languages like Italian, Greek, or Arabic.

(19) a. Aino$_i$ pani [*pro*$_i$ hattunsa] hyllylle.
'Aino put her hat on the rack.'

b. *Aino$_i$ luuli että [*pro* hattunsa] oli hyllyllä.
Intended: 'Aino thought that her hat was on the rack.'

This could indicate that Poss (or *pro* in construction with Poss) has an additional feature which makes it an anaphor in the Binding Theory sense (if such a feature exists). Alternatively it is an effect of the fact that Poss (and *pro*) is embedded inside a DP, and is thereby less easily accessible to an antecedent outside the minimal CP containing it. It would be 'less easily accessible' rather than 'inaccessible', as Brattico & Huhmarniemi (2015) includes a variety of examples where Poss/pro can have an antecedent outside the minimal CP, under certain conditions.

5. Residual issues: Lexical possessors and the 3rd person restriction

When the possessor is a lexical DP, a possessive suffix is excluded.

(20) Ainon hattu (*-nsa) on hyllyllä.
Aino.GEN hat 3SG is on.rack
'Aino's hat is on the rack.'

Holmberg (2020) argues that the reason is that the lexical DP is assigned Genitive case (GEN) by the noun, an inherent case assigned along with the theta-role. The case has the effect of preventing agreement (φ-feature value copying) between Poss and the lexical DP, in the same way that oblique case on the subject prevents agreement with T. Formally, the case would be a head taking the possessor DP as complement forming a phrasal category [$_{KP}$ K DP], which prevents feature value copying between Poss and the possessor DP.

Since the possessor pronoun, too, has Genitive case but does co-occur with the possessive suffix, this case must be assigned in a different manner. Above it was proposed that the pronominal case is assigned by Poss as part of Agree: the uφ-features are assigned values by the pronoun, which in return is assigned Genitive (Possessive) Case, as envisaged in Chomsky (2001) for the relation between the subject and T. This would be the case when the pronoun is a DP, not just a set of φ-features which get incorporated (in the sense of Roberts 2010a) in Poss. As discussed in Holmberg (2020), following Baker (1988), Case and incorporation are two alternative ways of encoding the relation between a head and a dependent.

It was noted that subject drop and possessor drop in Finnish exhibit a parallel pattern, in that 1st and 2nd person pronouns can be dropped freely, while 3rd person pronoun drop is restricted, assumed in the literature to be an element of the partial pro-drop signature. But we have now reached the conclusion that possessor drop in Finnish has a crucial property in common with consistent subject-drop in that the functional head corresponding to T in sentences, that is Poss, has the referential-definite feature [uD], one effect of which is that a generic null argument is excluded in noun phrases in Finnish, as it is in sentences in consistent subject-drop languages.

The parallel between sentences and noun phrases in Finnish is, instead, an effect of the fact that 3rd person pro-drop is more restricted than 1st and 2nd person pro-drop in any language. 1st and 2nd person null pronouns always have a local antecedent in the (abstract) shape of the speaker and addressee features ever present in the C-domain of finite clauses, according to Sigurðsson (2004, 2014), Giorgi (2009), Bianchi & Frascarelli (2010). 3rd person null pronouns have to rely on other means. According to Frascarelli (2007, 2018) they rely on an abstract Topic feature in the C-domain linked with a Topic in the discourse. Frascarelli (2018) discusses some parametric variation regulating this linkage, taken to explain differences between consistent and partial subject-drop, with Italian and Finnish as the

cases studied. She rejects the idea that there would be a difference between Italian and Finnish as regards the postulated [uD]-feature of T, arguing that both languages have this feature. Our comparison of clauses and noun phrases as regards, in particular, the inclusive generic pronoun indicates that there are grounds for maintaining that distinction, not as a distinction specifically between languages but between phrase types.

6. Conclusions

As a partial subject-drop language Finnish has a null inclusive generic subject pronoun. Following Holmberg (2010a,b) and Roberts (2010a,b) it is derived by incorporation in T, not effected by movement but by Agree. Consistent subject-drop languages cannot do this, as T in those languages has a referential-definite feature looking for a referentially restricted antecedent, or perhaps more accurately, any antecedent, therefore excluding the inclusive generic interpretation assigned as a default (Holmberg & Phimsawat 2017). Noun phrases with a possessor pronoun and a possessive suffix in Standard Finnish have the same feature as part of the make-up of the head encoding the formal markers of the relation between the head noun and the possessor argument, the head labelled Poss. This excludes an inclusive generic interpretation of the null possessor in Finnish. This means that the partial vs. consistent pro-drop distinction is not parametric in the sense that a language is one or the other, but is relativized to categories, being dependent on the presence or absence of a feature which may show up in sentences or noun phrases.

References

Baker, Mark. 1988. *Incorporation: a theory of grammatical function changing*. Chicago University Press.

Barbosa, Pilar. 1919. pro as a minimal NP. Toward a unified approach to pro-drop. *Linguistic Inquiry* 50, 3: 487-526.

Bianchi, Valentina and Mara Frascarelli. 2010. Is Topic a root phenomenon? Iberia 2.1, 43-88.

Bizzarri, Camilla. 2015. Russian as a partial pro-drop language: Data and analysis from a new study. *Annali di Ca' Foscari Serie occidentale* 49: 235-262.

Bošković, Željko. 2009. More on the NP-DP analysis of article-less languages. *Studia Linguistica* 63. 187 – 203.

Bošković, Željko. 2012. On NPs and clauses. In *Discourse and grammar: From sentence types to lexical categories,* ed by G. Grewendorf and T. E. Zimmermann, 179-242.]

.Brattico, Pauli. 2012. Long distance case-assignment in Finnish. *Studia Linguistica* 66: 245-285.

Brattico, Pauli & Saara Huhmarniemi. The Finnish possessive suffix. 2016. *Finno-Ugric Languages and Linguistics* Vol. 4, 1-2, 2-41. http://full.btk.ppke.hu

Chomsky, Noam. *Lectures on government and binding*. Dordrecht: Foris.

Chomsky, N. 2001. Derivation by phase. In M. Kenstowicz (ed.). *Ken Hale: a life in language*. Cambridge, MA.: MIT Press, 1-53.

Cole, Melvyn. 2010. Thematic null subjects and accessibility. *Studia Linguistica* 64: 271-320.

Collins, Chris and Paul Postal. 2012. *Imposters: A Study of Pronominal Agreement*. Cambridge MA: MIT Press.

Dalmi, Gréte. 2014. All-in-one: Generic inclusive null subjects in Hungarian. *Proceedings of the 31st West Coast Conference on Formal Linguistics*, ed. Robert E. Santana-LaBarge, 115-123. Somerville, MA: Cascadilla Proceedings Project.

Frascarelli, Mara (2007) Subjects, Topics and the interpretation of referential pro. An interface approach to the linking of (null) pronouns. *Natural Language and Linguistic Theory*, 25, 691-734.

Frascarelli, Mara. 2018. The interpretation of pro in consistent and partial null-subject languages in a comparative interface analysis. In Federica Cognola and Jan Casalicchio (eds.) *Null subjects in generative grammar*. Oxford University Press.

Giorgi, Alessandra. 2009. *About the speaker: Towards a syntax of indexicality*. Oxford University Press.

Grimshaw, J. and V. Samek-Lodovici. 1998. Optimal subjects and subject universals. In P. Barbosa, D. Fox, P. Hagstrom, M. McGinnis and D. Pesetsky (eds.) *Optimality and competition in syntax*. Cambridge, MA: MIT Press.

Gröndahl, Tommi. 2015. *Määräisyys funktionaalisena pääsanana suomen kielen nominilausekkeessa* [Definiteness as a functional head in the Finnish noun phrase]. MA thesis, University of Helsinki.

Helasvuo, Marja-Liisa & Maria Vilkuna. 2008. Impersonal is personal: Finnish perspectives. *Transactions of the Philological Society* 106, 2: 216-245.

Holmberg, Anders. 2005. Is there a little pro? Evidence from Finnish. *Linguistic Inquiry* 36, 533-564.

Holmberg, Anders. 2010a. Null subject parameters. In T. Biberauer, A. Holmberg, I. Roberts, I. and M. Sheehan, M. *Parametric variation: Null subjects in Minimalist theory*,

Holmberg, Anders. 2010b. The null generic subject pronoun in Finnish: A case of incorporation in T. In T. Biberauer, A. Holmberg, I. Roberts, I. and M. Sheehan, M. *Parametric variation: Null subjects in Minimalist theory*,

Holmberg, Anders. 2020. Case and agreement in possessive noun phrases in mainly English, Swedish, and Finnish. In András Bárány, Theresa Biberauer, Jamie Douglas & Sten Vikner (eds.) *Syntactic architecture and its consequences*, vol. 2: *Inside syntax*. Oxford University Press.

Holmberg, Anders. To appear. Null subjects in Finnish and the typology of pro-drop. To appear in Tamm, Anne & Vainikka, Anne (eds.) *Uralic Syntax.* Oxford University Press.

Holmberg, Anders, Aarti Nayudu and Michelle Sheehan.2009. Three partial null-subject languages: a comparison of Brazilian Portuguese, Finnish, and Marathi. *Studia Linguistica* 63: 59-97

Holmberg, Anders, Urpo Nikanne, Irmeli Oraviita, Hannu Reime and Trond Trosterud. 1993. INFL and the structure of the finite clause in Finnish. In A. Holmberg and u. Nikanne (eds.) *Case and other functional categories in Finnish syntax*, 177-206. Berlin: Mouton de Gruyter.

Holmberg, Anders and Urpo Nikanne. 2002. Expletives, subjects and topics in Finnish. P. Svenonius (ed.) *Subjects, expletives, and the EPP*, 71-106. Oxford University Press.

Holmberg, Anders and On-Usa Phimsawat. 2017. Truly minimal pronouns. *Diadorim*, Revista 19 − Volume Especial 2017
https://revistas.ufrj.br/index.php/diadorim/article/view/13512

Moltmann, F. 2006. Generic one, arbitrary PRO, and the first person. *Natural Language Semantics* 14: 257-81.

Nikanne, Urpo. 1989. Infinitiivien morfosyntaksia. Paper presented at the Linguistics Conference in Jyväskylä, 1989.

Roberts, Ian. 2010a. *Agreement and head movement. Clitics, incorporation and defective goals*. Cambridge: MIT Press.

Roberts, Ian. 2010. A deletion analysis of null subjects. In T. Biberauer, A. Holmberg, I. Roberts, I. and M. Sheehan, M. *Parametric variation: Null subjects in Minimalist theory*, 58-87.

Sigurðsson, Halldór Ármann. 2004b. The syntax of Person, Tense, and speech features. *Italian Journal of Linguistics* 16:219–251.

Sigurðsson, H. A. (2014). Context-linked grammar. *Language Sciences* 46, 175-188.

Trosterud, Trond. 1993. Anaphors and binding domains in Finnish. In In A. Holmberg and u. Nikanne (eds.) *Case and other functional categories in Finnish syntax*, 225-243. Berlin: Mouton de Gruyter.

van Steenbergen, Marlies. 1991. Long-distance binding in Finnish. In J. Koster & E. J. Reuland (eds.). *Long-distance anaphors*. 231–244. Cambridge: Cambridge University Press.