Pronominal Possessors and Feature Uniqueness

Carmen Dobrovie-Sorin, LLF/CNRS & Université Paris VII
Ion Giurgea, the 'Iorgu Iordan - Al. Rosetti' Institute of
Linguistics of the Romanian Academy

This article explains the correlation between agreeing and non-agreeing forms of pronominal possessors and their person features in Romanian: first and second person pronouns agree, whereas third person pronouns are non-agreeing forms marked with genitive Case. We show that the distribution of agreeing and non-agreeing pronominal forms follows from a constraint of Feature Uniqueness, which prevents a pronominal root from merging with more than one set of inflectional features (to be distinguished from lexical features, which belong to the root). The analysis is shown to extend to other languages that have the same alternation, as well as to languages that have generalized agreeing pronominal possessors to all persons. We also discuss the consequences of the phenomenon of agreeing possessors for the theory of case, proposing that ϕ-feature agreement should be recognized as a mechanism for formal licensing of DPs, besides case assignment.
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1. Introduction

The main aim of this article is to explain an intriguing alternation between agreeing and genitive-marked pronominal possessors in Romanian[1] :

(1) a.   băieţii   mei/   tăi/   noştri/ voştri
             boys-the my.MPL/ your$_{sg}$.MPL/ our.MPL/ your$_{pl}$.MPL
     b.   fetele   mele/   tale/   noastre/ voastre
             girls-the my.FPL/ your$_{sg}$.FPL/ our.FPL/ your$_{pl}$.FPL
(2) a.   băieţii   ei/   lui/   lor
             boys-the she.GEN/he.GEN/they.GEN
     b.   fetele   ei/   lui/   lor
             girls-the she.GEN/he.GEN/they.GEN

Because they agree with the head N (expressing the Possessee), 1st and 2nd pronominal possessors are called 'possessive adjectives' in traditional grammars. But contrary to what this label suggests, agreeing pronominal possessors are not adjectives, because they exhibit the referential properties characteristic of D(eterminer)P(hrase)s (they can bind reflexives, unlike thematic adjectives and sometimes allow secondary predicates and appositive relatives). They are special only in that, in addition to their inherent features (corresponding to the Possessor) they carry inherited ϕ-features, due to agreement with the head N (the Possessee).

Here, we will use the label 'pronominal possessor' for both of the two types of forms illustrated in (1)-(2), and we will distinguish between them by talking about agreeing versus genitive-marked pronominal possessors.

Over and above the alternation between agreement-marking and Case-marking, the data in (1) are theoretically important in that they show that pronouns expressing the Possessor can agree with the head noun (the Possessee). Such agreeing pronominal forms are unexpected : on a par with nominal projections, pronouns have referential indices, and as such they have inherent ϕ-features (pre-specified values for person, number, and gender), which could prevent them from exhibiting uninterpretable f-features inherited from the head noun. Indeed, the complementary distribution between inherent and inherited ϕ-features seems to be

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[1]The same alternation can be found in many other Indo-European languages, e.g., Albanian, Latin, Slavic languages, Gothic and Scandinavian languages. See section 4.1.

general crosslinguistically for the main lexical categories: verbs and adjectives have only inherited φ-features, whereas nouns and pronouns have inherent φ-features and in general do not have inherited φ-features. Despite their empirical and theoretical import, and despite their widespread existence in Indo-European languages, agreeing pronouns have not yet been theoretically investigated, presumably because they have been protected from the attention of theoreticians by their being classified as possessive adjectives in traditional grammars: since adjectives normally agree, nothing interesting seemed to be in need of investigation.

Agreeing possessors indicate that one and the same element can carry two distinct sets of features, one corresponding to the Possessor and the other one to the Possessee. The main aim of this article is to determine the nature of those two sets of features. We will first show that Pollard & Sag's (1988, 1994) distinction between Index Features and Concord Features, used by Zlatić (2000) in her account of Slavic agreeing denominal possessors is too powerful: it overgenerates, and in particular cannot account for the paradigm in (1)-(2). These examples show that the choice between agreeing and non-agreeing forms depends on the person feature of pronominal possessors: $1^{st}/2^{nd}$ person pronouns exhibit agreeing forms, whereas 3rd person pronouns do not agree with the head N and instead are marked with morphological genitive Case.[2] What we need then is to propose an analysis of the difference between $1^{st}/2^{nd}$ versus 3rd person pronouns that can explain the contrast shown in (1)-(2). We will argue that the crucial difference is the location of Number features (rather than their absence or presence) on either the pronominal root or on an inflectional morpheme attached to the root.

A crucial ingredient of our proposal is thus the distinction between *inflectional* features, which are realized as a distinct morpheme, and *lexical* features, which are marked on the root itself. Based on this distinction, we will propose a constraint of Feature Uniqueness, which prevents a pronominal root from merging with more than one set of inflectional features. Hence the impossibility of agreeing forms for 3rd person Possessors. Agreeing Possessors are allowed for 1st and 2nd person pronouns, because their inherent Number features are lexical, and as such they may co-occur with Number and Gender inflectional features that are valued by agreement with the Possessee. In sum, we will explain the *(im)possibility* of agreeing forms for certain pronominal possessors as a consequence of their morphosyntactic make-up.

A full account of the data in (1)-(2) also raises questions regarding Case: (i) why is it that the same grammatical function can be realized either by agreeing or by genitive-marked forms? (ii) why is it that agreeing forms are obligatorily chosen whenever they are possible, to the detriment of genitive-marked forms? These issues will be examined only briefly, since (morphological and abstract) Case and the competition between Case-marking and φ-marking are out of the main goal of this paper, which is the elucidation of the morphological constraints on the possibility of agreeing (pronominal) possessors.

The paper is organized as follows. In section 2 we present the syntax of agreeing pronominal possessors in Romanian, showing that it is identical with that of genitive-marked personal pronouns and very similar to that of non-pronominal genitives. In section 3 we explain the correlation between the availability of agreeing forms and the person feature of pronouns. We first discuss two possible accounts, showing why they are insufficient (sections 3.1-3.2), then we introduce the empirical evidence in favor of our account, which comes from the morphological decomposition of pronouns (section 3.3) and we explain how a constraint of Feature Uniqueness, together with our decomposition of pronouns, can account for the paradigm in (1)-(2) (section 3.4). In section 4 we show that the analysis proposed for Romanian extends (i) to other Indo-European languages that show the alternation illustrated in (1)-(2) for Romanian and even (ii) to languages that have generalized agreement to all

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[2] Third person pronouns that are based on a reflexive root pattern with 1st / 2nd pronouns (see section 3.4 below).

pronominal possessors/have agreeing pronominal possessors even for 3rd person pronouns (see § 4.1 and § 4.2). In section 4.3 we discuss Slavic nominal agreeing possessors, and in 4.4. we compare pronominal and nominal agreement. Section 5 proposes some suggestions for a more general principle which may imply Feature Uniqueness as a particular case. In section 6 we examine the competition between genitive marking and agreement, pointing out the consequences of our findings for the general theory of case. Section 7 sums up the main conclusions and points out some questions left open for further research.

2. The Syntax of Agreeing Pronominal Possessors

Before proposing an analysis for the paradigm presented in (1)-(2) above it is important to make it clear that from the syntactic point of view, agreeing possessors do not behave like adjectives, but instead they are referential expressions, which pattern with genitive-marked pronominal possessors, and more generally with genitive DPs.

2.1. *Al*-phrases

In Romanian, pronominal possessors have a distribution very similar to that of genitive DPs headed by lexical nouns: they immediately follow either the 'genitival/possessive article' *al/a/ai/ale* or the suffixal definite article. The genitival article agrees with the head noun (the 'possessee'):

(3)   a.   aceste reuşite   ale   mele
               these successes(F) *al*.FPL my.FPL
        b.   aceste reuşite   ale   profesorului
               these successes(F) *al*.FPL professor-the.GEN
(4)   a.   reuşita   mea
               success(F)-the my.FSG
        b.   reuşita   profesorului
               success(F)-the professor-the.GEN

According to Ortman and Popescu (2000) and Dobrovie-Sorin and Giurgea (2005), examples of the type in (4), in which Possessors follow a definite article suffixed to the head N, can themselves be analyzed as containing an underlying *al*, which has been deleted by a PF-rule[3]:

(4´)   a.   reuşit**a**   ~~a~~   mea
               success-the ~~*al*.FSG~~ my.FSG
        b.   reuşit**a**   ~~a~~   profesorului
               success-the ~~*al*.FSG~~ professor-the.GEN

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[3] This analysis is supported by the following arguments: (a) the syntax of Romanian Possessors becomes uniform: all of them are preceded by the 'genitival/possessive article' *al/a/ai/ale*; (b) the postulated deletion is phonologically plausible: *al* is made up of an invariable part *a-*, followed by a suffixal morpheme expressing bundled Number-Gender, which is identical to the definite article (*-l, -a, -i, -le*); the rule deleting *al* is therefore similar to haplology, which deletes one of two adjacent identical elements; (c) a genitive without *al* can be coordinated with a genitive introduced by *al*, which indicates that they occupy the same syntactic position :

(i)   Victoria noastră şi a ruşilor   împotriva turcilor   ne-a adus   independenţa
        victory-the our and *al* Russians.GEN against Turks.GEN us-has brought independence-the
        'Our and the Russians' victory against the Turks brought us the independence"

In this example, both genitives modify the same possessee, as shown by the singular agreement on the verb.

It should also be observed that *al*-phrases can occur on their own in argument positions:

(5) Maşina   mea   e parcată în faţa   casei.   **A Mariei**   e după
     car(F)-the my.FSG is parked in front-the house-the.GEN *al*.FSG Maria.GEN is behind
     colţ.
     corner
     'My car is parked in front of the house. Mary's is behind the corner'

In this context, *al* can be analyzed as a pro-N element (realized as *a*-) standing for the Possessee followed by the suffixal definite article carrying the φ-features of the Possessee (Coene 1999). Extending this type of analysis to the adnominal position, we may assume that in examples of the type in (3a) above, *al* functions as a relativizer (Dobrovie-Sorin 2002). This hypothesis is however problematic for *al-* phrases functioning as complements, which cannot be analyzed as reduced relatives:

(6) a.   prima   reprezentare a   piesei
         first-the performing(F) *al*.FSG play-the.GEN
         'the first performance of the play'
    b.   acest prieten   al   Ioanei
         this   friend(M) *al*.MSG Ioana.GEN
    c.   aceşti   prieteni   ai   mei
         this.MPL friends(M) *al*.MPL my.MPL

According to other authors, *al* is an agreeing preposition (Grosu 1988, 1994) or an agreeing case-marker (Giurgea 2008, Giusti 2008). Under this analysis, *A Mariei* in (5) relies on the ellipsis of the possessee.

    The precise analysis of *al* is out of the scope of this paper, which is only concerned with the phrase that follows *al*, and more precisely with the alternation between agreeing and non-agreeing pronominal possessors. Since *al* agrees in Number and Gender with the Possessee, we may say that *al*-phrases are themselves agreeing Possessors and since most – possibly all (if the analysis shown in (4′) is correct)– Possessors are immediately preceded by *al*, with which they form a constituent, we may say that all Possessors in Romanian agree with the Possessee. It is not this generalized Possessor agreement that interests us in this paper, but only the agreeing forms of pronominal Possessors, which co-occur with *al* (1st and 2nd pronominal possessors of the type in (6)c thus show double agreement with the Possessee, once on *al*, and once on the pronoun itself) and which are limited to part of the paradigm. The main difference between these two types of agreeing elements is that *al* is an independent X^0 followed by a phrasal complement[4], whereas pronominal Possessors are built with suffixal φ-features that attach to the pronominal root and agree with *al* itself (and indirectly with the head N.

    Summarizing, Romanian Possessors are all immediately preceded by *al*, which agrees with the Possessee. The phrase following *al* may be either a DP (including pronouns) marked with genitive case (in Romanian, the genitive and the dative have the same form, to which we will sometimes refer to as 'oblique' case), or an agreeing pronominal form.

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[4] As shown by the possibility of coordination under *al* :
(i)   Prima   reuniune   a   [deputaţilor   şi   senatorilor]
       first-the assembly(F) *al*.FSG deputies-the.GEN and senators-the.GEN
       'The first assembly of the deputies and senators'

2.2. Agreeing pronominal possessors occupy the same syntactic position as genitive-marked pronouns

In Romanian, there are two contexts in which genitive-marked non-pronominal DPs show a different distribution from that of pronominal Possessors, but crucially, agreeing pronominal possessors and genitive-marked pronouns pattern alike.

The example in (7a) shows that pronominal possessors can precede the noun if they follow a DP-initial adjective suffixed with the definite article and (8a) shows that they cannot be coordinated (*al* must be repeated in the second conjunct). The examples in (7b) and (8b) show that in these contexts, non-pronominal DPs contrast with pronominal possessors:

(7) a. prima   noastră / lor   întâlnire[5]
         first-the our.FSG/ they.GEN meeting(F)
         'our/their first meeting'
     b. *prima   profesorilor   întâlnire
         first-the professors-the.GEN meeting(F)
(8) a. * prima reuniune   a   [noastră şi   lor]
         first-the assembly(F) *al*.FSG our.FSG and they.GEN
     b. prima   reuniune   a   [profesorilor   şi   studenţilor]
         first-the assembly(F) *al*.FSG professors-the.GEN and students-the.GEN
         'the first assembly of the professors and the students'

The special syntactic behavior of pronominal possessors can be explained by assuming that they are 'weak pronouns' (Cardinaletti 1998, Cardinaletti & Starke (1999)), i.e., X° constituents that have a morpho-syntactic status that is intermediate between clitics and free standing pronouns. The difference between (7a) and (7b) can be explained if we assume that Romanian prenominal genitives obey the *head final constraint* (see Emonds 1976), which requires a pre-head constituent to be head-final[6]; since *al*- phrases are headed by *al* (recall that *noastră, lor* and *profesorilor* in (7a-b) are preceded by *al* in the underlying structure) they do not end in their head, so they cannot be prenominal, hence the ungrammaticality of (7b); weak pronouns have the option of creating a complex head together with *al*, so they may appear in prenominal position without transgressing the head-final constraint.

The ungrammaticality of (8a) is due to the impossibility of coordinating weak pronouns (see Cardinaletti & Starke (1999)). However, one can coordinate an *al*- phrase containing an agreeing possessor with another *al*-phrase, which may contain either a pronominal possessor or a genitive DP:

(9) a. această problemă comună a noastră şi   a voastră/ lor
         this   problem(F) common *al* our.FSG and *al* your.FSG/ they.GEN
     b. această problemă comună a noastră şi   a francezilor
         this   problem(F) common *al* our.FSG and *al* Frenchpeople-the.GEN

This shows that [*al*+Pronoun] sequences have a phrasal status and may occur in the same position as non-pronominal *al*- phrases.

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[5] Pronominal possessors can also appear postnominally, in the same position as genitives headed by lexical nouns :

(i)   prima   întâlnire   a noastră /lor   /profesorilor
      first-the meeting(F) *al* our.FSG /they.GEN/professors-the.GEN

[6] This constraint applies to prenominal modifiers in Germanic and Romance languages ; as shown by Haider (2004), this rule is characteristic of head-initial structures.

2. 3. Agreeing pronominal possessors are referential expressions

The following examples show that pronominal possessors can function as antecedents of reflexive pronouns. This possibility clearly distinguishes agreeing possessors from thematic adjectives (see (10)b) :

(10)   a.   opinia   noastră despre noi înşine
            opinion(F)-the our.FSG about ourselves
       b.   *opinia   americană despre ei înşişi
            opinion-the American about   themselves

This property is also found in languages where agreeing possessors occupy a different position from genitive DPs – for instance in Romance languages other than Romanian:

(11)   a.   il nostro giudizio su   noi stessi   (It.)
            the our.MSG opinion about ourselves
       b.   *il Americano giudizio su   sè stessi
            the American   opinion about themselves

Note also that in Romanian, agreeing pronominal possessors can receive a secondary predication or an appositive relative, like canonical DPs. In this case, the co-referential PRO or relative pronoun has the φ-features which characterize the referent of the pronoun. Thus, if the speaker is a male, a secondary predicate will be masculine, as in (12)a, even if the agreeing possessor co-indexed with its subject has a feminine form:

(12)   a.   o poză   a mea   blond   (Romanian)
            a picture(F) al my.FSG blond.MSG
            'a picture of me when I was blond'
       b.   Ce să   mai spunem de   disputa   noastră, care ne înţelegeam
            what SUBJ still say.1PL about dispute(F)-the our.FSG which got-along(1PL)
            înainte atât de bine
            before so   well
            'Not to mention the dispute between us, who used to get along so well'

These facts indicate that agreeing pronominal possessors carry a referential index. This behavior, which clearly distinguishes these expressions not only from modifying adjectives (such as *big*, *young*, etc.) but also from thematic adjectives, is arguably due to the fact that pronominal possessors have an inherent Person feature, whereas adjectives, including thematic adjectives, lack that feature. We can thus safely conclude that agreeing pronominal possessors are pronominal DPs rather than adjectives. The fact that they carry features that agree with the head N (the Possessee) has no consequence on their syntactic properties. In sum, the so-called possessive 'adjectives' are possessive pronouns that have the peculiarity of copying the features of the head N (instead of being marked with Genitive Case).

3. Feature Uniqueness and the Choice between Agreeing and Non-agreeing Possessors

Let us now go back to the main issue of this paper, namely the paradigm illustrated in (1)-(2), repeated below, which show that pronominal possessors of 1st and 2nd person agree with the Possessee, whereas 3rd person possessors are marked with genitive Case:

(1)   a.   băieţii   mei/   tăi/   noştri/   voştri
              boys-the my.MPL/ your~sg~.MPL/ our.MPL/ your~pl~.MPL
       b.   fetele   mele/   tale/   noastre/ voastre
              girls-the my.FPL/ your~sg~.FPL/ our.FPL/ your~pl~.FPL
(2)   a.   băieţii   ei/   lui/   lor
              boys-the she.GEN/he.GEN/they.GEN
       b.   fetele   ei/   lui/   lor
              girls-the she.GEN/he.GEN/they.GEN

Agreement phenomena have been traditionally described in terms of 'inheritance' or 'copying', which suggests a mechanism by virtue of which the features of a given element (the controller of agreement) are transferred to another element (the target, controlee or goal), which lacked those features before that particular mechanism applied. Such a copying mechanism is problematic, since it seems crucial for grammatical theory to assume that any relation, and in particular the agreement relation, can occur only if the two elements to be related are somehow eligible for that relation. Indeed, languages differ as to whether a given lexical class, e.g., adjectives, can function or not as targets of agreement: adjectives agree in Romance languages, but not in English. In order to capture the difference between Romance languages and English we need to assume that adjectives in Romance are eligible for agreement, in contrast with English adjectives.

In sum, the target of agreement must be marked as eligible for agreement prior to the application of the agreement relation. This 'marking' of targets of agreement can be technically implemented by assuming a distinction between features (or feature attributes) and feature values: Person, Number and Gender are the three universal φ-feature attributes, and $1^{st}/2^{nd}$, plural, feminine, etc. are feature values. Both the controller and the controlee/target carry feature attributes; the difference is that at the beginning of the derivation, the feature attributes are valued on the controller and unvalued on the target. The unvalued formal features thus have the role of marking concord-eligibility of the agreement target.

The distinction between feature attributes and feature values has been implemented within minimalism in Chomsky's (2000, 2001) valuation theory, which has replaced Chomsky's (1995) checking theory formalized in terms of interpretability. Our analysis of agreeing pronominal possessors will be embedded in the minimalist valuation theory[7].

Our account of the non-uniform paradigm of pronominal possessors shown in (1)-(2) is based on a constraint of Feature Uniqueness:

(13)   Pronominal roots merge with at most one set of inflectional φ-features.

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[7] In the implementation based on interpretability (Chomsky 1995, Pesetsky and Torrego 2001, Bošković 2006), the feature of case as well as the agreement features on the target enter the derivation with a value, but are uninterpretable, and as such must be checked. Valuation theory (Chomsky 2001, 2004) is more adequate, insofar as it dispenses with the distinction interpretable / uninterpretable, which is problematic in some cases (for instance, Case is uninterpretable on both the case assigner and the case-marked element). Valuation theory is also preferable on economy reasons: in the checking framework, we either have to list in the lexicon all the combinations of a given lexeme X with the different values of the feature F, or we have to assume a mechanism operating before syntax which associates X with a value for F. In the first alternative, the lack of economy pertains to the lexicon. In the second, it appears in the derivational process: two operations are needed to express the association between an item X and a contextual feature (a feature whose value is determined by the syntactic context in which the item appears). First the value for F is assigned to X before the derivation starts, then F is checked during the derivation. In valuation theory, there is only one operation instead: the unvalued feature F present on the lexical entry of X receives a value during the derivation.

Before presenting the details of our analysis (sections 3.3-3.4), we will present two possible accounts which will be successively discarded: the first one assumes the co-occurrence of two distinct types of φ-features on one and the same element (section 3.1), the second one assumes that pronouns which have agreeing forms do not have valued gender and number (section 3.2).

3.1. Co-occurring Index and Concord features

The existence of agreeing pronominal possessors seems to indicate that inherent φ-features (i.e., features that give indications regarding the referent of the Possessor itself) may co-occur with inherited φ-features (i.e., features that are inherited from the N-head, which give indications regarding either the grammatical features of N°, e.g., its grammatical Gender, or the referential properties of the Possessee). This intuition has been formalized in HPSG terms by Zlatić (2000) in her analysis of Slavic denominal agreeing possessors[8], which are peculiar insofar as the descriptive content of the noun (from which they are derived by suffixation of a possessive suffix) relates to the Possessor, but their φ-features (Gender and Number) agree with the head Noun (the Possessee):

(14)   a. siastr -yn -y malunk-i   (Belorussian)   (Zlatić 2000: 1)
        sister-POSS-MPL.NOM picture-MPL.NOM
        'the sister's pictures'
        b. Boris -ov -a knig-a   (Russian)
        Boris-POSS-FSG.NOM book-FSG.NOM
         'Boris' book'
        c. mam -in -og brata-a   (Serbo-Croatian)
        mom-POSS-MSG.GEN brother-MPL.GEN
        'of the mother's brother'
        d. matč -in dom   (Czech)
        mother-POSS-MSG.NOM house-MSG.NOM
        'the mother's house'

Zlatić's (2000) analysis of this phenomenon crucially assumes Pollard & Sag's (1988) theory, according to which each DP is marked with two distinct sets of features, labelled Concord and Index. The initial motivation for positing two types of features was to account for cases in which DP-internal agreement (traditionally referred to as 'concord') is different from DP-external agreement:

(15)   a. This$_{sg}$ committee are$_{pl}$ debating.
        b. Naš vrač prišla   (Russian) (Corbett 1991 : 6.23)
         our.MSG doctor left.FSG

While Concord features characterize DP-internal agreement, Index features were assumed to be involved in agreement on verbs and predicative adjectives as well as in the relation between a pronoun and its antecedent[9].
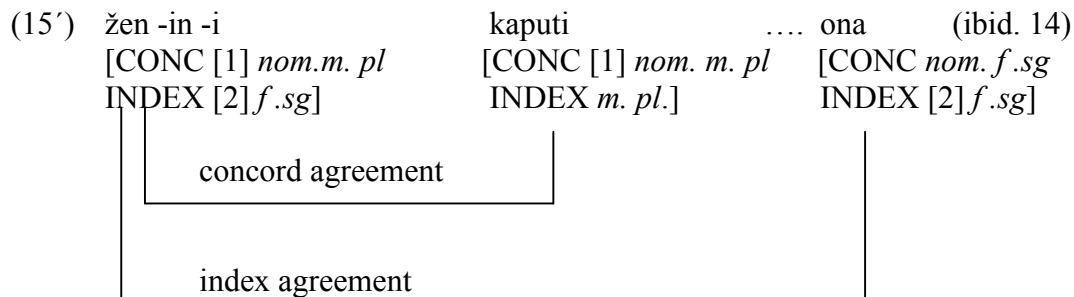
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[8] This phenomenon was extensively discussed by Corbett (1983), whose own label is 'denominal *adjectival* possessors'. Because Slavic denominal possessors are 'adjectival' only because they agree with the head noun, but are otherwise referential expressions, we have replaced this label by 'agreeing', which also ensures terminological consistency with the rest of the paper.

[9] Note that in Wechsler and Zlatic's (2000) system, *Index* features are defined as the features controlling predicate agreement and not as semantic features. Their system is more complex and distinguishes four types of features: declension (reflected in the forms of the nominal paradigm, not involved in agreement), concord (for

For an account of agreeing possessors, the distinction between Index and Concord features seems to be exactly what we need: the Index features of agreeing possessors give indications regarding the properties of their own referent, whereas their Concord features agree with the N°-head. This is indeed the core of Zlatić's analysis:

(15)   Ovo su žen-in-i$_j$ kaput-i.   Ona$_j$ ih je kupila juče.   (Zlatić 2000:8)
       this are woman-POSS-MPL coat-MPL   she-FSG them AUX bought yesterday
       'These are the woman's coats. She bought them yesterday.'

(15′) žen -in -i   kaputi   …. ona   (ibid. 14)
       [CONC [1] *nom.m. pl*   [CONC [1] *nom. m. pl*   [CONC *nom. f .sg*
       INDEX [2] *f .sg*]   INDEX *m. pl.*]   INDEX [2] *f .sg*]

                     concord agreement

                     index agreement

This analysis is problematic because it does not capture a severe constraint on this phenomenon: the Possessor can only be definite (which is not indicated in (15'), because presumably definiteness is not a ϕ-feature) and singular. In other words, the feature 'singular' that appears in the INDEX of the Possessor in (15') should somehow be encoded as the obligatory value of the feature Number of agreeing denominal Possessors. Unless this constraint is stipulated, the co-occurrence of divergent Concord and Index features massively overgenerates.

The agreeing pronominal possessors examined in this paper resemble Slavic denominal agreeing possessors: in both cases the Possessor is a referential term, which in addition to its inherent features (which give indications regarding its referent) carries features that agree with the Possessee. Given this similarity, one may try to apply Zlatić's analysis of agreeing denominal possessors to agreeing pronominal possessors. The problem is that an account of this type cannot explain the split between 1st-2nd person pronouns and 3rd pronouns: given that Index Features and Concord Features are independent of each other, we would expect agreeing pronominal Possessors not only for the 1st and 2nd persons, but also for the 3rd person. Nothing excludes representations such as (15):

(16)   Pronoun [CONC masculine plural] [INDEX 3rd feminine plural]

The problem is that this combination of features, which is generated by the formalism, is not available. In sum, the hypothesis that two distinct sets of ϕ-features may attach to the same element is too powerful.

3.2. Feature Uniqueness and the Number feature of Pronouns
In this section we will argue against a tentative analysis based on the hypothesis that 1st and 2nd person pronouns do not have Number and Gender features.

It is well-known, at least since Benveniste (1966), that 1st and 2nd pronouns should be distinguished from 3rd person pronouns. However, there is no general agreement regarding the characterization of this difference. One option is to follow Benveniste in assuming that 1st and

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DP-internal agreement and possibly also adjectival predicate agreement), index (for verb and pronoun agreement) and semantic features (which may be reflected in a special semantic agreement DP-externally – note that, as in Corbett's system, pronominal anaphora is treated in terms of agreement).

2nd pronouns have the Person feature, whereas 3rd person pronouns do not have it. This hypothesis must be made more precise by distinguishing among the following theoretical options for the analysis of 3rd person pronouns: (i) the feature (attribute)[10] Person is itself absent (Wechsler 2004, Kayne 2000, Cardinaletti 2008, a.o); (ii) the feature Person is present, but it takes the [-Participant] value (Nevins (2007)). The choice between these options is not directly relevant for our present concerns. For concreteness, we will assume the option in (ii). The status of pronouns with respect to the feature Person is relevant for us only insofar as it correlates with Number and Gender features: according to Wechsler 2004, Benincà & Polletto 2005, Cardinaletti 2008, 3rd pers possessors have Gender and Number, whereas 1st and 2nd pronouns do not have those features. These authors seem to assume a complementary distribution between Number-Gender and Person features (hence two classes of pronouns, the 'Person' and the 'Number' pronouns, as in Cardinaletti (2008)), which is incompatible with the view in (ii). But one may alternatively assume that Number-Gender features are needed for those pronouns that have a default/negative value for the Person feature.

The hypothesis that 1st and 2nd person pronouns (in Indo-european languages) do not have Gender features seems very natural, because these pronouns do not show any gender distinctions. As to the lack of Number, two arguments have been repeatedly invoked in the literature, one morphological and one semantic: (i) for 1st and 2nd persons, the number distinction is not marked by separate number morphemes, but rather by fused Person+Number forms (e.g. Rom. *eu, tu, noi,voi* 'I, you(sg.), we, you(pl.)', Fr. *je, tu, nous, vous*, Swed. *jag, du, vi, ni*, Rus. *ja, ty, my, vy*, etc.), which may be taken to count as Persons 1,2,4 and 5 rather than 1st+sg, 2nd+sg, 1st+pl and 2nd+pl (see Wechsler (2004) for evidence in favor of this assumption); (ii) on the semantic side, the so-called '1st person plural', e.g., *we*, does not refer to a plural speaker[11], but to a group which includes the speaker, together with other individuals; the '2nd person plural' may refer to several adressees, but may also refer to a group formed by the adressee and other individuals, which do not participate to the communication act, so its meaning is in fact "group including the adressee and not including the speaker".[12]

Given this analysis of 1st-2nd personal pronouns, the alternation between agreeing and genitive-marked pronominal possessors illustrated in (1)-(2) can be informally described as follows : those pronominal possessors that do not have valued (inherent) Gender and Number features, namely pronouns of Persons 1,2,4,5, can inherit Gender and Number from the head N; those pronominal possessors that have valued (inherent) Gender and Number features cannot inherit them from the head N, and therefore they need to be marked by Genitive Case. This constraint can be formulated as a principle of Feature Uniqueness:[13]

(17)   Pronominal possessors contain at most one set of φ-features (Person, Number, Gender).

The analysis of personal pronouns suggested above is however problematic because certain theorists have argued – based on typological and conceptual considerations – that 1st and 2nd

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[10] In this article, we abbreviate 'feature attribute' by 'feature'.

[11] Even the 'chorus *we'*, where a group of people utters the same words, cannot be described as involving a plural speaker, as it does not involve one utterance performed by several agents, but a number of simultaneous utterances which have only one agent; in each of these utterances *we* refers to the speaker + the others of the relevant group. See Greenberg (1993).

[12] See Benveniste (1966), Zwicky (1977), Noyer (1992), Moravcsik (2003), Corbett (2000), Cysouw (2003), Siewierska (2004).

[13] Some readers may have observed that the definition in (17) is a stronger version of (13), which was introduced as an anticipation of our analysis. In section 3.3. below we explain why (13) rather than (17) is needed for the data under examination in this paper.

person pronouns do have Number features. According to Cysouw (2003) and Harley and Ritter (2002), the special interpretation of plural 1st and 2nd person pronouns is due to the fact that Plural combines with a Person feature marked as +Participant; in other words, the group feature that we may postulate for 1st and 2nd plural (see Cysouw (2003)) can be viewed as a particular type of Number, which appears in the context of (positively valued) Person. Kratzer (2009) decomposes what we called persons 4 and 5 into combinations of the features 1st, 2nd, *group* and *sum*, in order to represent the inclusive and the exclusive reading of person 4 (minimal inclusive (*you and I*) = {1st, 2nd, sum}, augmented inclusive (*you, I and others*) = {1st, 2nd, group}, exclusive (*I and others*) = {1st, group} ; person 5 = {2nd, group}). The group interpretation of 1st and 2nd plural, which can be paraphrased by 'I and he/she/them', 'you and he/she/them', can be described as obtained by relating two antecedents, one of which is /+Participant/, with the *sum* operator. Note that the possibility to have 'split antecedents', related by *sum*, is also attested for 3rd person plural pronouns and plural definite DPs in general:

(18)   John met Fred at the pool. **They / The two boys** went to have a drink.

        Provided that it is feasible, an account relying on the combination of the Number feature valued as plural with the Person feature valued as 1st and 2nd (or ±Speaker) is preferable to the alternative suggested above, which relies on more than 3 values for the feature Person. In other words, labels such as Person 4 and Person 5 should be avoided, provided that they are semantically decomposable into Person and Number features.

3.3. Feature Uniqueness and the morphosyntactic make-up of pronouns
In this section we propose an analysis that reconciles the view that 1st and 2nd person pronouns have inherent Number features with the evidence that indicates that their Number is somehow invisible for certain phenomena. Our account will rely on the distinction between *inflectional* and *lexical* ɸ-features: inflectional features are those features that appear on inflectional morphemes, whereas lexical features belong to the root itself (a good example of a lexical ɸ-feature is gender on nouns in most Indo-European languages). The crucial observation is that the Number feature of 1st and 2nd person pronouns is a lexical feature, whereas the Number feature of 3rd person pronouns is inflectional.
        As shown in the table below, the strong forms of Romanian 3rd person pronouns can be decomposed into an invariable root *el/l*[14] (with *-l-* deleted in certain contexts[15]) and gender-number-case morphemes, which are also found on determiners such as the strong definite article, demonstratives or *alt* 'other' (the exponent of this morpheme is bold-faced in the table):

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[14] The vocalic form of the root is actually pronounced *ʝe-*, which is not reflected in spelling. This *ʝ-* also appears in the feminine singular oblique, where it is the only phoneme corresponding to the root.
[15] Deletion of *-l-* before *-i* (which is a semivowel) is also found in some nouns (e.g. *cal_{sg}/cai_{pl}* 'horse(s)') and adjectives (e.g. with the diminutive suffixe *-el* : *bunicel_{msg}/bunicei_{mpl}* 'quite good'). Deletion of *-l-* before fem.sg. *-ă*, which becomes *-a* after a semivowel, is particular to pronouns and determiners, but used to be more widespread (in nouns, the plural *-le-* was reinterpreted as a plural ending ; adjectives in *-el* used to have the form *-ea* in the feminine, e.g., *bunicea –*, but now this form is replaced by suffixal suppletivism – *bunicică* 'quite good (feminine)').

Table I

	personal pronoun	strong[16] definite article	distal demonstrative	'other'
direct case (Nom-Acc): m.sg.	el-Ø	cel-Ø	acel-Ø	alt-Ø
f.sg.	e-**a**	ce-**a**	ace-**a**	alt-**ă**
m.pl.	e-**i**	ce-**i**	ace-**i**	alț-**i**
f.pl.	el-**e**	cel-**e**	acel-**e**	alt-**e**
oblique: m.sg.	l-**ui**	cel-**ui**	acel-**ui**	alt-**ui**
f.sg.	-**ei**	cel-**ei**	acel-**ei**	alt-**ei**
pl.	l-**or**	cel-**or**	acel-**or**	alt-**or**

These paradigms clearly indicate that the Number and Gender features of Romanian 3rd person pronouns are inflectional, in the sense that they are realized on an inflectional morpheme that is distinct from the root. In other words, each of the forms that appear in the table above are obtained by two rules of Vocabulary Insertion, one for the root, and another one for the Number-Gender feature bundle.

Turning now to 1st and 2nd Person pronouns, they cannot be decomposed into a root expressing person and an inflectional morpheme expressing number and gender: they do not have an overtly expressed gender feature; as to their Number feature, it is not expressed on an inflectional morpheme, but rather the singular versus plural distinction is expressed by a pair of distinct roots (like in most Indo-European languages):

(19) a.   *eu, tu,   noi, voi*   Romanian
            'I,   you(sg.), we, you(pl.)'
      b.   *je, tu, nous, vous,*   French
      c.   *jag, du, vi, ni*   Swedish
      d.   *ja, ty, my, vy*   Russian

In these forms, the Number feature is not inflectional, because we cannot separate a plural exponent added to the person root; instead, the Number feature is bundled with the Person feature inside the root itself. In what follows we will use the label 'lexical features' to refer to those features that belong to the root itself. In other words, given a word W which can be analyzed into a root R and several morphemes X, Y, etc., its lexical features are the features on R and its inflectional features are the features that the other morphemes – X , Y – consist of. Our criterion for morphological decomposition is the existence of minimal pairs that have a separable common element (the root) and contrasting elements corresponding to different values of the same feature attribute. The elements shown in Table 1 are of this type. Pronouns of 1st and 2nd person, on the other hand, have lexical number, because the singular versus plural contrast is not ensured by X° elements that are distinct from a common root. Let us stress that the mere presence of an element that seems to encode plurality, e.g., *-i* in the Romanian forms *noi* 'we' and *voi* 'you_pl' or the *-s* in the French forms *nous* or *vous*, is not sufficient for assuming that number is inflectional. The existence of a common root is crucial. In other words, *noi* and *voi* or *nous* and *vous* have lexical number because we cannot obtain the corresponding singular forms by removing the marker *-i* or *-s* (in other words, the singular 1st and 2nd person forms are not **no(u)* and **vo(u)*), but rather by changing the root (Fr. *je, tu*). Note moreover that in Romanian, *-i* in *noi, voi* can be considered a case marker, being

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[16] The weak form of the definite article is a suffix and has inflectional-like properties, although its root *-l-* is still visible in some forms (see especially the oblique forms *-l-ui, -l-or*).

opposed to the oblique forms *nouă, vouă*. We can thus isolate the roots *no-, vo-* (appearing in the extended forms *nostr-* and *vostr-* in agreeing possessors) which encode person and plurality (the corresponding clitic forms, used for accusative and dative, keep the consonant but have a different vowel: *ne/ni* and *vă*). Since case and number normally have a syncretic exponent in Romanian, we can consider that the *-i* of the direct (nominative-accusative) case *noi, voi* redundantly marks the plural, duplicating a feature already present on the root. In conclusion, we have argued that the plural feature in first and second person pronouns is not inflectional but rather lexical, i.e., encoded in the root itself.

Summarizing, the difference between 1st and 2nd versus 3rd person pronouns is not that the former lack whereas the latter have the Number feature, but rather that in the former the Number feature is lexical (it belongs to the root), whereas in the latter the Number (and Gender) feature is inflectional.

3.4. Accounting for the (imp)possibility of agreeing pronominal possessors

Given this analysis of pronouns, the constraint of Feature Uniqueness formulated in (17), is too restrictive: it rules out any kind of co-occurring feature attributes, and therefore it cannot account for agreeing 1st and 2nd pronouns. In order to allow for forms of this type, we need to weaken Feature Uniqueness, by having it constrain only inflectional features, as stated in (13), which we repeat below:

(13)   Feature Uniqueness:
         Pronominal roots merge with at most one set of inflectional φ-features.

As stated in (13), Feature Uniqueness is not a general syntactic or morphological constraint, but merely a constraint on pronominal possessors. In section 4.3 we will show that it can be extended to denominal possessors in Slavic. In section 5 we will speculate on (possible) more general principles which might imply Feature Uniqueness as a particular case.

Because Feature Uniqueness concerns only inflectional features, a root that has valued φ-features is allowed to merge with unvalued inflectional φ-features. Thus, 1st and 2nd pronouns may merge with an inflectional morpheme containing unvalued gender and number. In addition, in languages with case concord, the inflectional morpheme also contains case, since agreeing possessors also agree in case with the Possessee. In Romanian, case concord is very restricted, but nevertheless found: feminine singular agreeing possessors have an oblique form distinct from the direct case form, see section 6. The feature composition of agreeing pronominal possessors in Romanian (listed in (20)) is given in (20´), where unvalued features are marked with the prefix *u*. Because the inflectional morpheme contains a bundle of features, we will label *inflectional feature matrix*, notated IFM[17]:

(20)   a.   meu/mea/mei/mele
              my -MSG/FSG/MPL/FPL
         b.   tău/tăi/ta/tale
              your$_{sg}$- MSG/FSG/MPL/FPL
         c.   nostru/noştri/noastră/noastre
              our- MSG/FSG/MPL/FPL

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[17] We use the D label for pronominal roots because pronouns show the external distribution and referential properties of DPs. We consider however that pronouns are distinct from other DPs in that they do not embed an NP complement (see Abney 1987, who considers them 'intransitive determiners'). Since personal pronouns are characterized by the existence of a person feature, we consider that another possible label for pronominal roots is Person. It has in fact been recently proposed that the category D should be identified with Person (Longobardi 2006).

        d.   vostru/voastră/voştri/voastre

               your_{pl}- MSG/FSG/MPL/FPL

(20′)   a.   [$_D$ Person=1, Number=sg][$_{IFM}$ uNumber, uGender, uCase]

        b.   [$_D$ Person=2, Number=sg] [$_{IFM}$ uNumber, uGender, uCase]

        c.   [$_D$ Person=1, Number=pl] [$_{IFM}$ uNumber, uGender, uCase]

        d.   [$_D$ +Person=2, Number=pl] [$_{IFM}$ uNumber, uGender, uCase]

It should be stressed that the morphological decomposition proposed here does not correlate with phrasal structure (compare other inflected categories, e.g., Tense on verbs, which are currently assumed to take a phrasal complement, VP (or vP in more recent implementation); see also Baker 2008 for adjectives and nouns)[18]. We assume that the IFM of pronouns is a functional head that combines by first merge with the X° constituent labelled D, yielding a complex X^0 constituent.[19] This analysis is supported by the weak nature of agreeing pronominal possessors, which can be observed in Romanian (see section 2 above), as well as in other languages (see section 4.2 below).

      The feature matrices shown in (20′) capture the dual status of agreeing possessors: they have lexical Person and Number, which give indications regarding the referent of the Possessor and they have unvalued features for Number and Gender, which are assigned a value via agreement with the head N (Possessee).

      3rd person pronouns, on the other hand, have valued inflectional gender and number, as shown in Table 1. For these pronouns, the only unvalued feature in the inflectional feature matrix is Case:

(21)   a. [$_D$ Person=3] [$_{IFM}$ Number=Sg, Gender=Masc, uCase]

        b. [$_D$ Person=3] [$_{IFM}$ Number=Sg, Gender=Fem, uCase]

        c. [$_D$ Person=3] [$_{IFM}$ Number=Pl, Gender=Masc, uCase]

        d. [$_D$ Person=3] [$_{IFM}$ Number=Pl, Gender=Fem, uCase]

The absence of agreeing forms for these pronouns is predicted under our proposal, because the feature matrices given in (22) are ruled out (as indicated by the # diacritic) by the constraint of Feature Uniqueness in (13):

(22)   a. # [$_D$ Person=3] [$_{IFM}$ Number=Sg, Gender=Masc] [$_{IFM}$ uNumber, uGender,uCase]

        b. # [$_D$ Person=3] [$_{IFM}$ Number=Sg, Gender=Fem] [$_{IFM}$ uNumber, uGender,uCase]

        c. # [$_D$ Person=3] [$_{IFM}$ Number=Pl, Gender=Masc] [$_{IFM}$ uNumber, uGender, uCase]

        d. # [$_D$ Person=3] [$_{IFM}$ Number=Pl, Gender=Fem] [$_{IFM}$ uNumber, uGender, uCase]

Summarizing, the maximal set of features contained in the IFMs of Romanian (among many other languages) pronouns is [Gender, Number, Case]. While case is always unvalued, gender and number can be either valued or unvalued. This means that all pronouns have at least one unvalued feature, namely Case. The difference between agreeing and non-agreeing possessors

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[18] The representations in (20′) should therefore be kept distinct from Déchaine & Wiltschko's (2002) DP-pronouns, described as Ds that take a φP complement. Note moreover that given our analysis, personal pronouns cannot be assumed to belong to any of the other two types of pronouns (φPs embedding an NP and simple NPs) proposed by Déchaine & Wiltschko. Further work is needed in order to reveal possible correlations between Déchaine & Wiltschko's three-way typology of pronouns, based on evidence from binding phenomena, and our own two-way typology, based on slots (root or inflectional morpheme) in which the features of pronouns are realized.

[19] For independent evidence in favor of a rule of Head-to-Head Merge see Dobrovie-Sorin (2001, 2007) and Alexandra Cornilescu et Carmen Dobrovie-Sorin (2008).

is that at the beginning of the syntactic derivation, the former have also the Gender and Number in their IFM unvalued.

In line with Distributed Morphology (see Halle & Marantz 1993), we assume that the output of the syntactic derivation contains X^0s carrying abstract labels (D, N, Adj, etc.) and feature-attributes (e.g. Gender, Number), which are valued as masculine or feminine, singular or plural, etc.; the vocabulary insertion rules replace these elements with phonological matrices called *exponents*.

Let us exemplify two derivations that respectively involve unvalued ɸ-features (the derivation of the form *mei* 'my.MPL') and unvalued Case features (the derivation of the form *lui* 'he.GEN'):

(23)
(i)   Merge root with unvalued inflectional features:
        $[_D +1^{st}+sg] + [_{IFM}$ uGender, uNumber, uCase]
(ii)   Assign ɸ-values by Agree:
        $[[_D +1^{st}+sg][_{IFM}$ uGender, uNumber, uCase]] $\rightarrow [[_D +1^{st}+sg][_{IFM}$ +masc, +pl, +Nom]]
(iii)   Spell-out: insert the exponents of the morphemes:
        Rules of Voc. Insertion: $[_D+1^{st}+sg]$ _$[_{IFM}$ gender=X, number=Y] $\rightarrow$ *me-*
                                     $[_{IFM}$ +masc, +pl, +Nom/Acc]] $\rightarrow$ *-i*
        Result: $[[_D +1^{st}+sg][_{IFM}$ +masc, +pl, +Nom/Acc]] $\rightarrow$ *mei*

(24)
(i)   Merge root with inflectional features:
        $[_D +3^{rd}] + [_{IFM}$ +masc, +sg, uCase]
(ii)   Assign a Case value (see section 6):
        $[_D +3^{rd}][_{IFM}$ +masc, +sg, uCase] $\rightarrow [[_D +3^{rd}][_{IFM}$ +masc, +sg, +Gen]]
(iii)   Spell-out: insert the exponents of the morphemes:
        Rules of Voc. Insertion: $[_D+3^{rd}]$ _[+Gen/Dat] $\rightarrow$ *l-*
                                     $[_{IFM}$ +masc, +sg, +Gen/Dat]] $\rightarrow$ *-ui*
        Result: $[[_D +3^{rd}][_{IFM}$ +masc, +sg, +Gen]] $\rightarrow$ *lui*

It is important to observe that IFMs have the same exponent for a given set of feature values, regardless of whether the feature were introduced as valued or unvalued at the beginning of the derivation (e.g., the masculine plural exponent *-i* appears in *mei* 'my.MPL', where the features were introduced as unvalued, but also in *ei* 'they(MASC)', where the features were introduced as valued). This is so because valued and unvalued inflectional features can no longer be distinguished at the stage of vocabulary insertion (step (iii)), since unvalued features have been previously valued (step (ii)).

Feature Uniqueness can also account for the existence, in Romanian, of a 3rd person agreeing possessor: *său*, based on a reflexive root, is in present-day Romanian no longer restricted to a reflexive use, but is used as an equivalent of the genitive forms *lui* 'his' and *ei* 'her'; *său* can only refer to singular possessors, which indicates that the root *să-/sa-* is inherently marked for singular Number:

(25)   a.   fratele   său   = fratele   lui / ei
            brother-the *să*.MSG   brother-the his/ her
       b.   sora   sa   = sora   lui / ei
            sister-the *să*.FSG   sister-the his / her
       c.   frații   săi   = frații   lui / ei
            brothers-the *să*.MPL   brothers-the his/ her

    d.   surorile   sale   = surorile   lui / ei
          sisters-the *să*.FPL   sisters-the his / her

The agreeing forms of *său* are ruled in by Feature Uniqueness, because the Number feature (together with Person) is valued on the root *să/sa-*, which makes the inflectional feature matrix available for unvalued features:

(26)   [să/sa-]   [D Person=3, Number=sg] [IFM uGender, uNumber, uCase]

        Summarizing, we have so far explained the (im)possibility of agreeing pronominal possessors as depending on the feature-composition of pronouns, and more precisely on whether or not they have valued inflectional φ-features. Feature Uniqueness allows inflectional φ-features to co-occur with lexical φ-features, hence the observable agreeing forms of pronominal possessors, but it prevents a set of inflectional features from co-occurring with another set of inflectional features, which explains why certain pronominal possessors cannot agree with the head N° (Possessee).
        In order to provide a full account of the alternating paradigms of pronominal possessors, one must still explain why agreeing forms may alternate with Genitive-marked forms inside the same paradigm (why the same grammatical function can be realized either by genitive marked or by agreeing forms) and why – in those contexts in which they are allowed - agreeing forms are preferred to non-agreeing case-marked forms. This issue will be taken up in section 6 below.

4. Extending the empirical domain
4.1. Agreeing pronominal possessors in other Indo-European languages
In this section we will show that the agreeing pronominal possessors found in various Indo-European languages obey Feature Uniqueness, because arguably they lack valued inflectional gender and number. When they exhibit interpretable number and gender oppositions, these are due to lexical features (the different feature values are associated to different roots).
        Let us first recall that some languages (Albanian, Latin, Slavic languages, Gothic and Scandinavian languages, a.o.) show an alternation between genitive marking and agreeing possessors in the pronominal system, similar to Romanian:

(27) a.   mina/ dina/ våra/ era   pojkar   (Swedish)
        my.PL/your$_{sg}$.PL/our.PL/your$_{pl}$.PL boys
      b.   mitt/ ditt/   vårt/   ert   hus
        my.NSG/your$_{sg}$.NSG/our.NSG/your$_{pl}$.NSG house(N)
(28) a.   hans/ hennes/ deras pojkar
        he.GEN/she.GEN/they.GEN boys
      b.   hans/ hennes/ deras hus
        he.GEN/she.GEN/they.GEN house
(29) a.   djemtë e   mi/   e   tu /   tanë /   tuaj   (Albanian)
        boys-the ART my.MPL/ART your$_{sg}$.MPL/ART-our.MPL/ART-your$_{pl}$.MPL
      b.   vajzat e   mia/   e   tua /   tona /   tuaja
        girls-the ART my.FPL/ART your$_{sg}$.FPL/ART-our.FPL./ART-your$_{pl}$.FPL
(30) a.   djemtë e tij/   e   saj/   e   tyre
        boys-the ART he.GEN/ ART she.GEN/ ART they.GEN
      b.   vajzat e tij/   e   saj/   e   tyre
        girls-the ART he.GEN/ ART she.GEN/ ART they.GEN

(31) a. pueri mei/ tui/ nostri/ vestri (Latin)
      boys my.MPL/ your$_{sg}$.MPL/ our.MPL/ your$_{pl}$.MPL

   b. puellae meae/ tuae/ nostrae/ vestrae
      girls my.FPL/ your$_{sg}$.FPL/ our.FPL/ your$_{pl}$.FPL

(32) a. pueri eius/ eorum/ earum
      boys (s)he.GEN/they.M.GEN/they.F.GEN

   b. puellae eius/ eorum/ earum
      girls (s)he.GEN/they.M.GEN/they.F.GEN

(33) a. moi/ tvoi/ naši/ vaši mal´čiki (Russian)
      my.PL /your$_{sg}$.PL/our.PL/your$_{pl}$.PL boys

   b. moja/ tvoja/ naša/ vaša devuška
      my.FSG/your$_{sg}$.FSG/our.FSG/your$_{pl}$.FSG girl

(34) a. jevo/ jejo/ ih mal´čiki
      he.GEN/she.GEN/they.GEN boys

   b. jevo/ jejo/ ih devuška
      he.GEN/she.GEN/they.GEN girl

In these languages, like in Romanian, agreeing possessors appear for the 1st and 2nd persons. Like in Romanian, number is a lexical feature in the 1st and 2nd persons, being expressed in the root, bundled with the person feature:

(35) a. *jag, vi, du, ni*   Swedish
      I.NOM we.NOM you$_{sg}$.NOM you$_{pl}$.NOM

   b. *ik, weis, þu, jus*   Gothic
      I.NOM we.NOM you$_{sg}$.NOM you$_{pl}$.NOM

   c. *ja, my, ty, vy*   Russian
      I.NOM we.NOM you$_{sg}$.NOM you$_{pl}$.NOM

   d. *ego, nos, tu, uos*   Latin
      I.NOM we.NOM you$_{sg}$.NOM you$_{pl}$.NOM

   e. *unë, ne, ti, ju*   Albanian
      I.NOM we.NOM you$_{sg}$.NOM you$_{pl}$.NOM

In all these languages, like in Romanian, 3rd person pronouns can be decomposed into a root expressing person and a distinct morpheme expressing inherent gender and number, bundled with case:

(36) a. Swedish
   sg., +human: masc. Nom. *han*, Acc. *hon-om*, Gen. *han-s*
                fem. Nom. *hon* (=*han*+ U-umlaut)*,* Acc. *hen-ne*, Gen. *hen-ne-s*
                (where *hen-* = *han*+ I-umlaut)
     - human: common *d-en*, neut. *d-et*, Gen. *d-ess*
   pl. *d-e*, Acc. *d-em*, Gen. *d-eras*.
   b. Gothic:
   Acc.: m.sg. *i-na*, f.sg. *ij-a*, n.sg. *i-ta*, m.pl. *i-ns*, f.pl. *ij-os*, n.pl. *ij-a*
   Gen.: m.sg. *i-s*, f.sg. *i-zos*, n.sg. *i-ta*, m.pl. *i-ze*, f.pl. *i-zo*, n.pl. *i-ze*
   c. Russian:
   Nom.: m.sg. *on*, f.sg. *on-a*, n.sg. *on-o*, pl. *on-i*
   Gen.-Acc.: mnsg. *j-evo*, fsg. *j-ejo*, pl. *(j)-ih*
   Dat.: mnsg. *j-emu*, fsg. *j-ej*, pl. *(j)-im*
   d. Latin:

Nom.: m.sg. *i-s*, f.sg. *e-a,* n.sg. *i-d,* m.pl. *e-i*, f.pl. *e-ae*, n.pl. *e-a*
Acc.:   m.sg. *e-um,* f.sg. *e-am*, n.sg. *i-d*, m.pl. *e-os*, f.pl. *e-as*, n.pl. *e-a*
e. Albanian:
Nom.: m.sg. *a-i,* f.sg. *a-jo*, m.pl. *a-ta*, f.pl. *a-to*
Gen-Dat.: m.sg. *a-tij*, f.sg. *a-saj*, n.pl. *a-tyre*

As a consequence, unvalued ϕ-features cannot appear on third person possessors, hence the recourse to licensing via Case.

These languages also have agreeing forms for 3rd person reflexives. This fact is predicted by our account, because there are no number or gender oppositions in the paradigm of reflexives in these languages, which means that there are no inherent inflectional ϕ features, and therefore the feature matrix given in (38) is legitimate:

(37)   Lat.   *se* "himself/herself/themselves", *suus* "his/her/their own"
        Swed. *sig* "himself/herself/themselves", *sin* "his/her/their own"
        Rus.   *sebjá* "himself/herself/themselves", *svoj* "his/her/their own"
(38)   su- [$_D$ 3rd Person, Reflexive] [$_{IFM}$ uNumber, uGender, uCase][20]

Other languages have agreeing forms not only for 1st and 2nd persons, but also for the 3rd person. Since we have already seen that for the 1st and 2nd persons inherent number is a lexical feature in the Indo-European languages, their agreeing forms are expected. What is not expected is the fact that 3rd person possessors show agreement with the possessee. In what follows we will show that these agreeing forms obey Feature Uniqueness, because they lack inherent/valued inflectional features.

Spanish has 3rd person agreeing possessors which show no inherent gender and number oppositions. They are built on a root *su-* (continuing the Latin reflexive), which only encodes Person[21]. Feature Uniqueness correctly predicts that such forms are eligible for agreement:

(39)   (prenominal) sg. *su,* pl. *sus*
        (postnominal) msg. *suyo,* fsg. *suyo,* mpl. *suyos,* fpl. *suyas*

French has two roots for 3rd person agreeing possessors, one for (inherent) singular – *s-* in *son, sa, ses* – and one for (inherent) plural – *leur-* in *leur, leurs.* Since the number opposition is not due to valued inflectional features (but rather encoded in two distinct roots), these pronouns can merge with unvalued inflectional features, hence their agreeing forms.

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[20] Some of the languages illustrated in (35) (Latin and Russian) have case concord, hence the feature uCase in the feature matrix.
[21] As an anonymous reviewer observed, *su-* forms are also used as the possessive forms of the politeness pronouns *usted / ustedes.* 'you$_{sg/pl}$'. The use of a 3rd person possessive form for politeness pronouns is expected because politeness pronouns have a formal 3rd person feature, also manifested in verbal agreement (see (i)) and the use of clitics (see (ii)):
(i)   Ustedes   llevan   sus   maletas.
         you$_{pl}$.POLITE carry.3PL *su-*.PL suitcases
         'You carry your suitcases.'
(ii)   Lo   conozco   a   usted
         3rd.CL.MSG.ACC know.1SG OBJ you$_{sg}$.POLITE
         'I know you'
Agreeing possessors show a similar behavior in other languages that have 3rd person politeness pronouns (see Italian *Lei* – possessor *suo*, German *Sie* – possessor *Ihr*).

Italian resembles French insofar as singular and plural possessors are built on distinct roots (which go back to the same two forms as French *s-* and *leur-*), *su-* (*suo, sua, suoi, sue*) for the singular and *loro* for the plural. It nevertheless differs from French in that only the singular forms agree (for further discussion see § 4.2. below).

German also distinguishes two roots for agreeing possessors carrying inherent gender and number: one for masculine and neuter singular (*sein-*, in *sein(er), seine, sein(es)*), and the other one for feminine and plural (*ihr-,* in *ihr(er), ihre, ihr(es)*).

4.2. On the syntactic distribution of agreeing and non-agreeing forms

The generalization of agreement to all pronominal possessors often correlates with the existence of different syntactic positions, one for weak (agreeing) pronominal possessors and the other one for nominal, as well as strong pronominal possessors. Thus, agreeing possessors in French occur DP-initially, while non-agreeing possessors (including strong forms of pronouns), which are introduced by a preposition (*de*, sometimes *à*), cannot appear in this position:

(40) a. mon   livre
        my.MSG book
    b. * de/à Jean livre
        of   Jean book
    c.   * de/à lui livre
        of   him book

Spanish is like French in that agreeing possessors occur in the DP-initial position, where non-agreeing possessors cannot appear. However, Spanish also has strong agreeing pronominal forms, *mío, tuyo* etc., which appear in the postnominal position:

(41) a. su   coche
        his/her.SG car
    b. *de Juan coche
        of   Juan car
    c.   un amigo suyo
        a   friend his/her.MSG
    d. un amigo de Juan / de él
        a   friend of Juan / of him

In German, agreeing possessors are always prenominal, and normally occupy the DP-initial position. Morphological genitives are very restricted in these positions (only proper names are allowed) and prepositional genitives (marked by *von*) are excluded altogether.

The DP-initial position that pronominal possessors occupy in French, Spanish and German may be assumed to be D. Pronominal possessors in this position have head-like properties (impossibility of coordination and modification, see (42)), which may indicate that they are head-adjoined to a null D, reaching this position by a type of movement that is similar to the one found with clitics in the tensed domain (movement from a phrasal position to a head position) (see Tremblay 1989, Cardinaletti 1998, Bernstein 2005):

(42) a. un problema   [solamente mío]   (Spanish)
        a   problem(M) only   my.MSG
        'a problem only for me'

      b.   * [solamente mi]   problema
                only   my.SG   problem
                Intended meaning: 'the problem which is only mine'

The ban on non-agreeing possessors in this position may arguably be attributed to a constraint that requires that the φ-features of D^0 be expressed. Since D^0 is null, the only way for its φ-features to be realized is by showing up on the possessor pronoun.

      Italian resembles Spanish and French in that agreeing possessors may be found in a position where non-agreeing nominal possessors cannot appear. However, this special position is not the D position itself, but a lower position, immediately on the right of an overt determiner:

(43)   a.   la (sua)   vecchia (*sua) fotografia   (cf. Giusti 2008)
              the his/her.FSG old   (his/her) photo(F)
       b.   la (loro)   vecchia (*loro)   fotografia
              the (they.GEN) old   (they.GEN) photo
       c.   * la di Gianni fotografia
               the of Gianni photo

Note now that in this position appear not only agreeing pronominal possessors, but also a non-agreeing form, *loro* 'they.OBL' [22]. The fact that one and the same position is accessible to both agreeing and non-agreeing forms is not surprising, because this position is specialized for weak forms, and both types of forms are weak.

      Let us now consider again the differences between *loro* in Italian and *leur* in French: both of them are 3rd plural forms that belong to the paradigm of 3rd person pronouns. And because in both languages, singular 3rd pers possessors are built on a reflexive root, both *loro* and *leur* can be viewed as having lexical (rather than inflectional) number, and as such they may agree with the head N without violating Feature Uniqueness. Note however that they are marked with oblique Case (and can be used as both Genitives and Datives), which might dispense them from licensing via agreement. And indeed, it seems plausible to believe that oblique marking explains why *loro* does not agree in Italian. The fact that *leur* must agree − despite its oblique marking - may be attributed to a fact already mentioned above: in French, pronominal possessors must realize the φ-features of the null D° to which they attach; compare Italian, where D° is overtly realized, and therefore pronominal possessors need not realize the features of D°; the agreement features that appear on pronominal possessors are required for licensing reasons on those forms that are not Case marked.

      As we have seen in section 2, in Romanian too agreeing and non-agreeing pronominal possessors pattern alike, being able to occur in positions in which non-pronominal possessors are excluded. However, since possessor DPs are always immediately preceded by the 'genitival article' *al*, this special distribution is explained as follows: (i) as weak elements, pronominal possessors may form a complex head with *al* (see section 2, ex. (8)); (ii) the complex head *al*+Pronoun behaves like a light element, so it can occur in positions where non-pronominal possessors are excluded (see section 2, ex. (7)).

      Romanian resembles Italian in that it has a 3rd person agreeing possessor restricted to singular, continuing the Latin reflexive possessor (*său, sa*, see (25)). However, it differs from

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[22] Prepositional genitives based on personal pronouns may appear in prenominal position only in formal, bureaucratic, or playful registers (Giusti 2008):

(i)   (%) le di lei tre figlie
       the of her three daughters

Italian in that these forms are in free variation with genitives (*lui, ei*), while Italian does not have weak genitive forms for singular possessors / singular counterparts of *loro* (see footnote 20: one can find the prepositional genitives *di lui, di lei* in prenominal position, but they are restricted to a formal or playful register, while for *loro* the prenominal position is the unmarked one). The difference between Italian and Romanian is thus due to the difference between case marking in these languages: the genitive, like the dative, has a prepositional realization in Italian. The Italian non-agreeing possessor form *loro*, which may also be used as a dative, can be analyzed as a spell-out for Pronominal-Root+Case. The absence of singular counterparts of *loro* is to be analyzed as a morphological gap. In Romanian, on the other hand, an unvalued Case feature appears inside the inflectional feature of pronouns (and determiners in general). Therefore all pronouns with valued inflectional φ-features can have their Case feature valued as genitive.

4.3. Slavic denominal Possessors
Going back to the Slavic denominal agreeing possessors presented at the outset of our investigation (see 3.1), it is easy to observe that they obey the Feature Uniqueness constraint. There is no inherent inflectional gender and number morpheme on agreeing possessors. The possessive suffix is directly attached to the nominal root, and then to this suffix the φ-morpheme hosting inherited gender, number and case is attached:

(44)   siastr -yn -y   (Belorussian)   (Zlatić 2000: 1)
        sister-POSS-MPL.NOM

Agreeing nominal possessors have inherent lexical gender because nominal bases have lexical gender. Slavic agreeing possessors can only be interpreted as referring to singular individuals. This constraint on their interpretation may be viewed as the default interpretation of a root that has no inflectional number. As to the definite interpretation, which is also necessarily associated with agreeing possessors, it is probably related to a property of the possessive suffix, which typically attaches to proper names in Slavic languages.

        In sum, a separate set of features called Index Features (see Zlatić (2000)) need not - viz. should not - be postulated for the analysis of Slavic denominal agreeing possessors. Under the account proposed here, Slavic agreeing possessors have only unvalued inflectional φ-features, their inherent features being attributable to the Lexicon or to default options[23].

        Sorbian differs from the other Slavic languages in that the possessor can be modified by adjectives or other possessors which agree in gender and number with the inherent features of the possessor and show genitive case:

(45)   moj-eho   muž-ow-a   sotr-a   (Corbett 2006: 2.7)
        my-M.SG.GEN husband-POSS-F.SG.NOM sister(F)-SG.NOM
        'my husband's sister'

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[23] Zlatić posits Index Features not only for interpretation, but also in order to account for the features appearing on the pronouns that resume the possessor.

(i)   Ovo su žen-in-i$_j$ kaput-i.   Ona$_j$ ih   je   kupila juče. (Zlatić 2000:8)
           this are woman-POSS-MASC.PL coat-MASC.PL she-FEM.SG them AUX bought yesterday
           'These are the woman's coats. She bought them yesterday.'

We do not think that in this case we deal with valuation of unvalued features. We assume that features on referential pronouns are already valued at the beginning of the derivation.

Since the dependents of the possessor do not agree with the inherited features of the possessor, it is reasonable to assume that the Sorbian possessive suffix, to which the inherited ϕ-features attach), is comparable to the English genitival suffix -*s* in that it attaches to the phrasal constituent formed by the possessor and its dependents[24], whereas in the other Slavic languages, the possessive suffix can only attach to an X^0 constituent:

(45′)   [$_{NP}$ moj-eho   muž][$_{Poss}$ -ow]
             my-M.SG.GEN husband   POSS

Inside the NP in (45′), the dependent *mojeho* 'my' agrees with the base *muž*- 'husband' in gender, number and genitive case.

4.4. Agreeing Nouns and Pronouns

The existence of nominal agreeing possessors seems to contradict Baker's (2008) crosslinguistic generalization that nouns cannot agree[25]. Note however that the unvalued inflectional ϕ-features are not added directly to the nominal root, but instead they always attach to a possessive suffix (see ex. (42)-(43) above). We can thus conclude that Baker's generalization is correct if it is formulated as applying only to ϕ-features directly attached to a nominal root:

(46)   Inflectional ϕ-features directly attached to the nominal root are necessarily valued

Baker explains this generalization by assuming that nominal roots always bear inherent ϕ-features, so that by locality of agreement any unvalued inflectional ϕ-features /IFM attached directly above an N(P) would agree with the ϕ-features of N (the nominal root/basis). This explanation incorrectly predicts that pronominal possessors cannot agree with the possessee. A different explanation for the generalization in (46) is therefore needed, which may follow the following line: the inflectional feature matrix that combines directly with a nominal root is necessarily valued at the beginning of the derivation because nominal roots do not have number. This is probably due to the fact that nominal roots – or the majority of them – denote concepts with no number specification. Therefore number is not a feature of the root itself, and the only way to introduce a number specification in the nominal projection is to combine the noun with another X^0 (such as an IFM) containing number.

For pronouns, this problem does not arise: since pronouns are bundles of grammatical features, they can express gender and number directly on the root, in which case they are allowed to combine with an IFM containing unvalued ϕ-features. This is why pronominal agreeing possessors are much more widespread than nominal agreeing possessors.

The fact that nominal agreeing possessors are possible in Slavic but not in Romance or Germanic is probably related to the absence of articles in Slavic. We consider that absence of articles is not due to an empty D (note that this D would have to be completely underspecified, given that bare nouns may be definite as well as indefinite, including strong indefinites in some positions), but rather reflects the fact that N(P)s can be referential without the aid of a D. Thus we predict the possibility that an N embedded under a possessive suffix

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[24] Nevertheless, the Sorbian possessive suffix differs from the English 's in that it is morphologically constrained to attach only to nouns.

[25] In his book, Baker discusses a different case of putative agreeing nouns, namely agreement of the possessee with the possessor (see Hungarian, briefly discussed in section 5 below). He argues that these agreement features do not directly attach to nouns, but rather to possessive determiners. When they appear inside the same word as the noun, this is the result of head raising of the noun to the possessive determiner. The issue of agreeing possessors is not addressed in his book.

may act as a referential expression. Note that even in languages without articles, nominal agreeing possessors are extremely rare: in Slavic languages, they are only found with a subset of animates (especially with proper names), and they never exclude genitive forms (while for pronouns, agreeing possessors sometimes exclude genitive forms, see section 6). In other Indo-European languages with no articles, such as Latin, there are no nominal agreeing possessors.

Note now that root extensions resembling the possessive suffix on nouns can also be found in various agreeing pronominal possessors – see Romanian *no-str-u* 'our.MSG' as compared to *no-i, no-uă* 'we.DIR', 'we.OBL'. However, although historically such forms are most likely explained by suffixation, we consider that synchronically it is better to analyze them as morphological variants of the root used before a ϕ-IFM. There are two reasons for preferring this analysis: (i) These 'root extensions' are found nowhere outside the pronominal paradigm; (ii) Even inside the pronominal paradigm, we don't find the same extension, but no less than three putative extensions for four forms, as can be shown from the following table[26]:

Table II

	Accusative		Dative		Agreeing possessor (putative extension boldfaced:)
	strong	clitic	strong	clitic	
1st sg	m-ine	mă	m-ie	m-}	m-**e**-u, m-**e**-a, m-**e**-i, m-**e**-le
2nd sg	t-ine	te	ț-ie	ț-}	t-**ă**-u, t-a, t-**ă**-i, t-a-le
1st pl	no-i	ne	no-uă	ne	no-**str**-u, noa-**str**-ă, no-**ștr**-i, noa-**str**-e
2nd pl	vo-i	vă	vo-uă	vă	vo-**str**-u, voa-**str**-ă, vo-**ștr**-i, voa-**str**-e

This table illustrates that not only ageing possessors, but also pronominal paradigms in general are highly irregular (in the clitic forms it is often difficult to separate a case morpheme; the case morphemes of strong forms are restricted to this paradigm, except for the -*i* in the plural forms, see discussion in 3.3; not moreover that the 1st singular nominative is expressed by a different root – *eu*). Therefore, the assumption of a root alternation for agreeing possessor forms is not unwarranted.

In conclusion, we analyze possessor based as allomorphs chosen at Vocabulary Insertion in the context _[IFM ϕ]:

(47)   [D Person=1 Number=pl] _[IFM gender, number] → *nostr-*
        [D Person=1 Number=pl] _[IFM case] → *no-*

In sum, both nouns and pronouns are referential entities (i.e., entities that carry a referential index), and as such they must carry inherent features (pre-specified values) for Number and Gender. But they differ in that the inherent features of pronouns can be realized on the root itself, whereas on nouns, (a non-default value of) inherent Number can only be realized on the inflectional morpheme. As a consequence, the inflectional slot of nouns cannot be filled with unvalued features. Pronouns, on the other hand, may have unvalued features in IFM provided that their inherent features are realized on the root.

5. Towards a more general principle
In the oldest Indo-European languages, we do not find words having more than one instance of an inflectional ϕ-feature (there is no agreement with more than one controller and no item bearing both inherited and inherent inflectional ϕ-features of the same type). We can infer that

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[26] We did not include the forms based on the root *să/sa-* in the table, because they do not belong synchronically to the reflexive root (*s-*) (see section 3.4), so they cannot be compared to any non-agreeing forms.

Feature Uniqueness is the particular case of a more general constraint operating in the parent language:

(48)   Generalized Feature Uniqueness I: Morphological macro-parameter:
        A word cannot contain more than one instance of an inflectional φ-feature.

Some modern Indo-European languages have come to disobey this general principle by virtue of former determiners and pronouns becoming clitics and then affixes. Languages with an affixal definite article, such as Romanian, typically duplicate the φ-features of the base on the article:

(49)   a.   fet-e-l-e   (Romanian)
              girl-F.PL-ART-F.PL.
        b.   fet-e-l-or
              girl-F.PL-ART-PL.OBL

One can say that since the φ-features cannot have different values, we do not deal with more than one instance of φ-features, but with a single morpheme split by a morphological rule (see Noyer 1997 on feature fission).
        However, a different account is possible, which builds on the observation that the two φ-exponents are separated by the exponent of the definite article. This suggests a formulation of Feature Uniqueness which may have a wider empirical coverage:

(50)   Generalized Feature Uniqueness II:
        A head cannot merge with more than one instance of an inflectional φ-feature

More than one instance of φ-features per word are found in many agglutinative languages: (i) agreement with more than one argument, on verbs (see (51)); (ii) nouns having φ-features inherited from genitive dependents (agreement with the 'possessor') besides their inherent φ-features (see (52)); (iii) agreement of the possessor with the possessee, added to a genitive ending (see (53)):

(51)   ma tăm kălaŋ   wel-sə-l-am   (Northern Ostyak)   (Nikolaeva 1999)[27]
        I   these reindeers kill-T-PL-1SG
        'I killed these reindeer.'
(52)   a.   a(z én)   kalap-om-at   (Hungarian)
              the me.NOM hat-POSS1SG-ACC
              'my hat'
        b.   a(z én)   kalapja-i-m-at
              the me.NOM hat(POSS)-PL-POSS1SG-ACC
              'my hats'
(53)   a.   ehun-šu-w   waŝ   (Bagwalal, Daghestanian)
              blacksmith(M)-OBL-M.SG brother(M)   (Corbett 2006: 2.44-45)
              'blacksmith's brother'
        b.   ehun-šu-j   jaŝ
              blacksmith(M)-OBL-F.SG sister(F)
              'blacksmith's sister'

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[27] We reproduced the author's glosses. "T" refers to Tense.

Agreement of the verb with several arguments complies with the principle in (46) under the current minimalist assumptions, in which different agreement relations between the verb and the arguments, correlated with argument licensing, involve different heads in the extended projection of the verb: the head which licenses the object (v* in nominative-accusative languages), the head which licenses the subject (Tense in nominative-accusative languages), and, in cases of agreement with the indirect object, an Applicative head.

Agreement with the possessors can be described in the same way as agreement in the verbal domain, i.e., as involving a functional head in the extended projection of the noun, as already proposed by Szábolcsi (1983) for the facts in (52). If this head is added above the number head, and the unvalued ϕ-features are added to this head, the structure complies with (50):

(54)   [[[N]   [+pl]] [[Poss][uϕ]]] [uCase]
        kalapja -i-   -m-   -at

For agreement with the possessee co-occurring with inherent ϕ-features, the head separating the two ϕ-morphemes is the case head, as overtly shown in (53):

(55)   [N]([Num]) [[+uCase][uϕ]]

6. On the competition between genitive marking and agreement

An important issue raised by agreeing possessors is the possibility that the same grammatical function can be realized either by genitive marked or by agreeing forms. A full account of this issue is beyond the scope of this paper. In what follows, we only intend to present some suggestions and point out the consequences that the facts examined in this paper have on theories of case.

In the GB model (see Chomsky 1981), DPs (including pronouns) were assumed to be subject to a licensing constraint known as 'the Case Filter' (Rouveret & Vergnaud (1980)), which required them to be assigned case. Given the alternation between ϕ-marking and case-marking exhibited by possessor DPs, our theory must include ϕ-valuation as a possible licensing mechanism in addition to licensing via Case.

Before making a tentative suggestion that attempts to capture the main empirical generalizations that we are aware of in this area, we should note that the Case filter is concerned with abstract case (i.e., licensing in a certain structural position), rather than morphological Case, while genitive marking and agreement, which are our concern in this article, involve morphological marking. However, abstract and morphological Case are related to each other via principles that are currently investigated (see Marantz 1991, Bobaljik 2005, Markman 2009). For our present purposes we will assume that via such principles, the Case filter bears on morphological Case.

Let us start by observing that across languages, the inflectional morphemes that appear on nouns and pronouns exhibit at most three features: Gender, Number and Case. These features show some internal structure in the following sense. All of them may be unvalued at the beginning of the derivation, and in that case, they are bundled together, so that case is valued on the target together with the valuation of ϕ-features – in languages with morphological case, when a pronoun is licensed by agreement, it also copies the case of the Possessee alongside its ϕ-features[28] (the so-called *case concord*):

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[28] The existence of case agreement between agreeing possessors and the possessee is manifested in Romanian only in the feminine singular. In the older Indo-European type, represented by Latin or Slavic languages, case agreement in agreeing possessors is general.

(56) a.   meas   manus   (Latin)
            my.PL.ACC hands.PL.ACC
      b.   fetei   mele   (Romanian)
            daughter-the.OBL my.FSG.OBL
            'to/of my daughter'
      c.   fata   mea
            daughter-the.DIR my.FSG.DIR

In other DPs, Number and Gender may be valued at the beginning of the derivation, Case being the only unvalued feature. In this type of configuration, the licensing of the DP depends on Case-valuation. In this case, at least for the adnominal environment, we cannot treat case valuation as relying on copying of the Case value, since the case assigned to the Possessor is always the genitive, while the Possessee can bear any case. To put it in another way, since agreeing possessors and genitives appear in the same position, if the case licensor had had valued genitive, we would have expected that the case feature of agreeing possessors always be genitive. But, as we can see, when a DP is licensed by φ-feature agreement and the φ-morpheme also comprises case, the case feature of the possessee is copied alongside with the φ-features. In conclusion, case assignment must be distinguished from valuation by copying in agreement/concord, although both can be described as valuation. For recent proposals which keep apart case assignment–from agreement, see Alboiu (2006), Markman (2009) and Pesetsky (2009) [29].

Notice that licensing by case valuation is a notion useful to describe *structural* cases. Inherent cases, which are either directly interpretable (see, e.g., locatives or benefactive datives) or are a subcategorization property of the root of a predicate (therefore being independent of the syntactic configuration in which the predicate appears – active, passive, nominal) can be described as valued from the beginning of the derivation (they are the equivalent of (lexical) Ps). As is well known, the genitive behaves like a structural case in the nominal domain: (i) it marks arguments of deverbal nouns which correspond to the subject and object of the respective verb; (ii) with complement-taking nouns not related to verbs, it is the overwhelmingly frequent realization of the noun's complement [30].

One of the conclusions of this article is that the position of structural genitive can be occupied by agreeing possessors. In this case, the presence of unvalued features is obvious – agreeing possessors have unvalued φ-features, which get valued by copying the values which they have on the possessee. This confirms the view that DPs occurring in structural case environments are characterized by unvalued features. We only need to extend the Case Filter as follows:

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[29] Giusti (2008), examining possessive constructions in Bantu, Italian and Romanian, also concludes that the mechanism of case assignment (which she treats as agreement) must be distinguished from DP-internal 'concord' (which corresponds to what we have called 'agreement'). However, contrary to us, she considers that concord is not capable of licensing possessors, but agreeing possessors participate both in Concord (due to a sisterhood relationship with the possessee or with a functional head in the extended projection of the possessee) and Agree (being case-licensed by a functional head F which also licenses genitives).

[30] What distinguishes it from the structural cases found in the verbal domain is the fact that it can also mark modifiers of non-relational nouns, expressing various relations, depending on the lexical meanings of the two nouns and on the context (very often, the relation expressed is possession, hence the traditional terms 'possessive', 'possessor' and 'possessee', which we also made us of). Since structural cases are not interpretable, this meaning component (the introduction of a relation) can be seen as a property of the configuration in which genitive is assigned – more precisely, on the assumption that structural cases are assigned by functional heads, as a property of the functional head which assigns genitive (be it Poss or n).

In other contexts (verbal, adjectival), the genitive, if it is found, behaves like an inherent case (it is subcategorized).

(57)   DPs may be formally licensed either by valuation of Case or by valuation of φ-features.

The correlation between verb-subject agreement and nominative assignment led Chomsky (2000) to propose that both agreement and structural case assignment/valuation are the results of a single operation, Agree. Although both agreement and case-assignment have in common the fact that they involve valuation of features, case assignment still remains distinct from φ-feature agreement in that the case assigner is not supposed to have a valued case feature. Rather, Nominative case is valued as a byproduct of Agree between the unvalued φ-features of the case licensor and the valued features of the nominal carrying unvalued case (as in verb-subject agreement). As we have seen, the existence of case concord on agreeing possessor, in the same position in which genitive is assigned, confirms the idea that case assignment is not an instance of copying[31].

Following Chomsky (2000, 2001), we characterize case assignment as a property of designated heads (such as finite T or v*), which is manifested when this head (the 'probe') finds a DP with unvalued Case in its c-command domain (the 'goal') (if the probe also bears an EPP feature, the goal is moved into a Spec of the probe). This relation may be accompanied by φ-feature copying (we use this shortest term for 'φ-feature valuation by copying'). Chomsky, modeling this relation on the subject-Tense relation, considers that the probe always bears unvalued φ, so that there is mutual valuation between the probe and the goal (therefore he names this relation 'Agree'). Since this extension is not obvious for other instances of structural case (a large number of languages, including Romanian, do not have object agreement and agreement with the possessor, many languages do not have agreement at all), we do not consider this condition as universal (see also Frampton & Gutman 2006, Baker 2008, Markman 2009). What is important is that the 'Agree' relation *can* be accompanied by φ-feature copying.

Now, agreeing possessors show that φ-feature copying can also take place the other way around, from the probe to the goal. We consider that this phenomenon is also an instance of Chomsky's Agree: the probe is the same as for genitive assignment, and the goal is characterized by unvalued features, which comprise case, at least in languages with case concord. Note that in languages with case concord on agreeing possessors, case is always bundled together with gender and number. Hence, we can conclude that when the goal contains not only unvalued case, but also unvalued φ-features, Agree is manifested as copying, to the effect that case is not valued as genitive, but gets the same value as the one on the licensor[32]:

(58)   A DP with unvalued φ-features bundled on the same head with Case values these features together with Case by copying from an adnominal licensor/ case assigner.

Let us finally observe that there seems to be no phenomenon comparable to agreeing possessors inside the verbal domain: in other words, DPs that are arguments of verbs do not seem to be able to be marked with uninterpretable phi-features. The reason seems intuitively speaking obvious: inside the verbal domain, those elements that govern (and license) DPs

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[31]A full assimilation of (structural) case assignment has been proposed by Pesetsky & Torrego (2001, 2004) – thus, for Pesetsky & Torrego (2001), nominative case is unvalued Tense ("uninterpretable", in the exact formulation, which uses checking theory); in their 2004 paper, they extend this view to accusative).

[32] Note that although Romanian and similar languages have case concord only in the presence of licensing by φ-feature copying, licensing by case agreement alone can be found in some languages, such as Korean.

(e.g., Tense or little v) do not have inherent φ-features, and therefore agreement in φ-features cannot apply between the licensing element and the licensed DP. Thus, although 1st and 2nd person pronouns do not have valued inflectional Number and Gender, and as such they would be allowed to be licensed via φ-agreement, they cannot do so when they occur as arguments of verbs. Therefore, 1st and 2nd pronouns that occur as arguments of verbs can only be licensed via Case-assignment. We assume that in this case the unvalued Number and Gender features are not projected in the inflectional matrix[33].

The fact that in the same position both agreeing possessors and genitives can be licensed raises another question. Although both genitive marking and agreement are available in this context, those pronouns which have the option of agreement show only agreeing forms. In other words, it seems that agreeing forms block genitive-marked forms. It should be observed that the impossibility of having a genitive in the 1st-2nd persons is not due to a morphological gap: indeed, Romanian does have oblique forms for 1st and 2nd persons, which however can only function as datives (recall that in Romanian the genitive and the dative have the same form):

(59) a.   acest prieten   al profesorului /   al lui /   al meu   /   *al mie
               this friend(M.) *al* professor-the.OBL / *al* he.OBL / *al* my.M.SG./ *al* me.OBL
      b.   Ion mi-   a   scris   mie.
              Ion me.CL.DAT-has written me.DAT

We do not have a good answer to this problem yet. A possible solution is to resort to a syntactic variant of the Elsewhere principle (cf. Kiparsky 1973, Aronoff 1976), such as the Principle of Maximal Specialization (Koster 1997):

(60)   In a relation of grammatical dependence, it is always the more specialized form which
       is preferred. A form A is more specialized than a form B, if A can fulfill fewer
       functions than B. (Koster, 1997: 224)

In this case, the choice is between pronouns carrying [uCase], and pronouns carrying [uGender, uNumber, (uCase)]. The contexts of licensing by φ-feature agreement, which are only DP-internal, are a subset of the contexts of case assignment, which comprise, beside the DP-internal context (where genitive is assigned), the VP and clausal contexts. In this sense, pronouns carrying [uGender, uNumber, (uCase)] are more specialized and block the use of pronouns carrying [uCase] in the relevant contexts.

Note that the compared elements must have an identical interpretation, which implies having the same inherent features. That is why there is no competition between *său* 'his/her (agreeing)' and *lui, ei* 'his, her': these items differ in their inherent features. *Său* only has inherent person (3rd) and number (singular), while *lui* and *ei* have inherent person, number and gender.

We may thus conclude that the way a DP is licensed - via Case-assignment or via phi-feature valuation depends not only on its position, but also on its featural make-up (what unvalued features can be merged in its inflectional morpheme).

7. Conclusions and open issues
In this paper we have shown that the behavior of pronouns with respect to agreement is determined by their morphosyntactic make-up, which supports the view, defended by

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[33] It may be argued that the non-projection of unvalued Number and Gender for 1st and 2nd pronouns is comparable to the possibility of non-projecting intermediate (or 'minor') functional categories such as Neg.

Distributed Morphology, that the internal structure of words is visible for the computational system. Agreeing possessors are allowed provided that their inherent features are realized on the root itself, rather than inside the inflectional feature matrix. For all (Indo-European) pronouns, the Person feature is realized on the root and for some pronouns the root also encodes Gender and Number, which leaves the inflectional feature matrix available for unvalued features. Hence the possibility of agreeing pronominal possessors, which are widely attested. Agreeing nouns are much less frequent, which is due to the fact that the inherent Number feature of nouns cannot be generated on the root itself. Slavic languages exhibit agreeing nominal possessors, but they can only be observed when the inherent Number is assigned the value singular by default.

In those languages in which agreeing forms of pronominal possessors have not generalized to all persons, a correlation exists between person and agreeing forms. We have shown that this correlation does not provide evidence in favor of the hypothesis that 1st and 2nd persons do not have number features (Wechsler 2004, Cardinaletti 2008); the relevant property of these pronouns is that their inherent features are all realized on the root. However, we have not attempted to explain the correlation between morpho-syntactic make-up and person: why is it that 3rd person pronouns may have an inflectional morpheme that encodes their inherent gender and number features, which is separate from the root (which encodes only the person feature), whereas for 1st and 2nd persons, gender and number features are bundled together with the person feature inside the root ?

The most important theoretical conclusion of the paper is that the same slot, namely the inflectional feature matrix, can host either inherent ɸ-features (pre-specified values for number and gender) or unvalued features, which trigger agreement with the Possessee. This conclusion should be further exploited from the theoretical point of view, since it seems to provide strong evidence in favor of the hypothesis, put forward by Distributed Morphology, according to which the merger of (grammatical) morphemes into words takes place in syntax.

The principle of Feature Uniqueness proposed in the paper goes against too permissive theories that allow more than one set of ɸ-features on one and the same element. In particular, we have shown that the constraints on (nominal or pronominal) agreeing possessors cannot be explained by postulating distinct Index and Concord features, as in Zlatić (2000). Further investigation is needed in order to see whether the mismatches between DP-internal and DP-external agreement (see in particular examples (15) in section 3.1) can be accounted for in a more constrained way, without resorting to two distinct sets of features.

Another important conclusion of the paper is that DPs may be formally licensed not only by case valuation, but also by valuation of a ɸ-feature bundle (which may also contain case), depending on the internal make-up of the (pronominal) DP. Therefore, Chomsky's mechanism of Agree (used to described formal licesing of DPs) must be enriched with the possibility of valuying the ɸ-features of the goal by the probe.

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