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When you have too many features: Auxiliaries, agreement and clitics in Italian varieties

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Syntactic variation can be ascribed to a range of factors. The Borer-Chomsky conjecture, as Mark Baker (2008) refers to it, states for instance that all parameters of variation are attributable to differences in the features of particular items (e.g. functional heads) in the lexicon. In this paper, this hypothesis is carefully considered in relation to a group of Abruzzese dialects that exhibit three seemingly unrelated syntactic patterns: split auxiliary selection, split differential object marking, and omnivorous participial agreement in number/argumental agreement mismatch marking. It will be proposed that these three patterns are closely interrelated, and can be attributed to the presence of an unvalued bundle of φ-features (π). Depending on which XP this head is merged with, different agreement patterns will emerge. Furthermore, these dialects will be shown to differ from another macrogroup of northern Italian dialects purely in the locus of Merge of this extra functional head: it will also be shown that the almost perfect areal complementary distribution between languages with subject clitics and languages with person-driven auxiliary selection is not accidental, but is the result of the presence of an extra φ-probe doubling the features of the subject in different parts of the syntactic spine. A microtypology of *v* will be presented, unifying many phenomena that were previously considered unrelated, such as auxiliary selection, participial agreement, differential object marking and subject clitics.

1 Introduction

In traditional dialectological studies, split auxiliary selection, i.e. the selection of HAVE or BE according to the subject person, has always been considered to be a completely separate phenomenon from subject clitics. One way of distinguishing between northern and southern Italian varieties is the presence or absence, respectively, of subject clitics, as well as the absence or presence of person-driven auxiliary selection.[1,2] In what follows it will be proposed that this almost perfect complementary areal distribution between subject clitics and person-driven auxiliary selection is not accidental, but is the result of the fact that these two phenomena are due to one and the same underlying cause: the presence of the same extra φ-probe (π) in different parts of the syntactic spine.

While subject clitic varieties are widely studied and documented (Renzi & Vanelli 1983; Poletto 2000; Cardinaletti & Repetti 2008; and many others), upper southern Italian

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[1] The situation is not as clear-cut as suggested here. We will return to the data in detail in section 2.2.

[2] Person-driven auxiliary selection effects are not unknown in northern Italian varieties. A reviewer points out that the whole north-eastern area of Italy has some phenomena that have not been analyzed in the literature and which strongly recall upper-southern auxiliary selection. These phenomena are found with reflexive clitics. Given that, as the reviewer states, there is no published material on this, I cannot really discuss the possible parallelism of the two phenomena. The fact that split auxiliation is found in northern varieties with reflexive clitics suggests that the analysis put forward in this article is on the right track, and that clitics and person-oriented auxiliaries are instantiations of the same φ-head.

varieties with split (i.e. person-driven) auxiliary selection are not. This study concentrates on the latter: the phenomena illustrated in detail here are split-person related phenomena found in some upper southern Italian dialects. These varieties distinguish morphologically between 1st/2nd person and 3rd person arguments, attributing different markers to the two sets. One such variety is Abruzzese, which is spoken in Abruzzo, a central Italian region (Figure 1). The phenomena discussed in this paper are found in Eastern Abruzzese, which belongs to the upper southern Italian group of dialects (and is distinct from Central Abruzzese/Aquilano Sabino). Notice that subject clitics are also not a uniform phenomenon, and occur in a variety of ways (Rizzi 1986). We will come back to this in section 2.2.

Abruzzese exhibits three seemingly unrelated syntactic phenomena involving the argumental domain: split auxiliary selection (illustrated below in 1.1), omnivorous participial agreement in number/argumental agreement mismatch marking (below, in 1.2), and split differential object marking (below, in 1.3). I propose that these three characteristics are closely related, and can be attributed to the presence of an unvalued feature bundle, which I will refer to as π (for "person", which is the most commonly found feature in such a bundle).

Three varieties will be taken into account: the variety spoken in Arielli (Ariellese, AR, Ic on the map), the variety spoken in San Valentino in Abruzzo Citeriore (Sanvalentinese, SV, Ic) and the one spoken in Ripatransone (Ripano, RT, Ia). It should be noted that Ripano is spoken in Le Marche, not in Abruzzo: however, this dialect is located on an isogloss separating central from upper southern dialects, and belongs to the Abruzzese group historically: it will be considered here as it offers an interesting test-bed for our hypotheses. Unless otherwise stated, the data discussed are from Ariellese, given that this dialect presents the richest and most informative agreement and auxiliary selection pattern of the three dialects investigated. The other two varieties will be mostly used to test our hypothesis developed on the basis of Ariellese.
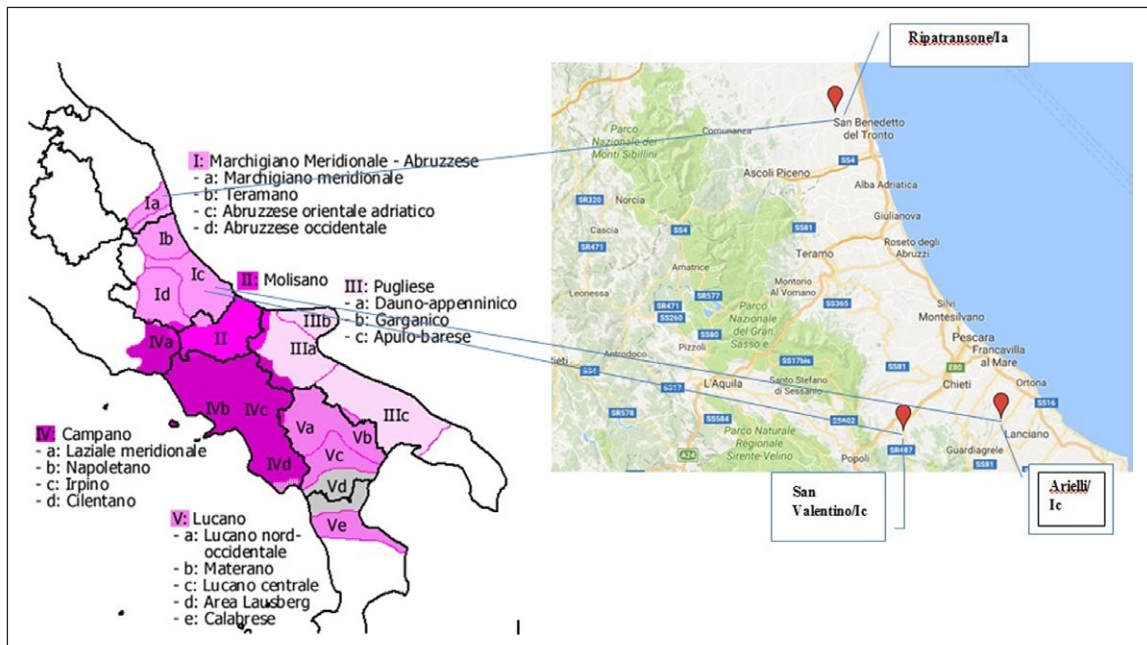

Figure 1: Upper southern Italian dialects/Abruzzese.[3]

The three syntactic phenomena we will examine here are:

1.1 Split auxiliary selection

The selection of BE or HAVE depends on the person of the subject. An example of this split can be found in (1) for Ariellese (observe that of the three dialects in Figure 1 only Ariellese has split auxiliary selection: Ripano has generalized BE[4] while Sanvalentinese has generalized HAVE).

(1)   *Ariellese*
    a. (ji) so[5]   magnatə
        I   be.1SG eaten.SG
        'I ate/I have eaten.'

    b. (tu) si   magnatə
        you be.2SG eaten.SG
        'you ate/you have eaten.'

    c. (essə) a   magnatə
        s/he   have.3 eaten.SG
        's/he ate/she has eaten.'

    d. nu semə   magnitə
        we be.1PL eaten.PL
        'we ate/we have eaten.'

    e. vu setə   magnitə
        you be.2PL eaten.PL
        'you ate/you have eaten.'

    f. jissə a   magnitə
        they have.3 eaten.PL
        'they ate/they have eaten.'

In (1), the auxiliary selected in the presence of a 1st or 2nd person subject is BE. HAVE is instead selected for 3rd person subjects. Observe that this paradigm is the same for all verb classes, as will be shown in more detail in section 2 (see Cocchi 1995). Furthermore, it should be noted that both BE and HAVE also have a full-fledged paradigm. The present tense of BE is in (2), while the present tense of HAVE is in (3).

(2)   so/   si/   jè/   semə/   setə/   jè
        be.1SG be.2SG be.3   be.1PL be.2PL be.3
        'I am, you are, (s)he is, we are, you are, they are.'

(3)   ajə/   ajì/   a/   avemə/ avetə/   a
        have.1SG have.2SG have.3 have.1PL have.2PL have.3
        'I have, you have, (s)he has, we have, you have, they have.'

The 3rd person singular and plural forms of BE, *jè*, are used in predicative constructions:

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[4] Dialects with generalized BE have been analyzed by Tuttle (1986) as varieties where BE has progressively extended from 2nd SG through all six persons of the paradigm. This could well be the case for Ripano. If the analysis outlined here is correct, this is exactly what would be expected, given that Ripano also has agreement mismatch phenomena that are linked to the presence of an extra (person-marking) probe. Hence, it must have had a morphological exponent for this head in some earlier stage of its history. This issue will be discussed in section 3.2.2.

[5] When not otherwise specified, all verbs are to be considered in the present tense.

(4)   Marijə   jè   bbellə.
       Mary   be.3   beautiful
       'Mary is beautiful.'

They can also be used in passives:

(5)   jè   rrəspəttatə   da   tuttə = quində.
       be.3   respected   by   all = PL
       '(S)he is respected by everyone.'

As for HAVE, other than as an auxiliary it is used as a possessive in some psych constructions:

(6)   Ch'ajì?
       what = have.3
       'What's wrong with you?' *lit.* 'What do you have?'

The possessive verb is instead *tene'* ('hold').

   Cases like these are also found in some northern varieties: some Veneto dialects, like Paduan, have what looks like person-driven auxiliary selection with reflexive clitics, as exemplified in (7):

(7)   *Paduan* (Benincà, Parry & Pescarini 2016: 204)
       a.   Me = so   petenà.
            myself = be.1SG   combed
            'I have combed my hair.'

       b.   Te = te = sì   petenà.
            you = yourself = be.2SG   combed
            'You have combed your hair.'

       c.   El = se = gà   petenà.
            he = himself = have.3   combed
            'He has combed his hair.'

       d.   Se = ghemo   petenà.
            ourselves = have.1PL   combed
            'We have combed our hair.'

       e.   Ve = sì / = ghì (gavì)   petenà.
            yourself = be.2PL / = have.2PL   combed
            'You have combed your hair.'

       f.   I = se = gà   petenà.
            they = themselves = have.3   combed
            'They have combed their hair.'

1.2 "Omnivorous" participial agreement in number (8); Agreement mismatch (13); Topic-oriented agreement (14).

Some varieties of Abruzzese (in particular Ariellese) show very peculiar argumental agreement patterns. In Ariellese, we find so-called "omnivorous" number agreement (D'Alessandro & Roberts 2010; Nevins 2011) for past participles, whereby the past participle agrees with whichever argument is plural (see example 8).[6] Ripano instead shows agreement mismatch: whenever the external and the internal argument exhibit conflicting feature specification, a special marker appears on the verb (Egidi 1965; Parrino 1967;

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[6] These patterns are not the only ones that are found in this area. It has also been noted (by Cocchi 1995) that in some varieties overt plural is favored if the external argument is also plural, but not if the plural only emerges in the external argument. We will limit ourselves to the analysis of these three varieties, for which we have extensive documentation, noting however that also others follow the same "agreement with both arguments" pattern.

Mancini 1988/1997; 1993; Harder 1998; Jones 2001; Ledgeway 2006; Rossi 2008); finally, Sanvalentinese exhibits what can be defined as topic-oriented agreement, whereby the verb agrees with the most highly referential, or definite, argument.

1.2.1 *"Omnivorous" participial agreement in NUMBER* (extended agreement domain for the verb).

In Ariellese, the participle agrees with whichever argument is marked as plural:

(8)   *Ariellese* (D'Alessandro & Roberts 2010: 45)

    a.   Giuwannə   a   pittatə   nu   murə.

       John.SG   have.3 painted.PP.SG a   wall.SG

       'John has painted a wall.'   [Subj.SG – Obj.SG]

    b.   Giuwannə   a   pittitə   ddu murə.

       John.SG   have.3 painted.PP.PL two walls.PL

       'John has painted two walls.'   [Subj.SG – Obj.PL]

    c.   Giuwannə   e   Mmarijə   a   pittitə   nu murə.

       John   and Mary   have.3 painted.PP.PL a   wall.SG

       'John and Mary have painted a wall.'   [Subj.PL – Obj.SG]

    d.   Giuwannə   e   Mmarijə   a   pittitə   ddu murə.

       John   and Mary   have.3 painted.PP.PL two walls.PL

       'John and Mary have painted two walls.'   [Subj.PL – Obj.PL]

In Ariellese participles are inflected for number, but not for gender. Plural marking obtains through *metaphony*, which causes an alternation between a low root vowel for the singular and a high one for the plural (as in *pittatə*-SG vs *pittitə*-PL), D'Alessandro & van Oostendorp (2016). In (8a) both the external argument and the internal argument are singular, and the past participle shows singular agreement. In (8b) and (8c) only one of the arguments is plural, and the past participle is plural. In (8d) both arguments are plural, and the participle is plural.

1.2.2 Agreement mismatch

Ripano finite verbs are marked for gender, as shown in (9)–(10) and (11)–(12):

(9)   *Ripano* (Rossi 2008:3)

    a.   i'   ridu

       I.1SG.M   laugh.SG.M

       'I laugh.'

    b.   tu   ridu

       you.2SG   laugh.SG.M

       'you laugh.'

    c.   issu   ridu

       he.3SG.M   laugh.SG.M

       'he laughs.'

    d.   noja   ridemi

       we.1PL   laugh.1PL.M

       'we laugh.'

    e.   voja   rideti

       you.2PL   laugh.2PL.M

       'you(pl) laugh.'

    f.   issi   ridi

       they.3PL.M   laugh.3PL.M

       'they laugh.'

(10) a. ìa   ride
     I.1SG.F laugh.SG.F
     'I laugh.'

   b. tu   ride
     you.2SG laugh.SG.F
     'you laugh.'

   c. esse   ride
     she.3SG.F laugh.SG.F
     'she laughs.'

   d. noja   ridema
     we.1PL laugh.1PL.F
     'we laugh.'

   e. voja   rideta
     you.2PL laugh.2PL.F
     'you(pl) laugh.'

   f. essa   ride
     they.3PL.F laugh.3PL.F
     'they laugh.'

(11) a. i' so   risu
     I be.1SG laughed.SG.M
     'I have laughed.'

   b. tu sci   risu
     you be.2SG laughed.SG.M
     'you have laughed.'

   c. issu e   risu
     he be.3 laughed.SG.M
     'he has laughed.'

   d. noja semi   risi
     we be.1PL.M laughed.PL.M
     'we have laughed.'

   e. voja seti   risi
     you be.2PL.M laughed.PL.M
     'you are laughed.'

   f. issi   e   risi
     they.3PL.M be.3 laughed.PL.M
     'they have laughed.'

(12) a. ìa so   rise
     I be.1SG laughed.SG.F
     'I have laughed.'

   b. tu si   rise
     you be.2SG laughed.SG.F
     'you have laughed.'

   c. esse e   rise
     she be.3 laughed.SG.F
     'she has laughed.'

       d.   noja   sema   risa
            we   be.1PL.F   laughed.PL.F
            'we have laughed.'

       e.   voja   seta   risa
            you   are.2PL.F laughed.PL.F
            'you have laughed.'

       f.   esse   e   risa
            they.3PL.F be.3   laughed.PL.F
            'they have laughed.'

Furthermore, the finite verb (or the participle) carries an agreement mismatch ending (-ə) whenever the external argument and the internal argument have different gender/number specification:

(13)   *Ripano* (Mancini 1997: 107)
       a.   Babbu   dicə   le   vərità.
            dad.SG.M say.3SG.N   the.SG.F truth.SG.F
            'Dad says the truth.'

       b.   So   magnatə lu   pani'.
            be.1SG eaten.N   the.SG.M breadroll.SG.M
            'I(fem) have eaten the breadroll.'

In (13a) the external argument is masculine and the internal argument feminine, while the verb displays a mismatch marker (-ə). In (13b), where the external argument is feminine (the sentence was uttered by a woman) and the internal argument is masculine, the participle shows a mismatch marker (-ə), while the auxiliary agrees with the external argument. (9) and (10) show that in Ripano gender is marked on the finite verb (unlike in the rest of Romance), while (11) and (12) show the paradigm for complex verb forms involving a participle, which is inflected for both gender and number in Ripano.

  It is important to note that agreement mismatch takes place when the external argument and the internal argument of a transitive verb occupy their canonical position. In case of topicalization, agreement mismatch is replaced by topic-oriented agreement (D'Alessandro et al. 2016). We will return to this in section 3.2.2.

1.2.3 Topic-oriented agreement

The participle agrees with the most definite (or known) argument:

(14)   *Sanvalentinese*
       a.   Ajə   cciosə   li   pellistrə.
            have.1SG   killed-SG.M   the.PL.M chickens.PL.M
            'I have been killing chickens.'[7]

       b.   Ajə   ccisə   li   pellistrə.
            have.1.SG   killed.PL.M   the.PL.M chickens.PL.M
            'I have killed the chickens.'

In (14a) the past participle agrees with the external argument, while in (14b) it agrees with the internal argument. What differs between the two sentences is the context, and the topichood of the arguments. Specifically, sentence (14a) refers to the action of killing,

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[7] Apologies for the gruesome examples, which were uttered spontaneously by a dialect speaker.

whereas (14b) refers to specific chickens which were killed ('as for those chickens, I killed them').

1.3 Split differential object marking

Like most southern Italian dialects, Abruzzese exhibits differential object marking (DOM) in the form of a prepositional accusative, by marking the direct object with the preposition *a* if the object is human. This phenomenon is also found in other Romance languages, most notably Spanish, as exemplified in (15):

(15)   *Spanish*
         Vi   a   tu   primo.
         see.PST.1SG   to   your   cousin
         'I saw your cousin.'

In Abruzzese, DOM is mostly restricted to personal pronouns, like in many other southern varieties (Ledgeway 2000; Manzini & Savoia 2005). In Ariellese, as well as in a number of other southern Italian dialects (Altamura, Colledimacine, Borbona, Cagnano Amiterno) however, there is a further restriction: DOM is only found with 1/2 person pronouns, but is mostly excluded with 3rd person pronouns, and is impossible with full DPs (see examples (16)–(18).

(16)   *Ariellese*
         So   vistə   a   mme/   a   tte.[8]
         be.1SG   seen   to   me/   to   you
         'I have seen me/you.'

(17)   Semə   vistə   a   nnu/   a   vvu.
         be.1PL   seen   to   us/   to   you
         'We have seen us/you.'

(18)   *So   vistə   a   Marije/   a   jissə/   a   quillə.
         be.1SG   seen   to   Mary/   to   them/   to   them

(16)–(17) show that a 1st/2nd person pronoun requires the preposition *a*. (18) shows that the same preposition is ungrammatical with 3rd person objects.

In the rest of the paper, it will be shown that all these data can be accounted for by assuming the presence of an extra head, a φ-feature bundle, which will be called π. The presence of π is not in fact unique to the *v* field and to southern Italian dialects, but constitutes a microparametric option for Italian varieties. It can be found in the C-T field, where it is instantiated in the form of a subject clitic (or, possibly, as complementizer

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[8] An anonymous reviewer points out that some northern Italian dialects show person-sensitive differential object marking in clitic-left dislocated constructions, like the following examples from Paduan:

i.   A mi, non me=vole   nisun.
       to me not me=wants nobody
       'Nobody wants me.'

ii.   *A la   Maria non la=vole   nisun.
        to the Mary not her=wants nobody

This had originally been noted also for Friulian. These facts point again towards the idea that some northern dialects have similar phenomena as southern dialects. In the rest of the paper, it will be argued in fact that this difference is mainly to be attributed to the different merging "area" of π, which is C-T in northern varieties. One thing that needs to be added is that clitic left dislocation is different than (dislocation is different than simple doubling) simple doubling, in that it needs topicalization; this means that doubling might be interacting with definiteness and other factors which are not the topic of this article, but that are definitely worth of further investigation.

agreement[9]); in the T-*v* field, in which case it takes the form of a subject-oriented auxiliary (and we see person-driven auxiliary selection, like in (1)); and in the *v*-V field, which is the internal argument field, in which case it emerges as split DOM. In each of these cases, we are dealing with a form of doubling of the argumental φ-features. Observe that there can be cases in which two extra probes co-occur, for instance when we see doubling of both arguments of a transitive verb. This is expected under the assumption that the extra probe doubles the features of the arguments, each of which is usually doubled once. Once again, nothing in principle prevents subject or object tripling. Hence, the co-occurrence of multiple extra probes is not *a priori* excluded. The difference between northern Italian and southern Italian varieties, it will be shown, lies simply in the site at which π is merged and in the morphological exponent of π, of course. In both cases, we are dealing with subject doubling, but in different forms.

Most Ariellese data regarding participial agreement and auxiliary selection (1.1 and 1.2.1.) were thoroughly investigated in D'Alessandro & Roberts (2010), who propose an analysis whereby person-driven auxiliary selection is due to the presence of a person feature on *v*. In light of this, they draw a correlation between null-subjecthood in a language and person-driven auxiliary selection. They also conclude that there is no relation whatsoever between person-driven auxiliary selection and participial agreement.

While building on D'Alessandro and Roberts's work, this study shows that the general picture is much broader and much more complex than previously envisaged. New data from Ripatransone and San Valentino show that agreement mismatch phenomena are not unusual in this area. A more thorough analysis of the auxiliary morphology shows that *v* does not encode a person feature, *contra* what D'Alessandro and Roberts propose. We are not dealing with a simple "cartographic" division of labor between T and *v* as proposed by D'Alessandro and Roberts; instead, we have a genuine extra element that triggers the emergence of all these apparently unrelated phenomena. This in turn also means that split auxiliary selection and participial agreement can be attributed to the same factor, π, and are hence not unrelated (*contra* what has been claimed in D'Alessandro & Roberts 2010). Finally, this new analysis brings to light a previously unobserved parallelism between northern Italian dialects, which exhibit subject clitics, and southern Italian dialects, which exhibit person-driven auxiliary selection. These dialect groups, which have always been considered microtypologically distinct (although both Romance, of course), have more in common than meets the eye.

Let us now turn to a detailed examination of the data, starting from split auxiliary selection.

2 Person-driven auxiliary selection, a probe in the T-*v* field

Split (person-driven) auxiliary selection is the phenomenon whereby the selection of the auxiliary BE or HAVE depends on the person specification of the external argument and is independent of the argument structure of the verb. If the external argument is 1st or 2nd person, the auxiliary selected to form the present perfect will be BE; if the external argument is 3rd person, the auxiliary selected will be HAVE, independently of the verb argument structure class or *Aktionsart*. Most upper southern dialects, with some notable exceptions in Apulia and in sporadic varieties in the whole upper southern area, follow this pattern of auxiliation, although the exact distribution of BE and HAVE can vary: 1/2 vs 3 is the most readily found pattern, but not the only one. Some varieties are attested where BE is selected only when the subject is 2nd person; some other varieties, more rarely attested, display opposition between 1st singular and everything else (Manzini &

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[9] Some possible cases of complementizer agreement in Italo-Romance can be found in Old Neapolitan (Ledgeway 2003; 2011; Formentin 1996), and some north-western varieties discussed in Parry (2007).

Savoia 2005: II, 728). Finally, there are some varieties in which argument structure does matter, with be always found when the verb is unaccusative, and the 1/2-be vs 3-have split is only found with unergative and transitive verbs. More on this will be presented in 2.1.2. Most varieties however follow the 1/2-be vs 3-have scheme for all verbs, and this is the pattern that will be discussed here. An example of person-driven split auxiliary selection is in (1), here repeated as (19):

(19)   *Ariellese*
        Transitive *magna'* ('to eat')
        a. (ji)   so   magnatə   BE
            I   be.1SG   eaten.SG
            'I have eaten.'

        b. (tu)   si   magnatə   BE
            you   be.2SG   eaten.SG
            'you have eaten.'

        c. (essə) a   magnatə   HAVE
            (s)he   have.3   eaten.SG
            '(s)he has eaten.'

        d. (nu)   semə   magnitə   BE
            we   be.1PL   eaten.PL
            'we have eaten.'

        e. vu   setə   magnitə   BE
            you.PL   be.2PL   eaten.PL
            'you have eaten.'

        f. (jissə) a   magnitə   HAVE
            they   have.3   eaten.PL
            'they have eaten.'

The same pattern is found in intransitive verbs, both unaccusative and unergative:

(20)   Unaccusative *cagna'* ('to change')
        a. (ji)   so   cagnatə   BE
            I   be.1SG   changed.SG
            'I have changed.'w

        b. (tu)   si   cagnatə   BE
            you   be.2SG   changed.SG
            'you have changed.'

        c. (essə) a   cagnatə   HAVE
            (s)he   have.3   changed.SG
            '(s)he has changed.'

        d. (nu)   semə   cagnitə   BE
            we   be.1PL   changed.PL
            'we have changed.'

        e. (vu)   setə   cagnitə   BE
            you.PL   be.2PL   changed.PL
            'you have changed.'

        f. (jissə) a   cagnitə   HAVE
            they   have.3   changed.PL
            'they have changed.'

(21)   Unergative *fatija'* ('to work')
    a. (ji) so   fatijatə   BE
        (I)   be.1SG worked.SG
        'I have worked.'

    b. (tu) si   fatijatə   BE
        you be.2SG worked.SG
        'you have worked.'

    c. (essə) a   fatijatə   HAVE
        (s)he have.3 worked.SG
        '(s)he has worked.'

    d. (nu) semə   fatijitə   BE
        we   be.1PL worked.PL
        'we have worked.'

    e. (vu)   setə   fatijitə   BE
        you.PL be.2PL worked.PL
        'you have worked.'

    f. (jissə) a   fatijitə   HAVE
        they   have.3 worked.PL
        'they have worked.'

It should be noted that this split obtains in Abruzzese only in the present perfect and in the pluperfect, and is absent in the past subjunctive/conditional (which is also periphrastic), where only HAVE is selected. The past subjunctive paradigm is illustrated in (22) for the verb 'to work'. The same pattern applies to all verbs:

(22) a. (ji) avessə   fatijatə   HAVE
        (I)   had.IMPF.SUBJ worked.SG
        'I would have worked.'

    b. (tu) avissə   fatijatə   HAVE
        you had.IMPF.SUBJ.2SG worked.SG
        'you would have worked.'

    c. (essə) avessə   fatijatə   HAVE
        (s)he had.IMPF.SUBJ worked.SG
        '(s)he would have worked.'

    d. (nu) avəssemə   fatijitə   HAVE
        we   had.IMPF.SUBJ.1PL worked.PL
        'we would have worked.'

    e. vu   avəssetə   fatijitə   HAVE
        you.PL had.IMPF.SUBJ.2PL worked.PL
        'you would have worked.'

    f. (jissə) avessə   fatijitə   HAVE
        they   had.IMPF.SUBJ worked.PL
        'they would have worked.'

The pluperfect is also an interesting tense in Abruzzese. We will return to this later, in 3.1.

2.1 The setup of auxiliaries

Split auxiliary selection is only found in the indicative mood, and not in the subjunctive/conditional mood, as we have just seen. In the indicative, auxiliaries appear only in periphrastic tenses, namely the present perfect and the pluperfect. Auxiliaries can be thought of as

perfectivity markers with a mood restriction. There is in principle no semantic conflict between *irrealis* mood and perfectivity which could justify this restriction to the indicative only.

Mood and tense have a *portmanteau* exponent in Abruzzese auxiliaries. These auxiliaries are also person markers (or doublers), in a way in which other Romance auxiliaries are not. Specifically, consider the two examples in (23) and (24), from Italian and Abruzzese respectively. Italian auxiliation is argument-structure driven and represents the prototypical system for Romance languages with auxiliary selection, where the auxiliary is selected depending on the argument structure. Abruzzese auxiliary selection is more complex, as illustrated in the following examples.

(23) *Italian*
    a.   Mattia   ha   mangiato
        Mattia.M have.3SG eaten.SG.M
        'Mattia has eaten.'

    b.   Mattia   è   cresciuto
        Mattia.M be.3SG grown.SG.M
        'Mattia has grown.'

    c.   Mattia   ha   lavorato
        Mattia   have.3SG worked.SG.M
        'Mattia has worked.'

    a'. voi   avete   mangiato
        you.PL have.2PL eaten.SG.M
        'you have eaten.'

    b'. voi   siete   cresciuti
        you.PL be.2PL grown.PL.M
        'you have grown.'

    c'. voi   avete   lavorato
        you.PL have.2PL worked.SG.M
        'you have worked.'

(24) *Ariellese*
    a.   Matte'   a   magnatə
        Matthew have.3 eaten.SG
        'Matthew has eaten.'

    b.   Matte'   a   crisciutə
        Matthew have.3 grown.SG
        'Matthew has grown.'

    c.   Matte'   a   fatijatə
        Matthew have.3 worked.SG
        'Matthew has worked.'

    a'. vu   setə   magnitə
        you.PL be.2PL eaten.PL
        'you have eaten.'

    b'. vu   setə   crisciutə
        you.PL be.2PL grown
        'you have grown.'

    c'. vu   setə   fatijitə
        you   be.2PL worked.PL
        'you have worked.'

The information that the Italian auxiliary expresses, morphologically, is the following:

Italian
a. transitivity [HAVE]; unergativity [HAVE]; unaccusativity [BE] [root]
b. person and number of the subject of the transitive, unergative or unaccusative verb [suffix]
c. present tense (which results in a present perfect when combined with the perfective past participle) [suffix]

The information that the Abruzzese auxiliary conveys, on the other hand, is the following:

Ariellese
a. the subject is 1/2 person [BE] vs the subject is 3rd person [HAVE] [root]
b. person and number of the subject of the transitive, unergative or unaccusative verb [-*a* vs -*ete*] [suffix]
c. perfectivity and non-*irrealis* (indicative mood) [root]

As we can see, Abruzzese auxiliaries encode the same piece of information about the person of the subject twice: first through the root of the auxiliary (which expresses "participant" information), and second through the inflectional ending on the same auxiliary (see also Loporcaro 2001; 2007 for similar considerations). To see this better, compare (25a), a present perfect auxiliary, to (25b), which exemplifies the present tense of the verb *to do*; the former clearly exhibits subject doubling, while the latter does not.

(25) a.   [pers]   [pers, nr]

so	= s	(be.1/2)	+	-o (1SG)
si	= s	(be.1/2)	+	-i (2SG)
a	= a	(have.3)	+	a (3)
semə	= s	(be.1/2)	+	-emə (1PL)
setə	= s	(be.1/2)	+	-etə (2PL)
a	= a	(have.3)	+	a (3)

       b.   [pers, nr]

faccə	= f	('do')	+	accə (1SG)
fi	= f	('do')	+	-i (2SG)
fa	= f	('do')	+	-a (3)
facemə	= fac	('do')	+	-emə (1PL)
facetə	= fac	('do')	+	-etə (2PL)
fa	= f	('do')	+	-a (3)

I propose that the person-oriented root selection of Ariellese is the result of merging an extra probe, π, in the syntactic spine, between *v* and T. π is a φ-bundle, i.e. a head with no other content than unvalued φ-features. The auxiliary root is, thus, an extra head with φ-features, and as such it differs from transitivity-related auxiliary roots of the sort found in other Romance languages, like Italian or French. The nature and licensing of π are discussed in the following section.

Note that π in Ariellese also encodes number (*contra* D'Alessandro & Roberts 2010). In general, the feature setup of π is language-specific: there can be a π encoding person and number, like in Ariellese, and a π encoding number and gender, like in Ripano. This situation is not unexpected if we consider that π in northern Italian dialects is realized as a clitic in the left periphery: as will be shown in 2.2, clitics in these varieties encode different

sorts of information. Some only express "participant", others only express "person", others only express "singular", and so on. For a detailed overview of the morphological microvariation in subject clitic paradigms please refer to Manzini and Savoia (2005: 117).

2.1.1 The licensing of π

According to Chomsky (1995: Ch. 4), heads encoding uninterpretable φ-features exclusively have no right to exist: "[…]T, C, D, and Agr. The first three have Interpretable features providing "instructions" at either or both interface levels. Agr does not; it consists of – Interpretable formal features only. We therefore have fairly direct evidence from interface relations about T, C, and D, but not Agr. Unlike the other functional categories, Agr is present only for theory-internal reasons". Chomsky's quote refers to the Agr head, a head which was postulated in order to obtain participial agreement (Kayne 1989; 2000), and then also subject-verb agreement, in a spec, head configuration. This head, having no semantic content, could not be maintained in the Minimalist framework, and was hence eliminated from the syntactic inventory, together with Spec-head agreement. While π reminds us of Agr, there is one fundamental difference between the two: Agr was thought of as a purely functional head, which would allow agreement to take place. Its presence did not have any impact on the syntax of the clause other than facilitating (or permitting) agreement between two syntactic items that would move onto it (the verb in the head, the subject or the object in the specifier). π is not Agr (see also fn. 14).

The objection raised by Chomsky regarding heads with no semantic content is overcome in this article in two ways: first, by providing empirical evidence of their presence; second, through some theory-internal considerations. Chomsky's problem is that a purely-φ head cannot be interpreted at the interface with CI, because of the fact that it does not bring any semantic content. His conclusion is that this head cannot exist. There is, however, another possibility, namely that this head does exist, but in order to be interpretable it must have merged/incorporated into another, semantically non-empty, head, before the interface is reached. Both subject clitics and roots, in fact, cannot stand on their own (see D'Alessandro 2017 for a more elaborated version of this point).

In recent years, several studies have considered merging extra feature bundles to the syntactic spine for non-Romance languages; see for instance Coon and Preminger (2012) for the merger of valued φ-features, Halpert (2015) and Van der Wal (2016).

2.1.2 Microvariation patterns of auxiliary selection

The patterns of auxiliary selection in Ariellese are the most common among SIDs. In what follows we will try to show that person-driven auxiliary selection depends on the feature content and value of π as well as on the morphological inventory of the dialect. Attributing auxiliary selection to a π probe whose φ-setup can vary, and whose morphological exponent also varies "lexically" means that virtually all combinations of BE/HAVE auxiliaries can be found. This seems to be the case.

Microvariation in southern Italian varieties is extreme; this means that virtually all BE/HAVE combinations can be found, including paradigms featuring only one of the two auxiliaries (Cennamo 2001; Loporcaro 2001; 2007; Manzini & Savoia 2005). For example, we find BE in the singular and HAVE in the plural in Pompeii (among people of the middle class):

(26) *Pompeii* (Cennamo 2001: 435)
    so /   si /   e /   aimme / aitə /   annə/ennə rimastə
    be.1SG be.2SG be.3SG have.1PL have.2PL have.3PL   remained
    'I/you/(s)he/we/you.pl/they have remained.'

The following patterns are listed by Cennamo (2001), for instance, only for unaccusative verbs for change of state in the Pompeii dialect. The variation involves the class and age

of the speakers (1 is for the older middle class, 2 is for the middle-aged middle class, 3 is for the young middle class; 4 is for the old lower class, 5 is for the mid-aged lower class, 6 is for the young lower class).

(27)

	1SG	2SG	3SG	1PL	2PL	3PL
Pompeii 1	HAVE	BE	BE	HAVE / BE	HAVE / BE	HAVE / BE
Pompeii 2	BE	BE	BE	BE	BE	BE
Pompeii 3	HAVE	BE	BE	HAVE	HAVE	HAVE
Pompeii 4	HAVE	BE	HAVE	HAVE	HAVE	HAVE
Pompeii 5[10]	HAVE	HAVE	**BE**	HAVE	HAVE	HAVE
Pompeii 6	HAVE	HAVE	HAVE	HAVE	HAVE	HAVE

Auxiliary selection can vary also according to sociolinguistic factors. For further considerations on this issue we refer the reader to Cennamo (2001).

From these data, we can conclude that each language has a different set of features for π. Given this wide microvariation, and given the fact that most southern Italian areas are still undocumented, it is not unreasonable to think that all combinations can be found, with some possible restrictions in person/number combinations (R. Manzini p.c.), which are irrelevant here. This article, however, focuses only on the patterns in Ariellese, which are the most common, and on their interaction with participial agreement. The system proposed does not exclude other possibilities, which are ruled out by more constrained systems such as that proposed by Kayne (1993) or Coon and Preminger (2012), precisely because it links auxiliary selection to the lexical/morphological inventory of a language.

2.1.3 PF resolution of π

We have proposed the existence of a π, a head consisting purely of φ-features. As we will see in detail in the next section, this head, a φ-bundle, will be specified with the same values as the subject, after agreeing with it. In this paper, we will use Chomsky (2000)'s agreement operation, called Agree, involving an unvalued (and uninterpretable) probe c-commanding a valued (and interpretable) Goal. The probe's features match those of the Goal and receive their value.

After Transfer (Chomsky 2000), these valued φ-features will be assigned exponents, which will constitute the root of the auxiliary, as we have seen above. Consider again the paradigm in (25):

(25)   a.

	[pers]	[pers, nr]
so	= s (be.1/2)	+ -o (1SG)
si	= s (be.1/2)	+ -i (2SG)
a	= a (have.3)	+ a (3)
semə	= s (be.1/2)	+ -emə (1PL)
setə	= s (be.1/2)	+ -etə (2PL)
a	= a (have.3)	+ a (3)

When T Agrees with a 1st singular subject, for instance, it will receive the following exponent at PF (recall that the tense/aspect/mood features, abbreviated to V here, and the φ-features are expressed by means of portmanteau morphemes in Abruzzese, like in most Romance languages):

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[10] Pompeii 5 is a particularly interesting case, given that the pattern seems to be almost the reverse of that found in Arielli, in the singular.

(28)   T = 1SG + pres = -o
         π = 1SG = be = s-

The rest of the paradigm for the present tense is as follows:

(29)   π   T
        1SG   s-   -o
        2SG   s-   -i
        3SG   0   -a
        1PL   s-   -emə
        2PL   s-   -etə
        3PL   0   a

0 shows that for the Ariellese pattern, *s-* is the exponent of both plural and singular 1st/2nd person π. HAVE is taken to be a null π (i.e. underspecified person/underspecified number of the root). Observe that this mapping only holds for Ariellese. Other varieties have other correspondences, as we have seen in the previous section.[11] Which exponence each dialect assigns to each feature bundle is, ultimately, a lexical issue, and as such largely unpredictable. π is not only found in southern Italian varieties; in fact, it is something that southern Italian auxiliaries have in common with northern Italian clitics. π corresponds to the BE root in upper southern varieties, and to a person clitic in northern varieties. Just as some paradigms in northern varieties are defective (Renzi & Vanelli 1983; Poletto 2000; Manzini & Savoia 2005; Roberts 2010, a.o.), and do not feature clitics for all person/number combinations, BE is not found for all person/number combinations.[12] The root paradigms of auxiliary selection can be compared to the paradigms of subject clitics in northern Italian varieties, both defective.

Before turning to this parallelism between subject clitics and auxiliaries, we need to clarify that subject clitics in northern Italian varieties come in many different forms, i.e. they are not a uniform phenomenon. In particular, we can divide them into at least two classes: the pronominal class, and the purely-φ/agreement-like class. Pronominal clitics, like object clitics or subject clitics of the sort also found in French, for instance, have a nominal element (a D feature, in the terms of Roberts 2010), and are radically different from agreement-like clitics. In this article, we are only concerned with agreement-like/pure-φ clitics. For an overview of the difference between these two classes and a number of diagnostics to tease apart the two, and for a fine-grained classification of clitics and their distributional properties, the reader is referred to Rizzi (1986); Poletto (2000); Cardinaletti and Repetti (2008); and Roberts (2010).

2.2 Subject doubling in northern and southern Italian dialects

Subject clitics have been the subject of extensive research, and a number of observations and generalizations have been made with regard to their distribution, for instance. Some of these generalizations also seem to hold for split auxiliation.

To start with, both subject clitics (of the purely-φ kind, the only type that we will consider henceforth) and auxiliaries can appear in the presence of an overt subject, as illustrated in (30a) and (30b), while pronominal subject clitics cannot (30c).

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[11] A reviewer asks whether it would be possible to have a theory for the assignment of morphemes to corresponding feature bundles along the lines of Silverstein's (1976) hierarchy, where 2nd person would be realized as BE only if 1st is too, etc. This idea could work for Ariellese, but it would not explain other auxiliary patterns in southern Italian varieties. At this point, I prefer to remain agnostic regarding possible restrictions on the patterns of occurrence of π.

[12] The definition of defective in this paper is quite atheoretical, and simply means that some clitic systems lack some forms. Given that BE expresses [participant], if the auxiliary paradigm is defective we will find 1st or 2nd person forms not specified as BE.

(30) a. *Trentino* (Rizzi 1986: 400)
   el   Gianni   el   magna
   the.M.SG   Gianni.SG.M   he.SCL.3SG.M   eat.3SG
   'Gianni eats.'

  b. *Abruzzese*
   Giannə   a   magnatə
   Gianni.3SG   have.3SG   eaten.SG
   'Gianni has eaten.'

  c. *French*
   Jean   (*il)   mange
   John   he.SG.M   eat.3SG
   'John eats.'

Furthermore, π-subject clitics cannot be omitted from a sentence if they are present in the lexical inventory of a language, as shown in (31a), differently from pronominal clitics (which cannot co-occur with full-DP subjects so they must be left out, as we saw in 30c). Auxiliaries must also be obligatorily inserted, as in (31b):

(31) a. *Trentino* (Rizzi 1986: 400)
   El   Gianni   *(el)   magna
   the.M.SG   Gianni.M.SG   he.SCL.M.SG   eats.3SG
   'Gianni eats.'

  b. *Abruzzese*
   Giannə   *(a)   magnatə
   Gianni.3SG   has.3SG   eaten.SG
   'Gianni has eaten.'

As mentioned above, languages with subject clitics do not all exhibit full-fledged paradigms, and many clitic paradigms exhibit gaps of some sort. In some cases, only one subject clitic is present in the lexical inventory of the language. When this is the case, according to Renzi and Vanelli (1983), this clitic will be the 2nd person singular. Manzini and Savoia (2005: I, 118–119) and Loporcaro (2007) show that this generalization is too strong: there are dialects that, for example, have a dedicated clitic for 3rd person only (including the dialects of Stroppo/Macra/Pradleves, S. Pietro Val Grana, Acceglio, Vermiglio-Val di Sole, Livo-Val di Non, Tuenno-Val di Non, S. Maria M., Coimo). In general, however, even if some exceptions to this generalization can be found, we can certainly acknowledge a strong tendency among dialects with subject clitics to prefer the 2nd singular clitic when only one clitic is present in the language.

 If subject clitics are the equivalent of auxiliary roots, the prediction is that they will roughly obey the same generalizations with respect to their distribution. We have seen that subject clitics obey Renzi and Vanelli's generalization; this means that auxiliary roots should also do so. If only one form in the auxiliary paradigm is marked in these dialects, it should also be the 2nd singular. This prediction is borne out, at least according to the auxiliary selection table in Manzini and Savoia (2005: 728 –79). The table clearly shows that if a dialect has only one BE form (the exponent of person in most dialects as we have seen), it will be the 2nd person singular.

 Some varieties are attested that present both person-driven auxiliary selection and subject clitics: one of these is the dialect of Cerano, in Piedmont. Given that we are talking about the same head π merged in different positions, a complementary distribution of subject clitics and auxiliaries might be expected. To be more precise, the fact that auxiliary selection and clitics are usually in complementary distribution stems from them being

two different (language- specific) lexical ways of realizing the same element, namely π in the v-T. Languages usually select one or the other, but there can be languages that choose to use both lexicalizations. They are just more rare.

The dialect of Cerano provides interesting evidence in this regard: it displays person-driven auxiliary alternation for the 1st person, according to the following paradigm for the present perfect:

(32)   *Cerano* (Manzini & Savoia 2005: III, 10)
  a. (i) sum gni
     SCL be.1SG come

  b. t   ε   gni
     you.SCL.2 be.2/3SG come

  c. l   ε   gni
     (s)he.SCL.3 be.2/3SG come

  d. (i) suma/ uma   gni
     SCL be.1PL have.1PL come

  e. si/   j/   i   gni
     SCL-2.PL you- SCL have-2PL come

  f. i in   gni
     SCL be-3PL come
     'I/you/(s)he… have come.'

Observe that the 1st and 2nd person plural display what looks like a free alternation between BE and HAVE. As we can see, the subject clitic is either optional or absent with the auxiliary BE, while it is obligatorily expressed in the 2nd plural form of HAVE. Let us look at the paradigm for the unergative verb *to sleep*:

(33)   *Cerano* (Manzini & Savoia 2005, III: 10)
  a. sum/i O   drumi
     SCL / SCL have slept.SG

  b. t   ε   drumi
     you.SCL be.2/3SG slept.SG

  c. l   ε   drumi
     (s)he.scl.3 be.2/3SG slept.SG

  d. **(i)** suma/ **i** uma   drumy
     SCL be.1PL SCL have.1PL slept.PL

  e. si/   i i   drumy
     SCL.2PL SCL be.2SG slept.PL

  f. i in   drumy
     SCL be.3PL slept.PL
     'I/you/(s)he… have slept.'

(33) shows more straightforwardly that whenever a BE-HAVE alternation is possible, the clitic is obligatory with HAVE and not with BE in this dialect.[13] It is important to underline

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[13] An anonymous reviewer points out that this alternation might be due to the fact that these we are dealing with so-called auxiliary clitics, i.e. a special form of subject clitics that occurs only with some auxiliary forms (see Garzonio & Poletto 2011 for a discussion of Piedmontese dialects). It seems that this analysis of the data is perfectly compatible with the presence of π.

that these are tendencies, not generalizations, as expected from the fact that the exponents of these feature bundles ultimately reflect the lexical inventory.

It should also be noted that "tripling" is also possible in some languages, and is attested in some Italian dialects; in principle, therefore, it should only be unusual, rather than impossible, to find both BE (subject doubling) and a person subject clitic. One example of subject clitic tripling is offered by Manzini and Savoia (2007) and reproduced here as (34):

(34)   *Castellazzo Bormida* (Manzini & Savoia 2007: 37)
        Ra   drwom-ra   tu   surela?
        she   sleeps-she your   sister
        'Does your sister sleep?'

In (34), the subject clitic is present twice: as a proclitic, in the usual pre-finite verb position, and in the inverted, enclitic position, which is the usual position for clitics in interrogative sentences. One of the two clitics is very likely pronominal, but the other certainly cannot be. While the proclitic position usually disappears in these contexts, the dialect of Castellazzo Bormida retains both clitics, thus resulting in the information about the person, number and gender of the subject being repeated three times: once on the full DP subject, once on the enclitic subject clitic, and once on the proclitic subject clitic. We can conclude on this basis that having more than one instance of π is rare, but possible.

2.2.1 Different distribution in subjunctive mood

One obvious difference between person-driven auxiliaries and subject clitics is that we see subject clitics in all tenses and moods, but the same is not observed for split auxiliary selection. If our argument above is correct, auxiliary selection effects should also be found in the present tense or in the subjunctive in upper southern dialects. To arrive at an explanation, the question needs to be divided into two parts: first, why are there no auxiliary selection effects in subjunctive clauses while clitics do occur in northern Italian subjunctive clauses?; and, second, why are there no person split effects at all in the present tense, while subject clitics are attested through the whole verbal paradigm?

A tentative answer to the first question is that *irrealis* is by definition not D-linked. Hence, a direct reference to speaker and addressee is less likely to be found (Geoffrey Khan p.c.). If there is a part of the paradigm that does not establish a link to speaker and addressee (i.e. to 1/2 person), that will be the *irrealis*. So the reason why we do not find person-driven split auxiliary selection in the past subjunctive or past conditional might be related to the nature of these tense/mood specifications.

The question of why we do not see person-split effects in the present tense in southern varieties while we do find subject clitics in northern varieties is more complicated, however. It seems that person split effects disappear in non-periphrastic tenses; or at least, there do not seem to be any clitic-like forms in the T-v domain in analytic tenses. The issue is whether we can conclude that π is still present in these tenses. In some cases, we do see morphological oddities which we can attribute to the presence of π even in the absence of split auxiliary selection, like in the case of inflected adverbs in Ripano, which will be discussed in 3.2.2. A possible explanation for this asymmetrical distribution might reside in the fact that the π probe in upper southern varieties is hosted by an auxiliary head. When the auxiliary is not there, the π probe cannot be realized, given that the finite verb morphology does not allow for person-sensitive roots (the way that, say, a Slavic paradigm would allow for two roots of the same verb for perfective and imperfective). This means that the fact that these splits only emerge in periphrastic tenses on auxiliaries is due to a morphological/lexical, not syntactic, restriction.

3 π in the T-*v* field
3.1 The complex probe

Morphological variation is reflected on π. In one variety π can be a person-number bundle, while in another it can be only person, and in another only number and gender, for instance. The featural setup of π[14] has also repercussions for agreement, especially if π is merged in a position in which it intervenes in argumental agreement.

Let us now consider the distribution and agreement of the pluperfect auxiliary (BE + HAVE) in Ariellese. The pluperfect in Ariellese[15] (see also D'Alessandro & Ledgeway 2010) involves several heads that together form a complex auxiliary:

(35) *Ariellese*

    a. (ji) so ve' magnatə/cagnatə/fatijatə BE + HAVE
        I be.1SG have.IMPF.PST eaten/changed/worked.SG
        'I had eaten/changed/worked.'

    b. (tu) si və magnatə/cagnatə/fatijatə BE + HAVE
        you be.2SG have.IMPF.PST eaten/changed/worked.SG
        'you had eaten/changed/worked.'

    c. (essə) ave' magnatə/cagnatə/fatijatə HAVE
        (s)he have.IMPF.PST eaten/changed/worked.SG
        '(S)he had eaten/changed/worked.'

    d. (nu) s'-avav-emə / s-av-emə
        we be.1/2-have.IMPF.PST-1PL / be.1/2-have-1PL
        magnitə/cagnitə/fatijitə BE + HAVE
        eaten/changed/worked.PL
        'we had eaten/changed/worked.'

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[14] An anonymous reviewer points out that π recalls the Agr head of the Government and Binding era (Kayne 1989; Belletti 2001). This is true, but there are some crucial differences between the two. One is that Agr was a "position" rather than a simple bundle of features; it was present so that the syntactic elements that moved onto its head and specifier could agree with each other. It is not clear at all that Agr had any features of its own (the system was a morpheme-based one). This issue and many other parallelisms have been addressed in D'Alessandro (2017), currently under review.

[15] The pluperfect in neighboring areas, and also in the Ariellese spoken by the young, has lost the alternation.

  (i)   a. (ji) ave' magnatə/cagnatə/fatijatə
        (I) have.IMPF.PST eaten/changed/worked.SG
        'I had eaten/changed/worked.'

        b. (tu) avi' magnatə/cagnatə/fatijatə
        you have.IMPF.PST.2SG eaten/changed/worked.SG
        'you had eaten/changed/worked.'

        c. (essə) ave' magnatə/cagnatə/fatijatə
        (s)he had.IMPF.PST eaten/changed/worked.SG
        '(s)he had eaten/changed/worked.'

        d. (nu) avavemə magnitə/cagnitə/fatijitə
        we have.IMPF.PST.1PL eaten/changed/worked.PL
        'we had eaten/changed/worked.'

        e. vu avavetə magnitə/cagnitə/fatijitə
        you.PL had.IMPF.PST.2PL eaten/changed/worked.PL
        'you had eaten/changed/worked.'

        f. (jissə) ave' magnitə/cagnitə/fatijitə
        they have.IMPF.PST eaten/changed/worked.PL
   'they had eaten/changed/worked.'

These neutralized forms do not tell us much about the internal setup of auxiliaries, so they will not be addressed here. Notice that the spreading of HAVE is registered in other upper southern varieties (see Torcolacci 2014).

e. (vu)   s'-avav-etə /   s-av-etə
   you.PL   be.1/2-have.IMPF.PST-2PL /   be.1/2-have-2PL   BE + HAVE
   magnitə/cagnitə/fatijitə
   eaten/changed/worked.PL
   'you had eaten/changed/worked.'

f. (jissə)   ave'   magnitə/cagnitə/fatijitə   HAVE
   they   have.IMPF.SUBJ   eaten/changed/worked.PL
   'they had eaten/changed/worked.'

In (35d), for example *s* and *avavemə* are two distinct heads, both being specified as 1st person, while in (35c) and (35f) there is only one head carrying the person information (*'ave'*). This head encodes the same information as the other heads as far as tense, aspect and person are concerned. In (35) we have the same person feature SHARED between two heads. In (35c) and (35f) there is only one instance of person, which is 3rd person. Note also that the imperfective of BE in Ariellese has a different morphology than the forms reported here: *sevə, sivə/jivə, jevə, savemə, savetə, jevə* ('I was, you were, s/he was, we were, you were, they were'). It is not possible to use these forms in the pluperfect.

The derivation for a sentence with a pluperfect, as (36), is exemplified in (37), which shows how π plays a fundamental role in the emergence of person-driven auxiliary selection. For the derivation, we consider feature valuation to take place under Agree (Chomsky 2001).

(36)   Nu   s'- avav-emə   magnitə   lə maccarunə
        we   be.1/2 - have.IMPF.PST-1PL   eaten-PL   the pasta-PL
        'we had eaten pasta.'

(37)
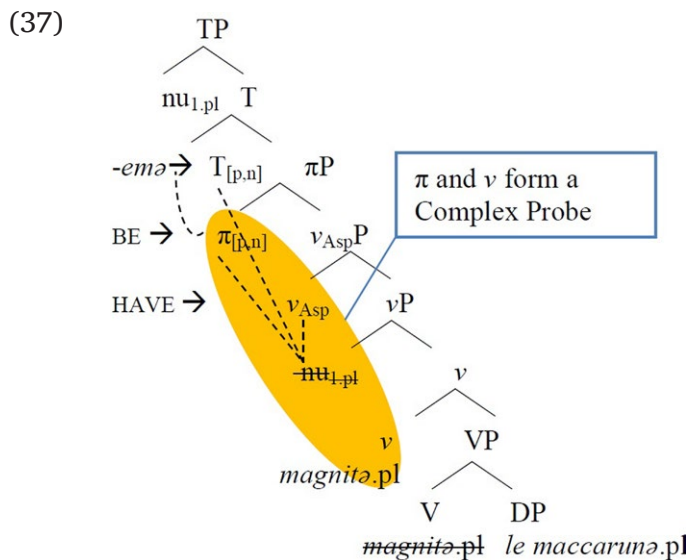
Before illustrating the derivation, two observations should be made: first, the participle raises at least to *v* in Abruzzese, as shown by D'Alessandro and Roberts (2010). Second, v_{Asp} is only morphologically realized as a separate item in the pluperfect. In the rest of the paradigm, it is usually the case that v_{Asp} is found together with T. It is possible that, even in the pluperfect, v_{Asp} and T are on the same head. However, examples like (38), which are quite common in Abruzzese (though they are not found in Ariellese) and show one or more clitics intervening between the higher and the lower auxiliary, suggest that in fact the aspectual auxiliary *ve'* is on a separate head.

(38) *Ortonese*
      So = tte = lə = ve'   dittə
      be.1SG = you.DAT = it.ACC = have.IMPF.PST   said
      'I had said it to you.'

The *v* head is scattered in (37) between *v* itself, π and v_{Asp}. T, π and v_{Asp} all probe the external argument. π incorporates on T for Full Interpretation (see section 2.1.1). We will return to the derivation in detail in the next section. This scattering is not too surprising under the assumption that every auxiliary occupies a different head. On the contrary, when the language morphology has portmanteau forms in its inventory, the functional sequence can be clustered together (Giorgi & Pianesi 1997; Rizzi 1997).[16] According to Giorgi and Pianesi (1997), scattering can only occur in a hierarchically ordered way. It seems that this feature hierarchy is respected in this language group, and in particular that person is the first feature that can be "scattered", followed by number, and then gender (which is rarely present on verbal finite heads in the first place).

More technically, we can think of a COMPLEX HEAD as a head which is in a feature sharing relation with other functional heads. Feature sharing has been proposed by several scholars in different forms (Ouali 2008; Schoorlemmer 2009; D'Alessandro & Roberts 2010; Miyagawa 2010, a.o.), and scattering the features contained on a head into several heads is also at the basis of a great deal of cartographic reasoning.

A COMPLEX HEAD is defined as follows:

(39) Given two heads F_1 and F_2, where F_1 immediately dominates F_2, F_1 and F_2 constitute a COMPLEX HEAD if they SHARE their φ-features.

If the heads encode unvalued φ-features, we talk of a COMPLEX PROBE:

(40) COMPLEX PROBE: Given two heads F_1 and F_2, where F_1 immediately dominates F_2, F_1 and F_2 constitute a COMPLEX PROBE if they SHARE their φ-features and these φ-features are unvalued.

The sharing operation has been proposed by several scholars, and consists in the presence of the same feature set on two adjacent functional heads. The mechanism giving rise to this SHARE configuration can be assumed to be that proposed by Ouali (2008: 169). According to Ouali, when a phase head receives unvalued features and has to pass them to the non-phase head (feature inheritance; Chomsky 2008), some of the features can be copied on the non-phase head and retained from the phase head. The definition of SHARE, adapted from Ouali is in (41):

(41) SHARE
      Transfer φ-features from X to Y and keep a copy.

Ouali refers to phase heads and feature inheritance mechanisms. While keeping the gist of his proposal, here we adopt a slightly different definition of SHARE, whereby *v* and π are one functional head, split into two subheads. This extended probe is no different from a scattered verbal head in those languages that show dedicated tense-aspectual morphemes rather than syncretic forms (see Giorgi & Pianesi 1997). If the morphology has a separate morpheme for each bit of inflectional information, then we will see the instantiation of each

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[16] See also a recent paper by Svenonius (2012) on feature-sensitive root merge and chunk spell-out, where heads corresponding to one morpheme are spelled out together but are scattered along the spine; finally, Szabolcsi (1994), following Bhatt and Yoon (1991), proposes a "subordinator conflation" mechanism for complementizers that is strictly linked to the agglutinative vs inflectional morphology of languages.

separate head in the morphology, as in (42). If the morphology only has a portmanteau form, it will not be possible to see the different heads, as in (43). They will nevertheless be instantiated as separate heads in the spine, but will constitute a unique, COMPLEX HEAD.

(42) *Italian*
    parl-a-va-mo   [imperf]
    speak-CLASS-IMPF-1PL
    'we spoke.'

(43) parl-ò   [perf]
    speak-PRF.3SG
    'he spoke.'

An issue that needs to be addressed regards the conditions that allow the existence of this COMPLEX PROBE. When can two adjacent heads constitute a COMPLEX PROBE and when can they not? For instance, can we say that C and T constitute a COMPLEX PROBE? What about T and v? In principle, any two heads can form a COMPLEX PROBE, as long as they are structurally adjacent. In the case of π, adjacency is a necessary condition for incorporation (and hence to ensure Full Interpretability).

3.2 Extending the domain: The π probe

I have proposed that the presence of an extra probe in T-v creates the peron-driven split in auxiliary selection; here, it will be shown that it also extends the agreement domain of the past participle, resulting in the phenomena that were listed in 1.2: omnivorous participial agreement, agreement mismatch marking and topic-oriented agreement.

   If π were valued and the agreement domain consequently split (Coon and Preminger 2012), it would be impossible for the past participle to Agree with the external argument (Chomsky 2001), as we see happening in Abruzzese. Not only does the extra probe not split the agreement domain: its presence causes omnivorous agreement and agreement mismatch to emerge. To see how this works, let us consider the Ariellese and Ripano data.

3.2.1 The COMPLEX PROBE in Ariellese

Ariellese displays person-driven auxiliary selection (Section 1.1) as well as omnivorous number agreement (1.2.1) and the double auxiliary construction (section 3.1), while Ripano shows agreement mismatch marking (1.2.2) but no auxiliary selection (the only auxiliary is BE) . Let us first consider the sentence in (44), from Ariellese.

(44)   ___   Semə   magnitə   lu   panə.
    pro.1PL be.1PL eaten.PL the.SG.M bread.SG.M
    'We have eaten the bread.'

In (44), the subject is 1st person plural and the auxiliary is consequently BE. The past participle is plural (*magnitə*) and shows agreement with the external argument, which is the only plural argument. This agreement pattern is unique in Romance: the past participle of a transitive verb never agrees with the external argument in Romance (Belletti 2005). We have proposed that Ariellese features a π probe in the T-v domain. π is responsible for person-driven auxiliary selection, as we have just seen. It also extends the v agreement domain in a way which will become clearer if we look at the derivation of (44) illustrated in (45).

  Like for (36)–(37), v is scattered on two heads (v and π), which constitute a COMPLEX PROBE. v probes the internal argument; both T and π probe the external argument (Chomsky 2001 Agree), just like in (37).

(45)

```
                              TP^17
                             /\
          T[p,n]            πP
          semə            /\
              π[p,n]      vP
                        /\
                 EA[p:1, n:pl]   v
                              /\
                        v[n]       VP
                      magnitə    /\
                                V    IA[n:sg]
                              magnitə  lu panə
```

- the past participle in *v* probes the IA
- T and π probe the EA
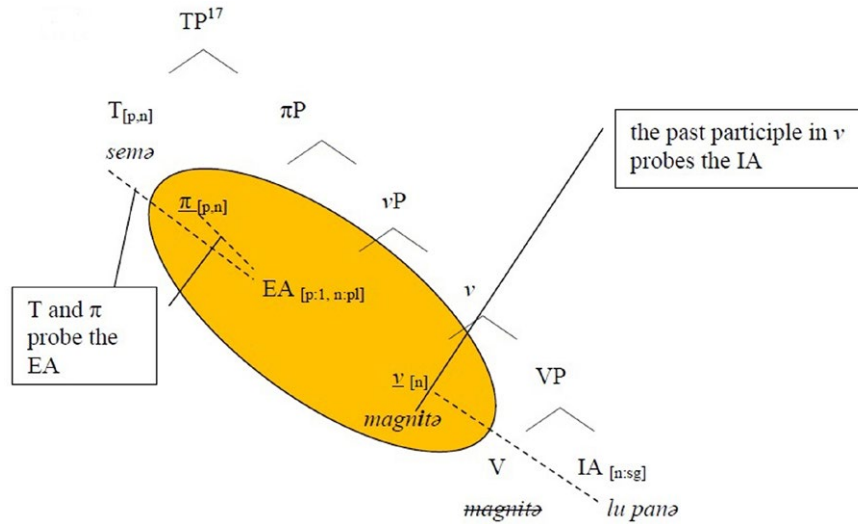
v and π constitute a COMPLEX PROBE. The definition of COMPLEX PROBE, in (39), is repeated in (46):

(46)   COMPLEX PROBE: Given two heads F_1 and F_2, where F_1 immediately dominates F_2, F_1 and F_2 constitute a COMPLEX PROBE if they SHARE their φ-features and these φ-features are unvalued.

Once the simultaneous probing of T and π[17] on the one hand and *v* on the other hand takes place, π incorporates into T because of Full Interpretability (see 2.1.1 and D'Alessandro et al. 2016), as it would not be possible for a purely φ-bundle to be interpreted at the LF interface (Chomsky 1995; π is in fact nothing more than a bundle of features in need of a host to be spelled out), and the sentence gets spelled out. π-*v* constitute a COMPLEX PROBE, hence they SHARE the values for their features. This means that the π-*v* head is valued by both the external and the internal argument simultaneously (π and *v* are in a SHARE relation). For (44)–(45), π-*v* will be hence valued as [Person: 1; Number: plural/singular; gender: masculine]. At PF, there is a late insertion of a morphological agreement marker for v and, as we have seen, there is a mismatch in the value of the Number feature on the COMPLEX PROBE *v*-π. Assuming, with Nevins (2011), that singular is a privative feature, plural morphology will be chosen at PF as an exponent of participial inflection. π, as we have said, has SHARED its features with *v*, but has incorporated into T because of its clitic-like nature. At spell-out, the T-π complex will have the values ([1st person; plural]$_π$;[1st person; plural]$_T$). BE will then be selected to realize π = 1st person, and the ending *–emə* will be the exponent of the 1st plural ending, following the scheme proposed in (25).[18]

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[17] The multiple probing could happen cyclically, so that first π probes the EA and then T probes π, or simultaneously. Alternatively, one could establish a dependency of unvalued features, and then value them simultaneously (López 2007). The option selected makes no difference to this account, so I will leave the issue open.

[18] Observe once again that the root for the present perfect in Ariellese is only selected depending on the person, i.e. the singular and plural specifications are parasitic on the person specification. In other words, 1 + SG equals 1 + pl (in the auxiliary root selection, BE in this case). We assume that number is present on π because of participial agreement. As for *v*, it only encodes number (not person, *contra* D'Alessandro & Roberts 2010). This is directly reflected in the morphology of the participle, which only alternates between singular and plural, as we have seen.

A similar mechanism is at work, according to Szabolcsi (1994), within the DP. Furthermore, a COMPLEX PROBE analysis for Tense/Aspect driven auxiliary selection in Kutchi Gujarati and Marwari has been proposed by Grosz and Patel-Grosz (2013).

3.2.2 The COMPLEX PROBE in Ripano

A similar mechanism to that which we have just seen for Ariellese is at play in Ripano, which shows agreement mismatch that obeys a different lexical insertion rule: when the features of π/v have different values, the reduced ending -ə will be selected as the morphological ending of the past participle. Recall that Ripano finite verbs also express gender inflection; participial agreement in Ripano also involves gender, unlike Ariellese, where participial agreement obtains for number only. As illustrated in 1.2.2, the agreement mismatch seen in Ripano also differs from that observed in Ariellese. Specifically, when the internal argument and the external argument of a transitive verb show different gender or different number specifications, the ending on the finite verb or on the participle in compound tenses will be -ə. (47) illustrates this pattern:

(47)   *Ripano*
  ___   So   rlavat**ə**   le   camisce.
  pro.1SG.M   be.1SG   washed.N   the.SG.F   shirt.SG.F
  'I.M washed the shirt.'

In (47), the subject of the utterance is masculine (the sentence was produced by a man), the object is feminine, and the ending on the verb is -ə. A masculine ending for the participle is judged as ungrammatical by some speakers, and as very marked but possible by others:

(48) */#___   So   rlavat**u**   le   chemisce.
  pro.1SG.M   be.1SG   washed.SG.M   the.SG.F   shirt.SG.F
  'I (masc) have washed the shirt.'

Those speakers who consider the sentence in (48), with the participle agreeing with the masculine subject, as marginally acceptable might be moving towards a topic-oriented system (D'Alessandro et al 2016), of the sort which is found in San Valentino, and which will be briefly addressed below.

In the presence of a finite verb, the agreement pattern for a transitive verb with a masculine EA and a feminine IA will be as in (49):

(49)   *Ripano* (Mancini 1997: 107)
  Babbu   dic**ə**   le   vərità.
  dad.SG.M   says.3SG.N   the.SG.F   truth.SG.F
  'Dad says the truth.'

In (49) the EA is once again masculine singular whereas the IA is feminine singular: this triggers the surfacing of a reduced vowel (ə) as the finite verb ending.

In those cases in which the subject and the object carry the same ending, no mismatch arises, obviously. See for example (50), where both subject and object are masculine singular, or (51), where they are both feminine singular:

(50)   *Ripano* (Mancini 1997: 106–107)
  So   ngundratu   n amigu.
  be.1SG   met.SG.M   a friend.SG.M
  'I met a friend.'

(51) So   rlavat**e**   le   chemisce.
      be-1SG   washed.SG.F   the.SG.F   shirt.SG.F
      'I.F washed the shirt.'

More examples of gender agreement mismatch marking involving the past participle are listed here:

(52) a. So   magnatə   lu   panì.[19]
          be.1SG   eaten.N   the.SG.M   breadroll.SG.M
          'I.F ate the breadroll.'

      b. Mamme   e   rlavatə   lu   mendì.
          mum.SG.F   is washed.N   the.SG.M   tablecloth.SG.M
          'Mum washed the tablecloth.'

      c. Si   rlavatə   le   chemisce.
          be.2SG   washed.N   the.SG   shirt.SG.F
          'You(m) washed the shirt.'

In all the examples in (52), a different gender specification for the EA and the IA triggers the insertion of the neutralized ending -ə. This only happens when the subject and the object occupy their canonical position, and not when dislocation occurs, as also reported in Mancini (1997). In clitic-left dislocated structures, agreement obtains consistently with the topic. As argued in D'Alessandro *et al.* (2016), this might be the reflex of a transformation of a purely structural-based agreement system into a topic-based one (Miyagawa 2010).

Number is also involved in agreement mismatch, as (53) shows:

(53) ____   Mazzə   li   keppù.
      pro.SG.M   kill.3SG.N the.PL.M   capon.PL.M
      'He kills the capons.'

Animacy seems to also play some role in the classical dialect, as in (54), where the only difference between EA and IA is animacy:

(54) Semə   magnat**a/ə**   lə   pera.
      be.1PL   eaten.PL.F/N   the.PL   pear.PL.F
      'We ate the pears.'

The agreement mismatch marker is produced only by some speakers, according to Mancini. Fieldwork confirmed that agreement mismatch marking is in regression (D'Alessandro et al. 2016).

Finally, a difference in the combination of both number and gender on the two arguments also leads to agreement mismatch:

(55) ____   Semə   magnatə lu   prəsciutta.
      pro.PL.F   be.1PL   eaten.N   the.SG.M   ham.SG.M
      'We-fem have eaten the ham.'

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[19] Unless otherwise stated, all examples from Ripano were collected through the author's fieldwork. Four speakers were interviewed; two of them were from an older generation. Where different translations or judgments were provided, the version given here is the one provided by the older speakers. During fieldwork, the data from Jones's (2001) MA thesis were also double checked. Those reported here were confirmed by the speakers.

It should be noted that while in all the examples above the 1st person singular auxiliary seems to agree exclusively with the EA, in the case of a 1st/2nd plural subject as in (55) a mismatch marker also emerges on the auxiliary. We will return to this fact later on.

The derivation of example (55) is in (56):

(56)
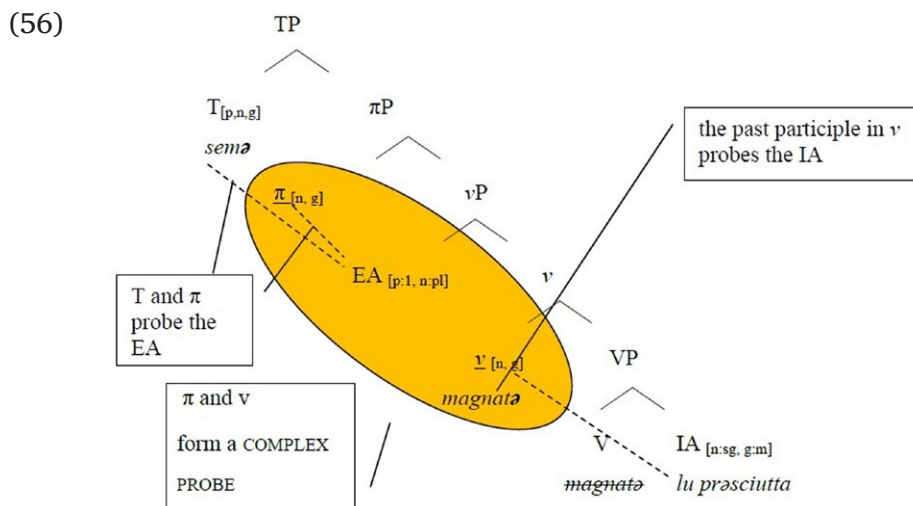
As in Ariellese, π and *v* form a COMPLEX PROBE. Observe that the φ-features on π in (55) are different from those on π in (44)–(45): as stated above, this variation is lexical, since π can encode different features, just like subject clitics. The features on *v* are also different: in Ripano, gender is also present on *v*. This is reflected in the participial morphology of this variety. At PF, the mismatching values on the π-*v* head will be resolved by inserting an -ə ending.

Two observations are in order here: first, agreement mismatch does not follow any specific feature hierarchy. There does not seem to be one gender which, if in EA or IA position, is preferred over the other for triggering agreement. In this respect, the Ripano agreement pattern looks different from both person restriction and omnivorous number patterns. Second, in (55) and (56) the past participle carries the -ə ending. This means that the past participle can somehow gather the information that the EA is of a different gender than the IA. The past participle thus seems to have an extended agreement domain, targeting the EA as well as the IA.

If agreement mismatches are the result of the presence of an extra probe in the T-*v* field, which is in turn reflected in auxiliary selection, why is there no auxiliary selection in Ripano? We have already clarified that it is not necessary for all phenomena to co-occur in all languages, and that their occurrence is determined by the syntax as well as by the morphology of the language. In many southern Italian dialects, for instance, participial agreement is impoverished, which means that the extra probe causes person-driven auxiliary selection but does not have any repercussions for argumental agreement. Ripano does not have split auxiliary selection, as already stated. Nevertheless, the presence of this extra probe is not without consequences for this variety: Ripano in fact displays "extraordinary" adverbial agreement (Ledgeway 2006; D'Alessandro et al. 2016). While it is true that T and π are always realized by one morpheme, we also see agreement endings emerge on adverbs and all kinds of modifiers:

(57) *Ripano*
      Magnu   sembru./   Magne   sembre.
      eat.3SG.M   always.M   eat.3SG.F always.F
      'He always eats.'/ 'She always eats.'

The presence of inflected adverbs is restricted to only some elements, but is still quite widely found in the language. Together with inflected manner, degree and place adverbs, we find inflected wh-elements (58), inflected quantifiers/numerals (59) and gerunds (60), (all data are from Mancini 1997):

(58) *Ripano*
      Ndovu   va?
      where.M go.3SG
      'Where is he going?'

(59) Ci   stiè   centi   frəkì.
      there   be.IMPF.PST.3PL   hundred.PLM   children.PL.M
      'There were a hundred children.'

(60) Chə   vva   fəcennu?
      what   goes.3SG   doing.M
      'What is he up to?'

Fieldwork has shown that examples of this sort are quite readily found in modern Ripano. Observe that all the extraordinarily inflected elements are mostly within the T-v domain. In (57) *always* is a low adverb (Cinque 1999); in (59) the numeral is within an IA; in (60) the gerund is arguably in V.[20]

The endings attached to these adverbs and modifiers are the realization of the φ-set on the π. Although there is no principled need to have π overtly expressed, in Ripano the extra person and number probe is realized in the form of affixes, attaching to the first available host in the v domain. Hence the unusual "spread" of agreement, or pragmatic agreement effect. These effects should not be attributed to pragmatics, but rather to the morphological realization of an extra probe in Ripano.

Finally, the paradigm in 1.2.3, referred to as topic-oriented agreement in this paper, also shows the same mechanism at play. The participle agrees with both arguments, and the agreement ending is selected on the basis of "topichood". In (61a) 'the chickens' are generic. In (61b) 'the chickens' are specific and known.

(61) *Sanvalentinese*
      a. Aje   cciosə   li   pellistrə.
          have.1SG   killed.SG.M the.PL.M chickens.PL.M
          'I have killed chickens.'

      b. Ajə   ccisə   li   pellistrə.
          have.1SG   killed.PL.M the.PL.M chickens.PL.M
          'I have killed the chickens.'

In all three varieties, the presence of an extra probe π creates some disruptions in argumental agreement mechanisms.

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[20] Observe that inflected adverbs are also reported for Marwari and Kutchi Gujarati (Patel 2007; Grosz & Patel 2013), which are also analysed as featuring a COMPLEX PROBE.

If the presence of π has these consequences, there should not be a dialect of the upper southern group that displays agreement mismatch of some sort but not auxiliary selection, and viceversa. This is not the case: it is well known that split auxiliary selection and participial agreement mismatch do not always go hand in hand. Those dialects that feature only one of these two phenomena do not necessarily constitute an exception: as the different morphological resolutions in Ariellese, Ripano and Sanvalentinese show, much depends on the morphological inventory of the language. It could well be that a language that has split auxiliary selection does not have a neutral ending for participles, for instance. In other cases, extended agreement could be covered by a preference for agreement with one argument. Alignment considerations might play a bigger role than expected. All in all, what this paper aims to show is that having a π probe in an argumental domain is a necessary condition for agreement mismatches to apply. Whether it is also a sufficient condition remains to be seen, but it seems very unlikely.

3.2.3 A note on pattern variations in Ripano

The Ripano examples show that the auxiliary can agree with both the EA and the IA; it is never the case that it agrees exclusively with the IA.

A distinction needs to be drawn, however, between person, number, and gender. It seems to be the case that the auxiliary always agrees with the EA in person and number. Gender is the only triggering factor for mismatch on the auxiliary. A sentence such as (62) where the EA and IA carry different number specification but the same gender specification, is judged ungrammatical if the auxiliary agrees in number with the object. Number agreement is triggered by the EA.

(62)   *Ripano*
        I'   *semu/*semə/so   magnatə   li   fəscəlitta.
        I.1SG.M   be.1PL.M/1PL.N/1SG   eaten.PL.M   the.PL.M   beans.PL.M
        'I have eaten beans.'

In a sentence featuring a 2nd person IA and a 3rd person EA, with gender and number being equal, the auxiliary must show 3rd person agreement, i.e. person agreement with the EA. A 2nd person agreement ending is ungrammatical:

(63)   Le   moja   və   *səndeta/ sende.
        the.F.PL   wife.F.PL   you.2SG   hear.2PL.F/hear.3PL
        'The wives hear you.'

These examples suggest that the auxiliary agrees in number and person with the EA. With polysyllabic auxiliaries, like *semə* in (54)–(55), agreement mismatch arises only in the case of gender mismatch between the EA and the IA. While in Ariellese auxiliaries only target the EA, and do not see the IA in any case, even in the presence of π, in Ripano the COMPLEX PROBE creates a larger agreement domain both for the past participle and for the auxiliary. This might be due to a parametric difference, but it might also be due to language change (Ferrari Bridgers 2010). The varieties surrounding Ripano mostly display neutralization of the final vowels. Given that the version with full agreement with the EA is more frequent, we can conclude that the agreement mismatch ending on the auxiliary is for now just a phonetic fact, and may not have entered the morpho-phonological system of the language.

Finally, while the older generation is quite consistent in producing agreement mismatches, it is sometimes the case that the finite verb or the past participle agrees exclusively with the external argument, as in (64) and (65):

(64)　　*Ripano*
　　　　　Tu　　　　　nghə　mme　　　　　tə　　　　piju
　　　　　you.2SG.M　with　me.1SG.ACC　you.REFL　take.2SG.M
　　　　　troppe　　　　　cunfidenze.
　　　　　too much.SG.F　confidence.SG
　　　　　'I think you're taking too much liberty with me.'

(65)　　*Ripano* (Rossi 2008: 86)
　　　　　So　　　　magnatu　　　li　　　　　fəscəlitta.
　　　　　be.1PL　eaten.SG.M　the.PL.M　beans.PL.M
　　　　　'I have eaten beans.'

These exceptions are possibly also due to an ongoing language change that has affected Ripano in recent years: this variety might be moving from an agreement mismatch language to a topic-oriented language. Although the facts in (64) and (65) would suggest a subject-oriented agreement system, this change is rather headed towards topic-oriented agreement. Neighboring languages, such as Sanvalentinese, as we have seen, show some sort of topic-driven agreement.

One reviewer points out that the masculine singular ending could be the default agreement. This could definitely be the case, and the agreement in (64) and (65) could then be simply a sort of contact-induced agreement pattern, influenced by Italian. I am reluctant to take this route, however, given that other examples such as (66) show that the topic (or at least the subject) is what triggers participial agreement:

(66)　　*Ripano*
　　　　a.　Issu　　　　a　　　　　rispostu　　　　malu.
　　　　　　he.SG.M　have.3.SG　answered.SG.M　badly.SG.M
　　　　　　'He answered badly.'
　　　　b.　Esse　　　　a　　　　　risposte　　　　male.
　　　　　　she.SG.F　have.3.SG　answered.SG.F　badly.SG.F
　　　　　　'She answered badly.'

We leave further speculations aside as they would fall outside the scope of the paper.

4. π in the *v*-V field. Split differential object marking (DOM)

Most upper southern dialects have a DOM which resembles that of Spanish, i.e. they mark the animate (or human) object with a preposition. This phenomenon is traditionally called the "prepositional accusative". As in Spanish, most of these dialects use the preposition *a*. DOM has been studied from many different viewpoints, most of which SHARE the postulation of the existence of a special projection (within the verbal field) encoding specificity.[21]

One of the most influential analyses of DOM for Romance is that proposed by Torrego (1998), according to whom the prepositional accusative is linked to several features of the object (such as the possibility of clitic doubling, the specific interpretation, the sensitivity

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[21] DOM was intuitively described by Rohlfs (1969) as a strategy to distinguish between internal and external argument. The same intuition is presented in D'Achille (2003); along the same lines, Torrego (2012) proposes a distinctness marker in Hindi. We will not go into the details of the various DOM analyses here.

to the aspectual class to which the verb belongs, animacy, etc.). Not all these features are found in DOM-ed internal arguments in Abruzzese. What interests us here is the proposal that DOM is linked to the presence of an extra head, encoding definiteness and animacy. Something similar is also proposed by Gallego (2013), according to whom DOM in Spanish is triggered by a prepositional head in the *v* field.

Abruzzese also has DOM, so we can assume with Torrego, Gallego, and others that it features a head in the *v* field. This head very likely encodes animacy and definiteness (or alternatively, it features a distinctness marker, as proposed by Torrego for Hindi). The "semantic" contents of this head are not so relevant here. What matters is that this head also encodes person, i.e. it also hosts π. In some dialects, including Ariellese, in fact, *a* marking appears only on 1st and 2nd person objects. The dialects that have been reported to exhibit split DOM are those of Altamura (Loporcaro 1988), Borbona, Cagnano Amiterno and Colledimacine (Manzini & Savoia 2005). Observe the difference between (67–68) and (69):

(67)   *Ariellese*
       So   vistə   a   tte.
       be.1SG   seen   to   you
       'I saw you.'

(68)   Semə   vistə   a   vvu.
       be.1PL   seen   to   you
       'We saw you.'

(69)   *So   vistə   a   Marijə/a   jissə /   a   quillə
        be.1SG   seen   to   Mary / to   them/   to   them

In (67) and (68), the pronominal 1st and 2nd person object is marked with an *a*. Third person objects do not allow DOM, as shown in (69). A 3rd person pronoun would be equally restricted, as we see in (70):

(70)   ??Si   vistə   a   essə
         be.2SG   seen   to   him

The reason for the double question mark (??) on (70) is that it is accepted by some speakers, possibly as a result of contact with neighboring varieties that allow 3rd person DOM. The DOM system in Ariellese is somewhere in between that described by Manzini & Savoia (2005: II, 515) for Canosa Sannita, where all pronouns are *a*- marked, and the split-person system discussed here.[22]

This prepositional marker is probably an instantiation of the extra person probe in the VP field. Specifically, *a* does not simply mark definiteness but also person (π).

The last option relates to the presence of valued φ-features on π in the *v*-V field. According to a recent proposal by Gallego (2013), this might be the origin of Spanish-type DOM, i.e. of DOM which is not person-sensitive.

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[22] To complete the picture, we need to consider 3rd person pronouns in Abruzzese, which also encode proximity to the speaker or addressee. Abruzzese in fact exhibits a tripartite pronominal system for 3rd person pronouns, whereby a distinction is drawn between a neutral 3rd person pronoun without any deictic referent (*essə*), a 3rd person pronoun referring to someone close to the speaker (*custù*), a 3rd person pronoun referring to someone close to the hearer (*cussù*) and a 3rd person pronoun referring to someone far from both speaker and hearer (*cullù*) (Giammarco 1979). For Ariellese, it seems to be the case that the "neutral" pronoun *essə* tolerates the preposition *a*, while the three more specified pronouns do not. In general, however, most speakers avoid the *a* marker with all 3rd person objects (D'Alessandro 2017).

5 Conclusions

Upper southern Italian varieties display a number of apparently unrelated features, such as split auxiliary selection depending on the subject person feature, as well as split DOM; furthermore, they exhibit unusual agreement patterns, whereby the verb, usually in the form of a past participle, agrees with both arguments in transitive constructions. A case study of auxiliary selection and participial agreement in Abruzzese was presented, and these features were shown to be attributable to the presence of an extra head (π) in the T-v (argumental) domain. π is a probe, and it can be found in several Romance varieties and in different domains. While in upper southern Italian dialects π is located in the T-v field, in northern Italian varieties it is in the C-T field and realized in the form of a subject clitic. The extra probe π can also be found in the VP field, in cases of DOM.

Subject clitics in norther varieties and person-driven auxiliary selection are thus different instantiations of the presence of an extra probe. They are typologically more similar than previously acknowledged.

The presence of π in the argumental domain has also been shown to create exceptional agreement patterns: omnivorous number agreement in Ariellese and agreement mismatch in Ripano.

Abbreviations

1 = first person, 2 = second person, 3 = third person, ACC = accusative, CLASS = DAT = dative, F = feminine, IMPF = imperfect, M = masculine, N = neuter, PL = plural, PRF = perfect, PST = past, REFL = reflexive, SCL = subject clitic, SG = singular, SUBJ = subjunctive

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Competing Interests

The author has no competing interests to declare.

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