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# PCC Effects with Expletives and Non-Associate Postverbal Subjects in Bolognese

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## Abstract

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This paper contrasts a Bolognese postverbal subject construction and other grammars with the common Romance one (also in Bolognese) that has long-distance full agreement of the tensed verb and the Case-Licensed subject, with an expletive satisfying EPP. In the new Bolognese data, full agreement is absent, a special clitic occurs, and the postverbal subject is person-restricted. Lack of subject agreement also raises questions about its licensing. The Minimalist proposal is that grammars like Bolognese can specify a feature set on the expletive that checks EPP in this data, and that it is thus an independent second nominal in the domain of the sole agreement and Case-Licensing probe, T. This specified expletive is shown to explain all the properties of this data. For the person-restrictions and Case-Licensing of the postverbal subject, it applies Cyclic/Multiple Agree, the elaboration of Agree underlying PCC-effects, to the two nominals. The analysis is extended to other grammars with similar but slightly differing data by simple manipulation of the feature-set on the specified expletive and of the clitic inventory of the grammar.

**Keywords:** non-agreement; clitics; northern Italian; expletives; person restrictions

## 1. Basic Data and Issues\*

Many Romance grammars permit postverbal subjects (*pvSs*), and an extensive literature on them has developed. Generally, these postverbal subjects control agreement on T and are Case-Licensed by it, while an expletive *pro* occupies the preverbal subject position only to satisfy EPP (Rizzi 1982, 1986, Burzio 1986, Cardinaletti 1997b, 2004, Belletti 2005, Roberts 2010, among many others). We refer to such data, with examples provided at the end of the section, as common Romance postverbal subject constructions (*cRpvS*). In Bolognese, the Gallo-Italic grammar of Bologna, Italy, there are such data, but there also exists a distinct postverbal construction, which we will call a non-agreeing person-restricted postverbal subject construction (*naprpvS*) for reasons quickly to be made clear and to distinguish it from *cRpvS*. In *naprpvS*, the subject of unergative (1) or unaccusative (2) verbs may appear in a postverbal position, but the relevant data exhibit empirical differences and theoretical problems that distinguish *naprpvS* from *cRpvS*. This section documents these issues of the Bolognese data with discussion of important aspects of its analysis. (All Bolognese data were collected in close work with native consultants.)

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| <p>(1) a. Ai=à      dscàurs la dôna .<br/>                 AI=have.3s spoken the woman.SF<br/>                 ‘The woman spoke.’</p> <p>b. Ai=à      dscàurs äI dôn .<br/>                 AI=have.3s spoken the women.PF<br/>                 ‘The women spoke.’</p> | <p>(2) a. Ai=é      vgnó la mî amîga .<br/>                 AI=be.3s come the my friend.SF<br/>                 ‘My friend came.’</p> <p>b. Ai=é      vgnó äI mî amîghi .<br/>                 AI=be.3s come the my friends.PF<br/>                 ‘My friends came.’</p> |
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The first notable issue of this Bolognese *naprpvS* data in (1-2) is that *it contains an invariable clitic on the tensed verb* (glossed<sup>1</sup> as AI<sup>2</sup>). We will demonstrate that AI is not

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1 Other glosses/abbreviations: Person ( $\pi$ ) - first (1), second (2), and third (3); Number (#) - singular (s) and plural (P); Gender - Feminine (F) and Masculine (M); Subject Clitics (SCL), Accusative Clitics (ACL), and Dative Clitics (DCL); and postverbal subject (*pvS*).

2 A complete morphological analysis of Bolognese or just its clitics is beyond the scope of this work. AI is glossed as a single element in this work to focus on the main points of discussion, which can ignore AI’s internal complexity. In brief, it is clear that AI contains two pieces. The first, [a], is homophonous with the preposition *a* ‘at, to’ and with three of the Bolognese SCLs, the 1s, the 1P, and the 2P (see example (8) in the text). These may sound like *vocalic* SCLs as discussed in Poletto (2000), but they generally don’t show the properties of this type (nor does AI). A full demonstration is not possible here, but these three Bolognese SCLs behave generally identically to the other SCLs (and AI behaves differently from them). The other part of AI is identical to the locative *i*, but bleached of its meaning. Suggestively, the community has established different spelling rules for AI (the two letters must be written together) and for a SCL followed by the locative

one of the Bolognese Subject Clitics (SCLS), of which the 3<sub>SF</sub> and 3<sub>PF</sub> are seen in (3-4), the correspondents to (1-2) with preverbal thematic subjects. Bolognese is what Roberts (2010: 106) calls “a ‘fully redundant’ null-subject system,” i.e. one which distinguishes all six person-number combinations via verbal suffixes together with SCLS. Bolognese also distinguishes gender in the third person via the relevant SCLS. (Some of the extensive morpho-phonological variation in particular Bolognese SCLS can be seen in (3-4).) In (3-4), the same thematic subjects as in (1-2) appear in a preverbal position, and the tensed verbs necessarily occur both with  $\pi$  and # identical to those of the subject and with SCLS that are also dependent on the subject’s  $\pi$  and # (and Gender, when  $\pi = 3$ ). If there instead appeared AI in any example in (3-4), it would be ill-formed. (Further evidence that distinguishes AI from SCLS is provided in the next section.)

- (3) a. La dôna      la=dscârr      / l’=à      dscâurs .  
 the woman.SF SCL.3<sub>SF</sub>=speak.3s / SCL.3<sub>SF</sub>=have.3s spoken  
 ‘The woman is speaking / spoke.’
- b. Äl dôn      ä̀l=dscârren      / ä̀li=an      dscâurs .  
 the women.PF SCL.3<sub>PF</sub>=speak.3P / SCL.3<sub>PF</sub>=have.3P spoken  
 ‘The women are speaking / spoke.’
- (4) a. La mî amîga      la=vén      / l’=é      vgnó .  
 the my friend.SF SCL.3<sub>SF</sub>=come.3s / SCL.3<sub>SF</sub>=be.3s come  
 ‘My friend is coming / came.’
- b. Äl mî amîghi      ä̀l=vénnen      / ä̀li=én      vgnó .  
 the my friends.PF SCL.3<sub>PF</sub>=come.3P / SCL.3<sub>PF</sub>=be.3P come  
 ‘My friends are coming / came.’

The second notable issue of such *naprvS* data as (1-2) is that *the tensed verb always shows 3s agreement*, regardless of the number of the postverbal subject (pvS), which can be s, as in (1a,2a), or P, as in (1b,2b). The *pvS*s in such data are 3, like the verbs, which could suggest some notion of partial agreement, essentially that  $\pi$ -only agreement might be operative. However, further facts involving a *pvS.1* or a *pvS.2* in structures like (1-2), shown in (5-6) below, demonstrate that no such notion can be adopted without significant elaboration.

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| <p>(5) a. *Ai=à      dscâurs mé/té/nó/vó .<br/>         AI=have.3s spoken I/you/we/you<br/>         ‘I/you/we/you spoke.’</p> <p>b. *Ai=ò      dscâurs mé/nó .<br/>         AI=have.1s spoken I/we<br/>         ‘I/We spoke.’</p> <p>c. *Ai=è      dscâurs té/vó .<br/>         AI=have.2s spoken you.s/you.P<br/>         ‘You spoke.’</p> | <p>(6) a. *Ai=é      vgnó mé/té/nó/vó .<br/>         AI=be.3s come I/you/we/you<br/>         ‘I/you/we/you came.’</p> <p>b. *Ai=sân      vgnó mé/nó .<br/>         AI=be.1s come I/we<br/>         ‘I/We came.’</p> <p>c. *Ai=î      vgnó té/vó .<br/>         AI=be.2s come you.s/you.P<br/>         ‘You came.’</p> |
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As seen in (5a,6a), *pvS.1/2s* are ill-formed with the V.3s seen in (1-2), which would be

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(must be written separately). Additional syntactic differences between AI and SCLS, including the homophonous ones, are discussed below. Despite the homophony, they are not one and the same element: AI does not contain a SCL (nor the P a ‘at, to’).

expected if partial agreement (in  $\pi$  only) is required. However, a  $pvS.1s/P$  is also ill-formed with a  $V.1s$  that matches it in  $\pi$  (5b,6b), and a  $pvS.2s/P$  is also ill-formed with a  $V.2s$  that matches it in  $\pi$  (5c,6c), both contrary to an expectation that agreement in  $\pi$  is all that is required. Something more, or something else, must be said: Any analysis must account for this third notable issue, that *first or second person  $pvSs$  and tensed verbs are impossible in the  $naprpvS$  construction*.  $PvS.1/2s$  are possible in Bolognese, just not in  $naprpvS$ , only in  $cRpvS$ , as we see next.

The final issue in understanding  $naprpvS$  is best seen in comparing it to  $cRpvS$ , which occurs in many Romance grammars, including Italian (7) and even Bolognese itself (8). We compare the properties discussed above first, then turn to this last issue.

## (7) Italian

- a. Ha parlato la donna .  
has.3s spoken the woman  
'The woman spoke.'
- b. Hanno parlato le donne .  
have.3P spoken the women  
'The women spoke.'
- c. Ho parlato io .  
has.1s spoken I  
'I spoke.'
- d. \*Ha parlato le donne .  
has.3s spoken the women  
'The women spoke.'

## (8) Bolognese

- a. A=dscãrr mé .  
SCL.1s=speak.1s I  
'I am speaking.'
- b. A=dscurãn nó .  
SCL.1P=speak.1P we  
'We are speaking.'
- c. T=dscãrr té .  
SCL.2s=speak.2s you.s  
'You are speaking.'
- d. A=dscurî vó .  
SCL.2P=speak.2P you.P  
'You are speaking.'

In the  $naprpvS$  data in (1-2), we first noted the special Bolognese clitic  $AI$ , and we see that that clitic (or one like it) is lacking in  $cRpvS$  data including (7-8). (If such a clitic occurred anywhere in Romance in  $cRpvS$  data, it most likely would have been investigated as intently as other aspects of the data. But see the discussion of Fiorentino in the following section.) The Bolognese  $cRpvS$  examples in (8) do include  $SCLs$ , though they are not always available in other Romance varieties, e.g. Italian, thus explaining their absence in (7). Following Roberts (2010) and many others, we take  $SCLs$  to relate to subject-agreement. In (8), thus, each  $SCL$   $\phi$ -agrees with the co-occurring  $pvS$ . Agreement was also central to our second issue above, when we noted that the  $naprpvS$  data in (1-2) showed 3s on the tensed verb, regardless of the features of the  $pvS$ . In contrast, in the well-formed  $cRpvS$  data in (7-8), we see that the tensed verbs show agreement morphology that matches each  $pvS$ . In Italian (7d), it doesn't, but instead bears 3s like in (1), and the example is ill-formed. This is evidence of the distinct nature of the two  $pvS$  constructions, on the assumption that Italian has grammatical elements that allow only  $cRpvS$  while Bolognese has some additional element(s), allowing both  $cRpvS$  and  $naprpvS$ . Finally, the third issue above, that explaining  $naprpvS$  requires an account of the impossibility of first and second person  $pvSs$ , clearly does not apply to  $cRpvS$ . Both Italian and Bolognese allow such  $pvSs$  in  $cRpvS$ , as shown in (7c) and throughout (8).

To clarify the fourth important issue in explaining  $naprpvS$ , we build on the standard analyses of  $cRpvS$  as involving an expletive *pro* (*expl*) in a preverbal position like the one occupied by a preverbal subject in data such as (3-4) (Rizzi 1982, 1986, Burzio 1986, Cardinaletti 1997b, 2004, Belletti 2005, Roberts 2010, among many others). In such data,

a preverbal subject satisfies EPP, determines the agreement on the tensed verb, and is Case-Licensed, all effected via Agree holding between T and the subject in its  $\theta$ -position, with movement of the subject to its final preverbal position (Chomsky 2008, etc). In standard analyses of *cRpvS*, on the other hand, *expl* occupies a preverbal position and “shares” with the *pvS* the three properties of the preverbal subjects effected by Agree: *expl* satisfies EPP while *pvS* determines agreement on the tensed verb and is Case-Licensed by T, via long-distance Agree. Lasnik (1995) called this situation “Case Transmission.” Because the *pvS* in *naprpvS* cannot satisfy EPP for the same reasons as the *pvS* in *cRpvS*, according to standard Minimalist approaches, we conclude that there also exists an *expl* in a similar preverbal position in *naprpvS* just as there is in *cRpvS*.

In *naprpvS*, however, determination of agreement by *pvS* and Case-Licensing of *pvS* cannot simultaneously occur by means of Agree as they do in instances of Case Transmission in *cRpvS*. This is related to the second issue above: the *pvS* in *naprpvS* does not in fact determine agreement, as it does in *cRpvS*. When data in other grammars similar to (1-2) is mentioned in the context of other discussions, it is usually suggested, e.g. Belletti (2005: 19) and Roberts (2010: 113), that the *expl* is what determines the agreement, i.e. that Agree(T,*expl*) values  $u\phi$  on T. But, if so, then there arise issues raised by Lasnik (1995) in another context (and in earlier but still relevant formulations of the mechanisms). If Agree(T,*expl*) values  $u\phi$  on T, then the *pvS* is not part of the Agree relation with T, and is thus not Case-Licensed as required. If, contrary to such an idea, Agree(T,*pvS*) holds in all such data, then the *pvS* is Case-Licensed, but it should also determine agreement on the tensed verb, as it does in *cRpvS*. Standard notions of Agree do not separate these two results, and doing so would be inappropriate in the Italian and Bolognese *cRpvS* seen in (7-8). The fourth issue in understanding *naprpvS*, then, is to explain why *the valuation of  $u\phi$  on T and the Case-Licensing of the *pvS* by T are apparently separated.*

## 2. Previous Work and Further Issues

In this section, we compare Bolognese *naprpvS* data to past analyses of similar data from other grammars. First, we look at Brandi and Cordin’s (1989) analysis of Fiorentino, followed by modern proposals that essentially adopt the same ideas using more recent theoretical mechanisms. Then we turn to Tortora’s (1999) analysis of Borgomanerese, where a specific proposal for  $\pi$ -restrictions is found.

Brandi and Cordin (1989) discuss data similar to (1-2) in Fiorentino, e.g. (9):

- (9) Gli=ha telefonato delle ragazze . (Fiorentino)  
 SCL=have.3s telephoned some girls  
 ‘Some girls telephoned.’

Brandi and Cordin (1989: 121-3) describe this data as involving a verb in “an unmarked neutral form (third person masculine singular)” and a “neutral impersonal clitic ... strongly reminiscent of the French clitic *il*.” They posit that *pro* occupies the subject position, and “the impersonal clitic of Fiorentino represents the spelling out of AGR features. ... the absence of a similar expletive agreement clitic in Trentino may simply be attributed to a gap in the morphological paradigm.” They add that “the preverbal subject is expletive *pro*, which, like other pleonastic elements, may be expected to bear neutral features (third person, masculine, singular); thus subject clitics and verbal agreement will also appear with

neutral features in the inversion constructions.” Brandi and Cordin (1989) includes data that demonstrate that the Fiorentino clitic in (9) is identical to the Fiorentino *SCL.3SM* that appears on tensed verbs with a preverbal 3<sub>SM</sub> subject.

Comparing this to our observations about (1-2), we find that Fiorentino and Bolognese differ with regard to the first noted issue, in that Fiorentino shows a *SCL.3SM* (with “neutral” features) in these inversion structures and Bolognese shows *AI*. *AI* is not identical to *(a)l*, the Bolognese *SCL.3SM* that also shows these “neutral” features, and is not a *SCL* at all, as shown below. The Fiorentino data do however show the same second noted issue of requiring 3<sub>s</sub> agreement on the tensed verb as observed in (1-2). In a footnote, Brandi and Cordin (1989) mention data exemplifying  $\pi$ -restrictions like those in (5-6), the third issue concerning *naprvS* noted above. They ascribe these  $\pi$ -restrictions to a mismatch in features between the *expl* in subject position, which is “always third person” (pg. 138), and a co-indexed non-3 *pvS*. They do not mention the Case-Licensing of *pvS* nor how the co-indexation between the *expl* and the *pvS*, a notion presumably adopted in parallel with its use in Case-Transmission data like (7-8), might make possible a separation between Case-Licensing and the determination of agreement in (9), but not in (7-8) (which is the fourth issue).

This analysis remains essentially standard, even in works adopting significantly updated theoretical mechanisms. For example, Belletti (2005: 19) says:

Languages may vary as to the status of ‘pro’ in the nominative position of inversion structures. ... In those cases where ‘pro’ has an expletive status, and it is thus assimilated to French *il* type expletive, verbal agreement would not obtain with the postverbal subject. A possibility which is well known to occur in several languages/dialects.

In that paper there is no mention of  $\pi$ -restrictions, which are therefore unaddressed. It also does not address how or why the separation of Case-Licensing of *pvS* and determination of agreement might occur. This analysis is a literal footnote to a discussion of agreement patterns in data like (7-8), in which a Case Transmission account is established by a “big DP” hypothesis in which the *pro* in the preverbal nominative position and the *pvS* start together and share identical features. That *pro* does not have the quoted expletive status. “[A]ccording to this proposal, nominative assignment to the postverbal position comes as a direct consequence” (pg. 18), for the commonly discussed *cRpvS* data like (7-8).

In the above quoted account, however, the treatment of data like (1-2, 9) comes with the important noted change, that an expletive *pro* stands in place of the one identical to *pvS*. As a result, just as in the discussion of Brandi and Cordin (1989) above, the fourth important theoretical issue concerning Agree arises again. In data like (1-2, 9), something blocks the sharing of features that holds in the other data between a *pro* and a *pvS* within a big DP, so that, here, it is the ‘expletive’ *pro* that determines agreement on the tensed verb when it moves to the preverbal subject position. Agree by T is presumably involved, and it can’t find the *pvS* or there wouldn’t be a difference in agreement patterns to explain. If Agree by T can’t find *pvS* (as Belletti’s explicit statement about verbal agreement not holding with the *pvS* implies), then an explanation of Case-Licensing of *pvS* is required. (Partitive Case (Belletti 1988, Lasnik 1995, etc) can’t help: These data include definite specific *pvS*s and unergative verbs.)

Another similar example of the endurance of Brandi and Cordin’s (1989) analysis is found in Roberts (2010: 113), which directly discusses their data in (9), saying that

“the obvious account of this is that SpecTP contains a deleted expletive pronoun, with which the subject clitic and the verb agree.” Again, if the obvious is the case, and thus Agree(T,*expl*) determines agreement on the SCL and the verb, then the *pvS* wouldn’t be involved in Agree with T, so Case-Licensing of the *pvS* needs an explanation. If, on the other hand, Agree(T,*pvS*) does hold, then why doesn’t *pvS* determine agreement and the subject clitic? If both hold, we need a clearer understanding of how this is possible.

Another general shortcoming of such characterizations of the data is that, in Bolognese, there are actually expletive constructions distinct from those in (1-2) in which there is an SCL.3SM, comparable to the French expletive that is sometimes mentioned. These include weather verbs and clausal complement verbs:

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| <p>(10) Al=naiva .<br/>         SCL.3SM=SNOW.3s<br/>         ‘It’s snowing.’</p>  | <p>(11) Al=pèr                      che ... .<br/>         SCL.3SM=seem.3s that ...<br/>         ‘It seems that ... .’</p> |
| <p>(12) L=é                      bél              ch’ al=piôv<br/>         SCL.3SM=be.3s beautiful that SCL.3SM=rain.3s after to all that dry<br/>         ‘It’s great that it’s raining after all that dryness.’</p> |  |

In data like (10-12), the clitic (*al*) is identical to the SCL.3SM that appears in data with a preverbal 3SM subject (e.g. *Pèvel al=dscàrr* ‘Pèvel is speaking’), both in form and behavior. Its form exhibits the 3SM features that are often considered default or neutral, and the natural state of an expletive, as has been mentioned above. A relevant crucial behavior is inversion, which applies generally to SCLs in interrogative clauses in Bolognese, as is common in Northern Italian grammars (e.g. *dscàrr=el?* ‘Is he speaking?’). These clitics also invert in interrogatives, evidence that they are indeed SCL.3SMs like any other:

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| <p>(10’) Naivel ?<br/>         snow.3s.SCL.3SM<br/>         ‘Is it snowing?’</p>   | <p>(11’) Pèrel                      che ... ?<br/>         seem.3s.SCL.3SM that ...<br/>         ‘Does it seem that ... ?’</p> |
| <p>(12’) Êl                      bél              ch’ al=piôv<br/>         be.3s.SCL.3SM beautiful that SCL.3SM=rain.3s after to all that dry<br/>         ‘Is it great that it’s raining after all that dry (weather)?’</p> |  |

In contrast, the clitic *AI* in the *naprpvS* data of interest to us here doesn’t show the same similarities to the SCL.3SM in form and behavior. It does not have the same form in terms of the features it displays, a first concern. And note: If *expls* are 3SM as a default or neutral state, and if Bolognese has the SCL.3SM that can display those features, as it does with the *expls* in (10-12), and if there are *expls* both in (1-2) and in (10-12), then why does the SCL.3SM not appear in (1-2) as it does in (10-12)? Given the logic underlying the relation between *expls* and EPP, we cannot simply assume there is no *expl* in (1-2).

Another concern is that *AI* does not invert in interrogative clauses like Bolognese SCLs do (including those pronounced [a]: *a cradd* ‘I believe’, *craddia?* ‘Do I believe?’). It instead remains proclitic in interrogative clauses, just as it is in declarative clauses (though there are typical intonational differences between the two):

- (13) a. *Ai=vén la Carólla e la Delénna .*  
*AI=come.3s the Carólla and the Delénna*  
 ‘Carólla and Delénna are coming.’
- b. *Ai=vén la Carólla e la Delénna ?*  
*AI=come.3s the Carólla and the Delénna*  
 ‘Are Carólla and Delénna coming?’

Because of the distinct forms and syntactic behaviors of *AI* and *SCLS*, we cannot simply claim that *AI* is a *SCL* (or contains one), as has been done for the data from Brandi and Cordin (1989). Like Bolognese complement clitics in declarative and interrogative clauses (*T s i dè*. ‘You give them to us’; *S i dèt?* ‘Do you give them to us?’), *AI* remains proclitic in interrogative clauses. Standard analyses hold that complement clitics attach below *T*, which is where *SCLS* cliticize, allowing *SCLS* but not the complement clitics that cliticize lower to invert when a tensed verb raises higher than *T* in an interrogative clause. We therefore hold that *AI* also cliticizes below *T*, thus avoiding inversion in the same way as the complement clitics do.<sup>3</sup>

Finally, let us consider the proposal made in Tortora (1999) for data again similar to Bolognese (1-2) and (5-6), as seen in (14).

- (14) a. *Ngh è rivà-gghi la Maria .*                      c. *\*Ngh è rivà-gghi mé/njau/té/vjau .*  
*LOC is arrived-LOC the Maria*                      *LOC is arrived-LOC I/we/you.s/you.P*  
 ‘Maria arrived.’
- b. *Ngh è rivà-gghi do mati .*                      d. *I summa rivà njau .*  
*LOC is arrived-LOC two.F girls*                      *SCL be.1P arrived we*  
 ‘Two girls arrived.’                      ‘We arrived.’

Borgomanerese (14a-b) are similar to Bolognese (1-2), though it shows no clitic in such data that is obviously similar to Bolognese’s *AI* or Fiorentino’s *SCL*. It does have an element *ngh* glossed as *LOC*, which is treated as “a F[rench]-type expletive, since it can only occur as a structural subject” (pg. 404). This grammar does have a typical *SCL.3SM* which doubles preverbal *3SM* structural subjects, but it doesn’t double this structural subject. Borgomanerese either has a morphological gap in its clitic inventory similar to the one in Trentino, if *ngh* is in Spec*T* like French *il*, or *ngh* is in fact like Bolognese *AI*, if it is a clitic doubling an *expl.3SM* (see the discussion in the conclusions). Like Bolognese, Fiorentino, Trentino, and others, it shows *3s* on the tensed verb whether the *pvS* is *s* or *P*. (14c) reveals  $\pi$ -restrictions like those in Bolognese (5-6), and finally, as in Bolognese, it uses *cRpvS* for those  $\pi$ s that are forbidden in this other *pvS* construction (14d).

Tortora (1999) uses early Minimalist mechanisms (Chomsky 1995, Cardinaletti 1997a), and proposes that the expletive checks the *NOM*(inative), *3*, and *s* features of *Agr*, deleting all but the *NOM* feature (a point to which we return below). It should be noted that *Agr* is split in this account, with # above  $\pi$ , and *NOM* located in  $\pi$ . With *NOM* un-

3 Following Rubin’s (2018) analysis of Bolognese psych-verbs like *pièser* ‘to please’, we rule out an analysis in which *AI* cliticizes to a head higher than *T*, since it may linearly follow an overt dative bare quantifier: *A inción ai pièss sti liber qué*. ‘Nobody likes these books.’ Bare quantifiers, including the dative subject *a inción*, are illicit in the left periphery in Bolognese as in other grammars, so following Belletti and Rizzi’s (1988) logic, it must be in Spec*T*. See Rubin (2018) for more details. This constitutes further evidence that *AI* is not a left-peripheral, vocalic *SCL*.



deleted, the *pvS* can be, in our terms, Case-Licensed, via raising of its formal features at LF to  $\text{Agr}_\pi$ . There, the formal features of the *pvS* are checked against  $\text{NOM}$  and 3 (as the expletive was), matching successfully whether the *pvS* is *s* (14a) or *p* (14b). For data like (9), Tortora (1999: 404) says that, “the person feature of a first/second *i*-subject [*pvS*], on the other hand, would not match  $\text{Agr}_{\text{pers}}$ ’s [3pers] feature. Thus, a first/second person *i*-subject would be prohibited from occurring with a verb that has third person singular morphology.”

This analysis has shortcomings, the first, most important of which was already mentioned within it. As noted above, it relied on not deleting the  $\text{NOM}$  feature when checked by the expletive, an assumption with “no convincing principled reason” (Tortora 1999:401). Moreover, although not noted, the checking of the  $\pi$ -feature of the *pvS* should not be any more necessary than that of its  $\#$ -feature, as is noted on that same page: “given Chomsky’s assumption that the  $\phi$ -features (i.e. the person and number features) on the argument are [+Interpretable], they do not have to be checked” and “the *PluralFF(DP)* does not get checked against anything, but since it is [+Interpretable], it does not need to be checked.” One might argue that, in that account, clashing  $\pi$ -features are located within a single head, while clashing  $\#$ -features never are. But this clash is not about checking, as quoted. Some further mechanism would be required to establish and rule out the clash.

This analysis shows resemblances to those in the footnotes of Brandi and Cordin (1989) and Belletti (2005) in that its treatment of the  $\pi$ -restrictions is based on a clash between features of an *expl* and the *pvS* in such data. There are clear similarities also in the role that the *expl* plays in these accounts in determining the agreement that appears on the tensed verb. This account, however, is inspirational in light of more recent Minimalist mechanisms that are otherwise unexplored in this domain, in that it separately relates the single Case-Licensing head to the two important elements in such data, the *expl* and the *pvS*. Relationships between a single probe and multiple goals have been proposed in the literature, and a new account using these ideas will be developed in the next section that connects the data discussed so far to other important data in Romance grammars.

### 3. Cyclic/Multiple Agree

In the previous sections, we identified four important empirical and theoretical issues in *naprpvS* as requiring explanation. First, Bolognese uses a special clitic  $\text{AI}$  that is not one of its  $\text{SCLs}$ , while in other grammars there may be a  $\text{SCL}$  or no clitic at all. Bolognese thus give overt evidence that is new about what is occurring in data of this nature. Second, tensed verbs in the relevant data show 3s agreement. Third, the data shows  $\pi$ -restrictions, permitting only *pvS*.3. Fourth, the standardly assumed connection enacted by Agree between determination of agreement on T and Case-Licensing by it does not seem to hold in the same way in *naprpvS* as it does in *cRpvS*. An *expl*, perhaps with ‘default/neutral’ features, determines agreement on T while the *pvS* appears to have no connection to T under standard assumptions about Agree. Optimally, the analysis of all these factors should be unified in a primitive distinction between *naprpvS* and *cRpvS*, with that distinction capable of capturing the variation observed within *naprpvS*.

We propose that these issues are all related to the *expl* that occurs in *naprpvS*, which is a (non-default, non-last-resort) *expl* with specified features (discussed below)

that is available in the grammars that have such data but not in those that don't. This *expl* is distinct from the default one in data like (10-12) that occurs when there is no nominal argument available for Agree, as required by interface conditions to value and delete the features of the probe in this domain. It is also distinct from the one that occurs in *cRpvS* data, when it and the *pvS* act as a single nominal available for EPP and the interface requirements of the probe. As we connect and explain the four issues in *naprpvS*, we show the role that the special nature of this *expl*, its true independence from the *pvS* (unlike in *cRpvS*), plays in Minimalist mechanisms developed for independent reasons.

For the first two issues, the presence of *AI* in *naprpvS* and tensed verbs with 3s, we start by adopting the common notion that it is an effect of the *expl* that the tensed verb is 3s, meaning that (some form of) an Agree relation holds between it and T (we address the Case-Licensing issue below). This is appropriate both for *naprpvS* data like (1-2) which have a 3s tensed verb and the clitic *AI*, and for the other distinct Bolognese expletive constructions in (10-12) which have a 3s tensed verb and the *SCL.3SM* (*al*). The verbal agreement is identical in the two, though the clitics are different. As noted above, *our proposal rests on the difference between the two expls in these two sets of data*: in (10-12), the *expl* has the 3SM features considered default/neutral and natural for expletives in many grammars (Brandi and Cordin 1989, etc), while in *naprpvS*, we propose that Bolognese specifies an *expl* that is simply 3s. The clitic *AI*, which always and only appears together with this specified *expl.3s*, results from whatever cliticization process generally holds of argument clitics, but in this case applying to the specified *expl.3s*. (As noted in the previous section, the clitic attaches to a head beneath T, where *SCLS* attach.) This specified *expl.3s* is sufficient to value 3s agreement on the tensed verb, and this proposal thus correlates the first two properties of *naprpvS* (*AI* and 3s agreement) by means of standard effects of features involved in Agree. The lack of *M* on the *expl.3s* furthermore explains the lack of a *SCL* in *naprpvS* even if it moves to a position where subject cliticization could occur (since there is no *SCL.3s* without gender in Bolognese), and thus also of inversion in interrogative clauses in *naprpvS*.

For the third and fourth issues regarding  $\pi$ -restrictions and Case-Licensing, the addition of this specified *expl.3s* in *naprpvS* effectively adds a second nominal to the domain of a single probe, introducing the conditions necessary to be subject to the same mechanisms underlying the identical  $\pi$ -restrictions seen commonly in Romance data like Bolognese (15-16). We first discuss these mechanisms, then return to explaining how the specified *expl.3s* underlies these last two issues.

- (15)
- |           |                 |          |           |
|-----------|-----------------|----------|-----------|
| m=        | (DCL.1s) /      |          |           |
| s=        | (DCL.1P) /      |          |           |
| t=        | (DCL.2s) /      | al=      | (ACL.3SM) |
| v=        | (DCL.2P) /      | i=       | (ACL.3P)  |
| Pèvel al= | i=              | la=      | dà.       |
| Pevel     | SCL.3SM= DCL.3= | ACL.3SF= | gives     |
- 'Pevel is giving it,them to me/us/you/you/him,her,them.'
- (16)
- |            |                 |            |       |
|------------|-----------------|------------|-------|
| *          | m=              | (ACL.1s) / |       |
| *          | s=              | (ACL.1P) / |       |
| *          | t=              | (ACL.2s) / |       |
| *Pèvel al= | i=              | v=         | dà.   |
| Pevel      | SCL.3SM= DCL.3= | ACL.2P=    | gives |
- 'Pevel is giving me/us/you/you to him,her,them.'

The explanation of Person Case Constraint effects like these are based, in recent accounts, on the elaboration of standard Agree known as Cyclic or Multiple Agree (Béjar and Rezac 2003, 2009, Nevins 2007, 2011). In the well-formed (15), a DCL related to an indirect object occurs with an ACL.3 related to a direct object. In the ill-formed (16), a DCL related to an indirect object occurs with an ACL.1 or an ACL.2 related to a direct object. In each, c-command holds between the two. Nevins (2007: 293) says that “it is assumed that these clitics double an underlying argument structure where the indirect object c-commands the direct object.” Béjar and Rezac (2009: 46) refers to the dative DP as “closer,” in this same, c-command-based sense. For the ill-formed (16), Nevin’s Multiple Agree approach holds that the third person dative interferes between the probe and the first or second person accusative that the dative c-commands (an intervention effect). In Béjar and Rezac’s Cyclic Agree approach, a first or second person accusative, probed in a first cycle, leaves the probe unable to probe the c-commanding third person dative in a second cycle (a probe-exhaustion effect). In the well-formed (15), these effects do not arise: a first or second person dative doesn’t interfere between a probe and the lower third person accusative, or that accusative doesn’t deplete the probe in the first cycle.

It is often noted that these PCC effects seem to apply only to clitics. Nevertheless, both major approaches refer to the underlying position of the clitic-related elements, presumably because the c-command relations between the clitics themselves would depend crucially on the analysis chosen, and on the application of the definition of c-command to head internal elements, which are unnecessary complications of the discussions. C-command holding between the related phrases captures the necessary generalizations and provides a basis for their explanations. Additionally, both approaches extend their mechanisms to phenomena not involving clitics, such as agreement displacement and omnivorous number. Moreover, these approaches are based in elaborations of Agree, which also underlies standard treatments of agreement, of course, and Case-Licensing as well (and note that Béjar and Rezac 2009:47 and Nevins 2011:955 explicitly tie these approaches to Case-Licensing).

PCC-effects do not arise in every grammar, but they do so in Bolognese (and many other Romance grammars), so Bolognese certainly has whatever factors make PCC-effects possible, and according to Multiple/Cyclic Agree, they are a set of mechanisms that can, in some grammars, have an effect on more than data involving only clitics. Our analysis builds on this, and in particular claims that the specified *expl* and the *pvS* in *naprpvS* are subject to Multiple/Cyclic Agree and that the two remaining issues can thus be given a simple analysis unified with the first two by the effect of the specified *expl*. Because not every grammar with PCC-effects induced by Multiple/Cyclic Agree also exhibits data like *naprpvS* (e.g. Italian, which has PCC but not *naprpvS*), grammars like Bolognese must have some additional mechanism or element that those others lack. This additional mechanism, as noted above, is precisely the specified *expl* added to the derivation in those grammars that, like Bolognese, have it available.

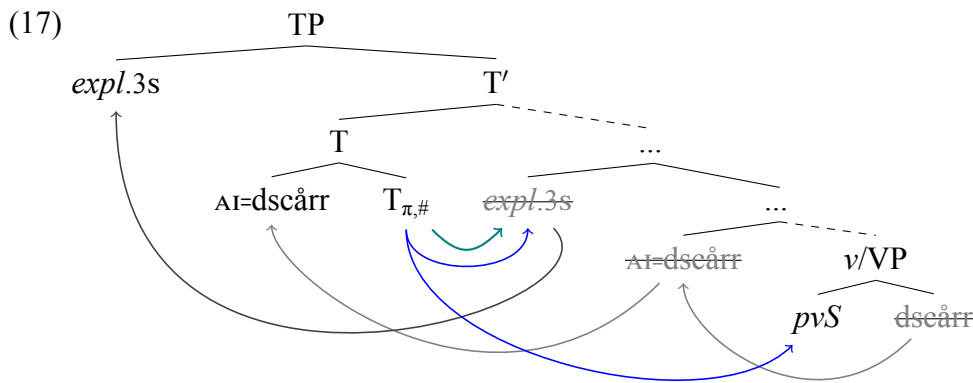
Since there are thus two independent nominals in the domain of the single probe head T in *naprpvS*, the *expl.3s* and the *pvS*, both requiring a connection to it, the elaboration of Agree as Multiple/Cyclic Agree can apply there, and it explains the link between the third and fourth noted issues ( $\pi$ -restrictions and Case-Licensing of *pvS*). This contrasts with (10-12), with the SCL.3SM (*al*), where there is no DP argument requiring Case-Licensing, and thus the (possibly default) expl.3SM is the only nominal available to

satisfy EPP and to value and delete the uninterpretable features of T, as required, and presumably getting Case-Licensed in the process. (Expletives of this nature are ill-formed in Caseless, or null-Case, environments: English *\*It to rain bothers me* vs. *For it to rain bothers me*; Bolognese *\*An um piès brîsa ed piôver* ‘It doesn’t please me to rain’ vs. *An um piès brîsa ch’al piôva* ‘It doesn’t please me that it rains’.) It contrasts also with *cRpvS*, where the *pro* in SpecT, whether called expletive or not (as in Belletti 2005, where it is contrasted with the ‘expletive’ *pro*), serves only to satisfy EPP, and it is only the features of the *pvS* that interact with those on T, simultaneously determining agreement on T and Case-Licensing *pvS*, either by long-distance Agree or by sharing them with *pro*. The *pro* and the *pvS* in *cRpvS* share the properties of a related preverbal subject, and they are, in effect, one nominal (which is made literal in Belletti 2005). On the other hand, in *naprpvS* data like (1-2) and (5-6), we have two nominals needing to relate to T. We have agreed with the literature that it is an effect of the *expl* that the tensed verb is 3s, indicating that  $\text{Agree}(T, \text{expl})$  holds.  $\text{Agree}(T, \text{pvS})$  should also need to hold for Case-Licensing of *pvS*, but this would result in *pvS* determining agreement on the tensed verb, contrary to fact. As noted, however, this is exactly the effect of Multiple/Cyclic Agree, an elaboration of Agree established for independent reasons. In data like (10-12) and *cRpvS* (where *pro* and *pvS* split the duties of a single DP) there is only one DP available for Case-Licensing and determination of agreement, the *scl.3sm* and the *pvS* respectively, and simple Agree will find the one DP without problem; Multiple/Cyclic Agree would be redundant, unnecessary, it would effectively reduce to simple Agree since there is only one goal in the domain of the probe T. In *naprpvS*, however, there are two independent nominals in the domain of T, the only available Case-Licenser. Both need to be Case-Licensed, and by standard logic, simple Agree can only find the higher one, which is the *expl*, since it is the one that raises to SpecT for EPP. The *pvS* in *naprpvS* would thus never be Case-Licensed, if simple Agree applied, because of the intervention effect of *expl*.

Instead, since Multiple/Cyclic Agree is available in such in a grammar, it can and does apply in this sort of data. As standard in these approaches, the individual  $\phi$ -features probe separately. A full discussion of the differences between the Multiple Agree and the Cyclic Agree approaches is beyond the scope of this paper, but either one should be compatible with our proposal, which requires only the shared essential notions of the ability of a probe to relate to more than one goal, the relevance of c-command between them, and the role of  $\pi$  in Case-Licensing. Several differences between them will result in different specific assumptions about the structures involved. Most significant is the location of the two nominals relative to the probe: Multiple Agree has the probe above both, Cyclic Agree has the probe between the two (and permits upward probing). In effect, this means that in the former, the *expl* must be below T, then raising to SpecT for EPP, while in Cyclic Agree, the *expl* must start in SpecT. Both of these ideas are common in the literature, and this paper will make no arguments one way or the other. The specific mechanisms for capturing  $\pi$ -restrictions in each approach differ in a correlated way, the intervention vs. probe-deletion effects described above.

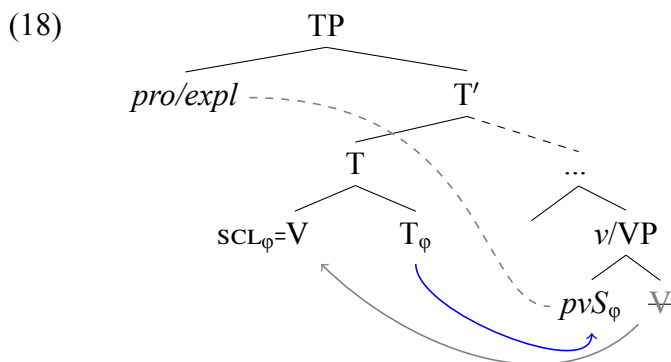
Let us now turn to the implementation of these proposals in the Bolognese data investigated. Given space limitations, the following is presented only in terms of Multiple Agree. Consider the structure in (17), in which (i) the heads and projections associated with auxiliary verbs and participles are ignored, since they are irrelevant to the discussion, and (ii) the structure indicates only an unergative verb: the structure would be identical

(above the  $\theta$ -domain) with an unaccusative verb:



In *naprpvS* data like (1-2) and (5-6), the *pvS* merges in its  $\theta$ -position, and does not undergo A-movement, or any other movement relevant here. The specified *expl* merges between T and v/VP, because (i) it must c-command the *pvS*, including the external argument of an unergative verb, and (ii) its associated clitic  $\text{AI}$  cliticizes below T, as discussed. When T merges, its  $\pi$ -feature probes in accordance with Multiple Agree. If the *pvS* is 3 (1-2),  $\pi$  on T simultaneously probes and can find both *expl* and *pvS*, since no intervention effect arises from an *expl.3* between T and a *pvS.3*. This successful multiple probe by  $\pi$  Case-Licenses them both: T is valued as 3, the cases of the two DPs are valued as nominative, and these all can be deleted. This mechanism resembles Tortora’s (1999) idea, but with no unmotivated assumption about the non-deletion of the  $\text{NOM}$  feature of Agr/T. Simultaneously, the # feature of T probes and finds the *expl*, valuing T as s,<sup>4</sup> another aspect of the notion that the agreement on T is due to the presence of the *expl*. If the *pvS* is 1 or 2 (5-6), and  $\pi$  attempts to probe both *expl.3s* and *pvS* simultaneously, it finds the *expl* that c-commands the *pvS*, but the feature 3 on *expl* creates the discussed intervention effect between T and the *pvS* with 1 or 2, blocking this part of Multiple Agree. Since the *pvS*’s case-feature is unvalued, it can’t be deleted (it is not Case-Licensed), and data like (5-6) is thus ill-formed.

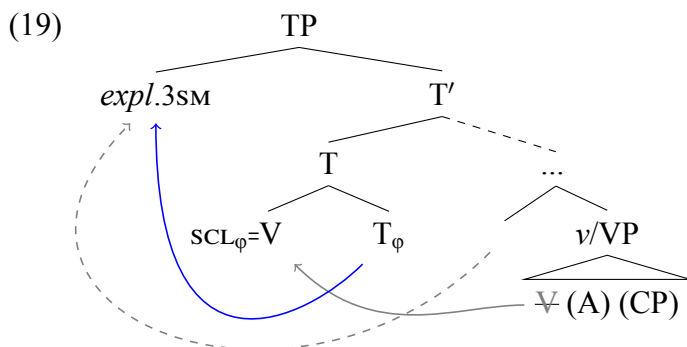
Contrast the structure for *naprpvS* in (17) with the general characterization of *cR-pvS* in (18), which highlights the important points, but abstracts away from particular analyses, which are not crucial here. Relevant data include (7) and (8).



4 This is simple Agree. While person-case effects occur in Bolognese and other Romance grammars, they show no omnivorous number nor number-case effects, and no reason to suppose that #, unlike  $\pi$ , ever involves Multiple/Cyclic Agree. This is directly related to the role that  $\pi$ , as opposed to #, plays in Case-Licensing. See Nevins (2011) for discussion.

The *pro/expl* in SpecT is associated with the *pvS*, and they have the same features (dashed line). It is surely expletive in the sense that it does not refer (separately from the *pvS*), though it may or may not be labelled as such. It may or may not have moved from a lower position, perhaps in close association with, or within, the *pvS*. This *pro/expl*, which either has no features or has features identical to and dependent on those of the *pvS*, merely satisfies EPP, while  $\text{Agree}(T, pvS)$  simultaneously determines agreement (and any *sCL*) on the tensed verb and enacts Case-Licensing of the *pvS*. Together, the *pro/expl* and the *pvS* act like a single element, in particular like a preverbal subject in many grammars, including those in Bolognese (3-4).

Finally, the structure in (19) represents data like (10-12), where there is no argument nominal in the domain of T with which it can Agree. A (default) *expl.3sm* occupies SpecT to satisfy EPP as well as to determine agreement (and the appropriate *sCL*) on T, and it is presumably also Case-Licensed there by T, as discussed above. This *expl* might start in a lower position and satisfy  $\text{Agree}(T, expl)$  there, and then move to SpecT for EPP (dashed arrow).



#### 4. Conclusions and Extensions

In Bolognese, an *expl* that is specified as 3s and independent of the *pvS* is introduced into *naprpvS*. This *expl.3s* underlies the four issues of this data type, including the clitic AI that is related to it, the obligatory 3s agreement of the tensed verb, the  $\pi$ -restrictions that rule out a *pvS.1* or *pvS.2* that it c-commands, and the Case-Licensing of the non-associate *pvS* apparently without agreement between it and the sole Case-Licensing head in the domain, T. With only one probe head available for Case-Licensing the two nominals, the standard application of Agree is insufficient. As a result, the application of the elaboration of Agree as Multiple/Cyclic Agree, independently motivated in the grammar, is induced by the introduction of the independent *expl.3s*, which in turns provides a novel explanation for these  $\pi$ -restrictions that is thus linked to completely independent explanations of the  $\pi$ -restrictions in previously unconnected Romance data.

The *naprpvS* data differs from two other constructions standardly assumed to involve expletives. The *expls* in those differ both from each other, and from the one in *naprpvS*. In *cRpvS*, the *expl* either is without features other than whatever is required to satisfy EPP or has the same features as the *pvS* in the data. The two elements thus act as a single nominal related to the probe T. In constructions without a nominal available to Agree with T, a default *expl.3sm* behaves like a preverbal subject, satisfying EPP, determining agreement on T (including the  $sCL.3sm$ ), and being Case-Licensed by it.

This analysis for *naprpvS* can be extended to other grammars with simple, typically

morphological adjustments. For example, Trentino lacks a clitic in data like *naprvvS*, and Fiorentino displays an impersonal clitic identical to its *SCL.3SM*. The same analysis as proposed here for Bolognese can apply to these, with only the features of the *expl* and the morphological realizations of the clitic involved differing. In Trentino, there is the above quoted “morphological gap,” which we take to mean that there is no clitic in Trentino associated with its specified *expl.3s* that is comparable to Bolognese *AI*. In Fiorentino, there is this same morphological lack as in Trentino of a clitic comparable to *AI*, but, unlike in Bolognese and Trentino, the introduced *expl* is *3SM* and not *3s*. This specification is rich enough to make possible a *SCL.3SM* when probed by *T*. Borgomanerese is quite similar to Bolognese, and we could hold that its clitic *ngh*, glossed as *LOC*, is actually an equivalent to *AI* (and perhaps homophonous with a locative). Other possibilities could arise, given the idea that *expls* with particular feature-sets can be specified in particular grammars. This idea seems reasonable, with the variation in the formal properties of expletives that has already been explored. Moreover, Poletto (pers. comm.) notes that, in Rodoretto di Prali, weather verbs seem to have *expl.3SF*, which suggests that there, at least, the default doesn’t occur, or, possibly, that a deeper look at the notion of the default is required. A possibility under the present account is that specific grammars could potentially specify the features for expletives not only in *naprvvS*, but also in domains without argument nominals, even if many of them do not do so, or they could specify a different set as default. In this way, Rodoretto di Prali may be held to specify *3SF*, which would be easy enough to acquire through positive evidence, every time it rained. All this suggests that the notion of specification of features for expletives merits deeper exploration.

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