Agreement: A Relational Property or a Functional Projection? Evidence from Romance

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Introduction

Pollock's (1989) analysis of the difference between English and French with respect to adverbial placement has led to the formulation of a functional projection, AgrS, to which French, but not English, verbs move.

Kayne (1989) investigating object - past participle agreement in French proposes an analysis that sees the agreement contingent upon a government relation between a functional projection Agr and the DP object, thus drawing a parallel between subject-verb and verb-object agreement.

Chomsky (1991), speculating on Kayne's work, suggests the existence of two functional nodes responsible for the instantiation of agreement, AgrS, for subject agreement, and AgrO, for object agreement.

More recently, Chomsky (1995) has proposed to eliminate agreement functional projections altogether, so that only those functional projections with clear semantic content - such as Tense or Negation - were allowed in the system, but has not formulated how to capture the empirical effects.

The tension between the notion of agreement as a pure relation and agreement as a functional projection has been mentioned increasingly frequently in footnotes but the question has rarely been faced directly.

The aim of this dissertation is two-fold. First, to provide a unified structural account of past participle agreement (PtPPL) with a full post-verbal DP (pvDP) and adjectival agreement. Secondly, on a more theoretical level, to make a small contribution to the understanding of the notion of agreement.

An interesting area in which Romance languages compare interestingly to each other and to English is the formation of the active form of compound tenses. In English tenses such as the present or past perfect are constructed by a form of the auxiliary to have, present or past respectively, followed by the PtPPL of the main verb.

In contrast, in the Romance languages the selection of the auxiliary ranges over two verbs, to have (A aux) and to be (E aux). Spanish and Rumanian, like English, make use exclusively of the A aux in the active form, while the E aux is used only in
the passive constructions. Various Central-Southern Italian dialects and some varieties of Catalan, on the other hand, display only the use of the E aux for both active and passive constructions. Standard Italian (SI) and French find themselves in a middle position and make use of both auxiliaries in active constructions.

Many attempts have been made to account for this alternation in French and SI (Leone (1954), Leone (1970), Agard (1977), Perlmutter (1980), Hyams (1981), Burzio (1981, 1986), Lefebvre (1988), Taraldsen (1987), Lois (1990), Vikner & Sprouse (1988), Guéron & Hoekstra (1988), Vikner (1991), Kayne (1993), Cocchi (1994, 1994a, 1994b)). Leone (1970: 30) clearly states that the choice of auxiliary is dependent on the nature of the PtPPL, in particular, on whether the speaker's "linguistic conscience" felt the PtPPL to act as an adjective or not. This dissertation will not deal with auxiliary selection phenomena; nevertheless, the topic will be touched upon when relevant to the main topic, PtPPL agr.

In French the E aux is used with reflexive verbs and verbs used reflexively - *ils s'est ennuyé* “he got bored”, *il s'est lavé* “he washed himself” - and some movement verbs *il est arrivé* “he has arrived”, *il est allé* “he has gone”. Impersonal and transitive verbs use the A aux and so does *être* (to be).

In SI the E aux - *essere* - is used with reflexive verbs and with verbs used reflexively, with *si*-impersonal constructions and with all those movement verbs which fall in the so-called category of unaccusative verbs, i.e. those verbs whose structural subject is generated post-verbally, in the canonical object position (Perlmutter (1978), Burzio (1981, 1986)). The A aux - *avere* - is usually used with transitive verbs. There are some verbs which admit both auxiliaries, A and E with the choice reflecting a clear semantic difference, and some intransitive verbs that select the A aux. Some examples are given in (1). (1) a is a *si*-impersonal construction, (1) b and c show some verbs which allow for the alternation between the two auxiliaries, and (1) d an intransitive verb selecting the A aux:

(1) a. Negli ultimi tempi si *é/*ha molto sentito
   *In-the last times SI is/*has a-lot heard*
   parlare di esperimenti di *ingegneria genetica*
   speaking of experiments of *Engineering Genetics*
   "Recently, there was a lot heard about Genetic Engineering experiments".
b. Sono corsa/*Ho corso a casa
   I-am run /*have run at home
   “I have run home (i.e. towards home)”

c. Ho corso /*Sono corsa per un’ ora
   Have run /*am run for an hour
   “I have run (i.e. jogged) for an hour”

d. Il cane ha/*é starnutito
   The dog has/*is sneezed
   “The dog has sneezed”

Traditional grammars such as Lepschy & Lepschy (1981), provide the reader with a straightforward rule: avere (A) aux is to be used with all transitive verbs and essere (E) aux with all intransitive verbs. Intransitives selecting avere are considered exceptions and are grouped in a list: camminare (to walk), chiacchierare (to chat), piangere (to cry), respirare (to breathe), ridere (to laugh), sorridere (to smile), tossire (to cough), and so on.

An issue closely connected with auxiliary selection and which is often discussed together with it is the agreement instantiated between a DP base generated post-verbally (pvDP) and the PtPPL (Leone (1970), Burzio (1986), Lefebvre (1988), Taraldsen (1987), Lois (1990)). Burzio (1986) formally expresses the link between E aux selection and PtPPL agr by accounting for them in a unified manner (see chapter 1 section 1.3 for a detailed discussion of his analysis).

In SI PtPPL is instantiated whenever the E aux is selected. A aux selection and PtPPL agr with the PtPPL’s internal argument is triggered only when the DO undergoes cliticisation and moves to a higher position, as shown in examples (2) a, b and c; if not movement takes place, the unmarked masculine, singular (m, sg) form ending in “-(x)to” surfaces - this will be always referred to as (UM) for unmarked:

(2) a. Paola ha mangiato la mela
    Paola has eaten (UM) the apple (f, sg)
    “Paola has eaten the apple”
b. ?*Paola ha mangiata la mela
Paola has eaten (f, sg) the apple (f, sg)
“Paola has eaten the apple”

c. Paola l'ì ha mangiata ti
Paola it has eaten (f, sg) it (f, sg)
“Paola has eaten it”

Because of the co-occurrence of movement and PtPPL many analyses (Kayne (1985, 1989), Burzio (1986), Taraldsen (1987), Lois (1990)) have taken the two phenomena to be interdependent.

When we turn to Italian dialects, the behaviour with respect to both auxiliary selection and PtPPL agr is extremely varied.

Friulian, the dialect on which this work is based, is spoken by over 700,000 people (Cf Vanelli (1997)) in the region of Friuli Venezia Giulia, Italy. The variety investigated here is a central-southern variety of Friulian, spoken south of Udine, in the areas between Palmanova and Aquileia, in particular in the village of Castions delle Mura. Together with the Ladin dialects of the Dolomitic Alps in South Tyrol - Italy - and the Romansch dialects of Grisons - Switzerland – Friulian

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1 The judgement here is not strictly ungrammatical, but it is felt to be archaic by most speakers. Nowadays there are still people using the agreeing form of the PtPPL in sentences like (2) b but the phenomenon is restricted mainly to highly educated, upper class speakers, especially those who are or have spent a long time in academic institutions. This suggests that this is learnt rather than spontaneous. However, since this is not widespread enough to be relevantly significant - to the best of my knowledge there are no very young speakers, i.e. under the age of 20, would spontaneously produce it - it will here be left aside. It will be maintained that the non agreeing form of the PtPPL in contexts not having cliticisation will be the natural choice for all speakers.
is one the so-called Rhaeto-Romance languages. It appears in many different varieties depending on the areas in which it is spoken, and it is influenced by the nature of the surrounding languages. Examples of this influence can be found in the varieties spoken in the area adjacent to the Carnic Alps along the Austrian border and in the areas around Gradisca near the border with Slovenia which displays features of the language across the border.

As with all other dialects, Friulian compares very interestingly to SI and in a way it can be considered more conservative than the latter. Here, too, the choice of auxiliary ranges over the \( E \) aux and the \( A \) aux, but the types of verbs selecting the one or the other is partly different form SI (for a detailed account the reader is referred to Benincà & Vanelli (1984)) - and there is variation between the different varieties of Friulian.

A challenge to the conditions on the agreement instantiated in SI by a transitive verb selecting the \( A \) aux and its direct object (DO) comes from Friulian. Friulian is, in some respects, more traditional than SI, allowing for constructions which were allowed in XIX century Italian and but have now disappeared from SI and are generally considered archaic. The most salient of these constructions is given in (3): with transitive verbs selecting the \( A \) aux, agreement is triggered between the PtPPL and a DO in situ, i.e. which has not undergone movement - or at least not visibly:

\[
\begin{align*}
(3) \ a. \ Marie & \ e \ a \ mangiadisli \ caramalis \\
& \text{MarySCL has eaten (f, pl) the sweets (f, pl)} \\
& \text{"Mary has eaten the sweets"}
\end{align*}
\]

\[
\begin{align*}
& b. \ Toniel & a \ mangiâs \ i \ pirus \\
& \text{TonySCL has eaten (m, pl) the pears (m, pl)} \\
& \text{"Tony has eaten the pears"}
\end{align*}
\]

Given that from the linear order the DO does not seem to have moved from its base-generated position, it is difficult to account for the Friulian data in terms of a theory invoking movement.
This dissertation is structured as follows.

In **chapter 1** I will present and discuss some ideas as to why PtPPLs seem to behave similarly to APs. **Chapter 2** presents an in-depth evaluation of different semantic accounts of PtPPL agr and shows that even with extensive modification a semantic analysis of the phenomenon cannot deal adequately with Friulian transitive activity verbs with an indefinite object. **Chapter 3**, presents a new analysis, where empirical evidence supports the complete elimination of an agreement functional projection responsible for PtPPL agr - be it AgrO or AgrP -. The semantic affinity between PtPPLs and APs is then interpreted on a syntactic level by adopting the same mechanical process for both PtPPL and DP internal agr, namely feature copying. The differences between the two categories are captured, syntactically, by the different operational domain of the feature-copying process. The triggering factor that underlies the two types of agreement is the matching of [+N] features. Friulian PtPPL is assumed to be specified for [+V,+N] features, while SI PtPPL is claimed to carry [+V] features. This claim finds support from a diachronic investigation of the evolution of the PtPPL and the Aaux from Latin to the modern Romance Languages presented in **chapter 4**. Here the differences noticed between younger and older Friulian speakers are explained claiming that Friulian is still undergoing the developmental process already accomplished by SI.
Chapter 1

Past Participle Agreement - Syntactic Accounts

1.0 Introduction

This chapter will concentrate on the data and present some questions left unanswered by two previous analyses, Burzio (1986) and Paoli (1996). In section 1.1 it is shown that there are no differences between SI and Friulian with respect to PtPPL agr when the $E_{aux}$ is selected, so that this work will concentrate only on the $A_{aux}$. Section 1.2 presents some background information on Friulian and refers to Paoli (1996), where the appearance of subject clitics (SCL) and PtPPL agr with a pvDP *in situ* were accounted for by formulating the “Agreement Parameter”. Section 1.3 digresses into a detailed analysis of Burzio’s (1986) and the adaptation of this made in Paoli (1996). Some problems left unanswered by the two analyses are illustrated in section 1.4. The feature specification of PtPPL and adjectival agreement suggests an affinity between PtPPLs and APs, captured in section 1.5 by

1.1 - Past Participle Agreement: the facts in Friulian

Both in Friulian and SI, as can be seen respectively from the examples in (4) and (5), the $E$ aux triggers PtPPL agr:

(4) a. Maria e Lucia e son ladis / *lât
   Mary and Lucy SCL are gone (f, pl) /*(UM)
   “Mary and Lucy have gone”

b. Piero e Toni e son rivâs / *rivât
   Piero and Toni SCL are arrived (m, pl) /*(UM)
   “Piero and Tony have arrived”

c. Maria e Lucia si son lavadis / *lavât
   Mary and Lucy themselves are washed (f, sg) /*(UM)
   “Mary and Lucy got washed”

b. Piero e Toni si son scris / *scrit
   Piero and Tony to each other are written (m, pl) /*(UM)
   “Piero and Tony have written to each other”

(5) a. Maria e Lucia sono andate / *andato
   Maria and Lucia are gone (f, pl) /*(UM)
   “Maria e Lucia have gone”

b. Piero e Toni sono arrivati / *arrivato
   Piero and Tony are arrived (m, pl) /*(UM)
   “Piero and Tony have arrived”

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2 SCL stands for Subject CLitic. See section 1.3 for an account of their nature and function.
c. Maria e Lucia si sono lavate / *lavato
Mary and Lucy themselves are washed (f, pl) /*(UM)
“Mary and Lucy got washed”

d. Piero e Toni si sono scritti / *scritto
Piero and Toni to each other are written (m, pl) /*(UM)
“Piero and Tony have written to each other”

This work will concentrate only on transitive verbs with a DO in situ selecting the A aux.
Examples (2) a, b and c show that in SI PtPPL agr with a DO in situ is not usually triggered. This is, on the other hand, what happens in Friulian, as shown in example (6) a, where PtPPL agr is triggered with a DO in situ as well as, on a parallel with SI, when the DO becomes a clitic, as shown in (6) b and d:

(6) a. Piero el a serâs / serât i barcôns
Piero SCL has shut (m, pl) / (UM) the windows (m, pl)
“Piero has shut the windows”

b. Piero jui a serâs / *serât ti
Piero them have shut (m, pl) /*(UM)
“Piero has shut them”

c. Maria e a viodude / viodût to sûr
Mary SCL has seen (f, sg) / (UM) your sister (f, sg)
“Mary has seen your sister”

d. Maria le i a viodude / *viodût ti
Mary her has seen (f, sg) /*(UM)
“Mary has seen her”

The possibility of having the UM form of the PtPPL in Friulian is witnessed in younger speakers, while the older ones prefer the agreeing one. This could be due to the fact that younger speakers are more in contact with SI speakers than the
older ones, having a wider network, or perhaps to a change in progress which is showing up in the younger speakers or, still, to an interaction of the two. This issue will be further developed in chapter 4. Throughout this work we will focus our attention on the variety of Friulian spoken by older people. The one spoken by younger people will be referred to when speculating on the possibility of a change in progress.

Section 1.2 illustrates some general characteristics of Friulian.

1.2 - What is Friulian?

Friulian, like other Northern Italian Dialects, has a set of subject clitics (SCL) which co-occur with lexical and pronominal subjects. Examples (7) from Friulian and (8) from SI show a comparison between the two languages:

(7) a. Marie e ciante  (8) a. Maria canta
   Mary SCL sings     Mary sings
   “Mary sings”

b. Je e ciante     b. Lei canta
   SheSP 3 SCL sings     SheSP sings
   “She sings”

c. pro E ciante
   ∅ SCL sings
   “(She) Sings”

d. * pro Ciante     c. pro Canta
   ∅ Sings     ∅ Sings

3 SP stands for “strong pronoun”, i.e. those pronouns which can occur by themselves in subject position as “she” She left.
Paoli (1996) investigated the nature of these subject clitics. The ungrammaticality of (7) d compared to its Italian grammatical counterpart (8) c, led me to think that Friulian was not one of the so-called pro-drop languages. However further investigations showed that Friulian displayed syntactic properties shared by pro-drop languages like Italian and thought of as being connected to the “pro-drop” phenomenon (Rizzi (1982)): free subject-verb inversion and lack of “that-trace” effects. The question to be answered was “what are these subject clitics?”, and an analysis was proposed following Rizzi (1986). Friulian SCLs, as other SCLs in Northern Italian Dialects, are different from French subject clitics (Cf Kayne 1975) in that they are clitics by virtue of being heads, but are an expression of agreement, and as such, base-generated under Infl. Consequently, I claimed that Friulian agreement features are not only expressed as a morphological marker on the verb that shows inflection, but are also phonetically realised as a SCL that agrees in -features with the verb and its lexical or pronominal subject.  

In the general approach to inflectional morphology developed by Baker (1985, 1988), morphologically complex words are derived from more basic elements - roots, suffixes, stems - by means of a syntactic process of incorporation, a variant of Move α affecting heads. Following this approach the SCL was assumed to be base generated under Agr - in a Pollockian (1989) framework - and the finite verb form adjoined to it through a process of head-to-head movement obtaining the following structure for (7) a:

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4 Cf Poletto (1992), for a different analysis.
To express the difference between Italian which does not display these SCLs and Friulian, it was claimed that in Friulian the AgrS node is specified for strong features which need to be spelt out taking the form of SCLs.

Some more support for this was derived from the investigation of the instantiation of agreement between a PtPPL selecting the Aux and its DO in situ.

In order to capture the link between the two manifestations of “extra” agreement, Burzio’s account was considered alongside others (Kayne (1985), Bouchard (1985), Lefebvre (1988), Brown (1988), Lois (1990), Cortés (1993), Taraldsen (1987)), and amended. We need to digress slightly at this point to present Burzio’s analysis and its adaptation in Paoli. Only the part regarding PtPPL agr will be considered in some depth.

1.3 - Burzio (1986) and its adaptation in Paoli (1996)

Fundamental to Burzio’s analysis is the distinction - put forward by Perlmutter’s (1978) work formulated in a relational grammar framework - within the group of intransitive verbs between unergatives and unaccusatives. Using as a test for “unaccusativity” the fronting of the clitic pronoun ne (of it/them) Perlmutter shows that the subject of verbs like telefonare - to telephone - is generated in a different position from the subjects of verbs like arrivare - to arrive. More specifically, while the former is base generated in the canonical position of the subject, i.e. pre-verbally, the latter is base generated post verbally, and behaves like a kind of object. This can be seen in the following examples: in (10) a it is shown how a DP base generated post-verbally can undergo “ne-cliticisation”; (10) c shows that the same can be applied to the subject of “arrive” but not to the subject of “telephone” in (10) e:

(10) a. Ho visto tre persone
    Have seen three people
    “I have seen three people”

b. Nei ho viste tre ti
    Of them have seen three
    “I have seen three of them”
c. Sono arrivate tre persone  
Are arrived three people  
“Three people have arrived”

d. Nei sono arrivate tre t  
Of them are arrived three  
“Three of them have arrived”

e. Hanno telefonato tre persone  
Have phoned three people  
“Three people have phoned”

f. *Nei hanno telefonato tre ti  
Of them have phoned three  
“Three of them have phoned”

Taking transitive verbs to have both an initial 1 (subject related) and initial 2 (direct object related) stratum - a reformulation of linguistic level (in a way, Θ-roles; see Perlmutter (1980: 198-200)) - he divides the intransitives into two groups: the unaccusatives, which contain only an initial 2 stratum, and the unergatives, which contain only an initial 1 stratum. He also claims (1980: 210) that the selection of the auxiliary is determined by the type of initial stratum the predicate contains. Initial 2 stratum will trigger selection of $E$ aux, initial 2 $A$ aux.

Burzio (1986) suggests a unified account of auxiliary selection and PtPPL agr: his account, based on SI, rests on the existence of empty categories at S-S which create a chain, responsible for triggering PtPPL agr. $E$ aux selection is formulated as follows (1986: 55):

\[(11) \quad \ldots \text{ESSERE ASSIGNMENT: The auxiliary will be realized as essere whenever a binding relationship exists between the subject and a nominal contiguous to the verb...} \]

A “nominal contiguous to the verb” is defined (1986: 56) as a “nominal which is either part of the verb morphology, i.e. a clitic, or a direct object. A direct object is
an NP in an A-position governed by the verb...”

This is translated into two configurations of binding relationships between:
i) an NP and its trace;
ii) the subject of the predicate and a clitic.

(12) a. NP V NP  b. NP cl-V ...

(12) a represents all the cases of NP-movement from object to subject position - passives and ergatives (in Burzio’s sense);
(12) b accounts for E selection in all cases where the clitic SI is involved, i.e. reflexive, reciprocal and impersonal constructions.
PtPPL agr is accounted for in the following way:

(13) “…PAST PARTICIPLE AGREEMENT: A past participle will agree (in gender and number) with an element holding a binding relationship with its direct object...”
PtPPL agr is triggered, under this definition, in two configurations of binding relationships between:
i) a subject NP and its trace;
ii) an object NP and its trace.

(14) a. NP V NP  b. ... cl-V NP ...

(14) a represents instances of unaccusative and passive constructions;
(14) b accounts for direct object clitics.

Given that both configurations, (12) a and (14) b partly overlap, the combination of the two will account for all those structures in which E aux selection and PtPPL agreement co-occur, as in reflexive constructions. The syntactic configuration in (16) corresponds to sentences like (15) where the functional subject is linked, through an intervening clitic to the canonical subject position:
(15) [Maria e Giada] si sono lavate (f, pl) ti
Mary and Jade themselves are washed
“Mary and Jade have washed themselves”

(16) NP cl-V NP

In all instances of movement it is assumed that the trace left behind by the pvDP
shares grammatical features of person, number and gender with the moved DP, as
stated in Chomsky (1981: 323):

(17) “... If (α, β) is a link of some chain C, α an argument, then β bears the same
features as α ...”.

Although Burzio’s analysis can consistently explain a considerable amount of data,
by considering A selection and PtPPL agr between a PtPPL and a pvDP in situ in
complementary distribution, it could not explain the agreement shown in examples
(3) and (6) from Friulian 5.
In order to strengthen Burzio’s proposal, in Paoli (1996) I interpreted “a nominal
contiguous to the verb” as an element carrying [+N] features, and identified it with
AgrO. Because of its pronominal nature, AgrO was able to bind the direct object
(DO) of the PtPPL. Furthermore, the “strength” of this node was considered
responsible for the difference between SI and Friulian: namely, the latter was
specified for “strong” features which had to be spelt out on the PtPPL, while the
former always caused the PtPPL to surface as the unmarked [m, sg] form unless
the DO underwent cliticisation 6.

5 Burzio’s (1986) account fails to capture data from a number of dialects (Cf
Brown (1988)). One of the many, Southern Lazio, displays lack of PtPPL agr with
the E aux. Rohlfs (1969:116) reports some examples: semo cercato - lit: we are
looked for (UM), semo vennuto - we are come (UM).

6 This difference in strength between the SI and the Friulian AgrO node is
captured by Cocchi (1994b: 89, note 5) in a different way. She assumes a difference
in timing in raising to the node: in Friulian the DO would raise to [Spec, AgrO]
before spell out; in SI this would not happen until LF. She further suggests that
this claim can find some support in Latin where in all transitive constructions
PtPPL agr with the DO was instantiated. In the transition to the Modern Romance
Languages this process has become non-overt, in that in all these languages the DO
raises to [Spec, AgrO] at LF, leaving the PtPPL in its [m, sg] unmarked form.
Medieval Romance represents an intermediate stage, where an alternation between
The structure obtained for (3), repeated here for convenience, is (17).

(3) Marie e a mangiadis li caramelis  
    Mary SCL has eaten (f, pl) the sweets (f, pl)  
    “Mary has eaten the sweets”

(17)  

\[
\begin{array}{c}
\text{AgrS} \\
\text{Spec} \\
\text{Marie} \\
\text{Agr} \\
\text{TP} \\
\text{e} \\
\text{Spec} \\
\text{T} \\
\text{ AuxP} \\
\text{Spec} \\
\text{T} \\
\text{Aux} \\
\text{Spec} \\
\text{AgrOP} \\
\text{Spec} \\
\text{AgrO} \\
\text{VP} \\
\text{Spec} \\
\text{V} \\
\text{DP} \\
\text{mangiadis li caramelis}\end{array}
\]

This solution has a number of theoretical and empirical problems which will be dealt with in section 1.4.

1.4 - Problems with Paoli (1996)

Although the analysis outlined in Paoli (1996) could provide a reasonably
consistent account of both SI and Friulian data, it leaves some questions unanswered, illustrated below in (18).

(18) a. An issue arising from the analysis suggested in the previous section, but primarily with Burzio’s analysis, is pointed out in Cocchi (1994b). She draws attention to reflexive constructions, where the clitic which represents an indirect object (IO) should not trigger PtPPL agr - remember that according to Burzio’s analysis only a DO can trigger PtPPL agr. The examples are taken from SI:

(19) a. Maria si é comprata dei libri
Mary (f, sg) refl. is bought (f, sg) some books (m, pl)
“Mary has bought herself some books”

b. ?Maria si é comprati dei libri
Maria (f, sg) refl. is bought (m, pl) some books (m, pl)
“Mary has bought herself some books”.

c. Maria se li é comprata / comprati tì
Mary refl. them (m, pl) is bought (f, sg) / (m, pl)
“Mary has bought them for herself”

In Friulian the situation is slightly different, as shown in examples (5) a and b, but it suggests even more strongly that an account based on Burzio’s analysis cannot be accepted. Although (20) a is a reflexive construction, both auxiliaries can be selected; furthermore, when the DO undergoes cliticisation, then only the A aux is selected, and the PtPPL surfaces in its UM form.

(20) a. Marie si a comprât/ e comprade un vistît
Mary refl. has bought(UM)/ is bought (f, sg) a dress (m, sg)
“Mary has bought herself a dress”

b. Si lui a comprât /*e comprade tì
Refl. it has bought (UM) /is bought (f, sg)
“She has bought it for herself”
Similar comments can be made about those verbs which allow both auxiliaries but the choice reflects a semantic difference (Cf (1) b and c) and which cannot be captured under Burzio’s analysis, as it stands.

More problematic evidence can be found in impersonal constructions, which show that auxiliary selection and PtPPL agr are not two different sides of the same coin, and do not, therefore, necessarily co-occur. Examples (20) c, d, e and f, compare two intransitive constructions and their corresponding si-impersonal counterparts. Only those intransitive verbs that usually select the E aux display agreement on the PtPPL, which proves that impersonal constructions do not show PtPPL agr by default:

(20) c. Mario ha camminato molto
Mario has walked a-lot
“Mario has walked a lot”

d. Si è camminato/ *camminati molto
SI is walked (UM)/ *(m, pl) a-lot
“One has walked a lot”

e. Mario è andato a fare la spesa
Mario is gone (UM) to do the shopping
“One has gone shopping”

f. Si è andati/ *andato a fare la spesa
SI is gone (m, pl)/ *(UM) to do the shopping
“One has gone shopping”

Although this matter will not be pursued any further here - see the solution suggested in Cocchi (1994b) - it is indicative of the limitations of the conclusions reached in Burzio (1986) and, consequently, in Paoli (1996).

(18) b. If we assume the functional subject of the PtPPL to be base-generated in [Spec, VP] 7, and then raised to [Spec, AgrSP], we have to explain why AgrO is

7 I will follow Koopman and Sportiche (1988) in assuming that subjects of
not specified for the features carried by the subject. In fact in its raising by Spec-to-
Spec the subject moves out of [Spec, VP] and raises into [Spec, AgrO] in order to
reach its final position.

One way round this problem would be to say that AgrO is actually a functional
projection available only to internal arguments of the verb to raise into. This would
imply that if the syntactic subject did raise into it and transmitted its features to it
then there would be a clash in semantic features of some sort - something on the
line of “subject-ness” vs “object-ness”. Therefore it could be claimed that although
the structural subject does indeed raise into [Spec, AgrO] it does not transmit its
features to it. Alternatively, it could be assumed that AgrO does not project a
Specifier position as SS, but only at LF in order to allow for the object to check its
features.

Although possible, this solution relies on the assumption that AgrO is a projection
closely linked to the logical function of object rather than to its syntactic position,
a question addressed in point c below.

(18) c. Another problem which will be fundamental to the line of thought
presented in this dissertation arises from the fact that in Friulian, as well as in
Italian, agreement between a verbal form and its DO takes place only with
compound tenses formed with the PtPPL. This would actually suggest treating
PtPPL agr as a phenomenon strictly linked to the nature of the PtPPL rather than
to the function of DOs in general.

(18) d. A fourth problematic fact to take into consideration is the different
feature specification of the two Agr nodes:

(21) \[\text{AgrS [person, number]; AgrO [gender, number].}\]

[person, number] are the features generally involved in subject-verb agreement in
SI and Friulian and other Romance languages. The features [gender, number], on

transitive and intransitive verbs are not base generated externally to the VP (as
assumed by Williams (1981)), but rather internally.
the other hand, are involved in the agreement instantiated between a noun and an adjective modifying it. The PtPPL is a verbal form, so that both nodes should be associated to verbal agreement. If this is the case, this difference in feature specification would represent a problem for any attempts to give a unified account of the two.

Kayne (1989) gives a parallel account for subject-verb and verb-object agreement, but distinguishes between the two by claiming that while the agreement is direct in the latter, it is mediated by an empty category. This is situated in a position adjoined to IP - AgrP strictly speaking - in constructions with Wh-PtPPL agr, and in [Spec, AgrP] with clitic-PtPPL constructions.

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The SCL is taken to be base generated under AgrS, so that when the verb raises to this position it right-adojins to the SCL. Kayne (1994) rules out right-

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8 The agreement relation is expressed in terms of co-indexation: the Agr node and the pvDP are co-indexed. Given that co-indexation is subject to locality conditions, the fact that the auxiliary agrees with the subject and the PtPPL with the pvDP could be easily derived: the verb will agree with its own subject but will not be able to do so with the subject of the next verb higher up. The postulation of an intervening empty category between the moved DP and the Agr node allows for a more strict locality condition than a direct agreement between PtPPL and DP would do, accounting for the ungrammaticality of (22) with the agreeing PtPPL:

(22) Paul a ...AGR [vp repeint / *(es) les chaises] Paul has re-painted (UM)/ *(f, pl) the chairs (f, pl) “Paul has repainted the chairs”

(22) suggests that a government relation has to hold between AGR and the NP and no barriers - in Chomsky’s (1989: 87) sense - can intervene between the two in order for agreement to be triggered. This is more forcefully illustrated in some examples where Wh-movement has occurred (Kayne 1989: 86):

(23) a. Je me demande combien de tables Paul a repeintes “I wonder how many tables Paul has repainted”.

b. ...[combien de tables]i [IP aux Paul [VP a [IP PtPPL, AGR: repeintes [e]:i]]]

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b. ...[combien de tables]i [IP aux Paul [VP a [IP PtPPL, AGR: repeintes [e]:i]]]
adjunction. The question of the position occupied by SCLs will not be pursued any further here. The reader is referred to Poletto (1992) for a solution 9.

(18) f. The notion of “strength” invoked in Paoli (1996) in order to explain the difference between Friulian and SI is rather curious. It is an intuitive concept and cannot really be identified with the meaning “strength” has in the Minimalist theory or others.

(18) g. Finally, SCLs and PtPPL agr are not two phenomena intertwined with each other, given that there are Dialects which have SCLs but do not present PtPPL agreement (e.g. Trentino).

Of the problems outlined above, (18) c and d are the most important ones. Combined together, they suggest a similarity between PtPPLs and APs. The next section will investigate further this suggestion, presenting Lehmann’s (1988) ideas on the existence of two types of agreement, and, in a subsection, Giorgi and Pianesi’s (1991) claim that the PtPPL is a verbal form with a “defective” nature lacking a “speech time” reference.

1.5 - Lehmann’s (1988) internal vs external agreement

Lehmann’s (1988) approach to agreement is functional. His basic thesis is that

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9 Investigating the nature and function of SCLs from all Northern Italian Dialects, Poletto comes to the conclusion that SCLs vary from dialect to dialect, and accordingly, they occupy different positions. The CP is split in four different projections and is referred to as the “Agreement field”. Inside it, each position is associated with a syntactic feature and hosts a different type of SCL.
agreement is referential in nature and its function is to identify or re-identify referents. Within this role he recognises two different types which he labels INTERNAL and EXTERNAL. Internal agreement refers to noun phrase internal agreement (Lehmann's concept of noun phrase is here taken to be a DP following Abney (1987), Szabolcsi (1987), Fassi Fehri (1989)). All the elements involved in internal agreement are c-referential, i.e. they all predicate over the same variable in semantic expressions of the form apple (x), red (x).

External agreement, on the other hand, is the agreement that is instantiated between a DP outside the governing category of the agreement term and the term itself, as in the subject-verb case.

As an example of internal agreement, Lehmann takes Latin constructions (1988: 56):

(25) illarum duarum bonarum feminarum
that.gen^{10}.pl.fem two.gen.pl.fem good.gen.pl.fem woman.gen.pl.fem

"Of those two good women"

The example in (25) shows the agreement of determiner, numeral, attributive adjective and noun. Lehmann observes that internal agreement may be specified - but does not need to - for [case] but never for [person] features - more support for this claim is found in examples of agreement between possessor and the possessed item in Dyirbal.

Investigating external agreement in Abkhaz, Lehmann comes to the conclusion that this type of agreement may be specified for [person] but never for [case] features; this points to the fact that agreement specified for [case] is in complementary distribution with the agreement specified for [person]. This claim will not be taken any further here, since Lehmann interprets this difference as a reflection of a difference in the function performed by the two agreement types, internal and external. In particular, both are seen as (1988: 64)

\(^{10}\) "gen" here stands for Genitive Case.
"... successful ways of signalling a dependency relation, but external agreement is more successful on purely syntactic relations, while Case marking is more successful on semantic relations..."

Although there is no direct reference to the agreement specified for [gender] features, it is very significant that [person] features are never involved in instances of internal agreement. This crucially suggests that PtPPL agr should be treated the same way as DP internal agreement. The next subsection presents a formal representation of the PtPPL's nature, which makes it very similar to adjectives.

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11 This claim is challenged by Hungarian, where DP internal agreement involves [person] features. What is suggested here maintains its value and strength if Szabócsi (1981, 1994, among other works) is right in her analysis that sees the DP with a sentence-like structure, containing an inflectional node and being headed by a determiner. She further claims that the argument frame of complex event nominals is identical to that of the underlying verb. Thus, there is a close parallel between the syntactic structure she gives to the DP and the one Chomsky (1986) gives to the CP. Compare:

<table>
<thead>
<tr>
<th>Szabócsi</th>
<th>Chomsky</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spec DP</td>
<td>Spec CP</td>
</tr>
<tr>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td>(N+I)P</td>
<td>IP</td>
</tr>
<tr>
<td>DP</td>
<td>I'</td>
</tr>
<tr>
<td>(N+I)'</td>
<td>VP</td>
</tr>
<tr>
<td>DetP (N+I)</td>
<td>[±tense]</td>
</tr>
<tr>
<td>[(AGR)]</td>
<td>[]</td>
</tr>
<tr>
<td>[±poss]</td>
<td>[(AGR)]</td>
</tr>
</tbody>
</table>
1.5.1 - [gender, number] features: Giorgi and Pianesi (1991)

Giorgi & Pianesi (1991) make clear reference to the nature of [gender, number] features. Analysing the differences between Latin and SI compound tenses, they adopt a revised version of Reichenbach’s (1966) theory of tense. They assign a structure to compound tenses in which two sets of functional nodes are present: one for the auxiliary and one for the PtPPL. The feature specification carried by the two nodes directly reflect the categorial specification of the two verbs: the auxiliary is specified for [person, number] and is a [+V, -N] category; the PtPPL is specified for [gender, number] and is a [+V, +N] category.

Furthermore the two sets of nodes carry different semantic information. In the syntax of temporal representation there are three primitive concepts: S, speech time, denotes the time at which the sentence is uttered; E, event time, denotes the time of the event e expressed by the verb; R, reference time, adopted to account for the semantics of perfect tenses. In (26) an example (Giorgi & Pianesi (1991: 190)) is given to exemplify this:

(26) When Mary entered the room at 5, John had already left at 4.

\[
\begin{array}{ccc}
E & R & S \\
\mid & \mid & \mid \\
at 4 & at 5 & \\
\end{array}
\]

In (26) “John had already left the room” is the event and it precedes R, also connected to an event, in this case Mary’s arrival. The pluperfect expresses a consecutio temporis in which both E and R precede S.

Giorgi & Pianesi claim that morphemes expressing temporal relations (i.e. past, future) and temporal representations (i.e. T-relations such as “S follows R”) are in biunique correspondence (Cf 1991: 191). One of the consequences of this is that the different tenses correspond to different temporal relations, and, more specifically, that every morpheme corresponds to a certain T-relation and vice versa. Therefore, given the T-relation S_R (S precedes R) the morpheme corresponding to it will be the one expressing future tense (1991: 192).

This information is encoded in the two sets of inflectional nodes, one correlated to each verbal form. For the present perfect they assume two nodes, T1 and Agr1 governing the auxiliary, T2 and Agr2 the PtPPL. T1 and T2 lexicalise tense relations, S/R and R/E respectively.
The necessity of having two agreement nodes stems from the “incompatibility” between T1 and T2’s feature specification: T2 is “adjectival”, i.e. a [+V,+N] category, T1 is “verbal”, i.e a [+V,-N] category. [person] features are here considered typical of verbal categories, [gender] typical of adjectival categories.

In (27) an exemplifying tree (1991: 193) shows the auxiliary carrying S/ R information, while R/ E are expressed by the PtPPL. The event e under both Vs is co-indexed to show identity of event:

(27)

\[ \text{AGR1}'' \]
\[ \text{AGR1}' \]
\[ \text{AGR1} \]
\[ \text{T1}'' \]
\[ \text{T1}' \]
\[ \text{T1} \]
\[ \text{V}'' \]
\[ \text{V}' \]
\[ \text{S/R} \]
\[ \text{[person, number]} \]
\[ \text{V} \]
\[ \text{AGR2}'' \]
\[ \text{AGR2}' \]
\[ \text{AGR2} \]
\[ \text{T2}'' \]
\[ \text{T2}' \]
\[ \text{T2} \]
\[ \text{V}'' \]
\[ \text{V}' \]
\[ \text{R/E} \]
\[ \text{[gender, number]} \]
\[ \text{V} \]
\[ \text{...} \]
\[ \text{ei} \]

The crucial points to extrapolate here are that...

\[ \text{12} \] It is interesting to notice that R was required when these tense relations were first introduced by Jespersen (1924) in order to account satisfactorily for the semantics of perfect tenses. It is claimed that R is an indication of “perfectivity” of the action.
i) the feature specification of PtPPL agr is due to PtPPL’s “adjectival” nature; ii) PtPPL agr, being specified for [gender, number] seems to be a phenomenon related to the PtPPL rather than to the DO.

The similarity between PtPPLs and adjectives is shown in (28). DP internal agreement in those languages where nouns are inherently defined for gender is specified for the same features, [gender, number] (28) a and c are from SI, (28) b and d from Friulian.

(28) a. La bella casa SI
    The (f, sg) nice (f, sg) house (f, sg)

    b. Le biele ciase F

    c. Il gatto morbido SI
    The (m, sg) cat (m, sg) soft (m, sg)

    d. El giat morbid F

The PtPPL has, on the other hand, properties clearly typical of verb forms: it can assign Θ-roles and Accusative Case. This is evident in absolute constructions, where only DPs generated post-verbally can appear: presumably a subject DP is ungrammatical because it cannot be assigned Nominative Case (Cf Belletti (1981, 1990).

(29) a. Pagât il cont, Toni l’ é lât cjase
    Paid the bill, Toni he is gone home
    “Having paid the bill, Toni went home”

    b. “Toni senât, l’ é lât cjase

---

13 I will leave here open the issue of whether SI PtPPLs are really specified for [+V, +N]. See chapter 3 section 3.3 and chapter 4 for a development of this idea.
Toni dined he is gone home

“Having had dinner Toni, he went home”

In summary, PtPPLs display both features typical of adjectival categories, agreeing in [gender, number], and features typical of verbal ones, assigning Θ roles and Case. These two are very significant observations and will be at the centre of the analysis put forward in chapter 3.

1.6 - Conclusion

Summing up, in this chapter we have seen that the Friulian data cannot find a proper account in a syntactic analysis such as Burzio’s (1986). Lehmann and Giorgi & Pianesi provide some evidence for the treatment of PtPPL agr as a phenomenon directly related to the nature of the PtPPL, rather than to the general function of DO - which is what the functional projection AgrO implies. In particular, the similarity between PtPPL agr and DP internal agreement, suggests a semantic affinity between PtPPLs and APs. Chapter 2 investigates the idea that the PtPPL is a “verbalised adjective” which describes a state brought about in the pvDP. Some semantic accounts of auxiliary selection and PtPPL agr ( Parisi (1976), Centineo (1996)) and a summary of the relevant points are presented. It is shown, however, that even a revised version of Centineo’s analysis does not adequately explain Friulian data, and that a purely semantic account of PtPPL agr is not satisfactory. This gives support to the idea that PtPPL agr is a syntactic phenomenon and it is in syntactic terms that its mechanism can be expressed.
Chapter 2

Past Participle Agreement: Semantic Accounts

2.0 Introduction

Chapter 1 has highlighted the affinity between PtPPLs and APs, suggesting that the particular syntactic feature specification involved in PtPPL agr could be due to this similarity between the two categories. More precisely, that PtPPL agr is due to the PtPPL's property of describing a state brought about in the pvDP. This chapter will investigate a number of semantic accounts of PtPPL agr and reach the conclusion that, although intuitively promising, a purely semantic analysis cannot account for all the data. This is an important step forward in the understanding of PtPPL agr and agreement in general.

Section 2.1 presents Parisi’s (1976) speculations. Parisi is the first to introduce the concept of verbs which “initiate a state in one of its arguments” and to distinguish
between these and those which are not initiators of a state. To each predicate, Parisi associates a logical representation in which the predicate is decomposed into its basic unit of meaning. It is in these logical representations that the affinity between adjectives and PtPPLs is evident.

Centineo’s analysis stems from Parisi’s, and reviewing Dowty’s (1979) Montague Grammar and Foley & van Valin’s (1984) - Role and Reference Grammar, Centineo formulates her own theory of auxiliary selection and PtPPL agr. Centineo’s framework is discussed in section 2.2, together with some key notions such as pivot, actor and undergoer from Foley & van Valin. Centineo’s analysis of auxiliary selection is presented only for its relevance to the “theory of markedness” that she applies to PtPPL agr.

Section 2.3 presents some speculations on the system created by Centineo and discusses problems arising from SI perception and activity verbs. To these a solution is suggested in section 2.4 where Krifka’s (1989, 1992) and Tenny’s (1992) aspectual analyses of events are illustrated.

Finally, section 2.5 shows how, even under a revised semantic analysis, Friulian data cannot be satisfactorily accounted for. Nevertheless, the observation that whenever PtPPL agr is instantiated it is always with the PtPPL’s internal argument will be very important in chapter 3 when defining the operational domain of the agreement process. This will allow us to restrict it to the nodes c-commanded by the PtPPL.

2.1 - Parisi (1976)

An account of auxiliary selection in Italian, based on the semantic properties of the verb, has been the focus of studies dating back to 1954 (Leone) and was carried out throughout the Seventies (Leone 1970, Parisi 1976).
Parisi starts from the observation that the PtPPL form of the verb always expresses something having been accomplished. Verbs are divided into two groups with respect to this property.

The first category (A) includes all those verbs which, whenever the accomplishment of the action is realised, initiate a state in one of the verb's arguments. In this category we can find both transitive and intransitive verbs, such as *lavare* - to wash- which implies a state in its logical DO and *uscire* - to go out - which imply a state in its logical subject. As a result of the two actions, we will have, respectively, a “washed” DO and a “gone out” subject.

The second category (B) includes all those intransitive verbs that express an accomplishment of something which will not initiate a state in any of the verb's arguments. An example is *dormire* - to sleep, where the subject of the action will not be in a “slept” state after having slept 14.

Giving a graphic representation of this generalisation, Parisi expresses the ongoing action as a wavy line, the accomplishment as a straight vertical line and the state resulting from it as a straight horizontal line:

$$\text{(30) Cat A: \quad \approx\approx\approx\approx \mid \quad \text{-------------}}$$

$$\text{Cat B: \quad \approx\approx\approx\approx \mid}$$

Extending the generalisation, he observes that all those verbs which contain the component CHANGE in their logical representation, typically denote a state in one of their arguments. A few examples are given (Parisi 1976: 80) with the corresponding logical representations. It must be stressed that I will not take the structures represented in the part b of all the examples as syntactic structures. They are logical representations of predicates.

---

14 This of course would be a logical possibility, but not for Parisi who interprets the predication on a syntactic, not logical level.
where \textit{out} is usually a predicate (as a consequence of going out the subject of the action is out), and the verb \textit{uscire} is actually seen as the transition between two states, that of being in and that of being out.

Here \textit{morta} - dead, not alive - is a state and both \textit{morire} - to die - and \textit{uccidere} - to kill - are verbs that indicate a state in one of their arguments. With \textit{kill} a new operator is introduced, \textit{CAUSE}. 
The adoption of a decompositional approach where all predicates are reduced to "atomic" logical representations and linked to each other by means of logical operators is highly desirable, particularly on the level of linguistic generalization. Predicates can be derived from one another by adding operators such as CAUSE and CHANGE (Cf section 2.3 (51) where the breakdown of predicates into their basic semantic units is applied to the four verb classes states, activities, accomplishments and achievements. Predicates are then transformed into one another by using the operators CAUSE and BECOME) 15. This avoids treating each

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15 The development of this type of decomposition analysis of word meaning finds its roots in the writings of Hjelmslev (1943) and Jakobson (1936), and is then applied to verbs by Lakoff (1965) who suggested that sentences like

Floyd melted the glass

were derived from deep structures like

(Floyd caused (the glass melt)).

In the late Sixties there were currents of thought among linguists who believed in a deep level of underlying syntactic structure representing the meaning of a sentence in pure semantic terms. The mapping from the deep to the surface level was explained by McCawley (1968) in terms of the so-called "Predicate Raising", a transformation which attached an operator to the next one higher up until the surface structure was obtained. Fodor (1970) brought some convincing evidence that this was not the case. Investigating the behaviour of "do so" and instrumental adverbials which can only be shared by two DPs if the DP is the subject of the modified verb, Fodor came to
verbal entry as unique and not derivable in any way - especially semantically - from other expressions such as adjectives (e.g. dead or not alive with to die) or other verbs (e.g. kill with to die).

Under Parisi's approach PtPPL agr is a phenomenon crucially linked with the particular category to which a verb belongs. Agr with an argument of the verb will be triggered by the PtPPL of those verbs which belong to category A, i.e. those verbs which predicate of a state in one of their arguments, while it will not be possible with the verbs belonging to category B.

With respect to Sl, this rule presents subject- object asymmetries, in that PtPPL agr is seen as compulsory when the state is predicated of the logical subject, while it is optional when it is the logical DO in situ of which it is being predicated (Cf examples (3) and (6) a and b from Friulian). The instantiation of this latter is considered "substandard", and Parisi formulates a rule which specifies that the non-agreeing form of the PtPPL - in its unmarked masculine singular form - will be preferred to the agreeing one with a DO in situ (1976: 82):

(34) a. I soldati hanno ucciso Maria
    The soldiers have killed (UM) Mary (f, sg)
    vs

b. ?I soldati hanno uccisa Maria
    The soldiers have killed (f, sg) Mary (f, sg)

the conclusion that a process of decomposition and derivation by lexicalisation cannot be accepted for "melt" and "kill" sentences.

As already pointed out, the structures presented here and those which will be given in section 2.3 are not taken to be syntactic structures, as they were originally meant to be, but just as logical representations of the semantics of predicates.
According to Parisi, when choosing between the two forms of the PtPPL illustrated in (34) a and (34) b the deciding factor seems to be

“... the emphasis on the accomplishment of something... (1976: 98)”,

the soldiers' activity in (34) a or the resulting state in (34) a, Mary's death. Perhaps in the Seventies people were still using sentences like (34) b rather productively in SI; the same observation could not be maintained for today SI where the semantic difference seems to have been lost.

Parisi draws a parallel between PtPPLs and adjectives on the following lines:
• PtPPLs always express the accomplishment of something, and, if belonging to category A, also predicate a state in one of their arguments;
• adjectives always and only express a state in one of their arguments.

Graphically:

(35)\[\text{PtPPLs} \approx \approx \approx \mid \quad \text{Adjs} \quad \]

The parallel is clear also in the logical representation (Parisi (1976: 84)):

(36) a. Maria è invecchiata
Mary is got old
“Mary has aged”

b. \[\text{PRED} \quad \text{ARG} \]
\[\text{CHANGE} \quad \text{PRED} \quad \text{ARG} \]
\[\text{old} \quad \text{Mary} \]

(37) a. Maria è vecchia
Mary is old
“Mary is old”

b. \[\text{PRED} \quad \text{ARG} \]
\[\text{old} \quad \text{Mary} \]
Parisi speculates on these similarities, and formulates a rule for auxiliary selection, which is not directly relevant to my discussion. However, it must be mentioned that those verbs which admit both auxiliaries, like *correre* - to run, *piovere* - to rain - (Cf examples (1) b and c) are accounted for in terms of the semantic difference that arises between the two choices (1976: 87). There is a clear link between the auxiliary and the meaning of the sentence.

(38) a. Maria è corsa a Milano
    Mary is run (f, sg) to Milan
    “Mary has rushed to Milan (i.e. the running is towards Milan)”

b. Maria ha corso a Milano
    Mary has run (UM) in Milan
    “Mary has run in Milan (i.e. the running is within Milan)”

In (38) a *correre* is a verb of category A; Maria has undergone a change of state: she finds herself in Milan as a result of the action of running. In (38) b *correre* is a verb of category B; Maria does not find herself in a state predicated by the verb as a result of her action.

Centineo speculates on these differences and adopts concepts derived from Foley & van Valin (1984), Vendler (1967) and Dowty (1979) to justify auxiliary selection and PtPPL agr. Section 2.2 presents her analysis.

### 2.2 - Centineo (1996)

Centineo (1996) reviews Parisi’s analysis and emphasises that subsuming under the same logical expression both agreement of predicate adjectives and PtPPL agr the distinction between the use of *essere* as copula and as auxiliary can be eliminated, a conclusion underscored by Parisi 16.

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16 This position is also independently supported by Benveniste (1966) and Kayne (1993), where an analysis that sees *have* derived from *be* through the
Centineo's theory of auxiliary selection and PtPPL agr in SI rests on some basic concepts which she derives from Vendler (1967), Dowty (1979)'s Montague Grammar and Foley & van Valin's Role and Reference Grammar.

From Vendler (1967) and Dowty - but originally from a tradition finding its roots in Aristotle's Metaphysics - she derives the classification of verbs for the explanation of auxiliary selection phenomena.

This classification does not create a biunique relation between a verb and a class. As Foley & van Valin observe (1984: 39), there is a certain degree of mobility between them. Activity verbs, for example, may become accomplishments if a definite goal is added. An example is given by walk, an activity verb which turns into an accomplishment when a goal is added, as in walk three miles. The reverse is also true: an accomplishment verb can become an activity if its object is a mass or generic noun. Compare eat a bag of popcorn and eat popcorn, where the former is an accomplishment and the latter an activity.

Dowty (1979) lists a set of tests distinguishing between activity and accomplishment verbs, one of which is the combination with specific adverbials. Activity verbs can happily combine with durative adverbials of the type V for an hour which can be equated by spend an hour V-ing; in these cases, V for an hour entails V at all times in the hour, and x is V-ing entails x has V-ed (cf Dowty 1979: 56). Accomplishment verbs prefer time-span adverbials of the type V in an hour and allow duration adverbials only marginally. We do not find the same entailments: x is V-ing entails that x has not V-ed yet.

Under Dowty's account the verbs selecting the A aux are all intransitive activity verbs. Those verbs which select the E aux are, on the other hand, intransitive verbs and the group is composed by predicates describing states or conditions of being, locative predicates and some predicates of perception and possession. Applying the logical structure of verbs to their choice of auxiliary and the system outlined in Vincent (1982), Centineo comes to the conclusion that the selection of the auxiliary incorporation of a functional head into the latter is extended to "have" and "be" as auxiliaries.

Verbs are classified in 4 groups, states (e.g. to know), achievements, (e.g. to recognise), activities (e.g. to drive) and accomplishments (e.g. to wash). See (48) for their logical representation.
depends crucially on the semantics of the pivot. In her own words, 

"... Verbs expressing an actor pivot occur with avere, while verbs expressing a pivot which is semantically "affected", that is an undergoer, ... occur with essere...(1996: 257)".

The notions of pivot and actor and undergoer from Foley & van Valin (1984: 29 and 110 reported here in (39) and (40) respectively), who give a description of "subject of a sentence" basing it on Heath (1975) and Dixon (1979):

(39) "... Provisionally we may characterize the actor as the argument of a predicate which expresses the participant which performs, effects, instigates or controls the situation denoted by the predicate, and the undergoer as the argument which expresses the participant which does not perform,

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18 This claim finds more support in the unaccusative - in Burzio's sense - verbs. Their argument is not an agent. If we compare two verbs such as *arrivare* - arrive, and *telefonare* - telephone, it is clear that arriving is not something you do, it's really something that happens to you, while telephoning is definitely a voluntary, agent-driven action. The single argument of unaccusatives usually denotes an entity that undergoes a change of state or location.

19 Actor and undergoer, the two arguments of a transitive predication, are concepts inherited from Gruber (1965) and Fillmore (1968). The terms were actually introduced by Foley & van Valin to capture the semantic functions of subject and object: their main aim was to mark the distinction between actor and syntactic subject and between undergoer and syntactic DO. The syntactic subject of an action is not necessarily an actor, and in unaccusative verbs for example, the subject can be the undergoer.
initiate or control any situation, but rather is affected by it in some way..."

(40) "...The pivot of a syntactic construction is the NP which is crucially involved in it; i.e. it is the NP around which the construction is built...".

The adoption of these concepts is necessary for Centineo to formulate of “marked” pivot choice. However, since these notions do not play any part in the analysis that will be put forward in chapter 3, I will not pursue any specific objections to the theoretical details of the notion of pivot. This is not to say that the notion is without conceptual as well as empirical problems.

Centineo equates the notion of “surface syntactic subject” in English and in SI to the notion of pivot, so that two main types of constructions are derived: the active, or unmarked, where that actor of the sentence is the pivot, and the passive, or marked, where the undergoer is the pivot.

Centineo creates a correspondence between this type of markedness and what she defines as the "theory of marked pivot choice", i.e. the pivot’s degree of “affectedness” in a sentence. Verbs are placed following a crescendo of "affected state" of their external argument, where [-affected] is the least marked one and [+affected] the most marked one. In this scale pivot-less verbs, such as impersonal

20 I will here point out just a major problem that the notion of pivot poses. The definitions given in (39) and (40) are weak for their being vague in general and consequently difficult to falsify. Considering double-object constructions like (41) can help to clarify this point.

(41) a. MAX gave Peter a pen
   b. Max gave PETER a pen
   c. Max gave Peter a PEN

Capitals indicate stress. The sentences in (41) could be uttered as answers to, respectively, the following questions:
   a. Who gave Peter a pen?
   b. To whom did Max give a pen?
   c. What did Max give to Peter?

Each of the questions is aimed at eliciting different information, the agent of the action, the goal and the theme. Each of these Θ-roles will be, in turn, the pivot of the sentence, i.e. “the NP around which the construction is built”. All sentences in (41) are syntactically equivalent, but each of them has a different pivot. Were pivot a notion we could successfully apply to Syntax, we would expect sentences with different pivots to be syntactically different.

Thus, the notion of pivot will be only referred to here because it is relevant to Centineo’s analysis, surely not for its intrinsic strength.
verbs, are considered the most marked instance of the range. To markedness of pivot choice corresponds markedness of auxiliary selection: the $E_{\text{aux}}$ is selected by those verbs whose pivot is the affected argument of a stative predicate in logical structure \(^{21}\), the $A_{\text{aux}}$ will be selected by all the other verbs. This concept of markedness is applied to PtPPL agr, too:

(42) a. "... PtPPL agr is obligatory when the argument of the stative predicate is the pivot of the construction, while it's optional when the argument of the state predicated is a non-pivot undergoer. ... In particular, the optional PtPPL agr will occur only with the second argument of transitive accomplishment, state and achievement verbs, while it will not be possible in the case of transitive activity verbs..." (1996: 267).

b. "... the PtPPL agrees with the patient or theme argument of a state predicate..." (1996: 269).

In stating the “optionality” of PtPPL agr with a DO in situ Centineo is able to account for the occurrence in SI of what has been called here a “learned” agreement (Cf chapter 1, section 1.1) as opposed to the one spontaneously produced by speakers of Friulian. Section 2.3 discusses some problems arising from Centineo’s solution in dealing with SI data.

\(^{21}\) “Affected pivot” here refers to the argument whose state or location or whose undergoing a change in state or location is predicated of.
2.3 - Problems with Centineo (1996): perception verbs and indefinite objects

Looking more closely at the semantic theoretical framework on which Centineo’s analysis rests, in particular at those categories of verbs which allow or require PtPPL agr irrespective of the auxiliary they select, the following conclusion can be drawn:

(43) in SI PtPPL agr is triggered by states, achievements and accomplishments by both intransitive and transitive verbs. 

Centineo clearly states (1996: 267) that the optional PtPPL agr occurs with the second argument of transitive accomplishment, state and achievement verbs, but it is not possible with transitive activity verbs. She derives some support from Italian, where apparently (44) is not possible, even for those speakers who would admit the use of a PtPPL agreeing with an in situ DO:

(44) *Maria ha mangiata pizza tutta la sera
    Mary has eaten (f, sg) pizza (f, sg) all the evening
    “Mary has eaten pizza all evening”

Why should this be so? What is the difference between a transitive activity verb and, let’s say, an accomplishment verb?

The answer could be found by looking at the logical representation of verbs belonging to these categories reported below from Foley & van Valin (1984: 39):

<table>
<thead>
<tr>
<th>Verb class</th>
<th>Logical structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. State</td>
<td>predicate’(x)</td>
</tr>
<tr>
<td>b. Achievement</td>
<td>BECOME predicate’(x)</td>
</tr>
<tr>
<td>c. Activity</td>
<td>DO (x, [predicate’(x)])</td>
</tr>
<tr>
<td>d. Accomplishment</td>
<td>φ CAUSE ψ</td>
</tr>
</tbody>
</table>

(where φ is normally an activity verb and ψ an achievement verb)

The logical representation of accomplishment verbs could be rewritten as:
Achievement and accomplishment verbs contain in their logical representations the atomic unit \textit{predicate' (x)}, where (x) refers to the internal argument of the predicate. In the representation of activity verbs, (x) can refer either to the external argument - in intransitive activities - or to the internal one - in transitive activities. It is difficult to see how, having a sentence like \textit{John runs}, an intransitive activity, the predicate \textit{run} could predicate of a state of John's; perhaps John would be in a state of movement, but this seems vague and not specific to the verb under consideration. I will leave the question open here.

We can draw a parallel between the classification in (45) and the one given by Parisi (1976): state, achievement and accomplishment verbs correspond to those verbs which Parisi includes in his category A verbs, i.e. those initiating a state predicated by them in one of their arguments and which contain the abstract operator CHANGE. The operator \textit{BECOME} in (45) can be seen as containing the idea of change from one state to another and by virtue of this be assimilated to Parisi's \textit{CHANGE}.

\textit{PtPPL agr} is instantiated by those verbs that initiate a state in their internal argument and these verbs belong to the categories listed in (45) as a, b and d, and all these verbs reduce to the same atomic unit \textit{predicate' (x)}, where (x) is crucially the verb's internal argument. \textit{predicate' (x)} is also the logical representation assigned to adjectives, so that the affinity between the two categories is formally expressed.

Summing up all this in graphical terms, this is what we obtain:

\begin{enumerate}
\item \textit{Intransitive activity verbs - No PtPPL agr;}
\item \textit{Transitive activity verbs, accomplishment and achievement verbs - PtPPL agr;}
\item \textit{State verbs and adjectives - agr.}
\end{enumerate}

(47) combines Parisi's and Centineo's accounts. Some problems arise from it. The
condition put by Centineo on PtPPL agr is that it is only instantiated between the PtPPL and the undergoer - i.e. the “affected” party in an action. Does this mean that in (44) the pizza is not affected by Maria’s eating it? Surely this is not the case, since after Maria’s action the pizza has undergone a change of state.

On a similar line of thought, perception verbs, which are classified under her system as achievement verbs, come to represent a problem. In the sentence (48) John has heard a noise

John is the actor and noise the undergoer. Again, the definition of actor and undergoer given in (39) is proved not to be very appropriate: the idea of "performer, effector, instigator or controller" entailed by the term actor, cannot really apply to John, given that he has no control over his hearing coming about. A parallel observation can be made for the idea of "affected" by an action implied by the term undergoer: the role of undergoer cannot really be applied to the noise, given that the noise is completely unaffected by John’s hearing of it. In (48) it is really the actor who undergoes a change of state, passing from a state of unawareness of the noise to one of awareness of it, and not the noise.

Still, the following should be accepted in SI by whoever allows for PtPPL agr with an in situ DO (Cf section 2.5 for an account of Friulian cases):

(49) Piero ha sentita la storia

“Piero has heard the story”

Agreement takes place between the story and the PtPPL, even if, according to Centineo, PtPPL agr is equal to affectedness. Piero in (49), who is the real entity in which the change of state takes place, agrees with the auxiliary and not with the

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22 Rogers (1971), classifying verbs under three headings, distinguishes two groups of verbs, cognitive and active. Some examples are cognitive - see, hear, feel; active - look at / watch, listen to, feel. He notices that the subject of the active verb is intentionally doing something and is responsible for it; the subject of the cognitive verb, on the other hand, can see or hear or feel something accidentally. The two would also be differentiated syntactically: the active listen to would have the same structure as hear but it would be embedded in a phrase headed by the abstract operator DO. If this is correct, then it seems that the operator DO is “responsible” for the notion of volition (and/or intention) on the part of the subject.
Since the notion of “change of state” and “affectedness” are the cardinal points on which Centineo’s, but primarily Dowty’s, accounts are constructed, it would not be desirable to discard them. On the other hand, the problems presented here are very strong and cannot be ignored or treated as a kind of “exception”. Below it is shown how Dowty’s revision of verb classification, adequately accounts for activity verbs, but fails to capture agreement with perception verbs.

In Dowty’s (1979: 184) revision of verb classification verbs are categorised by their temporal properties in the framework of interval semantics and by agency. In his revision, accomplishments and achievements are collapsed in the same category, reorganised into four groups depending on whether they imply a single or a complex change of state and a non-agentive or agentive action. Those verbs belonging to this new class can also be referred to as the “definite change of state” predicates, and they differ from activity verbs defined as “indefinite change of state”. The line between the two can be drawn following the syntactic test:

Does “X was V-ing (pragmatically) entail X has V-ed”?

Taking an activity verb like ballare - to dance - and an accomplishment predicate like mangiare la torta - to eat the cake -, the test yields the desired result:

(50) a. Maria stava ballando \texttt{entails} Maria ha ballato
    “Maria was dancing” \texttt{entails} “Maria has danced”

b. Maria stava mangiando la torta \texttt{does not entail} Maria ha mangiato la torta
    “Maria was eating the cake” \texttt{does not entail} “Maria has eaten the cake”.

Although this is a plausible solution for activity verbs, perception verbs would still be problematic given that achievements and accomplishments are collapsed into

\footnote{23} Here I will take “pragmatically” to mean “X has V-ed and is no longer V-ing”.

44
one category. Furthermore the concept of “definite” and “indefinite” change of state is not very clearly defined and, consequently, not very efficiently applicable.

In summary, transitive activity verbs and perception verbs pose a problem for Centineo’s conditions on PtPPL agr. Dowty’s revision of verb classification could account for activity verbs but not for perception verbs. In the next section it is shown how Krifka (1989, 1992) and Tenny (1992) can allow us to maintain Centineo’s analysis with some modifications in the way of expressing the state of the internal argument triggering the agreement in. This successfully accounts for SI data. However, the modifications still fail to account for Friulian transitive activity verbs, presented in section 2.5.

2.4 - Krifka (1989) and Tenny (1992): a solution to Centineo’s problems

The conditions put by Centineo on the “affected state” of the PtPPL’s internal argument are problematic when dealing with activity and perception verbs. In order to modify her analysis two important notions, predicates having an ending point and the centrality of the internal argument of a verb, are investigated here. It will be remembered from section 2.2, that one of the tests that makes possible a distinction between activity verbs on the one hand and accomplishment and achievement verbs on the other is the compatibility of a verb phrase with two time adverbials, in an hour and for an hour. In-phrases seem to produce well formed sentences only when modifying accomplishments, while activity verbs are only compatible with for-phrases. The following examples illustrate this property:

(51) a. Mary has danced for an hour / *in an hour
b. Mary has eaten the cake in an hour / *for an hour.

When an accomplishment verb is followed by an indeterminate NP it turns into an activity verb:
Mary has eaten cakes for an hour / *in an hour.

Krifka (1989: 76) shows that durative adverbial expressions like for an hour select for what he calls cumulative event predicates - using a term first introduced by Quine (1960: 91), while time-span adverbials like in an hour select for quantized ones. This distinction is carried over from the distinction originally made between cumulative and quantized NPs. A quantized NP is an NP which denotes an object with precise limits, i.e. an easily identifiable entity. A cumulative NP, on the other hand, is an NP which denotes something without clear limitation, like mass nouns or bare plurals. The contrast is clear with the quantized NP a pen and the cumulative NP milk.

The parallel between predicates and NPs is made on the basis of similar differences holding between cumulative and quantized NPs on the one hand and telic and atelic expressions on the other. A verbal expression is atelic if its denotation has no set terminal point; it is telic if it includes a terminal point. An example illustrating this contrast is given by the verb “swim” in two different constructions, swim and swim a mile. In the latter but not in the former the action has a terminal point expressed by the reaching of the goal “a mile”.

Krifka (1989: 91) gives a formal definition of an event with a terminal point:

(53) “... An event e of type \( \phi \) can be said to have a terminal point \( t \) relative to \( \phi \) iff it is the final temporal point of e and there are no \( e' \) of type \( \phi \) with either \( e' \subset e \) or \( e \subset e' \) (i.e. \( e' \) proper part of \( e \) or vice versa) which have an earlier or a later final temporal point; otherwise, \( e \) has no terminal point relative to \( \phi \) ...

There seems to be a semantic parallel between objects with precise limits and events with terminal points, and between objects without clear limitation and events with no set terminal point. Telic verbal expressions are those identified by Vendler (1967) as accomplishments, and atelic are activities. Typically, cumulative expressions yield atelic verbal predicates, quantized telic ones.

Drawing from examples from the Slavic languages Krifka (1992) shows how definiteness of the NP and perfectivity interpretation of the verb are intertwined.
Quantization is a component of the meaning of perfectivity, so that its definiteness or lack of it can affect the temporal constitution of the verb, and the reverse is also true. Aspectual properties seem to have some bearings on the “affectedness” of the internal argument.

The idea that aspectual properties of verbal expressions play a fundamental role in sentence interpretations is also found in Tenny (1992). In formulating the Aspectual Interface Hypothesis - a rule constraining the mapping between syntax and semantics - she claims that it is the aspectual structure associated with the arguments of verbs that constrain "...the kinds of event participants that can occupy these positions" (1992: 2) - she refers in particular to the characteristics that elements base generated in object position must have in order to be able to appear in that position24. It is only the aspectual part of the thematic structure which is visible to and interpretable by the syntax.

The internal argument of a verb is seen as the carrier of the aspectuality by virtue of which it "measures out the event over time" (1992: 3) - a similar view but expressed in terms of space is found in van Voorst (1988: 27). It is therefore the internal argument which delimits the event, and its definiteness is translated into delimitation when interpreting the sentence.

Tenny further claims that a highly constrained mapping of semantics into syntax can only be reached if based on aspectual properties rather than Θ-roles.

If we apply this notion of the event being delimited linguistically within the VP through reference to the "measuring out" action of the internal argument, the problem presented by perception verbs and the notion of affectedness can be overcome. “Internal argument as object of termination” can replace “non-pivot undergoer” in (42) in the account of all the instances of PtPPL agr. In particular, it

24 Tenny reaches the same advantage as Centineo has, i.e. the adoption of the notion of pivot to avoid referring to Θ-roles, by claiming that the syntax can only “see” certain syntactic/aspectual structures associated with the thematic roles, but not the roles themselves.
could be added that the PtPPL must “describe” the state in which its internal argument finds itself as a result of the action - property expressed by the relation predicate’ (x). Thus, the “noise” will be in a “heard” state after having been heard and will be the element “measuring out” the event. By virtue of these two combined properties it will trigger PtPPL agr.

Turning now to transitive activity verbs, maintaining that a definite DO “measures out” the event predicated by a verb, it is clear that not having a definite DO which can delimit the event, an activity verb has no set terminal point. This is translated on the syntactic level by the lack of PtPPL agr in sentences like (44). On the semantic level, the DO and the predicate are to be considered a fusion into one unit as far as meaning is concerned. Applying this to sentence (44), the following analysis can be reached: eat is one predicate (V), pizza is another one (N), and eating pizza is another predicate (V). It could be claimed that eating pizza belongs to the set of the eating activities being a subset of it - eating pizza is more specific than just eating. The focus is on the activity itself rather than on the resultant state of the pizza after the action has taken place.

From a different perspective, if we extract a fraction of the period of time in which the action of eating pizza is taking place, what we will have is a proper part of the event which can still be considered as eating pizza, no matter how little that fraction of time is - of course if the fraction of time selected is so little that the pizza only gets bitten but not eaten, then it will not be a proper part of the event of eating pizza.

If, on the other hand, we extract a little fraction of time during which the action of eating the pizza takes place, that part of the event cannot be considered as a proper part of an event of eating the pizza - the event will be such only when the pizza has been eaten completely.

Tenny’s notion of DO as measuring out the action combined with Krifka’s idea of a NP’s definiteness being intertwined with the perfectivity interpretation of the verb, provide a successful way of modifying Centineo’s semantic account of PtPPL agr. This could then be linked to the syntax by assuming - as Tenny (1992) does - that there are strong correspondences between meaning and syntactic structure,
especially between logical form and syntactic structure. The Aspectual Interface Hypothesis (Tenny 1992: 2) clearly states that the mapping between the two is governed by aspectual properties and that only these are visible to the syntax. Finally, the PtPPL’s aspectual properties as the main verb of a “measured out” event are syntactically expressed by the instantiation of PtPPL agr. Although the theory developed so far successfully accounts for SI, Friulian transitive activity verbs still present a problem: the next section illustrates how.

2.5 - What about Friulian?

Turning now to Friulian data and applying to it the verb classification, (54) what we obtain is - a stative, b and c accomplishments, d achievement:

(54) a. Marie e a savude le rispueste
Mary SCL has known (f, sg) the answer (f, sg)
“Mary has known the answer”

b. E ai lavâs i plas
SCL have washed (m, pl) the dishes (m, pl)
“I have done the washing up”

c. E ai mangiâs i spaghes cul sugo
SCL have eaten (m, pl) the spaghetti (m, pl) with-the sauce
“I have eaten spaghetti with the sauce”

d. Marie e a ricognusude to none
Mary SCL has recognised (f, sg) your grandma (f, sg)
“Mary has recognised your grandma”

PtPPL is instantiated in all of the above categories, which is what we would expect following Centineo’s modified analysis. The revised version of the semantic
account could also deal with perception verbs where PtPPL agr s triggered:

(55) a. Piero el a sintude une storie interesante
Piero SCL has heard (f, sg) a story interesting (f, sg)  "Piero has heard an interesting story"

b. Atu viudude to sûr?
Have-you seen (f, sg) your sister (f, sg)
"Have you seen your sister?"

Some serious problems arise when considering activity verbs. In (56) a and b PtPPL agr is triggered by a transitive activity verb:

(56) a. E ai mangiadis cussutis dute le di
SCL have eaten (f, pl) courgettes (f, pl) all the day
"I have eaten courgettes the whole day"

b. E ai cues pes di poles dute le di
SCL have cooked (m, pl) breasts (m, pl) of chicken all the day
"I have cooked chicken breasts all day long yesterday".

Here we have a bare NP - cussutis, courgettes and pes di poles, chicken breasts respectively, which, because of their being indefinite, should not be able to “measure out” the event of eating and cooking and consequently should not cause the instantiation of PtPPL agr. This clearly is not the case as can be seen from the examples: PtPPL agr is triggered in both cases.

More problems arise with meteorological verbs. In SI they can select both A and E auxiliaries, so that both forms are possible:

(57) a. È piovuto
Is rained
"It has rained"

b. Ha piovuto
Has rained
"It has rained"
There is a difference in interpretation between the two which is captured by Centineo’s analysis. When the focus of the sentence is placed on the activity of raining, only the one with the $A$ aux is possible. On the other hand, if the stress is put on the quantity of water that has fallen, only the $E$ aux is selected and PtPPL agr is triggered:

(58) a. Ieri sono piovuti 20 cc di acqua
    Yesterday are rained (m, pl) 20 cc of water
    "Yesterday 20 cc of water fell"

b. Ieri ha piovuto tutto il giorno
    Yesterday haverained (UM) all the day
    "Yesterday it rained the whole day”.

In (58) a *piovere* is an intransitive verb, whose only argument cannot really be affected by the action of which it is only formally a subject. In (58) b *piovere* is still an intransitive verb but this time its subject is a referential NP, a quantity of water. It could be claimed that this quantity of water is affected by the “raining” action - it moves from one position to another - and agreement between this latter and the PtPPL is triggered, as we would expect under Centineo’s analysis. Accordingly, while the emphasis in (58) a is on the action of raining, in (58) b it is on the quantity of water fallen as a result of the raining.

The same does not apply to Friulian, which does not allow for the alternation of auxiliaries with meteorological verbs: only the $A$ aux is selected, irrespective of whether the emphasis of the sentence is placed on the action or on the quantity of water that has fallen. Even in the latter case, Friulian still selects the $A$ aux and no agreement is triggered:

(59) a. Iar l’a plot dute le di
    Yesterday SCL has rained (UM) all the day
    “Yesterday it rained all day”
b. Iar l’a plot vinc sentimetros di aghe

Yesterday SCL has rained twenty centimetres of water

“Yesterday there came down 20 centimetres of water”

In Friulian the \( E \) aux is not selected: (56) and (59) put forward some evidence which is unequivocally showing that the semantic theory towards which we have gradually built does not satisfactorily account for Friulian. This is a consistent piece of evidence that discards the idea that PtPPL agr is regulated by semantic factors related to aspectuality and verbs classification.

At this stage it is necessary that we review the situation to see what has been achieved in this chapter.

2.6 - Conclusion

Clearly a semantic account formulated in terms of aspectuality does not adequately explain the Friulian data. The initial observations which motivated a reconsideration of the phenomenon PtPPL agr have not found an appropriate interpretation. Briefly I will recapitulate what they are:

(60) a. AgrS and AgrO are specified for different features, respectively: [person, number] and [gender, number];

b. Agreement between a verbal form and a full DO is instantiated in SI and Friulian only with the PtPPL, suggesting the phenomenon is directly dependent on the PtPPL’s nature;

c. The agreement instantiated between a noun and an adjective is specified for the same features carried by the PtPPL agreeing with a pvDP, i.e. [gender, number];

d. Finally an observation - derived from Parisi (1976) and Vendler’s (1967) verbal classification - about the nature and function of the PtPPL as an element “describing the state” of its internal argument - with the exceptions noticed for cognitive and perception verbs.
Although the above points have not found an adequate interpretation, what this chapter has shown is that PtPPL agr is triggered always with the internal argument - this latter being in a particular relation to the verb, and that the PtPPL predicates of its internal argument’s state. This captures the similarity between PtPPLs and adjectives, although the two categories are not identical.

Both the affinity and difference between PtPPLs and APs is captured in the next chapter, where a syntactic analysis of PtPPL based on a process of feature-copying operational in a “proper domain” is presented. Under the new account, both PtPPL and DP internal agr are instantiated by the same process of feature-copying; the differences between PtPPLs and APs are captured in the different operational domain in which the mechanism is effective.

In the next chapter I will look at the position occupied by the PtPPL with respect to different adverbials, following Cinque (1994, forthcoming) and adapting the structure for the Past Participial Phrase suggested by Belletti (1990, 1991). This will provide us with some support for discarding the existence of a functional projection responsible for PtPPL and DP internal agr, a step forward in the direction of understanding agreement.
Chapter 3

Past Participle and adjectival agreement: a unified account

3.0 Introduction

The last section of the previous chapter has shown how Friulian data casts serious doubts upon an aspectual semantic account of PtPPL agr on the lines of PtPPL agr taking place when the internal argument is the “affected” or “terminal” point of the action. In spite of this fact, the semantic investigation has nevertheless emphasised that PtPPL agr in Friulian is triggered always between the PtPPL and its internal argument. This, together with the semantic affinity between adjectives and PtPPLs, represents a very significant observation, and in this chapter I will suggest a possible syntactic interpretation that could be given to them: the mechanism responsible for adjectival and PtPPL agr is the same, but the syntactic domains in which this mechanism operates are different.

Some empirical evidence against the existence of an AgrO node triggering agreement comes from the results of tests carried out on the relative position of
different adverbials and the PtPPL in SI and in Friulian. If PtPPL agr were triggered by the PtPPL raising into and AgrP, we would expect the PtPPL in Friulian to be higher than in SI in constructions with a pvDP in situ. This is not what we see in section 3.1, where we follow Cinque (1994, forthcoming) in determining the order of the adverbials under consideration and draw significant conclusions from his speculations about the obligatory movement of the PtPPL. Section 3.2 presents the theoretical framework in which the present account is formulated and the assumptions on which the analysis rests.

Section 3.3 illustrates how both the adjectival and PtPPL agr can be subsumed under the same mechanism of feature copying (Postal (1964)), and stresses the different domains in which feature copying performs its action in the two cases. Finally, section 3.5 puts forward some speculations on the nature of the agreement specified for [gender] versus the one involving [person] features. The generalisations reached there hold for the Romance languages, but they need to be tested cross-linguistically. This is left open for further research.

3.1 - Adverb placement

Pollock (1989), whose work was inspired by Emonds (1978) and Klima (1964), has provided some support for the idea that several syntactic phenomena connected with word order can be interpreted in a very revealing way if taken to be an indication- or at least a reflection- of verb movement processes.

We will adopt Pollock’s framework and methodology as a means of investigating the movement properties of verbal elements. The strength of this interpretation lies in the assumption that the position occupied by different classes of adverbials is constant across languages (Cf Cinque (1994), forthcoming)\textsuperscript{25}.

\textsuperscript{25} This is by no means a universally accepted belief. Compare Williams (1994) for a contrastive view. He rejects the idea that adverbs are distributed in the same way across languages, and consequently that any alternation observed in their position with respect to verbs must reflect verb movement. Iatridou (1990), too, opposes the strategy of basing the individuation of the sequence of functional categories on adverb positions.
The most significant and revealing results for this research can be obtained by investigating those adverbials placed within the projections which delimit PtPPL movement, as specified in Cinque (1994). The adverbials tested are *mica* - a re-enforcing negative polarity adverb (since no literal translation can be given, it will be referred to as “NegPol”), *già* - already, *più* - any more, *sempre* -always and *completamente* - completely. Additionally, also the lowest adverbials, *tutto* - everything and *bene* - well, will be tested, given that they seem to mark the obligatory position to which the PtPPL must rise in SI.

The relative order of these adverbials in SI is given in (61):

(61)  mica > già > più > sempre > completamente > tutto > bene (Cinque 1994: 170)

The Friulian counterparts of the above adverbials are, in the same order *mingul*, *zà*, *plui*, *simpri*, *completaminti*, *dut* and *ben*. The examples in (62) show that they occur in the same order in Friulian and SI:

(62)  a. Mi an spiegât dut ben
    To-me have explained everything well
    “They have explained everything well to me”

b. *Mi an spiegât ben dut
    To-me have explained well everything

c. E an rifat completaminti dut
    SCL have re-done completely everything
    “They have done again completely everything”

d. *E an rifat dut completaminti
    SCL have re-done everything completely

e. Maria e je simpri completaminti sense bês
    Mary SCL is always completely without money
    “Mary is always completely penniless”
f. *Maria e je completaminti simpri sense bès
   Mary SCL is completely always without money

g. Maria no je plui simpri cioche a misdi
   Mary neg is anymore always drunk at midday
   “Mary is not anymore always drunk at midday”

h. *Maria no je simpri plui cioche a misdi
   Mary neg is alway anymore drunk at midday

i. No mangiave zà plui cjarna Pasche
   Neg ate already anymore meat at Easter
   “She did not eat meat anymore already at Easter”

j. *No mangiave plui zà cjarna Pasche
   Neg ate anymore already meat at Easter

k. No an mingul zà clamât
   Neg have NegPol already phoned
   “They haven’t already phoned”

l. *No an zà mingul clamât
   Neg have already NegPol phoned

(62) a and b show that dut precedes bene; (62) c and d that completaminti precedes dut; (62) e and f that simpri precedes completaminti; (62) g and h that simpri precedes plui; (62) i and j that plui precedes zà; (62) k and l that mingul precedes zà. Given the transitivity of sequentiality, the respective order of these adverbials in Friulian is just the same as in SI, and is given in (63):

(63) mingul > zà > plui > simpri > completaminti > dut > ben
Now that this order has been confirmed for Friulian, we can check the positioning of the PtPPL in the two languages and compare the results.

Basing his observations on empirical cross-linguistic evidence, Cinque (forthcoming) suggests that UG does not allow variation among languages with respect to the type of functional projections they admit. He interprets the rigid order of the above mentioned adverbials as a clear indication that they occupy fixed specifier positions. This allows him to propose a hierarchy of adverbials - and, consequently, of functional projections - that holds across languages. In his own words:

"... adverbs are the overt manifestation of (the specifiers) of different functional projections, which in certain languages may also manifest themselves via overt material in the corresponding head positions" (forthcoming: v).

Each of these heads finds in Cinque's system a specific projection.

(64) - taken from Cinque (forthcoming: 77) - shows the positions where a PtPPL is allowed to appear, represented by ticks, and those where it cannot do so, represented by stars 26:

(64) ✓ mica ✓ già ✓ più ✓ sempre ✓ completamente ✓ tutto * bene * 27

In Friulian, too, the PtPPL cannot be placed after tutto or bene:

(65) a. E vin risistemât dut ben

SCL have re-arranged everything well

"We have re-arranged everything well"

26 Northern Italian speakers find “odd” the position of the PtPPL when it precedes mica and già; Southern speakers, on the other hand, prefer the preceding position of the PtPPL to the one when it follows mica and già. This is really due to regional variation and it does not interfere with the trigger of agreement, i.e. the agreeing form of the PtPPL can be positioned either at the left or right of these two adverbials.

27 The PtPPL can appear after bene and tutto only when an intonational break is present before and after the relevant adverbial, which indicates extraposition of the adverbial. The same observation holds true for Friulian.
b. *E vin dut risistemât ben
   SCL have everything re-arranged well

c. *E vin dut ben risistemât
   SCL have everything well re-arranged

In order to capture and define the difference between SI, younger Friulian speakers (YF) and older Friulian speakers (OF) and understand the nature of the change in progress in Friulian, representatives of two different Friulian generations were tested. YF use the non-agreeing form of the PtPPL with a full pvDP, just like SI does, whereas OF use the agreeing form. Comparing minimal pairs it was clear that the position of the PtPPL and the appearance of the agreement morphology on it is not correlated in Friulian, i.e. the relative position of the PtPPL with respect to the adverbials does not vary depending on whether or not agreement with a full pvDP is triggered. An example is given in (66). (66) a is from OF and shows agreement; (66) b is from YF and it does not.

(66) a. E vin completaminti finude le torte OF
       SCL have completely finished(f, sg) the cake (f, sg)
       “We have completely finished the cake”

b. E vin completaminti finût le torte YF
   SCL have completely finished (UM) the cake

This is a very significant observation as it suggests that PtPPL agr is not a result of the PtPPL raising into an AGR functional projection. Some more support comes from the PtPPL’s obligatory movement: (67) illustrates the positions where the PtPPL is allowed to appear in Friulian; again, ticks stand for grammatical sentences and stars for ungrammatical ones:

28 These informants spoke the same variety - geographically speaking - of Friulian but belonged to two different generations, an older and a younger one.
(67) ✓ mingul ✓ zà ✓ plui ✓ simpri ✓ completaminti ✓ dut * ben *

Do not forget that all these adverbials fill the Specifier position of functional heads, so that ticks and stars indicate the head positions where the PtPPL is allowed or banned, respectively. As in SI, in Friulian the PtPPL seems to have to raise to the head to the left of dut, after having passed through the head to the right of ben and that in between dut and ben. All other movements are optional.

Cinque (forthcoming: 173) speculates on this obligatory raising into what in his system is an Aspectual functional projection hosting completaminti and interprets it as a necessary step that the PtPPL has to take in order to check its “perfect” feature.


Following Baker’s (1985) “Mirror Principle”, Belletti (1990) assumes two functional projections dominating the PtPPL: AgrP, carrying [gender, number] features and AspP, containing the perfective morpheme. The AgrP dominates the AspP which, in turn, selects the VP as its complement, as (69) illustrates (from Belletti (1990: 34)):

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In order to give the reader an idea of the relative positions filled by all these adverbs, I will include a partial version - only the relevant stretch of projections will be included - of an approximate universal hierarchy of clausal functional projections, formulated by Cinque (forthcoming: 178). The relevant adverbials are in bold.

(68) ... [always Asp Perfect (?)] [just Asp Retrospective]...

[completely Asp SgCompletive (I)] [tutto AspPl Completive ] [well Voice ]...

The question mark next to Asp Perfect indicates that it is unclear whether the projection should be related to Asp Perfect or Asp Imperfect. This does not affect the conclusions put forward here since that projection is higher than the one crucially involved in obligatory PtPPL raising. I will gloss over the nature of the two types of Completive Aspect projections since they are not directly relevant to my discussion. Tutto is assumed by Cinque to be in a derived position, but this does not affect the conclusions reached here.
Adopting Cinque's rigid order of functional projections and assuming that the asp feature is checked in the projection whose Specifier hosts *completely*, and adopting also Belletti's structure (69), the conclusion we reach is the following. Under current theory, the function of the Agreement projection - be it AgrO or AgrP - is to check the PtPPL's agreement features. Its position - Cf (69) - must be higher than Cinque's Asp $s_{completive}$, and in order for PtPPL agr to be instantiated, the PtPPL must raise into it. We have seen, on the other hand, that the only obligatory movement the PtPPL undergoes is into Asp $s_{completive}$, and crucially the PtPPL does not need to raise any further to show agreement, neither in SI nor in Friulian, as shown by examples (70) a - DO cliticisation in SI-, b - PtPPL agr with a full pvDP in Friulian - and c - DO cliticisation in Friulian. Therefore there is no Agreement functional projection purely devoted to the checking of agreement features.

(70) a. Le abbiamo completamente mangiate ti
    Them (f, pl) have completely eaten (f, pl)
    “We have completely eaten them”

b. E vin completaminti mangiadis li cussutis
    SCL have completely eaten (f, pl) the courgettes (f, pl)
    “We have completely eaten the courgettes”

30 I will interpret the rich hierarchy of the full version of the structure represented in footnote 29 to be an exhaustive and comprehensive array of all the functional categories existing in a clause.
Let us recapitulate on the evidence we have found and on what bearings it has on an analysis of PtPPL agr. First of all comparing SI and Friulian data we have seen that they both share the same order in a given sequence of adverbials and that both require that the PtPPL rise obligatorily to the head of the projection whose specifier hosts the adverbial completely. We have then adopted Cinque's hierarchical structure for adverbials and his speculation that by rising into Asp SgCompletive (I) the PtPPL checks its aspectual features. Were an Agreement projection present, it would be higher than Asp SgCompletive (I) and PtPPL agr would crucially be dependent on the PtPPL raising into it. The examples in (70) show that this is empirically falsified.

The conclusion that we can draw from this is that PtPPL agr is NOT triggered by virtue of the PtPPL rising into an Agreement functional projection. By taking this strong position, I want to propose an analysis of PtPPL agr where the agreement instantiated between two elements is determined by a mechanism of feature copying. In particular, agreement - as far as the one specified for [gender, number] in concerned - is a relational property.

Another consequence of the empirical evidence we have collected is that the agreement morphology on the PtPPL is derived, in SI, by a [Spec, head] configuration between the PtPPL and its cliticised internal argument in Asp SgCompletive (I).

The next section presents the analysis I would like to put forward to account for PtPPL agreement. The mechanism involved will be extended to DP internal agreement, thus capturing their semantic affinity.

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A tentative account of agreement specified for [person, number] features will be given in section 3.5.
3.2 - Theoretical assumptions

The concept of agreement as an instantiation of feature copying is a traditional notion and has been widely exploited in the generative framework. The assumptions underlying this idea are basically two: (i) the nominal source of agreement is fully specified with regard to agreement features, and (ii) the agreement relation ensures that duplicate (identical) information occurs on the agreement target.

The notion of feature copying expressed in these terms covers those analyses formulated in the Government-Binding (GB) framework, based on binding relations (Chomsky (1981), Bouchard (1984)), although feature copying has been replaced by a co-indexing relation between the nominal source and AGR or INFL. Co-indexing and feature copying are equivalent in that they both ensure identity of agreement features, as expressed in Chomsky (1981: 211):

"... when a NP and a pronominal are co-indexed, they must share the appropriate features..."

Little is said in GB theories about types of agreement other than subject-verb agreement, and a clear analysis of DP internal agreement has not been provided yet.

One of the earliest accounts of DP internal agreement making use of the feature-copying theory goes back to the early transformational period and was proposed by Postal (1964). Postal accounts for DP internal agreement in Spanish (1964: 44-48) where [gender, number] features are shared by determiner, adjective and noun within the same DP by formulating a set of transformational rules. These ensure that the relevant features are copied from the noun and adjoined onto the determiner and the adjective.

In formulating my account of PtPPL agr I have adopted Postal's structuralist approach in trying to define the formal conditions underlying the phenomenon rather than engaging myself in an investigation of the function of agreement in natural language (Cf Lehmann(1982, 1988)). However, to his transformational
rules I have substituted a domain in which feature copying can take place (Grimshaw (1991).
On a theoretical level, my proposal exploits the notions of “extended projection” formulated in a GB framework, and that of feature movement, promoted by Chomsky’s (1995) “Minimalist Program”.
Before turning to the account of PtPPL agr and adjectival agreement that I would like to suggest, I will illustrate the fundamental points on which my proposal rests. These are briefly summarised in (71):

(71) a. PtPPL agr is not triggered by movement into a functional category;
b. The PtPPL is specified for [+V,+N] features in Friulian and for [+V, ~N] in SI, which means that the [N] feature is present in SI but has no value;
c. in Friulian, DP internal agreement shares with PtPPL the same mechanical process of instantiation;
d. [+N] features in languages where nouns are specified for [gender] must be matched within the proper domain.

(71) a is the conclusion reached after having analysed the facts for PtPPL agr illustrated in section 3.1.
(71) b is a hypothesis at this stage and will find some support in chapter 4 where a diachronic account of the development undergone by the PtPPL and the auxiliary “have” during the evolution from Classical Latin to Romance Languages is presented. It must be clarified that by assuming a [+V,+N] feature specification for the Friulian PtPPLs I am by no means claiming that these latter are identical to adjectives. In fact the affinity that I claim exists between them is captured in (71) c: they both share the same mechanism for the instantiation of agreement. On the other hand, their different behaviour – outlined in section 3.4 – is captured in the different definition of the domain in which this mechanism is operational.
Finally, (71) d is the underlying rule which triggers the agreement. [+N] features must be shared by all the elements specified for them and contained in a “proper domain”. The notion of “proper domain” must be defined with precision and

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32 This kind of specification was originally suggested by Chomsky (1970), where all lexical categories are specified with respect to [V] and [N] features.
accuracy, and in order to achieve this aim I will refer to Grimshaw's (1991) notion of "extended projection".

I will follow Grimshaw in assuming that a functional projection D and its complement NP form an extended projection. The underlying assumption is that D and N share the same categorial features, [-V,+N], and that the functional element dominates the lexical one. The "Extended Projection" (1991: 4) and the "Generalised Θ-Criterion" (1991: 9) rule out ungrammatical combinations. Grimshaw formulates the "Extended Projection" as follows:

(72) x is the extended head of y, and y is an extended projection of x iff:
   i. y dominates x,
   ii. y and x share all categorial features,
   iii. all nodes intervening between x and y share all categorial features,
   iv. if x and y are not in the same projection, the F value of y is higher than the F value of x.

Let us apply this to the projection formed by the DP and the NP. D is a functional element dominating the NP, both D and N are specified for the same categorial features [-V,+N], and D's {F} value is higher than N's, so that the conditions are satisfied. I will here take "intervening" in clause iii to refer to an intervening projection. (73) illustrates the structure of the extended projection of N, with an AP adjoined to the NP, and a PP complement to the NP. The relevant nodes that are immediately contained in the extended projection are encircled.

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33 Grimshaw extends the feature system formulated by Chomsky (1970) to functional categories, so that N and D are [-V,+N] and V and I are [+V,-N]. Also, I follow Abney (1987), Szabolcsi (1987), Fassi Fehri (1989) among others in adopting the DP hypothesis.

34 "F" represents the functional feature associated to the element. Grimshaw assigns the value {F₀} to a lexical category and {F₁} to a functional one, so that by iv. only the configuration where the functional category dominated the lexical one could become an extended projection.
We will see how this definition can account for DP internal agreement in the next section.

3.3 - The structure

As we have seen in section 1.5.1, in both SI and Friulian within a DP a noun, an adjective and a determiner all agree in [gender, number]. When the NP has a PP complement, as in “La bella fotografia del gatto” - the beautiful photograph of the cat - the PP complement does not share the same features as the rest of the PP (the photograph is feminine, as are the D *la* and the AP *bella*, while the cat is masculine). Similarly, as shown in examples (74) a and b, c and d from SI and Friulian respectively, an AdvP modifying the AP does not share the same features as the rest of the DP:

(74) a. La casa molto antica
   The (f, sg) house (f, sg) very ancient (f, sg)
   “The very ancient house”

b. *La casa molta antica
   The (f, sg) house (f, sg) very (f, sg) ancient (f, sg)
Since we are taking DP internal agreement to be a process of feature copying, the algorithm setting the conditions for the instantiation of this process must allow the D and the AP to be targets of the feature-copying process, and it must exclude AdvPs and PPs complements to the NP. (75) expresses this set of requirements which will yield the desired result:

(75) Copy the features $\psi$ from x to y iff:
   i. x and y are inherently specified for [+N], and
   ii. y is immediately dominated by a node immediately contained in x's extended projection.

Comparing (73) and (75), we see that the nodes which are immediately contained in N's extended projection are DP, D', NP, N' and N. If W is immediately dominated by a node Z it means that Z is the first node dominating W. According to this, D and AP are legitimate targets for the copying-feature process being immediately dominated by, respectively, D' and NP, which are both immediately contained in the extended projection. AdvPs, on the other hand, not being immediately dominated by a node immediately contained in the extended projection, are excluded. Turning now to the PP complement to the NP, we notice that being immediately dominated by N' the PP is a potential target for the agreement, but being categorically specified for [-N] it does not satisfy condition (75) i. Were a language to allow for DP complements to the NP, our algorithm predicts that they should be targets for the agreement. On similar lines, [Spec, DP] is a potential target, too, allowing for whatever elements appearing there and inherently specified for [+N] to share the features with the rest of the DP.³⁵ In (73) for

³⁵ This prediction allows us to account for DP internal agreement where APs are placed in [Spec, DP], Cf Cinque (1994a).
simplicity I have glossed over any functional projections which have been assumed to exist inside the DP. The movement of the N to functional projections will not affect the agreement mechanism, since it is assumed that Agr is instantiated irrespective of N-movement, and can, therefore, take place before or after it. Also, whether the AP is adjoined to the left or to the right of the NP does not affect the agreement process just illustrated, given that it will be always immediately dominated by the NP.

In summary, we have seen that the notions of extended projection, feature-copying, inherent specification for [gender, number] together with the algorithm in (75) can satisfactorily account for DP internal agreement. (76) recapitulates: the nodes marked by a star are the potential targets for the feature-copying process. Whether they actually are targeted depends on their specification.

(76)

The reader is referred to Cinque (1994a) where the author argues for partial evidence of N-movement within the Romance DP, discarding evidence brought forward by Lamarche (1991). Cf also Ritter (1991, 1993) who argues, respectively, for two functional projections within the Romance DP and that [gender, number] features are placed in NumP, a functional projection dominating NP; Picallo (1991) who proposes that N raises into NumP in Catalan; Bianchi & Figueiredo-Silva (1994) argue for the existence of two functional projections above the NP, NumP and GenP respectively, in Brazilian Portuguese and SI. See also Bernstein (1991) for the idea that the N raises to different positions in different languages and that this difference is parametrised.
Let us turn now to PtPPL agr.

As it has already been claimed in (71), PtPPL agr shares with DP internal agreement the mechanism which instantiates it, i.e. feature copying from the nominal source on the target element. In PtPPL agr the target element is, of course, the PtPPL. In Friulian the instantiation of PtPPL agr crucially depends on the feature specification carried by the PtPPL, which is different from the one carried by SI PtPPL. This difference is responsible for the lack of PtPPL agr in SI with a full pvDP.

(77) is the structure I adopt for a transitive PtPPL:

(77) \[
\begin{array}{ccc}
\text{Spec} & \text{Asp'} \\
\text{Asp} & \text{VP} \\
\text{Spec} & \text{V'} \\
\text{V} & \text{DP} \\
\text{Spec} & \text{D'} \\
\text{D} & \text{NP} \\
\end{array}
\]

The PtPPL is placed in V, which will carry \([+V,+N]\) features in Friulian, \([+V,\neg N]\) in SI. Under Grimshaw’s approach, a verb and its complement never form an extended projection because they crucially do not share the same categorial features and because the requirement that the functional projection govern the lexical one is not met.

There is an alternative solution. If AspP and VP were taken to form an extended projection - both being specified for the same categorial features, as Grimshaw does for I and V - , then the verbs’ internal argument would be immediately dominated by a node immediately contained in the extended
Let us consider the Friulian case first.

It is apparent that there is no movement involved in the instantiation of PtPPL agr with a full pvDP. Therefore, I would like to suggest that PtPPL agr is triggered by the PtPPL “attracting” a copy of the inherent [+N] features of the closest element it c-commands.

The necessity for the requirement that the nominal source of agreement be c-commanded by the PtPPL, stems from the fact that the PtPPL never agrees with its pre-verbal subject. The c-commanding restriction accounts for all instances of PtPPL agr in unaccusative, ergative and passive constructions, where the logical subject is base generated post-verbally, as well as in transitive constructions.

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projection, as shown in (78). This, however, would not allow us to capture the different behaviour of PtPPLs and APs, discussed in section 3.4.

(78):
In SI, on the other hand, the PtPPL is categorically specified as [+V, ~N], i.e. the feature [N] is present but has no value. This lack of value is reflected in the fact that the PtPPL does not attract a copy of its DP complement’s [gender, number] specification. Once positioned in a [Spec, head] configuration with its internal argument, though, the PtPPL agrees with it, since the two elements carry compatible features, [+N] and [~N]. This accounts for all instances of PtPPL agr in SI, i.e. cliticised, unaccusative, ergative and passive constructions.

The PtPPL and its internal argument will be in a [Spec, head] configuration once raised in the functional projection dominating the PtPPL, AspP or, in Cinque’s (forthcoming) terms, Asp SgCompleteive (I), and the PtPPL’s feature [~N] will be turned into [+N].

(79) and (80) represents PtPPL agr in, respectively, Friulian and SI. The features carried by the V’s trace in (80) show that the [N] feature on the PTPPL changes from having no value to being specified for the same value as the DP’s with which it is in a [Spec, head] configuration.

(79) ... AspP
   Spec   Asp’
   Asp    VP
   Spec   V’
   V       DP
   [+V, +N]  [-V, +N]
   PtPPL

38 [gender, number] are parasitic on the feature [N], i.e. in order to have inherent [gender, number] features on a lexical item, that lexical item has to be [+N]. These same features can then be copied onto other lexical items. With the specification [+V, ~N] the PtPPL is distinguished from all other verbal forms which are [+V, -N].
(80) ... \[ \begin{array}{cccc}
\text{Spec} & \text{Asp} & \text{Spec} & \text{Asp'} \\
\text{DPi} & \text{Asp} & \text{VP} & \text{Spec} \\
[-V,+N] & \text{PtPPL}_{j} & \text{V'} & \text{Spec} \\
[+V,+N] & \text{VP} & \text{t} & \text{DP} \\
[+V, \sim N] & \text{t} & [-V,+N] & \text{t} \\
\end{array} \]

(81) is the algorithm that expresses formally the process of PtPPL agr:

(81) Copy the features \([\psi]\) from \(x\) to \(y\) iff:

either

i. \(x\) and \(y\) are inherently specified for \([+N]\), and

ii. \(x\) is the closest node c-commanded by \(y\),

or

iii. \(x\) and \(y\) have compatible feature specification, and

iv. they are in a \([\text{Spec}, \text{head}]\) configuration.

The first set of conditions accounts for PtPPL agr in Friulian and the second for all the other Romance languages. It is crucial to underline that “compatible” features here is taken to mean that the value of the two features does not clash. Thus two elements will have compatible features if one carries a positive value for that feature and the other carries no value at all. On the other hand they will not be compatible if one carries a negative value and the other a positive one. As a consequence, this condition predicts that if the PtPPL is specified as \([+V, -N]\) in a language, then no agreement will be possible. This is indeed what happens in Rumanian, Spanish and Portuguese (Cf chapter 4).

Finally, it must be pointed out that in accounting for PtPPL agr triggered by cliticisation in SI I will not follow Chomsky’s (1988) adaptation of Kayne’s (1985) original proposal that the clitic is adjoined to AgrO and creates a Spec-like position which triggers agreement with AgrO. Rather, I will follow Sportiche (1996) in assuming that the whole DP rises into \([\text{Spec}, \text{Asp}]\) and agreement is triggered with
the PtPPL raising into the head position\textsuperscript{39}. On the last step of its movement, the D clitic will be extracted from the DP and head will move to reach its final destination\textsuperscript{40}.

In summary, this section has presented a unified account for DP internal and PtPPL agr in Friulian. The unifying thread between the two is the necessity for items carrying [+N] features within the proper domain to share them. The distinguishing factor between the two, is the definition of proper domain: this latter is delimited in the DP to the same projection, in the case of PtPPL agr to the attraction of a copy of the [+N] features from the closest c-commanded head.

In the next section the importance of a different domain proves important when accounting for the differences in behaviour between APs and PtPPLs agr with lists.

\textsuperscript{39} With respect to raising into the specifier of a functional category, Cinque's (forthcoming) proposal is problematic since all specifier positions are filled by adverbials. In order to allow for the raising of the DP we must assume that either there are more projections with empty specifiers - which would undermine the value of the observations in section 3.1, or allow for multiple specifiers. This issue will not be pursued here any further.

\textsuperscript{40} Kayne (1989: part I, 1991: sect. 1.1) convincingly shows that clitics adjoin to functional heads.
3.4 - Relevance of the different domains of the feature-copying process in PtPPL and DP internal agr

It has already been shown in section 1.5.1 (Cf examples (29) a and b) that Friulian PtPPLs, just as SI ones, assign Case and a Θ-role to their internal argument\textsuperscript{41}, and a Θ-role to their external argument. Adjectives do not assign Case or Θ-roles \textsuperscript{42}. Generally speaking, PtPPLs used adjectivally inside the DP cannot be modified by intensifiers, while APs can. Some examples from Friulian \textsuperscript{43}:

\textsuperscript{41} Following Giorgi & Pianesi (1991) I will assume that since an auxiliary does not take part in the semantic meaning of the composed tense but only in the syntactic one, it is base generated under T. Thus it wouldn't be able to assign an external Θ-role on its own, i.e. it would be unspecified for external Θ-role assignment (in Lois (1990)'s sense). The actor of the action would be Θ-marked by the PtPPL. The auxiliary here is thought to be only “helping” the PtPPL to assign a Θ-role to the subject. As noted in Stowell (1982) the auxiliary and the PtPPL share the same agent, so that it is reasonable to believe the Θ-role is assigned compositionally.

\textsuperscript{42} Adjectives can, nevertheless, express the external Θ-role of a N. (Cf Giorgi and Longobardi (1991: 125ff) and Kayne (1981: 111)).

\textsuperscript{43} The reader is referred to Bisetto (1994) for a set of criteria to distinguish
b. I tant afetuôs frus
   The very affectionate (AP) children

Furthermore, a difference in behaviour is found when lists of items are involved. In SI, and in Friulian too, in the presence of a mixed group of people belonging to both sexes an adjective referring to it must carry a \([m, \text{pl}]\) ending, as shown by (83) a from SI and (83) b from Friulian:

(83) a. Che bei ragazz [m, pl] e ragazze [f, pl] in costume!
   What beautiful [m, pl] boys [m, pl] and girls [f, pl] in costume
   “How beautiful boys and girls in traditional costumes!”
   
   b. Se biei frus e frutis in costum!
   What beautiful boys and girls in costume

When the PtPPL refers to a group of items carrying different grammatical gender, the situation is different: in both languages the PtPPL surfaces in its unmarked \([m, \text{sg}]\) form, and the sentence results in ungrammaticality if we apply to PtPPLs the
same rule adjectives follow, i.e. in a group of mixed gender or sexes use the [m, pl] ending. This is shown by (84) for SI and (85) for Friulian:

(84) a. Ho visto/ *visti Marco, Luisa, Giorgio e Ada
    Have seen (UM)/*(m, pl) Marco, Luisa, Giorgio and Ada
    “I have seen Marco, Luisa, Giorgio and Ada”

    b. Ho comprato/ *comprati i fichi, le pesche,
       Have bought (UM)/*(m, pl) the figs (m, pl), the peaches (f, pl),
       i pompelmi, le pere e i meloni
       the grapefruits (m, pl), the pears (f, pl) and the melons (m, pl)
       “I have bought figs, peaches, grapefruits, pears and melons”

(85) a. E ai viudût/ *viudûs Marco, Luisa, Giorgio e Ada
    SCL have seen (UM)/*(m, pl) Marco, Luisa, Giorgio and Ada
    “I have seen Marco, Luisa, Giorgio and Ada”

    b. E ai comprât/ *comprâs i fics, li pomis,
       SCL have bought (UM)/*(m, pl) figs (m, pl), the apples (f, pl),
       i pompelmos, li fragulis e i melôns
       grapefruits (m, pl), the strawberries (f, pl) and the melons (m, pl)
       “I have bought figs, apples, grapefruits, strawberries and melons”

In examples a in (84) and (85) each DP in the list has an empty D; in examples b in (84) and (85) each DP in the list has its own D, and it is different from the DP which follows and precedes it. This shows that the agreement is not affected by whether Ds are present or not in the lists.

Under the theory formulated in this chapter this difference can be captured by the different feature-copying operational domains assumed for DP internal and PtPPL agr.

It appears that while adjectival agreement between a NP and an AP can “see” [number] features when dealing with lists, PtPPL cannot do so when their internal
argument is a list. I would like to suggest that this depends on the AP and the NP belonging to the same extended projection and on the necessity for them to be specified for the same \( \psi \) features. As far as [gender] is concerned, both in SI and Friulian, a group of items of mixed sexes or genders is referred to as [m] - masculine being the unmarked choice for gender. The resulting specification which appears on the adjective, [m, pl], is derived as follows: the specification for [gender] is the default unmarked one, while the [number] specification comes from the group containing a number of individuals, and being, therefore, plural. Belonging to the same extended projection is the crucial factor here, since it forces plurality on the A and D.

PtPPL agr, on the other hand, operates across projections on its selected internal argument. When the PtPPL selects for a list formed by many DPs as its internal argument, each of these DPs has its own feature specification, so that the feature specification cannot be represented by one set of features. Furthermore, all these DPs are all c-commanded by the PtPPL so that they are all on an equal hierarchical position with respect to the PtPPL, i.e. the DPs are all sisters to the PtPPL. As a consequence, the PtPPL is not able to “choose” which copy of features to attract, and it surfaces in its [m, sg] unmarked form.

Although suggestive rather than conclusive, this analysis shows how the different operational domain assumed for PtPPL and DP internal agreement could capture the above presented different behaviour of PtPPLs and APs. The last section in this chapter will present some speculations on the nature of agreement specified for [person] features and draw a conclusion for the chapter.

### 3.5 - Final remarks and Conclusion

The semantic affinity between PtPPLs and adjectives has been interpreted in

\[ \text{I will assume that the syntactic representation of a list is a recursive DP.} \]
syntactic terms in having the two categories sharing the same mechanism for the instantiation of agreement with a nominal. In the previous section, the operational domain of this mechanism has been proved to be very significant when dealing with agreement in special circumstances, such as with lists.

The investigation of PtPPL agr was triggered by the original observation of the different feature specification of the two functional nodes allegedly involved in agreement - AgrS and AgrO. In this chapter some convincing evidence against the existence of AgrO has been presented. Given that AgrO is specified for [gender, number], at this stage it is desirable to make a further suggestion, which takes shape in two possible claims: either the mechanism involved in agreement for [gender] features is different to the one involved in [person] features, due to the existence in the second case of AgrS, or agreement is only a relation in ALL circumstances, and there exist no AGRPss. It must be stressed that these are only speculations and should be tested cross linguistically to see whether they hold.

The first possibility sees verbal agreement - V agr - as a property acquired by the verb by virtue of raising into an AgrS head position. This claim would be supported by some evidence from the Scandinavian family, where the existence of agreement in [person] features within the verbal paradigm implies the existence of an AgrS node to which V raises (cf Holmberg & Platzack (1995)).

Alternatively, we could follow Iatridou (1990) is assuming that there is no such functional projection as AgrS and that the function of Case assigning - or checking - is performed by Tense. This is supported by the fact that in Friulian and SI only a finite verb can assign Nominative Case to its logical subject and from the fact that a finite verb shows inflection for [person] features, we could deduce that [person] features are involved in Case assigning processes. Thus the sharing of the features between a finite verb and its syntactic subject would surface as a result of a [Spec, head] configuration between the two. A consequence of this is that by eliminating all the Agreement functional projection the tension between functional projections whose semantic properties are clear - such as Tense or Negation - and Agreement functional projections, which do not have a property that can be isolated semantically, could be resolved. By following this second claim, agreement can therefore be reduced to a pure relation between two or more elements which
determines feature sharing between them.

In summary, this chapter has investigated the relative positions of PtPPL, its object and some adverbials, in order to establish whether PtPPL agr is triggered as a result of the PtPPL raising into an Agreement functional projection. This was discarded due to the evidence that PtPPL moves obligatorily into one functional projection, AspP, but no further movement is necessary in order to trigger agreement. In order to capture the semantic affinity between PtPPLs and adjectives, it has been proposed that the same mechanism which is responsible for PtPPL agr is also responsible for adjectival agreement.

A possible rule has been formulated with precise restrictions imposed by configurational relations, invoking the concepts extended projection, immediately contained and immediately dominated for adjectival agreement, and c-command for PtPPL agr. The matching of the [+N] features underlies both agreements, and the difference between SI and Friulian PtPPL agr has been captured in claiming that the two verbal forms carry different feature specifications in the two languages. While PtPPL in SI is a [+V, ~N] category, it is a [+V, +N] category in Friulian, due to the fact that Friulian is still undergoing the process which derived the modern PtPPLs from Latin.

The system so formulated has been then applied to a problematic case, agreement with lists, and a solution exploiting the two different operational domains has been proposed. Finally, some speculations on the difference between agreement in [person] and agreement in [gender] features have been made, suggesting two alternatives: either agreement in [person] features reflects the existence of an AgrS node while agreement in [gender] is only a relation, or simply all agreement is a relation. If this last suggestion finds some support from a cross-linguistic investigation, then some more evidence can be available to decide on the long debated issue of whether agreement is a relation or a functional projection.

The next chapter will present some support for the claim made on the difference categorial feature specification of the PtPPL in SI and Friulian.
Chapter 4

Historical development of the PtPPL and the auxiliary in Romance Languages

4.0 - Introduction

In the previous chapter it has been claimed that the different behaviour of the PtPPL in SI and in Friulian is due to the different feature specification the PtPPL has in the two languages. While in SI it is specified for \([+V, \sim N]\) features, it is specified for \([+V, +N]\) in Friulian. The fact that Friulian is in a way more conservative than SI in allowing structures considered archaic in Modern Italian, suggests that Friulian is still undergoing the diachronic change already completed in SI.

Taking this observation as a starting point in this chapter we will find some more support for this claim by investigating what has been considered to be the "ancestor" of the compound tenses in Latin.

Section 4.1 presents some data from Latin illustrating its verbal tense system,
how analytic forms developed, what function they had and the semantic change they underwent. Section 4.2 investigates the syntactic reflection of the semantic changes. Section 4.3 focuses on the changes undergone by *habere* - to have - and the influence this transformation had on word order. Some data from Friulian and Portuguese shows a close link between the function performed by the respective version of habere, linear order of auxiliary - PtPPL - DO and the possibility of the subject of *habere* and of the PtPPL of not being co-referential. Section 4.4 interprets the facts illustrated in section 4.3 and places Friulian in the wider framework of Romance Languages.

4.1 - The Latin tense system

The Classical Latin tense system had the means of expressing both the location of an event in present, past or future and also its relation to a specific reference point, i.e. anterior, simultaneous or posterior to it. The former function was performed by the so-called synthetic one-word forms, such as *scripsi* - I wrote, *lexi* - I read. The latter was performed by analytic, or periphrastic forms, found in the passive construction or with verbs called deponent, i.e. which had only passive morphology. These were fully operational throughout Latin. Cf (86):

(86) a. laudatus eram  b. profectus eram
   praised      I was     left      I was
   "I had been praised"    "I had left"

In analytic constructions only one auxiliary was used, esse - to be, a one-place predicate which gradually lost its original existential meaning and came to represent only a general relation. In this respect it can be claimed that esse was a real auxiliary, resembling its French and SI modern versions. The PtPPL was passive in meaning (deponents excepted) and was "... a verbal adjective [which agreed] in gender, number and Case with the N it modified..." (Randall (1992: 233)).
Some constructions with *habere* - to have - and the PtPPL were present in Latin, too, and are considered to be the "ancestors" of the Modern Romance constructions, although they were not equivalent to them.

The Latin construction was formed by a finite form of *habere* followed by an object and the passive PtPPL, as shown in example (87):

(87) qui eum *vinctum* habebit
who him tied will have
"Who shall hold him in bonds" (From Pinkster (1987: 197))

Some more examples are shown in (88): (88) a shows the θ-role and Case assignment process:

(88) a. *in ea provincia pecunias magnas* collocatas habent
in that province capital (f, pl) great (f, pl) invested (f, pl) they have
"They have great capitals invested in that province" (Cicero)

b. *habeo epistulam scriptam*
I-have letter-ACC written-ACC
"I possess the written letter"

c.  Case  Case
    |_________| |__________|
  [ego] habeo epistulam scriptam
  |_θ-role_| |_θ-role_

*Habere* in the above examples cannot be considered a proper auxiliary yet, since it retains its meaning as a full possession verb and an argument structure of its own, as can be seen from its ability of assigning Case and a θ-role to its subject and object. The object is selected by *habere* and the PtPPL is really a
Praedicativum, i.e. it indicates a property in which the direct object is as a result of the action predicated by the PtPPL, which, as pointed out above, syntactically behaves like an attribute, agreeing in case, number and gender with the object. It is interesting to notice that in Classical Latin only those PtPPLs which could act as adjectives and mainly derived from resultative or terminative verbs were allowed in these periphrastic constructions. In sentences like (87) and (88) a and b the PtPPL could be omitted without affecting the general meaning of the sentence, i.e. (87) can simply mean “who shall hold him”, (88) a “they have great capitals in that province”, and (88) b “I possess the letter”.

Expressing this graphically, analytic constructions could be represented as:

(89) Habere  +  (Object + PtPPL)

On a parallel with such constructions, there existed very similar ones where the PtPPL could not be omitted without making the sentence meaningless. An example is given in (90):

(90) (Flamines) ... caput *cinctum* habebant *fiilo*  
Flamines: head (m, sg) girted (m, sg) they had by a string  
"The Flamines had their heads girted by a woollen fillet" (From Pinkster (1987: 1997)).

Since the omission of *cinctum* results in the sentence being pointlessly obvious as not deserving to be overtly stated - “they had heads” -, it has been claimed (Ramat (1987: 369)) that in these examples *habere* should be considered as a three place predicate, where the PtPPL is one of them and predicates of the state in which the object is as a consequence of the action. Graphically, these constructions can be all reduced to the structure represented in (91):

(91) (Habere  +  participle)  +  object

Salvi (1987: 226) compares these structures to others which are found in SI.
The PtPPL performs here the same function as it did in Latin sentences (90). Some examples, reported from Salvi (1987: 226) are given in (92):

(92) Tengo gli occhi aperti
    I-keep the eyes (m, pl) open (m, pl)
    “I keep the eyes open”

Some syntactic tests show that indeed gli occhi and aperti are two separate constituents:

(92) a. Li tengo aperti
    Them I-keep open
    “I keep them open”

b. Come tieni gli occhi? Aperti
    How keep the eyes? Open
    “How do you keep your eyes? Open”

c. Gli occhi che tengo aperti
    The eyes that I keep open
    "The eyes that I keep open"

In the Latin examples the object and the PtPPL are two separate constituents, just like their SI counterparts, as can be seen in (93), similar to (92) c, reported in Salvi (1987: 227):

(93)(equitatum) quem ex omni provincia... coactum
    habebat cavalry whichACC from each province
    gatheredACC he had "The cavalry which he had gathered from all provinces"

From Cicero onwards, an increasing variety of verbs were allowed to enter into the habere + PtPPL construction, perception and cognition verbs in particular. The object could no more be understood as the object of habere, nor the PtPPL as
predicative of its change of status as a result of the action. In fact with cognition and perception verbs it is the subject of the action which is undergoing a change, i.e. it becomes aware of the existence of the object - as it has been pointed out in chapter 2. Some examples are given in (94), taken from Pinkster (1987: 204):

(94)a. cum cognitum habeas quod sit sumni rectoris...
when known you have what be of supreme governor
numen
will
"When you have realised what is the will of the supreme lord"

b. auditum habemus quod ...
heard we have that ...
"We have heard that ..."

It was only in a later period that the periphrastic construction was extended to intransitive verbs, so that *habeo dormitum* became to signify what it means nowadays in SI, *ho dormito* - I have slept.

It is in these last types of constructions that the amalgamation of *habere* and the PtPPL into a complex verb form was completed, giving origin to the Modern Romance constructions. It is clear from the examples in (94) that the sentential object is selected by *auditum* and not by *habere*, which, semantically bleached, has come to assume the meaning of a general relation, similar to the one instantiated by esse.

4.2 - How did the change come about?

How did this transformation take place?

It began on a semantic level first. The original meaning of the Latin periphrasis took on the meaning it has nowadays in Romance.

This was due to the semantic emptying of *habere*. From having the same meaning as *tenere* - to keep, a durative action - it acquired the meaning of possession, and finally it came to represent just a generic relation, i.e. to perform the function of an auxiliary, with no selectional properties of its own, very similarly
to esse. If esse expressed a relation between two entities, A and B, habere could express the reverse relation, between B and A. An example is found in pairs such as:

(95)a. Domus est Marco
House is to Marcus
"The house is of Marcus"

b. Marcus habet domum
Marcus has house
"Marcus has a house" (adapted from Salvi (1987: 229))

Another factor that contributed to the change was the increasing tendency of the subjects of the two verbal forms to coincide, particularly evident in constructions containing perception and cognitive verbs (Cf examples (94) a and b above). Habere did not enter into the semantic interpretation of the action and this caused the transfer of the semantic axis of the sentence from the auxiliary and its object to the PtPPL, i.e. it became transparent to verbal restrictions. The consequence of this is that the PtPPL came to lose its adjectival nature and assume a verbal one. The object was then selected by the PtPPL, and the construction which originally meant "I own the result of an action" became to mean "I performed that action in the past".

The change was only later followed by a syntactic change. A first consequence in interpretation was that the restrictions on the categories of verbs which were allowed to enter into the construction were gradually lifted, so that resultative or terminative verbs were sidused alongside of perception, cognitive and activity verbs. Thus the adjectival nature of the PtPPL gradually disappeared, and it was ultimately reflected by the loss of the agreement between the PtPPL and a full pvDP, which is what we find in SI.

From a structural point of view, it has been claimed (Salvi (1987: 228)) that the syntactic structure the periphrasis

habeo epistulam scriptam
had in Latin was a small clause governed by *habere*, where a predication relation between the PtPPL and the object was instantiated. The small clause was headed by the PtPPL functioning as an adjective. The object was assigned Accusative Case by *habere* through the AP small clause, which did not represent a barrier.

The structure assigned to it is represented in (96) (Salvi (1987: 228)):

(96)\[
\begin{array}{c}
\text{VP} \\
\text{Spec} \quad V' \\
\quad [\text{ego}] \\
\quad V \\
\quad \text{AP} \\
\quad \text{habeo} \\
\quad \text{NP} \\
\quad \text{epistulam} \\
\quad \text{A}' \\
\quad \text{A} \\
\quad \text{scriptam} \\
\end{array}
\]

(96) shows that there is no direct connection between *habeo* and *scriptam*.

When the semantic emptying of *habere* was completed and the syntactic transformation started to take place, the small clause was still headed by the PtPPL, but its category changed: from being an AP the small clause turned into a VP, which reflected the shift of the axis of the sentence on the PtPPL. The new structure is represented in (97):

(97)\[
\begin{array}{c}
\text{VP}_1 \\
\text{Spec} \quad V' \\
\quad [\text{ego}] \\
\quad V_1 \\
\quad \text{VP}_2 \\
\quad \text{habeo} \\
\quad \text{NP} \\
\quad \text{epistulam} \\
\quad V_2 \\
\quad \text{V}' \\
\quad \text{scriptam} \\
\end{array}
\]

The subject of the small clause - *epistulam* - was now the object of the PtPPL, so that adopting structure (98) instead of (97), a parallel can be drawn with passive sentences. In (98) [Spec, VP\textsubscript{2}] is empty for the NP to raise into in order to get Acc
Case from habere - the PtPPL cannot yet do so.

\[
\text{VP}_1 \\
\text{Spec} \quad \text{V'} \\
\quad [\text{ego}] \quad \text{V}_1 \quad \text{VP}_2 \\
\quad \text{habeo} \quad \text{NP} \quad \text{V'} \\
\quad \text{V}_2 \quad \text{NP} \\
\quad \text{scriptam} \quad \text{epistulam}
\]

Structure (98) is based on the assumption that the PtPPL is not able to assign an external Θ-role on its own. Habere, having undergone a semantic bleaching, can no longer assign an external Θ-role on its own either, but can help the PtPPL to do so.

Finally, when habere had completely lost its properties as a full verb, it could no longer assign Acc Case to the object: the PtPPL acquired that property, becoming a verbal form. As a consequence agreement with the object - which made it so adjective-like - disappeared. Structure (99) represents the final development of the Latin construction, which is nowadays found in the Romance languages:

\[
\text{VP} \\
\text{Spec} \quad \text{V'} \\
\quad [\text{io}] \\
\quad \text{ho} \quad \text{NP} \quad \text{V'} \\
\quad \text{V} \quad \text{NP} \\
\quad \text{scritto} \quad \text{la lettera}
\]

In the next section some facts relative to the rigidification of the linear order exemplify the ability of the auxiliary to assign Acc Case to the DP object. The examples are drawn from Friulian and Portuguese.

---

45 All the above given structures were formulated by Salvi in the Government and Binding framework.
4.3 - Effects on word order: evidence from Portuguese and Friulian

The shift from the construction in (88), where the object and the PtPPL were in a relation very similar to the one instantiated between a noun and an adjective modifying it, to those where the auxiliary and the PtPPL came to amalgamate into a complex verb form was reflected also in the linear order that the auxiliary, the PtPPL and the object had with respect to each other.

When *habere* imposed selectional restrictions on the object, its subject and the subject of the PtPPL did not necessarily coincide. (88), for example, means that “I possess the result of the fact that a letter has been written [by somebody]”, and not “I have written the letter myself”.

In later examples, illustrated in the previous section by (93) and (94), *habere* and the PtPPL tended to share the same subject, so that a direct relation between the two arose. This affected word order, so much so that the sequence that became more and more rigid to the extent of being the only one acceptable in expressing an action performed in the past was Aux - PtPPL - DO.

The same is also true nowadays. Different word order leads to a different interpretation; in particular, when the object immediately follows the *A* aux this latter is interpreted as a main verb expressing possession.

This is witnessed in Portuguese, investigated by Lois (1990). In this language the two different functions of “to have” as an auxiliary and as a main verb are not morphologically distinct in two corresponding different verbal forms (Cf Spanish *haber* and *tener* respectively). Portuguese *ter* performs both, but it behaves differently, syntactically speaking, depending on the function it performs: agreement of the PtPPL with the object signals the function of *ter* as a main verb, lack of it signals its function as an auxiliary. Compare (from Lois (1990: 236 n 4)):

(100)a. Tenho a carta escrita
I-have the letter (f, sg) written (f, sg)
“1 possess the written letter”

b. Tenho escrito a carta
I-have written (UM) the letter (f, sg)
“I have written the letter”

Notably, the position of the DP is crucial to the function of ter: (100) a becomes ungrammatical if agreement is not instantiated:

(101) *Tenho a carta escrito

A similar phenomenon can be observed in one of the varieties of Friulian that uses the “non-agreeing” form of the PtPPL with full pvDPs - what has been referred to as “young Friulian” in chapter 3. Here, too, the position of the DP disambiguates the interpretation of avere, i.e. as a main verb or as an auxiliary. On a suggestion by Poletto (personal communication) minimal pairs with the presence of a sentential adverb were tested to see if there was a difference in meaning between sentences with different word order. The pairs are given in (102): it can be seen that the position of the DO plays a crucial role:

(102)a. E ai fumât simpri li sigaretis
PtPPL [UM] Adv DO
SCL have smoked always the cigarettes
“I have always smoked cigarettes”

b. E ai simpri fumât li sigaretis
Adv PtPPL [UM] DO
SCL have always smoked the cigarettes
“I have always smoked cigarettes”

c. E ai li sigaretis simpri fumadis
DO Adv PtPPL [+agr]
SCL have the cigarettes always smoked
“I possess cigarettes always (already) smoked”

d. E ai simpri li sigaretis fumadis
   Adv DO PtPPL [+agr]
SCL have always the cigarettes smoked
“I possess always (already) smoked cigarettes”

(102) a and b unambiguously yield an interpretation where the Friulian counterpart of avere - vè - is an auxiliary and the PtPPL does not agree, just like in SI. (102) c and d cannot be accepted without agreement, and vè comes to function as the main possession verb: the DP is its internal argument and the PtPPL is modifying it, just like an adjective. Interestingly, (102) d is preferred when an agent is added, as in (103) 46:

(103) E ai simpri li sigaretis fumadis da to pari
   SCL have always the cigarettes smoked from your dad
   “I always have my cigarettes smoked by your dad”

(103) resembles very closely English constructions “to have something done by somebody”, constructions possible in Friulian, but not in SI. Compare (104) from Friulian and (105)a and b from SI:

(104) E ai vude le cjase rimodernade da cantine fin
   SCL have had the house re-decorated from cellar up to sul solâr tre ains fa
   on the attic three years ago
   “I have had my house redecorated from top to bottom three years ago”

(105) a. *Ho avuto la casa rimodernata da cima a fondo

46 In SI the counterpart of sentence (102) c and d are marginal and they have the same meaning as in Friulian. They do not allow, however, for the addition of an agent. Compare also the ungrammaticality of example (20) a.
Have had the house re-decorated from top to bottom
“I have had the house re-decorated from top to bottom”

(105) b. Mi hanno rimodernato la casa
To-me have re-decorated the house
“They have re-decorated my house”

In English, too, the position of to have and the object decides which function the PtPPL is playing: verb or adjective. Denison (1993: 341) reaches similar conclusions: after having investigated the nature of have as a main verb and as an auxiliary he shows that adjacency of finite have and PtPPL gives the auxiliary interpretation, while non-adjacency of the two leads to the main verb interpretation.

He claims (1993: 341) that a sentence like
(106) America has found a role
stems from a re-analysis of (106)a, where has indicates possession and its object, a role, is modified by the adjectival PtPPL - the role is in a “state of found-ness” - , to (106) b, where a role is the object of the verbal syntagm “has found”:

(106) a. America [vp [v has ] [[np a role ] [ap found ]]] have = main

b. America [vp [ has [ v found ]] [np a role ]] have = aux

4.4 - The status of Friulian with respect to the other Romance Languages

Going back to Friulian and SI, what examples (103) and (104) suggest is that the option that was available in Latin for the auxiliary and the PtPPL to have separate subjects is still available in Friulian. Crucially, the interpretation will rely on the relative position of vè and the object: the object must immediately follow vè. This adjacency can also be interpreted as a necessity for vè to be able to assign Acc
If this is the case, then we could interpret the fact that this option is available in Friulian but not in SI as an indication of the "conservativity" of Friulian in comparison with SI. In other words, Friulian has not yet undergone the change that SI already has.

This conclusion provides some more support for the idea put forward in the previous chapter that the PtPPL in Friulian and the PtPPL in SI are specified for different features, and they derive this difference from a diachronical development.

Friulian and Old Italian represent an earlier stage of the transition which the PtPPL has undergone. The fact that Friulian allows the present perfect to be formed with all existing PtPPLs, and not just like early Latin which allowed only those PtPPLs that could function as adjectives, shows that the same process of change as the one that has originated the Romance present perfect forms has been active in Friulian. Given the differences we have noticed with SI, the process has not completed its cycle in Friulian - or at least in the "Old Friulian" - which remains "behind" SI as far as the transformation of the PtPPL is concerned.

As we have seen, the structure Aux - PtPPL - DO has the same meaning in Friulian and SI. This shows that in Friulian, too, the structure has undergone the semantic change that affected Latin periphrasis like (87) and (88). What Friulian has not undergone yet, is a full syntactic change, which would result in Friulian not allowing PtPPL agr with a full pvDP, like SI. This uncompleted change is reflected in the feature specification of the two PtPPLs.

In Latin, the PtPPL behaved syntactically like an adjective and accordingly it was specified as a [+N,+V] category. In its development towards the modern PtPPL, it has ended up as being a [+V] category in SI. The lack of [-N] feature, typical of all the other verbal categories, formally expresses the potential

47 In Latin this adjacency was not required given that Latin had a relatively free word order - due to its rich Case inflection - and tended to place the finite verb at the end of the sentence. Friulian on the contrary, just like SI, has a fairly strict word order, and the position of the object affects the meaning of the construction Aux - PtPPL - DO, as it has been seen.

48 It would be interesting to see whether the corresponding example of (105) was allowed in Old Italian or Latin, at all.
“adjectival” nature of the PtPPL in SI - i.e. its ability to agree with a DP which has been cliticised.

In Friulian, on the other hand, its specification is still [+N,+V], which causes the PtPPL to be subject to the principle outlined in (81) chapter 3 section 3.3, showing agreement in [number, gender] with the pvDP. The fact that younger speakers prefer the “non-agreeing” form of the PtPPL shows that there is a change in progress: the PtPPL is shifting from a [+N,+V] specification to a [+V] one in Friulian, and with the old generations gradually dying, the only possibility which will be available to Friulian speakers in a few decades will be the same as SI: no PtPPL agr with a full pvDP.

Languages like Rumanian, Portuguese and Spanish have reached the end of this transition, not allowing for the agreement to be even triggered by cliticisation of the pvDP. In these languages the PtPPL has probably come to its specification as a [+V, -N] category, just like other verbal categories.

4.5 - Conclusion

This chapter has provided some support for the claim made in (71) b. By investigating the semantic and syntactic structure that the periphrasis had in Latin, a link has been suggested between the differences noticed between Friulian and SI and a diachronic development of the PtPPL. While it is a [+V, ~N] category in SI, where the [N] feature has no value, it remains a [+V, +N] category in Friulian, just like it was in Latin. Some more evidence for this claim comes from the possibility - that existed in Latin and which is still available to Friulian but not to SI - for the subjects of the auxiliary and the subject of the PtPPL not to be coreferential.

Both verb forms, the PtPPL and to have have undergone a change. The process has involved all Romance languages: while Rumanian, Spanish and Portuguese have fully accomplished it, SI and French are half way through the process and Friulian has just started its journey towards the complete “verbalisation” of the PtPPL.
Conclusions

The aim of the present work was two fold. We set off investigating the nature of PtPPL agr and trying to find an answer to the question “Why are AgrS and AgrO specified for different features?”. The answer to this question would also, in an indirect way, throw some light on the tension between agreement as functional projection and agreement as a relation.

The question was raised by the investigation of Friulian carried out in Paoli (1996), and it is on this language that the research has been based.

The search for an answer to the question led us first to investigate the semantic nature of PtPPLs and adjectives: the agreement instantiated by both categories is specified for [gender, number] features, and it was felt that this could be due to their semantic affinity. An account of PtPPL agr based on a revised version of Centineo’s (1996) semantic analysis of PtPPL agr in SI, however, has not proved powerful enough to explain Friulian data: even with revisions derived from Tenny’s (1992) and Krifka’s (1989, 1992) theories of aspectuality, a semantic account could still not account for activity verbs with an indefinite object in Friulian. Nevertheless, it was made clear that the PtPPL only agrees with its internal argument, and the semantic affinity between PtPPLs and adjectives was maintained.

This affinity on a semantic level was interpreted on a syntactic level as suggesting that the same mechanism responsible for adjectival agreement could be responsible for PtPPL agr. The mechanism invoked is feature copying, which was exploited already in the Sixties by Postal (1964). The definition of the agreement process’s operational domain has proved very significant in capturing differences in behaviour between PtPPLs and adjectives when agreeing with a list of nominals. Finally, some speculations were made on the different nature of agreement specified for [person] and the one specified for [gender] features. Two possible hypotheses have been suggested: either the appearance of [person] features reflects the presence of an Agr functional node, or there is no such functional node and subject-verb agreement is triggered by a [Spec, head] configuration between the two. The functional projection hosting this configuration would be Tense.

Although these last speculations need further cross-linguistic investigation-
a suggestion for further research -, they have shed some light on the debate about the nature of agreement in general. Although linguists feel comfortable with Tense and Negation, two functional projections that mark clear semantic properties, an AGRP cannot be accepted as easily. From a functional projection point of view, AGRPs are semantically empty, agreement being generally thought of as a relation between two elements, not as a property possessed by an element in isolation. Using AGRPs has turned the relational character of agreement into a property that an item acquires by virtue of occupying a particular head position.

Linguists have been aware of this tension, but the matter has been commented upon mainly in footnotes, not directly addressed. This work has tried to relate its value with respect to a contained phenomenon, agreement in [gender] features, to this more theoretical question and to provide some evidence against the existence of an AgrO projection, possibly even an AgrS one. This latter fact must receive more attention, and I leave it here open for further research.
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