

## PAST PARTICIPLE AGREEMENT IN FIVE ROMANCE VARIETIES (1993)\*

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Italian morphosyntax is an area where formal syntactic theories can claim some major successes. Perlmutter's key insights on Italian auxiliaries (1978) led to further research that extends to much wider zones of the language (in GB Burzio 1981, 1986, in RG Davies and Rosen 1988, La Fauci 1988, 1989, 1991, Rosen 1988 [1981], 1990). Collectively, these studies leave no doubt that in Italian there are robust generalizations relating syntactic structure not only to auxiliary selection, but also to past participle agreement.

For past participle agreement, however, this line of research needs to be carried farther for at least two reasons.

First, there is a recalcitrant construction, the reflexive clause with *si* involving an indirect object (i.e. with 1 and 3 identical), as in (1). In clauses of this type, the participle agrees mandatorily, but can agree either with the initial 1 or the initial 2 (respectively *gli studenti* or *una pausa*):

- (1) Gli studenti si sono concessi / -a una pausa.  
the students REFL. are allowed a break  
'The students allowed themselves a break.'

We will see that (1) presents apparent anomalies in comparison to the general pattern of participle agreement. In GB the problem is ignored (Burzio's rule predicts non-agreement in (1): see the critique in §4 below), while in RG no analysis of participle agreement has ever appeared other than the one given in this paper. So the first criterion we need to satisfy is simple adequacy.

Second, the realities of the Romance family should be recognized: standard Italian is one member of a dense spectrum of dialects and standard languages, and the problem of giving conditions for participle agreement can be posed for each and every Romance variety. The multiplicity of these related grammars is a good test for formal accounts of a phenomenon that cross-cuts all of them. Do the variant systems of participle agreement differ chaotically? Or do the variants arrange themselves in orderly fashion along some scale that can be readily conceptualized and formalized? The answer may depend on the framework we use, which is thus tested. So the second criterion to be satisfied in an account of participle agreement is easy parametrizability.

The plan of this paper is to formulate a rule of participle agreement for standard Italian (§§1-4) and then examine its counterparts in French (§5) and in three dialects which have been closely studied in this respect: Altamurano, Grizzanese and Bonorvese (§6).

### Past Participle Agreement in Italian

1. Preliminary Observations. Let us begin with a survey of environments in which a past participle (PTCP) inflects to agree in gender and number with a controlling nominal.<sup>1</sup> One necessary condition can be noted immediately: all nominals controlling agreement must bear the 2 relation in some stratum. But not all nominals bearing the 2 relation are controllers.

Intransitive clauses in Italian fall into two types which, under a solid and well known analysis (Perlmutter 1978, 1989), differ in structure according to the predicate's valence: unergatives such as *regnare* 'rule' license a 1 and no 2, while unaccusatives such as *decadere* 'decline' license a 2 and no 1. We note in (2)(3) how this contrast impinges on agreement: as (2) shows, the PTCP cannot agree with a nominal which is a 1 only, or an oblique only.

- (2) a. I papi hanno regnato sulle Marche.  
 the Popes have ruled over the Marche [region]  
 'The Popes ruled over the Marche.'
- b. \* *I papi* hanno regnati sulle Marche.
- c. \* I papi hanno regnate *sulle Marche*.
- d.
- |        |       |         |  |              |
|--------|-------|---------|--|--------------|
| 1      |       | P       |  | Obl          |
|        |       |         |  |              |
| 1      | P     | Cho     |  | Obl          |
| i papi | hanno | regnato |  | sulle Marche |

But in (3), an initially unaccusative clause, the PTCP agrees mandatorily with its argument, which is initially a 2 and finally a 1:

- (3) a. *I grandi imperi continentali* sono decaduti.  
 the great empires continental are declined  
 'The great continental empires have declined.'
- b. \* I grandi imperi continentali sono decaduto.
- c.
- |                    |   |      |          |
|--------------------|---|------|----------|
|                    | 2 |      | P        |
|                    | 1 |      | P        |
|                    |   |      |          |
| 1                  |   | P    | Cho      |
| i grandi imperi... |   | sono | decaduti |

In finally transitive clauses, Italian overwhelmingly favors pattern (4a): no agreement. But between (4b) and (4c), there is a clear difference of degree. Agreement with a 1 as in (4b) is totally unacceptable. Agreement with a 2 as in (4c) is marginally possible, but not current in the standard language. Its rare attestations turn up in a variety of registers, both spoken and written.<sup>2</sup> Our analysis, reflecting the standard, should rule out both (4b) and (4c).

- (4) a. Ada ha ingoiato le tue scuse.  
 Ada has swallowed your excuses  
 'Ada swallowed your excuses.'
- b. \* *Ada* ha ingoiata le tue scuse.
- c. ? *Ada* ha ingoiate *le tue scuse*.

d.

1		P		2
1	P	Cho		2
Ada	ha	ingoiato		le tue scuse

Reflexive clauses (i.e. with a reflexive clitic on the verb) are central to this study. Shown in (5) is the ‘direct’ type (1 and 2 identical), while the ‘indirect’ type (1 and 3 identical) comes under close scrutiny later (§3). The PTCP agreement in (5a) is mandatory:

(5) a. *Lia* si è derisa.  
 Lia REFL. is mocked  
 ‘Lia mocked herself.’

b. \* *Lia* si è deriso.

c.

1,2		P
1		P
1	P	Cho
Lia	si.è	derisa

We adopt in diagram (5c) an analysis of reflexive clauses that finds specific corroboration in Italian (Perlmutter 1978, 1989, Rosen 1988:65-70). In the initial stratum, a single nominal *Lia* bears both the 1 and 2 relations, and is said to be **multiattached** in that stratum. Multiattachments in Italian are not allowed to persist into the final stratum:<sup>3</sup> to resolve them, the grammar has a rule prescribing the **cancellation** of the lower relation, with the result seen in the second stratum of (5c). In this analysis the clitic is not a nominal, not a referring expression at all, but rather an element of morphology that signals the resolution of a multiattachment.

Based on (2-5), we know that a nominal whose only relation is 1 or oblique cannot be a controller, and that every controller is a 2 in some stratum. But 2-hood alone is too general: agreement with a final 2, we recall, is marginal and faintly attested. In both of the standard agreement environments seen so far, the controller is a 2 and not a final 2, namely in the unaccusative (3c) and the multiattachment reflexive (5c).

Admittedly, comparing (3) and (5) with the other structures, the condition just stated is underdetermined. Perhaps the condition on controllers calls for a 2 which is a final 1, a situation found in (3)(5) and not in (2)(4). Or one might think that PTCP agreement environments are coextensive with environments for the auxiliary *essere* ‘be’, which also occurs in (3)(5) and not in (2)(4). This indeterminacy is resolved by (6), the last example in the survey.

In a clause with a pronominal 2, registered by an accusative clitic on the verb, the PTCP agrees mandatorily with this pronominal argument.<sup>4</sup>

(6) a. *Eva* le ha sperperate.  
 Eva them.F. has squandered  
 ‘Eva squandered them.’

b. \* *Eva* le ha sperperata.

c. \*Eva le ha sperperato.

d.

1		P	2
1		P	
1	P	Cho	
Eva	le.ha	sperperate	[3rd.F.PL]

Here the controller is again a 2 as in other agreement environments, but it is not a final 1 and the auxiliary is not *essere*, so the specious generalizations fall away. Diagram (6d) incorporates the idea that clitics in Italian are not nominals, but elements of verb morphology which signal a cancellation (so the reflexive type mentioned above is a special case of this broader analysis).<sup>5</sup> In this view, Italian clause structures can contain null pronouns consisting of a feature matrix, such as the 2 of (6d). These null nominals cannot bear a final relation (other than 1). In their presence, the grammar prescribes a cancellation, as seen in the second stratum of (6d). Concomitantly, the verb takes an affix (a clitic) registering the features of the cancelled element.<sup>6</sup>

Thus, cancellation of a 2 is a detransitivizing mechanism. What is common to all the PTCP agreement environments, including (6d), is the fact that the controller is a 2 and not a final 2. Or, as an alternative that works equally well at this point, we can envision a rule referring to the P-final stratum of the PTCP (the last stratum where it bears the P relation). In the standard PTCP agreement environments this stratum is always intransitive.<sup>7</sup>

2. The Participle Agreement Rule. Though there are other clause types to be considered, the ones surveyed above are sufficient to motivate a formal statement of the conditions for PTCP agreement in Italian. This formulation, which extends to cover adjective agreement as well, represents an innovation in that (as shown later in §4) it covers domains of data which have proved recalcitrant to all previous formal accounts of PTCP agreement.

(7) **Participle/Adjective Agreement In Italian**

Let *p* be a participle/adjective bearing the P-relation in clause *b*.

Then *p* inflects for gender and number iff:

- (i) the P-final stratum of *p* is intransitive, and
- (ii) a legal agreement controller exists.

Nominal *a* is a legal agreement controller iff it bears the 2-relation in clause *b*.

The gist of rule (7) is that a predicate of the relevant morphological class, if P-finally intransitive, must agree with a clausemate 2 if any is present. The basic examples (2-6) are covered: no agreement in (2) because the clause has no 2, and no agreement in (4) because the PTCP is P-finally transitive.

But the scope of the rule extends well beyond our introductory examples. One of its significant but routine consequences is the fact that adjectives agree with their arguments. Adjectives are intransitive predicates, uniformly unaccusative,<sup>8</sup> and morphologically unable to occur as the final P of a clause. Their typical syntactic contexts are exemplified by (8b), where the adjective is auxiliated, and (9b), where it serializes with another unaccusative:<sup>9</sup>

(8) a. *Eva era bellissima.*  
Eva was very.beautiful

(9) a. *Eva divenne bellissima.*  
Eva became very.beautiful

b.						
	2			P		
	1			P		
	-----					
	1	P		Cho		
	Eva	era		bellissima		

b.						
	2			P		
	2	P		Cho		
	-----					
	1	P		Cho		
	Eva	divenne		bellissima		

Under these analyses, the conditions for adjective agreement are the same as for PTCP agreement. The adjective has an intransitive P-final stratum and a clausemate 2 (*Eva*), with which it therefore agrees under our rule.

It can happen that two Ps of the relevant morphological type co-occur in one clause, and only one shows agreement. This is exemplified by (10), where causative *rendere* ‘make’ serializes with an adjective (here an agreeing PTCP *rese* would be non-standard, the same fact as in (4c)):

- (10) a. La situazione economica ha reso/-?e necessarie le misure restrittive.  
 ‘The economic situation has made the restrictive measures necessary.’

b.

				P	2
	1		P	Cho	2
	-----				
	1	P	Cho	Cho	2
	la situazione...	ha	reso	necessarie	le misure restrittive

The Ps *reso* and *necessarie*, though clausemates, do not match with respect to agreement. Rule (7) captures this by looking at the P-final stratum of each P: *necessarie* is P-finally intransitive, so it agrees with the 2, but *reso* has a valence that initializes a 1 (*la situazione...*), and its P-final stratum is transitive. Therefore *reso* does not meet the conditions for agreement. The picture changes, predictably, if we modify (10) by replacing the 2 with a null pronoun consisting of a feature matrix, which will give rise to a clitic:

- (11) a. La situazione economica le ha rese necessarie.  
 ‘The economic situation has made them necessary.’

b.

				P	2
	1		P	Cho	2
	-----				
	1	P	Cho	Cho	
	la situazione...	le	ha	rese	necessarie
					[3rd.F.PL]

In this case, the required cancellation of the null pronoun detransitivizes the second P-sector, with the result that *rese* and *necessarie* do match, both being P-finally intransitive and both agreeing mandatorily with the 2.

Also covered by rule (7) are passives, which can be twice auxiliated as in (12). In this case the three clausemate Ps include two PTCPs: the main verb (*condannata*) and the passive auxiliary (*stata* ‘been’).

- (12) a. La rottura della tregua è stata condannata dal Consiglio di Sicurezza.  
 ‘The violation of the truce has been censured by the Security Council.’

b.

2			P		1
1			P		Cho
1			P		Cho
1	P	Cho	Cho		Cho
la rottura...	è	stata	condannata		dal Consiglio...

In a passive structure, both PTCPS are P-finally intransitive, and both have a clausemate 2 (the nominal advancing from 2 to 1) with which they must agree.

Also covered by rule (7) is the construction we will call pretheoretically ‘Unspecified Human Subject’ (UHS), more problematic and more debated than any other cited above. As in other Romance languages, this construction is marked by a seemingly gratuitous reflexive clitic, and interpreted as if the final 1 were an abstract nominal ‘Pro-Arb’, whose meaning can be roughly characterized as ‘[+human]’ (more exactly, an empathy focus).<sup>10</sup> Under the analysis posited here (modifying that of Rosen 1988), a UHS clause contains a stratum with Pro-Arb as 1, after which an expletive (‘dummy’) enters as 2 and advances:

- (13) a. Si è cenato.  
 REFL. is dined  
 ‘One dined.’ [according to pragmatic context, 1st/2nd/3rd dined]

b.

	1		P
2	1		P
1,2	Cho		P
1	Cho		P
1	Cho	P	Cho
Expl	Pro-Arb	si.è	cenato

Unique to Italian, however, is the fact that Pro-Arb is plural, and regularly imposes this feature on adjectives and PTCPS in agreement environments.<sup>11</sup> For example, in a UHS clause formed on an unaccusative, the PTCP is plural:

- (14) a. Si è pervenuti/\*-o all’accordo di sospendere le ostilità.  
 REFL. is arrived at.the agreement to suspend hostilities  
 ‘One arrived at the agreement to suspend hostilities.’

b.

	2		P
	1		P
2	1		P
1,2	Cho		P
1	Cho		P
1	Cho	P	Cho
Expl	Pro-Arb	si.è	pervenuti

A mandatorily plural PTCP makes an odd contrast with the singular verb è ‘is’. But this discrepancy arises by rule: the rule inflecting a final P refers to the final 1, in this case a featureless expletive, hence the default third singular è. A different rule assigns PTCP agreement, namely rule (7). Like

any other unergative and unaccusative pair, (13b) and (14b) differ in that the initial term is a 2 in (14b), thus an agreement controller. Therefore the PTCP agrees with this 2, which is Pro-Arb, a plural nominal. The expletive is also a 2, but cannot be a controller, presumably owing to a broad principle whereby featureless nominals (expletives) are imperceptible to feature matching rules. In the same way, rule (7) accounts for agreement in the UHS counterparts of other clause types surveyed earlier. For example, Pro-Arb occurs as the initial 2 of the adjective in (15a) and of the passive PTCP in (15b):

- (15) a. Quando si è giovani, ...  
 when REFL.is young  
 ‘When one is young, ...’
- b. In quei momenti si è percorsi da un brivido di terrore.  
 at those moments REFL.is run.through by a shudder of terror  
 ‘At times like that, one is seized by a shudder of terror.’

It seems we have in (7) a simple and successful formalization of the condition for PTCP and adjective agreement.

3. Indirect Reflexives. There is one construction which, though central and conspicuous in the language, has proved fatal to all previous attempts to formalize the PTCP agreement data in Italian. This is the so-called ‘indirect’ reflexive, where a nominal is initially multiattached as 1 and 3:

- (16) a. *I senatori si sono concessi altre ricche prebende.*  
 the senators REFL.are granted other rich benefits  
 ‘The senators awarded themselves additional generous benefits.’
- b. *I senatori si sono concesse altre ricche prebende.*
- c. \* *I senatori si sono concesso altre ricche prebende.*

Agreement in (16) presents two apparent anomalies. First, the pattern (16b), where the PTCP agrees with a postverbal nominal, is acceptable and definitely falls within the bounds of the standard language (see §4.2 for references). This is odd in view of the contrast with (4c): outside the indirect reflexive construction, agreement with a postverbal nominal is non-standard and attested only rarely. Another oddity is that two different agreement patterns, (16a) and (16b), are equally acceptable in indirect reflexive clauses, though there is no such optionality in any other clause type. The PTCP agrees with one or the other of two legal controllers (non-agreement as in (16c) is impossible).

3.1. An Older Analysis. For clauses like (16) the only extant RG analysis is one adopted in works that focus on other Italian data (auxiliary selection and reflexive clitics) and ignore PTCP agreement (Perlmutter 1978, Rosen 1988). The initial stratum of (16) is uncontroversial: *concedere* ‘grant’ is ditransitive, as we can verify in a non-reflexive clause such as (17) (the dative clitic *gli* in (17b) confirms that the corresponding pronoun is a 3).

- (17) a. I senatori hanno concesso altre ricche prebende a X.  
 ‘The senators awarded additional generous benefits to X.’
- b. I senatori gli hanno concesso altre ricche prebende.  
 ‘The senators awarded them additional generous benefits.’

For a reflexive clause like (16), then, the initial stratum contains all three term relations, but one nominal is multiattached as 1 and 3. Under the older analysis, given here as (18), a cancellation ensues in the second stratum:

(18)

1,3	P	2
1	P	2
1	P	Cho
i senatori	si.sono	concessi concesse
		2
		altre ricche prebende

Both Perlmutter 1978/1989 and Rosen 1988, in stating the distribution of auxiliaries *avere* ‘have’ and *essere* ‘be’, have to come to terms with the fact that diagram (18) departs from the otherwise fully general pattern. Normally, they note, *essere* is selected in exactly those clauses where a single nominal bears both the 1 and 2 relations. But indirect reflexive clauses also select *essere*, and the analysis in (18) shows no such nominal. Perlmutter and Rosen both elect to modify the auxiliary rule, making it refer to object relations, a class that compromises both 2 and 3:

- (19) **Perlmutter 1989: Italian Auxiliary Selection**<sup>12</sup>  
 If there is a nominal heading both a 1-arc with tail *b* and an Object arc with tail *b*, then clause *b* requires the perfect auxiliary *essere*. Otherwise it requires *avere*.

This ad hoc adjustment reconciles the rule with the structure in (18), making a 1-3 multiattachment meet the condition for auxiliary *essere*. But the change from ‘2’ to ‘object’ is motivated only by (18) and no other construction. The analysis in (18) becomes even more suspect when we take into account PTCP agreement. This structure, when confronted with the otherwise valid PTCP agreement rule in (7), fails to correspond to the facts. The PTCP is shown as P-finally transitive, so it should not agree at all, but it does. A second mystery is the fact that there are two potential agreement controllers. And, oddest of all, one of the controllers would be a non-2, *i senatori* in (18), which would bear only 1 and 3 relations. In no other context does 1-hood confer the ability to control agreement (recall (2b) (4b)), nor does 3-hood, as we can verify in the following examples with and without clitics:

- (20) a. I senatori hanno concesso altre ricche prebende a X.  
 ‘The senators awarded additional generous benefits to X.’
- b. \* I senatori hanno concessi altre ricche prebende a X.
- (21) a. I senatori gli hanno concesso altre ricche prebende.  
 ‘The senators awarded them additional generous benefits.’
- b. \* I senatori gli hanno concessi altre ricche prebende.



Thus, the older analysis of indirect reflexives is faulty not only because it requires an ad hoc extension of the condition for *essere*, but also because it fails to interact correctly with the PTCP agreement rule.

3.2. A New Analysis. As a counterproposal, we suggest that reflexive verb morphology (i.e. the reflexive clitic) conforms to the following principle in Italian and indeed throughout most of the Romance family:

(22) Every reflexive clitic correlates biuniquely with a 1-2 multiattachment.

This principle, characterizing the whole distribution of reflexive clitics, goes hand in hand with the claim that in indirect reflexives too, there is a 1-2 multiattachment. Against (18), we propose the following structure:

(23)

1,3		P	2
1,2		P	Cho
1		P	Cho
1	P	Cho	Cho
i senatori	si.sono	concessi concesse	altre ricche prebende

Under this analysis, any stratum with a nominal multiattached as 1 and 3 is always followed by a stratum where the same nominal is multiattached as 1 and 2. Otherwise stated: such nominals advance from 3 to 2.

Before taking up the independent evidence for this 3 and 2 advancement, we note some immediate corollaries. First, the auxiliary selection rule takes on a simpler form (as stated by Davies and Rosen 1988:63, with acknowledgement to the proposal presented here):

(24) **Italian Auxiliary Selection**

An auxiliary is *essere* ‘be’ if the nominal heading its P-initial 1-arc also heads a 2-arc in the same clause.

This rule correctly selects auxiliary *essere* for the structure in (23), since *i senatori*, the P-initial 1 of the auxiliary, is also a 2 in the same clause. The disjunction (‘2 or 3’), which in the older formulation (19) served only to accommodate indirect reflexives, is now eliminated.

Second, the agreement phenomena unique to indirect reflexives are exactly predicted by the rule already stated in (7). In (23), the nominal advancing from 3 to 2 chômeurizes the initial 2. Therefore the P-final stratum of the PTCP is intransitive, under which condition it must agree with a clausemate 2. Moreover, the clause contains two potential agreement controllers: one is the initial 2 (*altre ricche prebende*), the other is the multiattached nominal that advances to 2 (*i senatori*). Agreement with either of these 2s satisfies the requirement, hence the optionality peculiar to this construction.

3.3. Evidence for Advancement in Indirect Reflexives. Besides simplifying the auxiliary selection rule and the condition for reflexive clitics, and besides explaining the agreement pattern peculiar to indirect reflexives, the 3 to 2 advancement analysis given in (23) is also corroborated in other ways. Four arguments for this advancement are outlined below.

3.3.1. Argument One: Impossibility of Passive. The attempted passive (25b) below illustrates the fact that indirect reflexive clauses have no passive counterpart. But under the original analysis in (18), nothing happens to the initial 2: the clause is finally transitive, and would be expected to have a corresponding passive. The non-advancement analysis wrongly makes available a hypothetical passive structure (25c), which has to be excluded ad hoc:

- (25) a. Le suore si sono imposte/-a una dura penitenza.  
 the nuns REFL. are impose a harsh penance  
 ‘The nuns imposed on themselves a harsh penance.’
- b. \* Una dura penitenza si è stata imposta dalle suore.  
 a harsh penance REFL. is been imposed by the nuns  
 ‘A harsh penance is been imposed on themselves by the nuns.’

c. **Hypothetical Passive Under The Non-Advancement Analysis**

2			P	1,3
2			P	1
1			P	Cho
1		P	Cho	Cho
1	P	Cho	Cho	Cho
una dura penitenza	si.è	stata	imposta	dalle suore

Under the advancement analysis, the first P-sector of (25a) is sufficient to explain why it has no passive counterpart:

- (26)
- |          |         |                    |     |                    |
|----------|---------|--------------------|-----|--------------------|
| 1,3      |         |                    | P   | 2                  |
| 1,2      |         |                    | P   | Cho                |
| 1        |         |                    | P   | Cho                |
| ...      |         |                    | ... | ...                |
| le suore | si.sono | imposte<br>imposta |     | una dura penitenza |

The premise of this analysis is that a 1-3 multiattached nominal must advance to 2. As a concomitant to this advancement, the initial 2 becomes a chômeur, which is why it cannot advance via passive.<sup>13</sup>

3.3.2. Argument Two: The Feature Passing Condition. An arcane point of Italian grammar, never explained in formal terms to the best of our knowledge, is illustrated by the pair of UHS constructions in (27), nearly identical except that in (27a) the verb shows plural agreement. It is unclear at first why this contrast should affect the meaning in exactly the way it does: in (27a) the 3 is ‘us’ and the 1 is some distinct party represented as Pro-Arb, whereas (27b) is reflexive, with Pro-Arb understood to be both 1 and 3:

- (27) a. Ci si *ponevano* le seguenti domande.  
 us REFL.put.PL the following questions  
 ‘Pro-Arb put to us the following questions.’

- b. Ci si *poneva* le seguenti domande.  
 REFL.REFL.put the following questions  
 ‘Pro-arb put to self (or each other) the following questions.’

To understand (27a), consider first an ordinary initially transitive UHS construction, a type omitted from the brief survey in (13-15):

- (28) a. Si soffriggono le cipolle per cinque minuti.  
 REFL.sauté.PL the onions for five minutes  
 ‘Pro-Arb sautés the onions for five minutes.’  
 ‘The onions are sautéed for five minutes.’

b.

	1	P	2
2	1	P	Cho
1,2	Cho	P	Cho
1	Cho	P	Cho
Expl	Pro-Arb	si.soffriggono	le cipolle...

The analysis in (28b) accounts for the meaning, the word order, the reflexive clitic, and correctly predicts that in a corresponding perfective clause, the auxiliary is *essere* and the PTCP agrees with *le cipolle*. However, something has to be said about the inflection on the verb. Normally this agreement is with final 1s, but here the verb agrees with *le cipolle*, a pattern reminiscent of English existentials (*there are two mice...*). To formalize this phenomenon and keep it correctly circumscribed, the notion of a ‘Brother-in-Law’ relation has been proposed (Perlmutter 1983, Perlmutter and Zaenen 1984):

- (29) A nominal *chômeur*ized by the birth of an expletive (‘dummy’) stands in the relation of Brother-in-Law (BIL) to that expletive.<sup>14</sup>

Along with this definition comes the hypothesis that universal grammar makes available a ‘Brother-in-Law Option’, a schema for interpreting certain rules of morphosyntax (the proposed limits do not concern us). Languages may select this option across the board, or even for single constructions (as is claimed for English existentials). The effect is as follows:

- (30) A rule interpreted under the Brother-in-Law Option replaces the features of an expletive by the features of its BIL, if any.

Examples are ready at hand: Italian always uses the BIL option for both case marking and verb agreement, while French never does. Compare *c’est moi* (Expl is me) with *sono io* (Expl am I) ‘it’s me’. Under this analysis, many pairs of Italian and French constructions are alike in abstract structure but differ in realization, owing to the one rule feature [+BIL] versus [-BIL]. The Italian verb agreement rule remains intact, except that we now add the feature [+BIL]:

- (31) A final P, if finite, inflects to agree with its final 1. [+BIL]

These notions yield a coherent account of verb agreement in UHS constructions. Returning to (28b), note that the final 1 is an expletive. The agreement rule referring to this final 1 uses the BIL option, so agreement control reverts to *le cipolle*, which is the BIL of the expletive. Returning to (13-15), one can verify that in these cases the birth creates no *chômeur*, the expletive has no BIL, therefore the verb can only occur in a default third singular form.

Now, returning to the mysterious minimal pair (27), we take (27a) to be an ordinary initially transitive UHS clause with a structure like (28b), repeated here for clarity. It differs from (28) only in having a pronominal 3:

- (32) a. Ci si *ponevano* le seguenti domande.  
 us. REFL.put.PL the following questions  
 ‘Pro-Arb put to us the following questions.’
- b.
- |      |         |                       |                     |          |
|------|---------|-----------------------|---------------------|----------|
|      | 1       | P                     | 2                   | 3        |
|      | 1       | P                     | 2                   |          |
| 2    | 1       | P                     | Cho                 |          |
| 1,2  | Cho     | P                     | Cho                 |          |
| 1    | Cho     | P                     | Cho                 |          |
| Expl | Pro-Arb | <i>ci.si.ponevano</i> | le seguenti domande | [1st.PL] |

Just as in (28b), the expletive regularly born in UHS clauses *chômeurizes* the initial 2 *le seguenti domande*, which thus qualifies as BIL to the expletive. Under the [+BIL] agreement rule, control reverts to *le seguenti domande*, so the verb inflects as a third person plural.

With (32) [= (27a)] we have accounted for half of the mysterious minimal pair. The next necessary fact is that Italian (again unique among the Romance languages) allows two reflexive markers in one clause. Constructions normally marked with a reflexive clitic have a UHS counterpart with double reflexive marking, realized not as *si si*, but as *ci si*. For example, a reflexive clause such as (33a) has a UHS counterpart (33b), analyzable as in (33c):

- (33) a. I due testimoni si contraddicevano.  
 the two witnesses REFL.contradicted.PL  
 ‘The two witnesses contradicted themselves (or each other).’
- b. Ci si contraddiceva.  
 REFL.REFL. contradicted  
 ‘Pro-Arb contradicted self (or each other).’
- c.

	1,2	P
	1	P
2	1	P
1,2	Cho	P
1	Cho	P
Expl	Pro-Arb	<i>ci.si.contraddiceva</i>

The second member of our minimal pair, analyzed below in (34) [= (27b)], is a UHS clause with reflexive (or reciprocal) meaning, similar to (33b), except we are now dealing with an indirect reflexive: Pro-Arb is initial 1 and 3.

- (34) a. Ci si *poneva* le seguenti domande.  
 REFL.REFL.put the following questions  
 ‘Pro-Arb put to self (or each other) the following questions.’

b.

	1,3	P	2
	1,2	P	Cho
	1	P	Cho
2	1	P	Cho
1,2	Cho	P	Cho
1	Cho	P	Cho
Expl	Pro-Arb	<i>ci.si.poneva</i>	le seguenti domande

Why is the verb plural in (32) but singular in (34)? The advancement analysis for indirect reflexives yields the answer. The difference is that in (32b), as we saw, the expletive *chômeur*izes *le seguenti domande* and thus has a plural BIL, resulting in a plural verb. But (34b) has an initial 1-3 multiattachment. Under the advancement analysis, advancement to 2 ensues, *chômeur*izing the initial 2. The expletive in (34b), just as in (33c), enters from a 2-less stratum, creates no *chômeur*, has no BIL, and is featureless. Therefore as final 1, it yields default third singular verb agreement.

Of the two UHS constructions we contrasted, then, (27a) corresponds to a non-reflexive ('Pro-Arb put to us...') and (27b) to an indirect reflexive ('Pro-Arb put to self...'). The entering expletive encounters a 2 in type (27a), but not in type (27b), which behaves as if already detransitivized, as is predicted by the advancement analysis for the indirect reflexives. From the non-advancement analysis, on the other hand, we obtain a wrong prediction:

(35) **Hypothetical UHS Construction Under The Non-Advancement Analysis**

	1,3	P	2
	1	P	2
2	1	P	Cho
1,2	Cho	P	Cho
1	Cho	P	Cho
Expl	Pro-Arb	<i>ci.si.poneva</i>	le seguenti domande

This analysis leaves the 2 intact in the second stratum. This 2, *chômeur*ized by the birth of the expletive, is a BIL and should control verb agreement by the usual BIL mechanism, just as happens in (28) or (32). So this view of indirect reflexives leaves the phenomenon unexplained.

3.3.3. Argument Three: Impossibility of Reflexive Passive. Alongside UHS constructions like (36a) [= (28a)], there is another variety (36b) in which no expletive enters. Instead, the initial 2 advances to 1, as shown in (36c):

- (36) a. Si soffriggono le cipolle per cinque minuti. [= (28a)]  
 REFL.sauté.PL the onions for five minutes  
 'Pro-Arb sautés the onions for five minutes.'  
 'The onions are sautéed for five minutes.'
- b. Le cipolle si soffriggono per cinque minuti.  
 the onions REFL.sauté.PL for five minutes  
 'The onions are sautéed for five minutes.'

c.

	2	1	P
	1,2	Cho	P
	1	Cho	P
le cipolle		Pro-Arb	si.soffriggono

Superficially, these look like mere word order variants, with the postverbal nominal of (36) appearing preverbally in (36b). In the analysis adopted here (based on Perlmutter 1983, Rosen 1988, among other works), *le cipolle* is postverbal in (36a) because it is a 2-chômeur (recall (28b)), but preverbal in (36b) because it advances to become the final 1.

Keeping in mind these ordinary UHS clauses (with Pro-Arb as 1), we turn to the corresponding indirect reflexives (with Pro-Arb as both 1 and 3). Indirect reflexives also have a postverbal nominal, *le seguenti domande* in (37a). But unlike (36), there is no variant in which that nominal occurs preverbally:

- (37) a. Ci si *poneva* le seguenti domande. [= (27b)]  
 REFL.REFL.put the following questions  
 ‘Pro-Arb put to self (or each other) the following questions.’
- b. \* Le seguenti domande ci si *poneva*.  
 the following questions REFL.REFL.put  
 ‘The following questions were put to self (or each other) by Pro-Arb.’

Evidently, ‘free word order’ is not a sufficient explanation for the variants in (36), since (37b) cannot occur. The reason for its exclusion is syntactic: with a 1-3 multiattachment in place, no 2 can advance to 1. The early strata for (37a) are sufficient to show why, with an initial stratum of this form, there is no possibility for *le seguenti domande* to advance to 1:

(38)

	1,3	P	2
	1,2	P	Cho
	1	P	Cho
...	...	...	...
Expl	Pro-Arb	ci.si.poneva	le seguenti domande

Under the advancement analysis for indirect reflexives, a 1-3 multiattachment converts to 1-2, as in (38), with the result that the previous 2 is a chômeur, ineligible for advancement (compare also (26) and note 13).

The older analysis for indirect reflexives fails to explain why (37b) is excluded. It wrongly makes available a structure such as:

(39) \* **Hypothetical UHS Construction Under The Non-Advancement Analysis**

	2	1,3	P
	2	1	P
	1,2	Cho	P
	1	Cho	P
le seguenti domande		Pro-Arb	ci.si.ponevano

This analysis does not chômeurize the 2, so there is no apparent reason why it cannot advance as *le cipolle* does in (36c). The unwanted structure (39) also predicts that the final 1 should impose plural verb agreement, but as we saw in §3.3.2 (see (27)), there is no such clause with a reflexive meaning.

3.3.4. Argument Four: Reciprocals. Another argument rests on properties of the reciprocal phrase *l'un...l'altro* 'each other', rarely if every exploited in syntactic argumentation. After seeing how it interacts with obliques, then with 2s, we turn to the format of reciprocals involving 3s.

If the reciprocity involves some oblique relation marked by a preposition, that marker is infixes in the phrase *l'un...l'altro*, mandatorily (see (40b)). No reciprocal (= reflexive) clitic can appear on the verb (see (40c)).<sup>15</sup> And *l'un...l'altro* itself cannot be omitted (see (40d)).

- (40) a. Ugo conta *su* Leo.  
Ugo counts on Leo
- b. Eva e Tea contano l'una *sull'*altra / \* l'un l'altra.  
Eva and Tea count one on the other one the other
- c. \* Eva e Tea si contano l'una *sull'*altra / l'un l'altra.  
Eva and Tea REFL.count one on the other one the other
- d. \* Eva e Tea si contano.  
Eva and Tea REFL.count.

If the reciprocity involves the 1 and 2 relations, these properties reverse themselves. The phrase *l'un...l'altro* contains no preposition, a reflexive clitic is mandatory (see (41b,c)), and *l'un...l'altro* is optional (see (41d)):

- (41) a. Ugo influenza Leo.  
Ugo influences Leo
- b. Ivo e Meo si influenzano l'un l'altro.  
Ivo and Meo REFL.influence one the other
- c. \* Ivo e Meo influenzano l'un l'altro.  
Ivo and Meo influence one the other
- d. Ivo e Meo si influenzano.  
Ivo e Meo REFL.influence

Which pattern should be expected for 3s? Overt 3s in Italian are marked by a preposition *a*. Strangely, however, the forms in (42) echo the pattern for 2s:

- (42) a. Ugo somministrò a Leo un potente sonnifero.  
Ugo administered to Leo a strong sleeping pill
- b. Ivo e Meo si somministrarono *l'un l'altro* un potente sonnifero.  
Ivo and Meo REFL.administred one the other a strong sleeping pill
- c. \* Ivo e Meo somministrarono l'un l'altro un potente sonnifero.  
Ivo and Meo administered one the other a strong sleeping pill

- d. Ivo e Meo si somministrarono un potente sonnifero.  
Ivo and Meo REFL.administered a strong sleeping pill

What emerges in (42) is that 1-3 multiattachment can produce the same forms as a 1-2 multiattachment: a reflexive clitic, a prepositionless and optional *l'un l'altro*, and, without it, an undetermined meaning (since reflexive and reciprocal clauses are identical in structure when not overtly disambiguated).

Besides (42), however, there is another way to form reciprocals involving the 1 and 3 relations. The forms in (43) echo the pattern for obliques:

- (43) a. Ugo somministrò a Leo un potente sonnifero.  
Ugo administered to Leo a strong sleeping pill
- b. Ugo e Meo somministrarono *l'uno all'altro* un potente sonnifero.  
Ugo and Meo administered one to the other a strong sleeping pill
- c. ?\* Ugo e Meo *si* somministrarono *l'uno all'altro* un potente sonnifero.  
Ugo and Meo REFL.administered one to the other a strong sleeping pill

This option treats 3s like obliques in that the phrase *l'un...l'altro* includes a preposition (see (43b)). Under this condition the reflexive clitic, totally excluded with obliques, is almost totally excluded with 3s (see (43c)).

To explain these facts, a useful hypothesis would be that *l'un...l'altro* is a predicate, having an unspecified one-place valence, requiring only that its argument be multiattached in the next stratum.<sup>16</sup> This analysis envisions such structures as (44), among others.

- (44) a.
- |           |                |              |
|-----------|----------------|--------------|
| 1         |                | P            |
| 1,2       | P              | Cho          |
| 1         | P              | Cho          |
| Ivo e Meo | si.influenzano | l'un l'altro |
- b.
- |           |         |                  |
|-----------|---------|------------------|
| 1         |         | P                |
| 1,Obl     | P       | Cho              |
| 1         | P       | Cho              |
| Eva e Tea | contano | l'una sull'altra |

The proposal is efficient. First, *l'un...l'altro*, in causing its argument to be interpreted as a set of reciprocators, serves as a semantic role assigner, a normal function for Ps. Second, being a P, *l'un...l'altro* does not behave like a nominal (it cannot passivize, conjoin, topicalize, etc.). Third, it linearizes in the normal position for an innermost P-chômeur. Fourth, features on *l'un...l'altro* (for instance, feminine in (44b)) are determined by a rule that refers to its argument, as opposed to the traditional view taking it to be an ‘anaphor’. Fifth, from the claim that its ‘antecedent’ is actually its argument, we obtain automatically the equivalent of a ‘clausemate antecedent’ requirement. Sixth, by leaving its valence unspecified, we correctly admit a range of possibilities where its argument is not a 1 (e.g. *li proteggo l'uno dall'altro* ‘I protect them from each other’).<sup>17</sup>



The point for present purposes, however, is that the highly specialized P *l'un...l'altro* also carries case marking, again reflecting the status of its argument. Based on (44), the rule is: in the multiattachment headed by the argument of *l'un...l'altro*, the lower relation determines a case marker (zero or a preposition) which is registered in the P *l'un...l'altro*. Under this rule *l'un l'altro* in (44a) is zero-marked, reflecting the 2-hood of the argument, while in (44b) *l'una sull'altra* is marked for the particular oblique relation assigned to the argument by *contare su* 'count on'.

The interaction of *l'un...l'altro* with 3s weighs heavily in favour of the advancement analysis. We saw two options, now analyzed as follows:

(45) a.

1	P	P	2
1,3	P	Cho	2
1,2	P	Cho	Cho
1	P	Cho	Cho
Ugo e Meo	si.somministrarono	l'un l'altro	un sonnifero

b.

1	P	P	2
1,3	P	Cho	2
1	P	Cho	2
Ugo e Meo	si.somministrarono	l'uno all'altro	un sonnifero

Without an advancement analysis, all indirect reflexive clauses would resemble (45b) in that the only multiattachment they contain is 1-3 (recall (18)). The old analysis makes no provision for explaining how (45a) and (45b) differ, or why we find that, strikingly, *l'un l'altro* is prepositionless in the presence of reflexive clitic marking on the verb.

Given the advancement analysis, however, we simplified the conditions for auxiliary *essere* and for reflexive clitics, taking the view that these rules refer to 2s, not 3s. So (45a,b) both contain a cancellation, but under the 1-2 multiattachment condition it yields a reflexive clitic only in (45a), not in (45b) (see rule (22)). For the same reason, perfective clauses parallel to (45a,b) differ in that (45a) would select auxiliary *essere* and (45b) auxiliary *avere* (see rule (24)), which is true.

The prepositionless *l'un l'altro* is a further reason for positing a 1-2 multiattachment stratum in (45a). Case marking on *l'un...l'altro* is readily captured in a rule referring to the last multiattachment: its lower relation determines the case marking. This relation is 2 in (45a), hence a zero-marked *l'un l'altro*, and 3 in (45b), hence the preposition in *l'uno all'altro*.<sup>18</sup>

To sum up §3.3.: the advancement analysis for indirect reflexives, under which 1-3 multiattachments convert to 1-2, is corroborated by four kinds of evidence. In addition to its independent motivation, the advancement analysis also reduces the condition for reflexive clitics (see (22)) and for auxiliary *essere* (see (24)) to a simpler form than was previously thought possible.

4. Epilogues to the Italian Participle Agreement Rule. It remains true, then, that we have in (7) a simple and successful formulation of the condition for PTCP and adjective agreement in Italian. It interacts correctly with the independently established structure for indirect reflexives, repeated here:

- (46) a. *I senatori si sono concessi altre ricche prebende.*  
 the senators REFL.are granted other rich benefits  
 ‘The senators awarded themselves additional generous benefits.’
- b. *I senatori si sono concesse altre ricche prebende.*
- c. \* *I senatori si sono concesso altre ricche prebende.*
- d.

1,3		P	2
1,2		P	Cho
1		P	Cho
1	P	Cho	Cho
i senatori	si.sono	concessi concesse	altre ricche prebende

The agreement pattern that seemed anomalous now proves to be exactly predicted by the rule. The PTCP is P-finally intransitive, so rule (7) requires it to agree with a clausemate 2. The reason why either term is a legal controller is that both are 2s. Agreement with either of them satisfies the rule.

Below, after noting one more result, we turn to the empirically inadequate formulation in Burzio 1986, and then to a general Feature Harmony Principle in Italian which makes PTCP agreement optional under certain conditions.

4.1. Antipassive. Indirect reflexives are actually not the only context where a PTCP can agree with either of two controllers. There is another type where this optionality is also an undeniable fact. Superficially similar to indirect reflexives, these clauses are best analyzed with no initial 3, since they are truth-conditionally synonymous to corresponding monotransitives:

- (47) a. *I Verdi si sono scordati le chiavi.*  
 the Verdis REFL.are forgotten the keys  
 ‘The Verdis forgot the keys.’
- b. *I Verdi si sono scordate le chiavi.*
- c. \* *I Verdi si sono scordato le chiavi.*
- (48) a. *Eva si è già scolata cinque birre.*  
 Eva REFL.is already drained five beers  
 ‘Eva has already knocked back five beers.’
- b. *Eva si è già scolate cinque birre.*
- c. \* *Eva si è già scolato cinque birre.*

d.

1		P	2
1,2		P	Cho
1		P	Cho
1	P	Cho	Cho
Eva	si.è	scolata scolate	cinque birre

The analysis in (48d), first presented in La Fauci 1984, takes these clauses to be instances of demotion from 1 to 2, as in the antipassive construction (Davies 1984), but in this case retroherent (= reflexive).<sup>19</sup> The antipassive structure correctly entails not only their truth-conditional equivalence to their non-reflexive variants, but also all the observed morphosyntax: from the intervening 1-2 multiattachment we predict a reflexive clitic, auxiliary *essere*, detransitivization, and PTCP agreement with either of two controllers.

4.2. Critique of Burzio 1986. Given that the phenomenon of optional PTCP agreement with either of two possible controllers is attested so conspicuously and centrally for indirect reflexives in Italian, it is more than a little surprising to find the following given as data in Burzio (1986:61, his (98b)):

(49) **Indirect Reflexives In Burzio 1986**

Maria si è comprata/??-o un libro.  
 Maria REFL.is bought a book  
 ‘Maria bought herself a book.’

In the first place, an example with *un libro* as initial 2 is an unfortunate choice, because its masculine singular features produce the same PTCP forms as the default forms from non-agreeing PTCPs. The alleged (near) ungrammaticality of *comprato* in (49) might be meant to illustrate either of two points, and the commentary by Burzio leaves the distinction murky.

If the intended generalization is that non-agreeing PTCPs are excluded in this context, then this is not a case of quasi-ungrammaticality, but of total ungrammaticality. Agreement is mandatory here, as we have seen all along.

If, on the other hand, (49) is meant to assert that a PTCP agreeing with the postverbal nominal is excluded in an indirect reflexive, this is factually incorrect, too far from reality to be saved by any ‘in my idiolect’ defense. This agreement pattern belongs to the standard language, and the descriptive grammarians bear witness to it (see Dardano and Trifone 1983:258, Fogarasi 1983:381, Ghiselli and Casagrande 1974:146, Lepschy and Lepschy 1979:198 ff., Migliorini 1947:248, Morandi and Cappuccini 1923:189, Spore 1975:177, Trabalza and Allodoli 1939:233, Sensini 1990:259, Insolera 1991:78). In fact, some of the authors just cited regard this agreement pattern as the more standard and the more frequently attested of the two.

Only with a systematic black-out of data like (46-48) can Burzio propose the following rule of PTCP agreement (1986:55-56, his (86b)):

(50) **Participle Agreement In Italian (Burzio 1986)**

A past participle will agree (in gender and number) with an element holding a ‘binding relation<sub>1</sub>’ with its ‘direct object’.

Following up the definitions of the terms in quotation marks (see Burzio's (87) and (103)), one can verify that under rule (50) the agreement pattern in (46b) (47b) (48b) should be ungrammatical, which is not the case. This is one of two ways in which Burzio's account fails to correspond to the facts.

The other problem, one that he acknowledges, is that in the types (46-48), both agreement patterns are deemed ungrammatical under Burzio's rule. Though he asserts that the PTCP must agree with the final 1 (the other option goes unrecognized, as we saw), Burzio nonetheless offers a formulation which fails to license this agreement: *Maria* in (49) is not a 'binding relation<sub>1</sub>' with *un libro*. Conceding that something is wrong, he suggests that this agreement may be justified not syntactically, but as an analogical effect, based on the fact that *si* shows no overt accusative/dative contrast.<sup>20</sup> The proposal seems to be that 3s, if marked by clitics lacking the case contrast, behave like 2s. But non-third person pronouns belie this. Their 3-clitics (*mi ti ci vi*) look like 2-clitics, yet the agreement rule is not fooled: 3-hood never qualifies a nominal as a controller (*\*ci ha risposto* 'he replied to us' is impossible).

Pursuing the idea that the agreement in (49) need not to be predicted, Burzio states: "agreement with indirect object reflexives is somewhat weaker" [than the cases covered by his rule]. He concludes in favour of his formulation, which treats as non-existent both of the agreement patterns shown in (46-48).

Also excluded from consideration are the indirect reflexives with verbs taking only a 1 and 3, such as *nuocere* 'do harm'. In (51b) we have another instance of PTCP agreement which is undeniably mandatory:

- (51) a. Tacendo, Pio e Leo hanno nociuto a se stessi.  
 remaining.silent Pio and Leo have done.harm to themselves
- b. Tacendo, Pio e Leo si sono nociuti/\*o.  
 remaining.silent Pio and Leo REFL.are done.harm  
 'By not talking, Pio and Leo did harm to themselves (or each other).'

c.

1,3	P
1,2	P
1	P
-----	
1	P
Pio e Leo	si.sono
	nociuti

Rule (7) correctly entails that the PTCP, being P-finally intransitive, must agree with its clausemate 2 *Pio e Leo*. Burzio's rule (50) wrongly predicts that this nominal will not control PTCP agreement, since in his framework it does not stand in a 'binding relation<sub>1</sub>' with a direct object.

In short, Burzio's account covers a range of clause types including our introductory examples (2-6), but breaks down when confronted with reflexives involving a 3. Moreover, since GB's Projection Principle seems to forbid any analogue of 3 to 2 advancement, it is far from clear how Burzio's account could be modified to reproduce the RG analysis offered here.<sup>21</sup>

4.3. Feature Harmony. In all cases seen so far, PTCP agreement is either impossible or mandatory (with a choice between two possible controllers in the cases we emphasized). But there is one more phenomenon to be considered: in some contexts, a controller correctly selected by rule

(7) imposes agreement only optionally, and a non-agreeing PTCP is also an option. This happens, for example, when the 2 is a pronoun represented by a clitic other than the third person series *lo la li le* (thus, a first or second person or partitive):

- (52) a. *Ida vi ha disillusi/-o.*  
 Ida 2nd.PL has disappointed  
 ‘Ida disappointed you (M.PL).’
- b. *Ada ci ha sgridate/-o.*  
 Ada 1st.PL has scolded  
 ‘Ada scolded us (F.PL).’
- c. *L’assessore ne ha intascate/-o tre.*  
 the councilman PART.has pocketed three  
 ‘The councilman pocketed three of them (F.PL).’

This effect does not follow from rule (7), so something further must be said. The goal of this section is to show that wherever it occurs, this phenomenon reflects a single morphological principle, stated here:

(53) **Feature Harmony Condition for Mandatory PTCP Agreement in Italian.**

Let N be a pronoun bearing no final relation. Where N is an eligible controller, N is a mandatory controller if and only if the morphology marking its cancellation registers all the features registered in PTCP agreement. Otherwise, agreement with N is optional.

A first effect of the Feature Harmony Condition is to entail that agreement in contexts like (52) is optional. These examples have as their initial 2 a null pronoun N (an abstract feature matrix) in a syntactic environment where it can control PTCP agreement. If the clitic marking a cancellation of N is one that does not register gender (*mi, ti, ci, vi, ne*), as in (52), the Feature Harmony Condition states that agreement with N is optional rather than mandatory. In these cases, the Feature Harmony Condition overrides the PTCP agreement rule, which would otherwise require agreement in (52).

Below, as we verify that this principle is fully general, it is essential to recall that clitics are items of verb morphology signalling cancellations. Since clitics are not nominals, and no clitic ever bears the 2 relation, there is no such thing as ‘agreement with a clitic’. This is why reflexive clauses, though their clitics are genderless (*mi ti ci vi si*), do not behave like those in (52). To repeat a typical *si* clause:

- (54) a. *Lia si è derisa/-\*o.* [= (5)]  
 Lia REFL.is mocked  
 ‘Lia mocked herself.’

b.

1,2		P
1		P
1	P	Cho
Lia	si.è	derisa

The controller in (54b), the nominal meeting the 2-hood requirement, is *Lia*. But the Feature Harmony Condition refers to a closed class of controllers: the null pronouns (feature matrices)

which, owing to cancellation, bear no final relation. *Lia* is not a member of that class, so the Feature Harmony Condition is inapplicable in (54), and agreement with *Lia* remains mandatory.

Controllers may be null and still not belong to the class specified in the Feature Harmony Condition. Pro-Arb in UHS constructions is null, but finally a 1-chômeur. Final 1s can be null pronouns (as in *siamo partiti* ‘we left’), but these are not in the specified class, so the Feature Harmony Condition never intervenes when these elements control PTCP agreement.

The Feature Harmony Condition does intervene, however, to create a further effect shown in (55). In indirect reflexives with an initial 2, a structure that normally yields a choice between two legal controllers, the presence of a third person clitic (*lo la li le*) tends to block their alternation:

(55) a. Eva se le è iniettate.  
 Eva REFL.them.F.is injected  
 ‘Eva injected them into herself [lit., to herself].’

b. \*? *Eva se le è iniettata.*

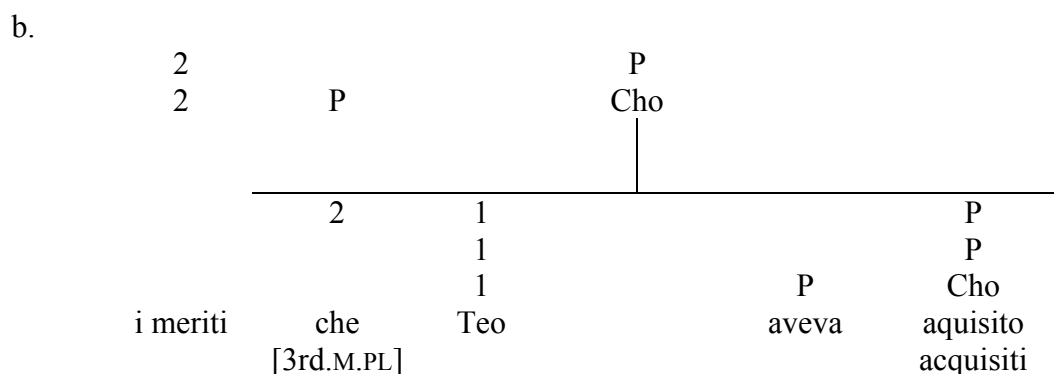
c.

1,3		P	2
1,3		P	
1,2		P	
1		P	
1	P	Cho	
Eva	se.le.è	iniettate ?*iniettata	[3rd.F.PL]

To see why the option of agreement with *Eva* becomes unavailable, recall that rule (7) identifies PTCPs that must exhibit agreement, and nominals that may control it. This difference in modality is vacuous when only one possible controller is identified, but becomes important in cases where two nominals qualify as controllers: the PTCP meets the requirement by agreeing with either one (we avoided a formulation that would wrongly require it to agree with both simultaneously). So rule (7) sees in (55c) a PTCP that must exhibit agreement, and two nominals that may control it. The Feature Harmony Condition, on the other hand, identifies in (55c) a nominal that must control agreement, namely the null pronoun [3rd.F.PL]. The observed agreement pattern satisfies both rule (7) and the Feature Harmony Condition.<sup>22</sup>

Also subsumed in the same family of facts is the alternation seen in (56): in relative clauses a PTCP agrees optionally with a relativized 2. To avoid a long excursus on the (clause-like) internal structure of nominals, diagram (56b) shows only the first two strata of the nominal (56a):

(56) a. *I meriti* che Teo aveva acquisito/-i...  
 the merits that Teo had acquired



This partial structure is sufficient to capture the fact that the relative clause contains a variable (feature matrix), and occurs as a nominal-internal predicate, with *i meriti* as its argument. The content of this predication, including the selectional restriction imposed on *i meriti*, is computable from the form of the relative clause. Diagram (56b) also incorporates the idea that the pronominal variable undergoes cancellation, bears no final relation in the relative clause, and is realized as *che*.<sup>23</sup> This *che* would thus have in common with clitics the fact that it marks a cancellation. This puts it in the class of agreement controllers specified in the Feature Harmony Condition, which correctly entails that *che*, since it registers neither gender nor number, will control agreement only optionally.

We have seen that the interaction of the PTCP agreement rule (7) with the Feature Harmony Condition (53) accounts not only for the major outlines of the phenomenon, but also for the seemingly intricate patterns of optionality which may involve, according to the context, a choice between two possible controllers (predictably revoked in (55)) or a choice between agreement and non-agreement.

### Past Participle Agreement in French

5. PTCP agreement in periphrastics has ranked high among the topics most discussed by normative French grammarians over the centuries, with the result that even the government has had a hand in trying to prescribe the proper usage (see Levitt 1973 for a brief history). Moreover, phonological evolution has eroded the set of environments where PTCP agreement is audible. This situation tends to foster the impression that the whole question is moot, at best a pedantic dispute about spelling. However, many PTCPs show agreement overtly in the spoken as well as the written language, and the argumentation below rests on these clear cases except where otherwise noted.<sup>24</sup>

In French the syntactic condition for PTCP agreement is narrower than in Italian. In (57-62) we survey the cases that show the same pattern as their Italian counterparts in (2-6): a PTCP cannot agree with a final 2 as in (57), nor with any non-2, such as the unergative 1 in (58) or the 3 in (59):

- (57) a. Max a cuit les grenouilles.  
 Max has cooked the frogs  
 ‘Max cooked the frogs.’
- b. \*Max a cuites les grenouilles.
- (58) a. Les filles ont geint la nuit entière.  
 the girls have moaned the night whole  
 ‘The girls moaned all night.’

- b. \* *Les filles* ont geintes la nuit entière.
- (59) a. Tom a écrit à sa belle-mère.  
Tom has written to his mother-in-law  
'Tom wrote to his mother-in-law.'
- b. \* Tom a écrite à sa belle-mère.

As in Italian, the following environments require PTCP agreement: initially unaccusative clauses such as (60), direct reflexives (1-2 multiattachment) as in (61), and clauses with an accusative clitic such as (62):

- (60) a. *Les marguerites* sont écloses hier.<sup>25</sup>  
the daisies are bloomed yesterday  
'The daisies bloomed yesterday.'
- b. \* *Les marguerites* sont éclos hier.
- (61) a. *Léa* s'est décrite à son fiancé.  
Léa REFL.is described to her fiancé  
'Lea described herself to her fiancé.'
- b. \* *Léa* s'est décrit à son fiancé.
- (62) a. [Les parois...] Max les a repeintes.  
the walls Max them.has repainted  
'[The walls...] Max repainted them.'
- b. \* [Les parois...] Max les a repeint.

Assuming structures analogous to those posited for Italian, we arrive at the same generalization: a P-finally intransitive PTCP agrees with a clausemate 2. However, there is also a series of seemingly miscellaneous environments where PTCPs agree in Italian, but not in French. The goal here is to discover why. We begin with causatives, a topic not yet considered in discussing Italian.

5.1. The Initialization Requirement in French. Given their monoclausal properties, *fare* causatives in Italian and most *faire* causatives in French<sup>26</sup> are identifiable as unions, which means multi-predicate clauses in the view adopted here (following Davies and Rosen 1988). For example, in the structure of (63a,b), an inner serial P 'swallow' initializes its two terms,<sup>27</sup> then the causative verb 'make' ensues as a second P in the same clause. In the present case there is also a third clausemate P, an auxiliary (and as we have seen consistently, clitics cliticize to the final P of their clause). What emerges in (63) is that the PTCP of the causative verb agrees with the pronominal 2 in Italian, but not in French:

- (63) a. Lea le ha fatte/\*-o ingoiare a Max.  
Lea them.has made swallow to Max  
'Lea made Max swallow them.'
- b. Léa les.a fait/\*-es avaler à Max.  
Léa them.has made swallow to Max



c.

			P	2	1
1		P	Cho	2	3
1		P	Cho		3
1	P	Cho	Cho		3
Lea	le.ha	fatte	ingoiare	[3rd.F.PL]	a Max
Léa	les.a	fait	avalere	[3rd.F.PL]	à Max

Rule (7) predicts agreement: owing to the cancellation, the PTCP is P-finally intransitive and must agree with its clausemate 2, the null pronoun. This is correct for Italian *fatte*, so the question is why French excludes an agreeing PTCP *\*faites*.

The novel feature of (63) has to do with initialization, the relationship between a P and the arguments it licenses.<sup>28</sup> In (63) it is the verb ‘swallow’ that initializes the 2 and assigns its semantic role. In the next stratum the causative verb inherits this nominal as a 2, but does not (re)initialize it. The causative verb’s valence only calls for a 1 and a P-chômeur, and remains oblivious to any inherited nominals (it imposes no selectional restrictions on them and assigns them no role). So, in our terminology, this 2 is a P-initial 2 of both the said verbs, but is initialized as 2 only by ‘swallow’.

A suitable hypothesis is that in French, a PTCP agreement controller must meet the same conditions as in rule (7), plus a further requirement: it must be initialized as a 2 by the PTCP. So the causative verb, which may acquire a 2 by legal means but never initializes it, can never exhibit PTCP agreement.

This hypothesis is confirmed by other constructions, which we now put on record even though, unfortunately, they involve verbs whose PTCP agreement is inaudible, so these facts belong to the written language only.

The first confirmation comes from perception verbs such as *voir* ‘see’, which enter into two distinct infinitival constructions. One of these, shown in (64), is demonstrably a union (*le bûcheron* is chômeurized by *Jean*, and clitic position indicates that all three Ps belong to one clause). In this case, PTCP agreement with the pronominal 2 is disallowed:

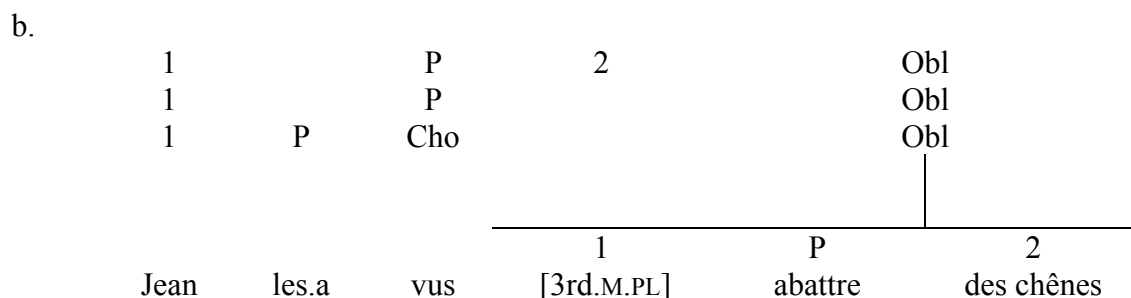
- (64) a. [Ces arbres] Jean les a vu/\*-s abattre par le bûcheron.  
 those trees Jean them.has seen cut.down by the woodsman  
 ‘[Those trees] Jean saw the woodsman cut them down.’

b.

			2	P	1
1		P	2	Cho	Cho
1		P		Cho	Cho
1	P	Cho		Cho	Cho
Jean	les.a	vu	[3rd.M.PL]	abattre	par le bûcheron

In the other type, shown in (65), the 2 of *voir* ‘controls’ the final 1 of a subordinate clause. Here, PTCP agreement with the pronominal 2 is required.

- (65) a. [Ces bûcherons] Jean les a vus abattre des chênes.  
 those woodsmen Jean them.has seen cut.down some oaks  
 ‘[Those woodsmen] Jean saw them cut down some oaks.’



The difference is that in (64), a union parallel in structure to a causative, *voir* has only a 1 and P-chômeur in its valence, and inherits the pronominal 2 without (re)initializing it (only on pragmatic grounds does (64) entail that Jean saw the trees).<sup>29</sup> The PTCP *vu* in (64) cannot agree with the pronominal 2 which it does not initialize. But in (65) the pronoun co-originates with the PTCP *vus* in a superordinate clause, where it can only be initialized by that verb. Meeting this requirement, the pronoun controls agreement on *vus*.

Also significant is the fact that *été* ‘been’ never shows agreement (though in the modern language, of course, this is only a matter of spelling). So in passives such as (66), Italian treats both PTCPs alike, while French disallows agreement on the PTCP of the auxiliary:

- (66) a. *La capra è stata/\*-o munta dal fattore.*  
 the goat is been milked by.the farmer  
 ‘The goat was milked by the farmer.’
- b. *La chèvre a été/\*étée traite par le fermier.*  
 the goat has been milked by the farmer
- c.

2			P	1
1			P	Cho
1		P	Cho	Cho
1	P	Cho	Cho	Cho
la capra	è	stata	munta	dal fattore
la chèvre	a	été	traite	par le fermier

The Italian pattern follows from rule (7) alone: both PTCPs, being P-finally intransitive, agree with their clausemate 2 *la capra*. The rule is oblivious to the fact that *munta* is an initializer and *stata* a null-valent auxiliary. But in French this distinction matters. The PTCP *traite* meets the additional condition imposed on agreement controllers in French: it initializes *la chèvre* as a 2 and therefore agrees with *la chèvre*. This requirement can never be met by the PTCP *été*, which only inherits a 1 (and initializes nothing).

We return soon to the parametric contrast between French and Italian, which also figures in auxiliary selection. One characteristic of French PTCP agreement is now evident: the controller must be not only a 2, but initialized as a 2 by the agreeing PTCP.

5.2. The No-Cho Requirement in French. Another context where PTCPs agree in Italian and not in French is in impersonal clauses,<sup>30</sup> i.e. where the final 1 is an expletive (‘dummy’). The impersonal unaccusatives in (67) differ in two other ways (silent dummy and BIL verb inflection in

Italian, overt dummy and non-BIL inflection in French), but our concern is with the contrasting PTCPS:

- (67) a. Durante l'inverno sono morte/\*-o *tre oche*.  
 during the.winter are died three geese  
 'During the winter, there died three geese.'
- b. Pendant l'hiver il est mort/\*-es *trois oies*.  
 during the.winter Expl is died three geese
- c.

2		P	2
1		P	Cho
1	P	Cho	Cho
Expl	sono	morte	tre oche
Expl	est	mort	trois oies

Impersonal passives show the same contrast. In Italian both PTCPS agree as they do in a personal passive, whereas in French the inner PTCP, which agrees in a personal passive, remains invariable in the impersonal construction:

- (68) a. Sono state/\*-o prese/\*-o *parecchie decisioni molto importanti*.  
 are been taken several decisions very important  
 'There have been several very important decisions made.'
- b. Il a été pris/\*-es *plusieurs décisions très importantes*.  
 Expl has been taken several decisions very important
- c.

	1		P	2
2	1		P	Cho
1	Cho		P	Cho
1	Cho	P	Cho	Cho
1	Cho	P	Cho	Cho
Expl	Unspec	sono	state	prese parecchie decisioni...
Expl	Unspec	a	été	pris plusieurs décisions...

Italian presents no problem: given these diagrams, rule (7) correctly entails that the PTCPS in (67-68), all P-finally intransitive, agree with a clausemate 2, in these cases respectively *tre oche* and *parecchie decisioni...*<sup>31</sup> But in French, the corresponding 2s impose no agreement at all, not even on the PTCPS initializing them as 2s (respectively *mort* and *pris*). So this fact cannot be attributed to the initialization requirement noted above (§5.1).

To understand the limits on French PTCP agreement, we need some syntactic condition that distinguishes impersonal from personal constructions. The basic difference is the entry of the expletive, which *chômeurizes* the initial 2 and results in a conspicuously different word order. A straightforward approach, then, is to say that in French no *chômeur* can control PTCP agreement.

With this restriction, the initial 2 of an impersonal construction cannot be a PTCP agreement controller because, as shown in (67c)(68c), it becomes a 2-*chômeur* upon the entry of the expletive.

5.3. Parametrizing French and Italian. We now have the ingredients for a parametrized PCTP agreement rule covering French and Italian. The simpler and more inclusive rule is that of Italian, while the French rule differs in that two additional restrictions were found (§5.1, §5.2). Rule (7) now becomes:

(69) **Participle/Adjective Agreement In Italian And French**

Let  $p$  be a participle/adjective heading a P-arc in clause  $b$ .

Then  $p$  inflects for gender and number iff:

- (i) the P-final stratum of  $p$  is intransitive, and
- (ii) a legal agreement controller exists.

Nominal  $a$  is a legal agreement controller iff...

ITALIAN:  $a$  heads a 2-arc of clause  $b$ .

FRENCH:  $a$  is initialized as a 2 by  $p$ , and heads no Cho-arc.

There is another source of evidence regarding the French rule (§5.5), but in order to interpret it, we must stop to examine auxiliaries in French.

5.4. French Auxiliary Selection. Compared to other Romance varieties such as Italian, auxiliary selection in French is far less amenable to a rigorous syntactic rule, because among the verbs that appear to be unaccusative, some take *avoir*. At present, no one really knows why a verb such as *monter* ‘rise’, identified as unaccusative under other tests, takes auxiliary *avoir*, while its Italian counterpart takes *essere* under the unproblematic Italian rule:

- (70) a. Durante il mese, il livello dell’acqua è salito di due metri.  
 during the month the level of.the.water is risen by two meters  
 ‘During the month, the water level rose two meters.’
- b. Pendant le mois, le niveau de l’eau a monté de deux mètres.  
 during the month the level of the water has risen by two meters

Until such time as the behaviour of French unaccusatives is somehow reduced to a syntactic problem as opposed to a mystery, there is little to say about them in this framework. However, this problem is circumscribed, confined solely to (probably unaccusative) intransitive clauses. If we set it aside on ‘beyond the scope’ grounds, the path is cleared for the present effort, since the rest of the grammar lends itself perfectly to a rule of auxiliary selection.

French and Italian differ in three auxiliiation environments where Italian has *essere* and French has *avoir* (henceforth ESSE and HABERE): the perfective auxiliary of the copula (*è stato / a été* ‘has been’), the perfective auxiliary of the passive auxiliary (same forms), and locative-existential constructions (*c’è / il y a*). This third type falls into place in a theory that takes the putative ‘existential verb’ to be an auxiliary (La Fauci and Loporcaro, in preparation), but we will not pursue that idea here. The first two types are exemplified by:

- (71) a. Lea è stata inflessibile.  
 Lea is been inflexible  
 ‘Lea was inflexible.’
- b. Léa a été inflexible.  
 Léa has been inflexible

c.

2			P
1			P
1		P	Cho
1	P	Cho	Cho
Lea	è	stata	inflexibile
Léa	a	été	inflexible

(72) a. Lea è stata sedotta dal fascino di Max.  
 Lea is been seduced by the charm of Max  
 ‘Lea was seduced by Max’s charm.’

b. Léa a été séduite par le charme de Max.  
 Léa has been seduced by the charm of Max

c.

2			P	1
1			P	Cho
1		P	Cho	Cho
1	P	Cho	Cho	Cho
Lea	è	stata	sedotta	dal fascino di Max
Léa	a	été	séduite	par le charme de Max

In these doubly auxiliated clauses, then, Italian has ESSE ESSE while French has HABERE ESSE. In these diagrams, note how the Italian condition for ESSE (see (24)) is met twice: for each auxiliary, its P-initial 1 *Lea* is also a 2. It is irrelevant for Italian that *Lea* is a 2 in the top P-sector only. But in French, it seems, each auxiliary is determined by the immediately preceding P-sector. In this view, Italian and French have auxiliary selection rules that coincide in part and differ in one parameter. In selecting a given auxiliary, both rules refer to its P-initial stratum, but the French rule then refers to the preceding P-sector, rather than to the whole clause:

(73) **Auxiliary Selection In Italian And French**

An auxiliary is ESSE iff the nominal heading its P-initial 1-arc also heads a 2-arc...

ITALIAN: in the same clause.

FRENCH: in the preceding P-sector.

Given the structures (71c)(72c), this rule correctly entails that the inner auxiliatio (third stratum) calls for ESSE in both languages: the P-initial 1 *Lea/Léa* meets the condition in Italian by being a 2, and in French by being a 2 in the preceding P-sector. The outer auxiliatio (last stratum) brings out the contrast: Italian has ESSE for the same reason as before, but French has HABERE because *Léa* is not a 2 in the preceding P-sector. This pattern recurs whenever *être* is auxiliated: as is computable from (73), *être* always inherits a 1 and no 2, so its P-sector never meets the condition for a second *être*.

Apart from the closed class of French unaccusatives which we set aside as intractable, the French auxiliary selection rule in (73) is as comprehensive as the Italian rule. For example, it covers direct reflexive clauses (initial 1-2 multiattachment) as in (74b). As predicted, these take the auxiliary *être*:

(74) a. Max a nourri Marie de poésie malgache.  
 Max has nourished Marie on poetry Malagasy  
 ‘Max nourished Marie on Malagasy poetry.’

b. Jean *s’est* nourri de poésie malgache.  
 Jean REFL.is nourished on poetry Malagasy  
 ‘Jean nourished himself on Malagasy poetry.’

c.

1,2		P		Obl
1		P		Cho
1	P	Cho		Obl
Jean	s’est	nourri	de poésie malgache	

Rule (73) correctly assigns *être* because *Jean*, P-initial 1 of the auxiliary, is a 2 in the preceding P-sector.

With indirect reflexives such as (75b), the valence indicates initial 1-3 multiattachment (compare (75a)), and we now ask whether French, like Italian, converts 1-3 multiattachments to 1-2. At this point, both auxiliary *être* and the reflexive clitic must be seen as diagnostics revealing this advancement:

(75) a. Tom a injecté à Jim un antibiotique.  
 Tom has injected to Jim an antibiotic  
 ‘Tom injected an antibiotic into Jim [lit., to Jim].’

b. Tom *s’est* injecté un antibiotique.  
 Tom REFL.is injected an antibiotic  
 ‘Tom injected an antibiotic into himself [lit., to himself].’

c.

1,3		P		2
1,2		P		Cho
1		P		Cho
1	P	Cho		Cho
Tom	s’est	injecté	un antibiotique	

The advancement analysis in (75c) imposes itself because if one chooses not to posit an intervening 1-2 multiattachment stratum, the result is that two major rules must be modified *ad hoc*, solely to accommodate indirect reflexives. In their independently motivated form, both rules point to the presence of this stratum, namely the condition for reflexive clitics (see (22)) and the French auxiliary selection rule (see (73)), which correctly assigns *être* in (75c).

5.5. Evidence from Indirect Reflexives. After digressing into auxiliary selection and diagnosing the structure of French indirect reflexives, we now return to PTCP agreement, and to the parametrized rule (69), in which French puts two extra conditions on controllers: the initialization requirement and the no-Cho requirement.

In French as in Italian, indirect reflexives interact with PTCP agreement in a revealing way. The structures are the same, each containing two 2s, but the effects are opposite. While in Italian this structure gives rise to two possible PTCP agreement patterns, French allows no agreement at all on the PTCP in an indirect reflexive:

(76) a. La veuve s'était écrit/\*-e/\*-es des fausses lettres anonymes.  
 the widow REFL.was written some false letters anonymous  
 'The widow had written fake anonymous letters to herself.'

b.

1,3		P		2
1,2		P		Cho
1		P		Cho
1	P	Cho		Cho
la veuve	s'était	écrit		des fausses lettres anonymes

But this effect is exactly predicted by the independently grounded conditions on PTCP agreement in French. Under rule (69), a P-finally intransitive PTCP (or adjective) agrees with a controller which meets two conditions: it must be initialized as a 2 by that PTCP (or adjective), and it must not be a chômeur. Neither nominal in (76b) meets those conditions: *la veuve* is not initialized as a 2 by *écrit*, but only as a 1 and 3, whereas the other nominal *des fausses lettres anonymes* does meet the initialization requirement, but is disqualified as a controller because, owing to the advancement, it becomes a chômeur.

Because the elements of this analysis all have independent motivation, it wins further plausibility for its success in explaining how the PTCP agreement rule interacts with the indirect reflexive structure to produce, in French and Italian, two different patterns, seemingly exceptional in opposite ways. The ideas that gain further support are: (i) that reflexive clitics arise from 1-2 multiattachment only, (ii) that the auxiliary selection rule refers to 2s, not 2s/3s, and differs from Italian to French only in the domain it scans, (iii) that PTCP agreement also accepts only 2s as controllers, (iv) that the PTCP agreement rules in Italian and French differ only parametrically, as stated in (69), with two extra conditions in French, now multiply motivated.

One final observation about French indirect reflexives: if the initial 2 is a minimal pronoun (a feature matrix), it undergoes cancellation, and thus is not chômeurized. An example is the relative clause in (77), shown with a partial structure only, since space limits preclude a full discussion of the internal structure of nominals (for commentary refer to (56) above):

(77) a. Les lettres anonymes que le maire s'était écrites...  
 the letters anonymous that the mayor REFL.was written  
 'The anonymous letters that the mayor had written to himself...'

b.

2			P	
1	P		Cho	
	2	1,3		P
		1,3		P
		1,2		P
		1		P
	1	P	Cho	
les lettres anonymes	que	le maire	s'était	écrites

In this structure the PTCP *écrites* finds a legal agreement controller in the pronominal *que*. First, the cancellation makes *écrites* P-finally intransitive. Second, this pronominal 2 is initialized as a 2 by the PTCP and, by virtue of the cancellation, is never a *chômeur*. So all the conditions of rule (69) are met, and in fact the PTCP in this context does exhibit agreement.<sup>32</sup>

### Past Participle Agreement in Three Romance Dialects

6. By formalizing French PTCP agreement alongside Italian, and identifying the two extra conditions imposed in French, this analysis becomes a venture in comparative formal syntax, one that could be further pursued anywhere in the Romance family. Although PTCP agreement and other morphosyntactic phenomena vary kaleidoscopically across different Romance varieties, the facts are not unmanageable with an approach that can find, behind the phenomena, simple and minimal differences in relational conditioning.

As an exploration of the options parametrically available in Romance PTCP agreement systems, three dialects are surveyed in this section: one located in Southern Italy, one in Northern Italy, and one in Sardinia.

6.1. Altamurano. Spoken by about 50,000 inhabitants of Altamura (in the Puglie region near Bari), Altamurano has a PTCP agreement system characterized by a minimum of restrictions and a maximal set of agreement environments.<sup>33</sup> However, there is an obstacle like the one we face in French: Altamurano has undergone a drastic reduction of final vowels, with the result that the weak PTCPs (from Latin *-atus* etc.) have lost their agreement inflection. Moreover, many Latin strong PTCPs have moved to the weak class. Only the few surviving strong PTCPs inflect for agreement, and this inflection consists of root vowel alternations (metaphony) formerly conditioned by final vowels.<sup>34</sup>

The following sketch shows that PTCP agreement in Altamurano only requires the controller to be a 2. That is, any PTCP (among the few that inflect) must agree with a clausemate 2 if it has any. The background information necessary here has to do with auxiliaries and an unusual 3 to 2 advancement.

Auxiliary selection in Altamurano is riddled with optionality and gives an impression of chaos at first, though at a closer look it reflects the same principle as the auxiliiation system of standard Italian. Auxiliary selection is constrained only for the third person forms. In their first or second person forms, HABERE and ESSE are in free variation, regardless of whether the clause is transitive, unergative, or unaccusative (respectively (78a-c)):

- (78) a.     aggjə vɪstə / sɔ vvɪstə nʊ kwɛjn.  
           I.have seen / I.am seen a dog  
           ‘I saw a dog.’
- b.     aggjə kamənejt̪ / sɔ kkamənejt̪.  
           I.have walked / I.am walked  
           ‘I walked.’



- c. aggjə kadutə / sɔ kkadutə nderr.  
I.have fallen / I.am fallen on.the.ground  
'I fell down.'

In third person forms the optionality continues, but now with crucial limits. Unaccusative clauses are distinguished by the fact that in the third singular they must take ESSE:

- (79) a. ġġowann a / e vvistə nʊ kwɛɪ̃n.  
Giovanni has / is seen a dog  
'Giovanni saw a dog.'
- b. ġġowann a / e pparlet asse<sup>i</sup>.  
Giovanni has / is talked a.lot  
'Giovanni talked a lot.'
- c. ġġowann e / \*a mmwertə stɛmatɪ̃n.  
Giovanni is / has died this.morning  
'Giovanni died this morning.'

and also by the fact that in the third plural they may take ESSE, while this option is unavailable for transitives and unergatives:

- (80) a. kidd ɔnnə / \*sɔ vɪstə nʊ kwɛɪ̃n.  
they have / are seen a dog  
'They saw a dog.'
- b. kidd ɔnnə / \*sɔ parlet asse<sup>i</sup>.  
they have / are talked a.lot  
'They talked a lot.'
- c. kidd ɔnnə mwertə / sɔ mmwertə stɛmatɪ̃n.  
they have died / are died this.morning  
'They died this morning.'

Or, to put it another way: 'middle' clauses (where some nominal is both 1 and 2: *essere* clauses in Italian) are marked as such in the third singular, while 'active' clauses (where no nominal is both 1 and 2: *avere* clauses in Italian) are marked as such in the third plural. Under this interpretation we expect direct reflexives in the third singular to require ESSE, which is correct:

- (81) kjerə s e / \*a ssolt.  
Chiara REFL.is / has released  
'Chiara got loose (freed herself).'

Another salient phenomenon in Altamurano is a 3 to 2 advancement that occurs with unergative verbs (La Fauci and Loporcaro 1989). It never produces a final 2 as in (82b), but occurs when the advancee is either a cancelled pronoun, as in (82c), or goes on to advance to 1 via passive, as (83b):

- (82) a. ġġowannə parl a ffranġisk.  
Giovanni talks to Francesco.

- b. \* ġġuwannə parlə franġisk.  
Giovanni talks Francesco.
- c. ġġuwannə lu pwarl.  
Giovanni him.ACC.talks  
'Giovanni talks to him [lit., 'talks him'].'
- (83) a. ɪ karabbənirə tələfuneʃen a ġġuwann.  
the police telephone to Giovanni  
'The state police phone Giovanni [lit., 'to Giovanni'].'
- b. ġġuwannə jevə / venə tələfunetə də: karabbənirr.  
Giovanni has / comes telephoned by.the police  
'Giovanni is telephoned by the state police.'

The generalization (not important here) is that this advancement occurs in clauses where the initial and final strata are both unergative.

PTCP agreement in Altamurano conforms to a simple rule: any PTCP agrees with a clausemate 2 if it has any. This includes finally transitive clauses:

- (84) a. pəppin a ssøltə / \*sseltə la ʃummwənd.  
Peppino has released.F / released.M the mare  
'Peppino let the mare loose.'
- b.
- |        |   |        |    |          |
|--------|---|--------|----|----------|
| 1      |   | P      |    | 2        |
| 1      | P | Cho    |    | 2        |
| pəppin | a | ssøltə | la | ʃummwənd |

That is, Altamurano diverges from French and Italian in that agreement is not contingent on P-final intransitivity of the PTCP. Further, Altamurano is like Italian in that all 2s qualify as legal controllers, with neither of the extra conditions found in French (the initialization and no-Cho requirements). In a 3 to 2 advancement clause such as (85), or its reflexive counterpart (86), we can verify that the controller need not be initialized as a 2 by the PTCP:

- (85) a. ġġuwannə l a kkøtt / \*kkwett.  
Giovanni her.has cooked.F / cooked.M  
'Giovanni cooked for her [lit., 'cooked her'].'
- b.
- |          |     |       |  |            |
|----------|-----|-------|--|------------|
| 1        |     | P     |  | 3          |
| 1        |     | P     |  | 2          |
| 1        |     | P     |  |            |
| 1        | P   | Cho   |  |            |
| ġġuwannə | l.a | kkøtt |  | [3rd.F.SG] |

(86) a. *kjerə s e kkøtt / \*kkwett.*  
 Chiara REFL.is cooked.F / cooked.M  
 ‘Chiara cooked for herself.’

b.

1,3		P
1,2		P
1		P
1	P	Cho
<i>kjerə</i>	<i>s.e</i>	<i>kkøtt</i>

The pronoun in (85) and *kjerə* in (86) are not initialized as 2s, but become 2s by advancement, which makes them legal agreement controllers. To verify that *chômeurs* are not excluded as controllers, consider an impersonal clause such as (87), for which we posit a structure parallel to impersonal unaccusatives in Italian and French (§5.2). With the entry of the expletive, the initial 2 *do jaddiṅ* becomes a 2-*chômeur* and thus appears in postverbal position:

(87) a. *ɔnnə mwortə do jaddiṅ.*  
 have.PL died two hens  
 ‘There died two hens.’

b.

		P	2
2		P	Cho
1		P	Cho
1	P	Cho	Cho
Expl	<i>ɔnnə</i>	<i>mwortə</i>	<i>do jaddiṅ</i>

The mandatorily agreeing PTCP in (87) shows that Altamurano, like Italian and unlike French, admits any 2 as a controller, including 2-*chômeurs*.

Indirect reflexives in Altamurano call for an advancement analysis on the same grounds as in French (§5.4): they have a reflexive clitic and auxiliary ESSE, both indicating that 1-3 multiattachments convert to 1-2, since it would be unjustified to modify both rules ad hoc to avoid that conclusion. Having determined that in Altamurano all 2s can control PTCP agreement, we can expect indirect reflexives to admit two possible controllers, as they do in Italian (not French). The prediction is borne out:

(88) a. *ḡḡuwannə s e kkwett ɪ skarčøffələ.*  
 Giovanni REFL.is cooked.M the artichokes  
 ‘Giovanni cooked artichokes for himself.’

b. *ḡḡuwannə s e kkøtt ɪ skarčøffələ.*  
 Giovanni REFL.is cooked.F the artichokes

c.

1,3		P	2
1,2		P	Cho
1		P	Cho
1	P	Cho	Cho
ğğuwannə	s.e	kkwett kkøtt	ı skarčøffələ

This corroborates the rule we established for Altamurano: since in (88c) both nominals are 2s, either can control PTCP agreement. So Altamurano exemplifies the least restrictive PTCP agreement system: transitivity is irrelevant and no conditions are placed on controllers other than 2-hood.

6.2. Grizzanese. A Northern Italian dialect typical of the mountain area near Bologna, Grizzanese is centered in the town of Grizzana Morandi and has fewer than 3,000 speakers.<sup>35</sup> Like French and Altamurano, Grizzanese lost much of its PTCP agreement morphology through phonological evolution. Besides the apocope of weak PTCPs, other phonetic changes have also neutralized agreement contrasts in many environments (for details see Loporcara 1992), leaving only a limited domain in which the system can be observed. In the current state of the grammar, a number of participles still exhibit three endings:  $\emptyset$  for M.SG./M.PL., *-a* for F.SG., and *-i* for F.PL. Among these is *fē* ‘make’, which behaves in an interesting way when used in causatives (see below).

As for syntactic conditions on PTCP agreement, Grizzanese patterns with Italian and French in the clause types where these two coincide. Like both these languages (and unlike Altamurano), it disallows agreement on P-finally transitive PTCPs, as shown in (89). The PTCP in (90), P-finally intransitive because of cancellation, agrees with its 2, as in Italian and French.<sup>36</sup>

(89) ı ragazoŏ al ē pērs /\* pērsi al skērp.  
 the kids they.have lost the shoes  
 ‘The children lost their shoes.’

(90) ı ragazò il è persi/\*pers.  
 the kids they.have.them lost  
 ‘The children lost them.’

In the clause types where Italian and French diverge, it seems at first that Grizzanese duplicates the French system. Impersonal constructions, whether unaccusative as in (91) or passive as in (92), have no PTCP agreement, which suggests that Grizzanese, like French, disallows agreement with a *chômeur*:

(91) a. ı ē mōrt/\*mōrti dō parsō.  
 Expl.is died two people  
 ‘There died two people.’

b.

		P	2
2		P	Cho
1		P	Cho
1	P	Cho	Cho
Expl	l.ĕ	mōrt	dō parsō

(92) a. l ĕ      sta      avĕrt/\*averti    tōt al bōst.  
 Expl.is been opened                      all the envelopes  
 ‘All the envelopes have been opened.’

b.

	1			P	2
2	1			P	Cho
1	Cho			P	Cho
1	Cho		P	Cho	Cho
1	Cho	P	Cho	Cho	Cho
Expl	Unspec	l.ĕ	sta	avĕrt	tōt al bōst

A no-Cho condition on PTCP agreement controllers would explain why in (91) (92) the initial 2s, *chômeurized* by the expletive, are disqualified as controllers.

Indirect reflexives again provide the perfect diagnostic. The advancement analysis, in which 1-3 multiattachments convert to 1-2, should be assumed on the same grounds as in French and Altamurano: reflexive clitics and auxiliary *ĕser* (see Loporcaro 1992: 23-36). And what we find is that indirect reflexives in Grizzanese follow the French pattern, showing no PTCP agreement at all:

(93) a. la lāŭra    la sĕ      dāt/\*dāta    una šmartlĕda.  
 the Laura she.REFL.is given      a hammer.whack  
 ‘Laura gave herself a whack with a hammer.’

b.

	1,3		P	2
	1,2		P	Cho
	1		P	Cho
	Cho	P	Cho	Cho
	la lāŭra	la.s ĕ	dāt	una šmartlĕda

We can conclude that Grizzanese shares with French the no-Cho condition, which blocks PTCP agreement not only with the 2-*chômeurs* of impersonal constructions such as (91) (92), but also with the 2-*chômeurs* created in (93b).

The advancee in (93b), *la Lāŭra*, is also ineligible to control agreement, despite its 2-hood. One might suppose that Grizzanese also shares the other requirement found in French, that a PTCP agreement controller be initialized as a 2 by the PTCP. But here Grizzanese diverges from French. The difference emerges in causatives: in French the PTCP of the causative verb never shows

agreement, but in Grizzanese it does, provided the other conditions are met. For example, the causative verb in (94) is P-finally intransitive because of a cancellation, and does agree mandatorily with its clausemate 2, the pronoun:

- (94) a.    *la mareġja la l ē            fāti /\*fāt mañċē aġ fīō.*  
 the Maria she.them.has made        eat        to.the children  
 ‘Maria made the children eat them.’

b.

			P	1	2
1		P	Cho	3	2
1		P	Cho	3	
1	P	Cho	Cho	3	
<i>la mareġja</i>	<i>la.l ē</i>	<i>fāti</i>	<i>mañċē</i>	<i>aġ fīō</i>	[3rd.F.PL]

For Grizzanese the appropriate generalization is that an agreement controller must be a P-initial 2 of the PTCP. The pronominal 2 in (94b) does bear the 2 relation in the P-initial stratum of the PTCP, so it meets this condition and does control agreement, whereas in (93b) *la Laura* is not a P-initial 2 of the PTCP and cannot be a controller. This is distinct from the French rule, which disqualifies both of these nominals, because it requires a controller to be initialized as a 2 by the PTCP. In (94b) the nominals initialized by the first P are inherited by the causative verb without (re)initialization, i.e. without figuring in its valence (recall (63) and commentary).

One might ask: why not (‘simply’) say that PTCPs do not agree in indirect reflexives, and do in causatives? The answer is that these constructions have no such invariant property. For example, a causative may itself be reflexive, as in (95) (96), where the causative 1 has another relation already licensed by the inner P. In (95) *la Laura* is initialized as a 2 by the inner P, and in this case it goes on to become the P-initial 2 of the causative verb (*fata*), on which it therefore imposes agreement:

- (95) a.    *la lāura la s.ē fata / \* fāt dišdċē al sċē.*  
 the Laura she.REFL.is made awaken at six o’clock  
 ‘Laura<sub>i</sub> got somebody to wake her<sub>i</sub> up at six.’

b.

			P	1
2				
1,2		P	Cho	Cho
1		P	Cho	Cho
1	P	Cho	Cho	Cho
<i>la lāura</i>	<i>la.s.ē</i>	<i>fata</i>	<i>dišdċē...</i>	Unspec

In (96), however, *la lāura* is initialized as a 3 by the inner P and inherited by the causative verb as a 3, creating an indirect reflexive causative. The interaction of these constructions is computable: the causative PTCP shows no agreement (*fāt*), because *la lāura* is not its P-initial 2 (and *al čċv* is also ineligible to control because it is a *chômeur*):

- (96) a. la lāura la s ē fāt / \*fāta / \*fāti dē al čēv.  
 the Laura she.REFL.is made give the keys  
 ‘Laura<sub>i</sub> got somebody to give her<sub>i</sub> the keys.’

b.

		P	2	1
1,3		P	Cho	2
1,2		P	Cho	Cho
1		P	Cho	Cho
1	P	Cho	Cho	Cho
la lāura	la.s.ē	fāt	dē	al čēv
				Unspec

Vice versa, indirect reflexives can have agreeing PTCPs. In (97) the pronoun is a P-initial 2 of the PTCP and never a *chômeur*, so it controls agreement:

- (97) a. [al čēv...] la lāura la s al ē fāti / \*fāta / \*fāt dē.  
 the keys the Laura she.REFL.them.is made give  
 ‘[The keys...] Laura<sub>i</sub> got somebody to give them to her<sub>i</sub>.’

b.

		P	2	1
1,3		P	Cho	2
1,3		P	Cho	Cho
1,2		P	Cho	Cho
1		P	Cho	Cho
1	P	Cho	Cho	Cho
la lāura	la.s.al. ē	fāti	dē	[3rd.F.PL]
				Unspec

We conclude that the PTCP agreement rule in Grizzanese requires the PTCP to be P-finally intransitive and places two conditions on a controller: it must be a P-initial 2 of the PTCP and must not be *chômeurized*.

In the picture now emerging, there is a spectrum of variant PTCP agreement rules, in which Grizzanese occupies a point intermediate between Italian and French (since ‘P-initial 2’ is less stringent than ‘initialized as 2’).

6.3. Bonorvese. Still another PTCP agreement system occurs in Bonorvese, a Sardinian dialect of the Logudorese group, spoken by about 5,000 people in the town of Bonorva (province of Sassari).<sup>37</sup> Bonorvese patterns with all four of the above-cited Romance varieties in the clause types where these coincide: unergative clauses do not show agreement, unaccusative clauses do, and direct reflexives do, as seen in (98a-c) respectively:

- (98) a. bore e ppeðru ang triβaλλaðu /\*-ozo.  
 Bore and Pietro have worked

- b. *bore e ppeðru kke zum bénniðozo/-u.*  
 Bore and Pietro here are come  
 ‘Bore and Pietro have come here.’
- c. *manğedqða z ε ssamunaða/\*-u.*  
 Mangella REFL.is washed  
 ‘Mangella has washed herself.’

As in Italian, French, and Grizzanese (not Altamurano), agreement in Bonorvese is limited to PTCPS which are P-finally intransitive. So in (99) the PTCP is uninflected, whereas in (100) the PTCP is detransitivized by cancellation and agrees with its 2, the cancelled pronoun:

- (99) *bore e mmanğedqða an leaðu/\*-a/\*-os sa žae.*  
 Bore and Mangella have taken the key  
 ‘Bore and Mangella took the key.’
- (100) *bore lɔz a bbiðozo / \*bbiðu.*  
 Bore them.M. has seen  
 ‘Bore saw them.’

The facts seen in (98-100) are those which follow from the basic conditions on agreement: P-final intransitivity of the PTCP and 2-hood of the controller.

The remaining facts will show that Bonorvese places two further conditions on controllers. One of these, a no-Cho requirement, is shared with French and Grizzanese. The other, instead of requiring initialization as a 2 (French) or P-initial 2-hood (Grizzanese), requires a controller of PTCP agreement to be the first 2 of its clause.<sup>38</sup> La Fauci and Loporcaro (1991) also argue that in Bonorvese this same notion figures in the auxiliary rule: ESSE is selected if and only if the P-initial 1 of the auxiliary is the first 2 of its clause. We can observe in Bonorvese that the option ‘first 2’ produces its own pattern, equally regular but distinct from any seen so far.

Impersonal constructions show the first sign that Bonorvese has a no-Cho requirement. As in French and Grizzanese, the PTCP is uninflected:

- (101) a. *k a bbénniðu/\*bénniðol ðuos pastóreze.*  
 here has come two shepherds  
 ‘There have come here two shepherds.’

b.

		P	2
2		P	Cho
1		P	Cho
1	P	Cho	Cho
Expl	a	bbénniðu	ðuos pastóreze

Because it is chômeurized by the entry of the expletive, *ðuos pastóreze* cannot control PTCP agreement (note also that in contrast to (98b), the auxiliary is HABERE because the first 2 does not go on to become the 1 of the auxiliary).



Indirect reflexives again provide decisive evidence. In (102a), as in its French and Grizzanese counterparts, no PTCP agreement occurs. But curiously, (102b), which initially has a 1 and 3 and no 2, does show PTCP agreement:

- (102) a.    *manġedqda*    *z ađ*            *iskrítta/\*-a/\*-al*    *đual litteraza*.  
 Mangella    REFL.has written            two letters  
 ‘Mangella has written two letters to herself.’
- b.    *manġedqda*    *z eł*            *faedqada/\*-u*    *addananti*    *ess ispiđu*.  
 Mangella    REFL.is talked            in.front.of the mirror  
 ‘Mangella has talked to herself in front of the mirror.’

Under the advancement analysis, in which 1-3 multiattachments convert to 1-2, the first fact correctly entailed is that *đual litteraza* in (102a) [= (103a)] cannot control PTCP agreement. This follows from the no-Cho requirement, since *đual litteraza* is chômeurized by the advancement:

- (103) a.
- |                  |             |                 |                       |
|------------------|-------------|-----------------|-----------------------|
| 1,3              |             | P               | 2                     |
| 1,2              |             | P               | Cho                   |
| 1                |             | P               | Cho                   |
| 1                | P           | Cho             | Cho                   |
| <i>manġedqda</i> | <i>z ađ</i> | <i>iskrítta</i> | <i>đual litteraza</i> |
- b.
- |                  |             |                 |                             |
|------------------|-------------|-----------------|-----------------------------|
| 1,3              |             | P               | Obl                         |
| 1,2              |             | P               | Obl                         |
| 1                |             | P               | Obl                         |
| 1                | P           | Cho             | Obl                         |
| <i>manġedqda</i> | <i>z eł</i> | <i>faedqada</i> | <i>addananti ess ispiđu</i> |

Secondly, the auxiliaries contrast in these structures because in (103a) the P-initial 1 of the auxiliary is not the first 2 of the clause (hence HABERE), while in (103b) it is (hence ESSE). Lastly, under the requirement that a PTCP agreement controller be the first 2 of its clause, *manġedqda* does not qualify as a controller in (103a), but does in (103b).

The first-2 requirement has another predictable effect: if we alter (102a) by replacing the initial 2 *đual litteraza* with a null pronoun, the PTCP then agrees mandatorily, and only with this pronominal 2, not the other nominal:

- (104) a.    *manġedqda*    *zi.laz.ađ*            *iskríttaza / \*iskrítta / \*iscrítta*.  
 Mangella    REFL.them.has written.F.PL  
 ‘Mangella has written them to herself.’

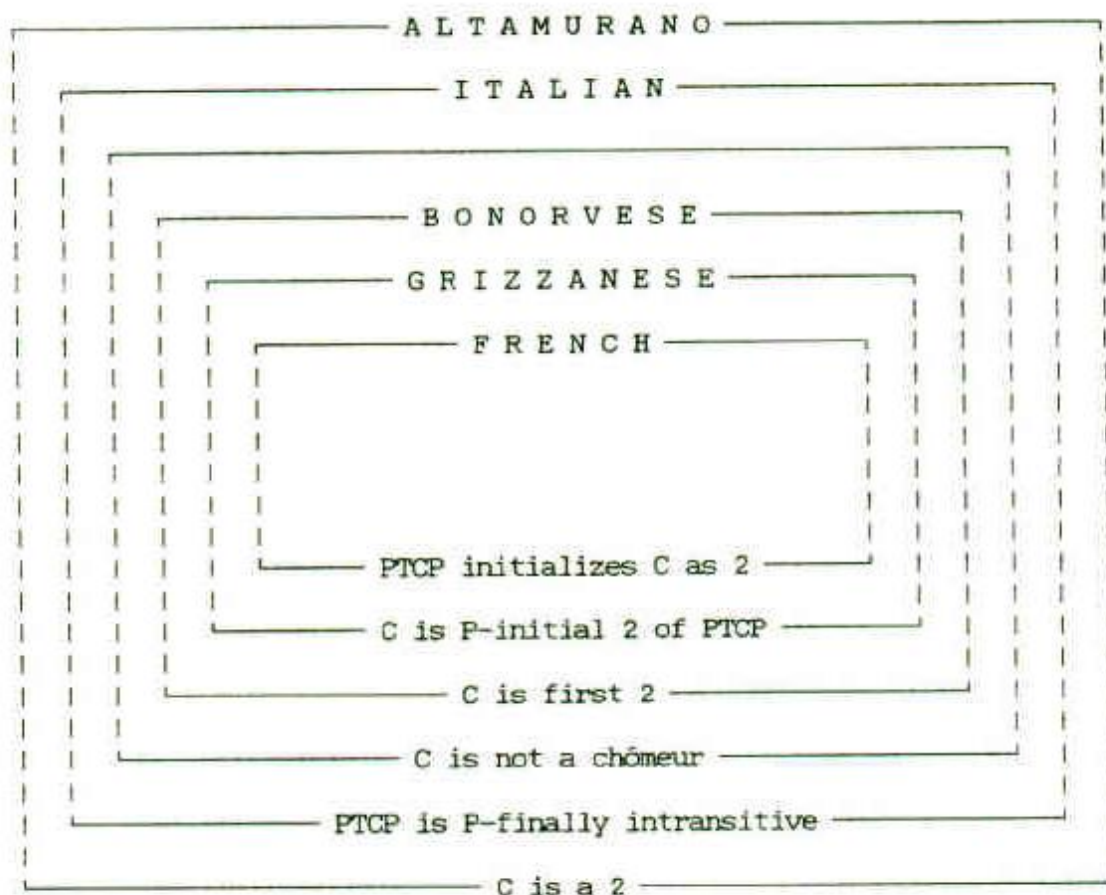
b.

1,3		P	2
1,3		P	
1,2		P	
1		P	
1	P	Cho	
manǰeɖɔ	zi.laz.að	iskríttaza	[3rd.F.PL]

Unlike the initial 2 of (103a) (a *chômeur* and therefore a non-controller), the initial 2 of (104) escapes *chômage* by being cancelled. In this case all the conditions for agreement are met: not only is the PTCP P-finally intransitive (as it is in (103a)), but the pronoun is a legal controller, being the first 2 of its clause and never a *chômeur*.

#### Parametric Options in Romance Participle Agreement

7. This study compared the conditions for PTCP agreement in five varieties of Romance speech: Italian, French, and three dialects. The following chart sums up the result (C = controller):



We have made one observation about the Romance family and another about the theoretical framework in use here. First, no two of the varieties considered here behave exactly alike with respect to PTCP agreement. Yet each variety proves to be internally regular, and the variant conditions for PTCP agreement align themselves along a scale from most to least restrictive. The innermost rectangle represents a nucleus of syntactic environments where PTCP agreement is still mandatory in all five varieties. Moving outward into other syntactic environments that do not meet the maximally restrictive conditions (impersonal constructions, causatives, indirect reflexives), we find that PTCP agreement begins to be abandoned by the more restrictive grammars, not haphazardly, but in layers, formally characterized by the conditions we stated.<sup>39</sup> This picture is of course open to diachronic interpretation as well (La Fauci 1988, 1991).

A final point concerns the theory. The multiplicity of Romance grammars and the subtlety of their variation could make the data seem chaotic if viewed atheoretically. By working with abstract structures, we found not only that each grammar has simple conditions on PTCP agreement, but also that these fall into line with relational categories (natural classes) recognized in the RG framework. Considering that Chomskyan theories have yet to give us a factually adequate account even for Italian (see §4.2 above), the approach adopted here seems to yield a useful product.

## NOTES

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1. Agreement morphemes and their controllers are italicized. The paradigm is: m.sg. (and default) *-o*, f.sg. *-a*, m.pl. *-i*, f.pl. *-e*.

2. It has sometimes been claimed (e.g. by Kayne 1985) that the agreement pattern in (4c) never occurs. This may be true of French, but in Italian it is best described as marginal and archaic, certainly not impossible.

3. But see Gerdts 1989 for a typology of reflexives that envisions final multiattachments as a possibility available in universal grammar. For further references on the concept of multiattachment, including precedents and analogues outside RG, see Perlmutter 1989:112, note 15.

4. This is true of third person pronouns as in (6). With first or second person pronouns, agreement is optional, a fact which follows from a broader Feature Harmony Principle discussed in §4.3 below.

5. The idea that (Italian) clitics are cancellation markers dates back to unpublished lectures by Perlmutter in the mid-1970s. Perlmutter observed that this analysis makes PTCP agreement environments like (6) fall together with (3) (5) into a class defined by a shared syntactic condition (see below).

Independent evidence for cancellation comes from verb agreement in certain impersonal constructions (Rosen 1988:102) and from compactness phenomena in causatives (Rosen 1993).

6. Under our assumptions, then, the cases of cancellation are coextensive with cases where a corresponding clitic appears on the verb. Null pronominal subjects, we assume, do not undergo cancellation and do occur as final 1s.

It would be slightly inaccurate to say that every null pronominal object undergoes cancellation and determines a clitic. The one exception is Pro-Arb, an abstract nominal synonymous with French *on* or German *man*, occurring in such impersonal structures as (13-15) and (32-34). Pro-Arb can demonstrably occur as a 2 or 3, though null. For instance, it supplies the required 2 of *lascia* in (i), and controls an infinitive requiring 3-control in (ii). Its presence is also confirmed by a plural feature which shows up regularly in all contexts where Pro-Arb controls participle/adjective agreement:

- (i) La reazione della stampa lascia perplessi.  
the reaction of.the press leaves perplexed.PL  
'The reaction of the press leaves [one] perplexed.'
- (ii) La loro risposta non consente di essere molto ottimisti.  
the their reply not consents to be very optimistic.PL  
'Their reply doesn't allow [one] to be very optimistic.'

In this analysis, the null Pro-Arb in (i) (ii) differs from other null pronouns in that it does not undergo cancellation and does not determine a clitic.

7. P-sector, P-initial stratum, and P-final stratum are the indispensable technical terms associated with multi-predicate clauses.

For each P in a multi-predicate clause, its P-sector is the set of strata in which it bears the P relation. The first of these is the P-initial stratum of that P, and the last its P-final stratum. In our diagrams, P-sectors are separated by dotted lines.

8. Auxiliary selection, formalized in (24) below, reliably distinguishes unergative from unaccusative predicates in Italian. This test indicates that adjectives are best analyzed as unaccusatives: their auxiliary is *essere* 'be' (see (8b) and (71c) for sample structures). Further evidence from causatives and serializations is given by Rosen 1993. Mirto (in preparation) offers a critique and rebuttal of the recent claim that some adjectives in Italian are unergative (Cinque 1990).

9. Evidence for these contrasting structures is given by Rosen 1987, 1990.

10. From the many discussions of the semantics of Pro-Arb, it emerges that this abstract nominal is unmarked for person and denotes an unspecified being or beings whose viewpoint the speaker can share. Thus, *\*si piove* 'one rains' and *\*si succede* 'one happens' are impossible, whereas *si abbaia* 'one barks' is fine in the context of a fantasy world where the speaker is a dog.

11. Recall the examples in note 6. The plural feature on Pro-Arb, visible in (14) and all UHS constructions where Pro-Arb is a controller, also imposes mandatory plural agreement in such uncontrolled infinitive clauses as:

- (i) L'importante è restare calmi.  
the.important is to.remain calm.PL  
'The important thing is to remain calm.'
- (ii) Sarebbe meglio nascere ricchi.  
would.be better to.be.born rich.PL  
'It would be better to be born rich.'

Pro-Arb is never defective in features: it has number (invariably plural) and gender (open to pragmatic manipulation, feminine in some contexts). Looking ahead to (53), the Feature Harmony Condition, we note that this condition does not affect Pro-Arb, and agreement with Pro-Arb is never rendered optional.

12. Perlmutter 1978, an unpublished work, gives a formal statement similar to (19) plus the following informal version:

- (i) If a dependent of the clause bears both the 1-relation and an object relation, the auxiliary is *essere*. Otherwise, it is *avere*.

Rosen (1988:68), though rewording it slightly, presents the rule not as an innovation but basically as a quotation of Perlmutter's 1978 proposal:

- (ii) Select *essere* 'be' in any clause that contains a 1-arc and an Object-arc with the same head. Otherwise, select *avere* 'have'.

13. What emerges from this argument is that no 2 can possibly advance in the presence of a 1-3 multiattachment. Either it is chômeurized immediately, as just shown in (26), or else we might attempt to advance the 2 first, before it is chômeurized, as shown in (i).

- (i)

1,3		P	2
Cho,3		P	1
...		...	...
le suore	si.sono	imposte	una dura penitenza
		imposta	

But (i) is also an ill-formed structure. The advancement creates a chômeur and therefore an illegal multiattachment of the form Cho-3, which cannot be resolved (Rosen 1988:186-8, 193).

14. A later generalization of this idea led to a definition of the Overrun relation, which is extensionally different. If nominal *a* chômeurizes nominal *b* in any circumstances, *a* is said to be an Overrunner of *b*. The definition of the Brother-in-Law relation is more limited, referring to expletive nominals and specifically to their birth stratum.

15. There may of course be a reflexive clitic which is licensed in some other way, independent of the reciprocal construction, as in:

- (i) Eva si allontana *da* Pia.  
'Eva distances herself from Pia.'

- (ii) Eva and Pia si allontanano l'una dall'altra.  
 'Eva and Pia distance themselves from each other.'

The point is that a reflexive clitic marking reciprocity (as in (41b) below) is inadmissible in combination with an oblique-marked *l'un...l'altro*.

16. The requirement that the argument of *l'un...l'altro* be subsequently multiattached is of a type that has precedents, since it is subsumed under the concept of 'extended valence' (Davies and Dubinsky 1991).

17. This view of *l'un...l'altro* is presented for the purpose of assuring that our account of reciprocals is explicit. The idea that *l'un...l'altro* has an unspecified valence is irrelevant here, but would probably find motivation in a more complete account of Romance reciprocals. This means, for example, that *l'un...l'altro* would initialize its argument as a 2 when it combines with an unaccusative verb, as in:

- (i) Questi fenomeni derivano l'uno dall'altro.  
 'These phenomena derive from each other.'

2		P
2,Obl	P	Cho
2	P	Cho
1	P	Cho
questi fenomeni	derivano	l'uno dall'altro

If, instead, *questi fenomeni* were assumed to be a 1 in the first stratum, the resulting structure would be anomalous, violating what seems to be the major principle constraining the form of multi-predicate clauses (the Union Law: see Davies and Rosen 1988:86). The most plausible alternative structure is (i), which brings with it the premise that *l'un...l'altro* has a variable valence, initializing its argument either as a 1 or as a 2.

For a transitive example like (ii), then, the most plausible structure is:

- (ii) Proteggo Ivo e Meo l'uno dall'altro.  
 'I protect Ivo and Meo from each other.'

1	P	2	P
[1stSG]	proteggo	2,Obl Ivo e Meo	Cho l'uno dall'altro

18. For the marginal type (43c), where *si* co-occurs with *l'uno all'altro*, the structure is (45a), and we can invoke a (rare) variant rule which refers not to the last multiattachment, but to any multiattachment in the clause.

19. Retroherent revaluations are those where a nominal revaluing to a new relation also retains its previous relation, thus creating a multiattachment and imposing reflexive morphology. On retroherent unaccusative advancement in Italian, see Rosen 1988, Chapter 2. Retroherent antipassive is similar, but starts from an unergative stratum. Another instantiation of retroherent antipassive is the following semi-productive Russian type:

- (i) Naša sobaka kusaetsja.  
our dog bites.REFL

1	P	2
1,2	P	Cho
1	P	Cho
naša sobaka	kusaetsja	Unspec

The condition for this antipassive is the use of an unspecified 2 (primarily with transitive verbs of a limited semantic class known as ‘aggressive’).

20. The shape of the reflexive clitic paradigm, of course, is differently interpreted under the analysis given in this paper. The neutralization of the dative versus accusative distinction is not, as Burzio suggests, an autonomous fact that gives rise to syntactically exceptional realizations. Instead it is a regular reflection of the syntactic structure: all reflexive clitics mark the resolution of a 1-2 multiattachment, as stated in (22). In no context does a 1-3 multiattachment directly impose any morphological marker.

21. Several notches below Burzio’s account, in terms of adequacy, is the GB account given by Lois 1990, a work that ostensibly compares PTCP agreement in Italian and French (among other Romance languages), but omits most of the data, saying nothing about how to explain PTCP agreement in Italian indirect reflexives, nor about the contrast between Italian and French with respect to causatives, impersonal constructions, indirect reflexives and the PTCP of the passive or copular auxiliary (see §5 below).

22. Structures like (55c) can also produce rare exceptions to the Feature Harmony Condition. In (i), the initial 2 is represented by the accusative clitic *lo*, which should thus control agreement mandatorily. But in fact the PTCP agrees with the null subject ‘we’ (from Luca Goldoni, *Cioè*, p. 96):

- (i) [il calcolatorino] ce lo siamo comprati tutti...  
the calculator us it we.are bought all  
‘[the calculator] we all bought ourselves one’ [lit. ‘it’]

This marginal third-order effect is possible only with the m. sg. clitic *lo*. Variably, it seems, speakers may regard this clitic as ‘featureless’ (since m. sg. is the default form), in which case the Feature Harmony Condition makes it a non-mandatory controller.

23. In this analysis, then, relative *che* is a nominal which linearizes in the position of a complementizer. This view is in accord with the fact that a 3 or oblique in the same environment exhibits nominal-like case marking, e.g. *a cui* ‘to wh...’, *con cui* ‘with wh...’.

24. Syntactic conditions for PTCP agreement seem to remain systematic even in those Romance varieties where its physical realization has been compromised by phonological evolution. Below in §6.1 and §6.2 we examine two varieties in which PTCP agreement is observable only with a limited set of verbs, but still clearly shows syntactic conditioning. As these are dialects, the regularities we find cannot be attributed to any prescriptive tradition.

25. French unaccusatives present a chaotic picture in comparison to the regularities found in Italian (many, if not most, take auxiliary *avoir*). In this situation a new line of research, the study of ‘unaccusative mismatches’ (moderately disparate outcomes from different diagnostics), has found

an ideal terrain. See especially Legendre, Miyata and Smolensky 1990, 1991, and for background, Legendre 1987, 1989. As stated below in §5.4, we sidestep the problem and make no attempt to contribute to that literature.

26. Handorf 1988, examining French causatives with apparent anomalies in clitic placement (e.g. *faire s'évanouir* 'make faint'), concludes on the basis of several tests that these actually reflect an alternate biclausal causative construction, available in French but only under limited conditions.

27. That is, the inner P licenses two arguments. See note 28 on the basic assumptions and terminology associated with licensing and well-formedness.

28. The valence of a P is a template over the P-initial stratum, stating which relations must or may occur and what semantic role is associated with each. Any nominal counted in satisfying the valence is said to be initialized by that P, and gets a semantic role as a concomitant. Apart from advancements and other rule-governed manipulations, initialization is the main device that licenses the origin of an arc (in our diagrams, a vertical series of identical relational signs). Once started, an arc continues until licensed to end.

29. Suitably constructed examples make it clearer that perception verbs, in their union construction, only inherit the inner 2, without assigning it a semantic role. For example, (i) is a union parallel to (64):

- (i) [I sergenti] li ho sentiti sgridare dal capitano.  
the sergeants. them.I.have heard scold by.the captain  
'[The sergeants] I heard the captain scold them.'

The pronominal 2 of *sgridare* is inherited, but not reinitialized, by the next predicate 'hear'. This is evident in the fact that (i), although it contains the string *li ho sentiti*, does not entail 'I heard them'

But in (ii), a biclausal construction parallel to (65), the pronominal 2 is initialized by 'hear' and does get the concomitant semantic role. We note that (ii) necessarily entails 'I heard him':

- (ii) [Il capitano] l'ho sentito sgridare i sergenti.  
the captain him.I.have heard scold the sergeants  
'[The captain] I heard him scold the sergeants.'

30. For background on impersonal constructions see especially Perlmutter 1983 and more recently Bickford 1987, Legendre 1990. The discrepancy between Bickford's and Legendre's view (as to whether the expletive enters as 1 or 2) has no bearing on our topic.

31. The expletive is also a 2, but can never be selected as an agreement controller. Recall from (14) the suggestion that no featureless nominal can ever be accepted as the operand of a feature-matching role.

32. French seems to have no analogue of the Feature Harmony Condition that exists in Italian (§4.3). Syntactic conditions alone, those expressed in rule (69), determine whether a PTCP does or does not show agreement.

33. See Loporcaro 1988 for a full description of Altamurano. For details on the RG analysis summarized here, see La Fauci and Loporcaro 1989.



34. See Loporcaro 1988. Basic data on this system of inflection by vowel alternations is also given in La Fauci and Loporcaro 1989. For an overview of this phenomenon in Southern Italian dialects, see Rohlfs 1968: §§369 ff.

35. For a detailed account of Grizzanese, see Loporcaro 1992, the source for all the data in this section.

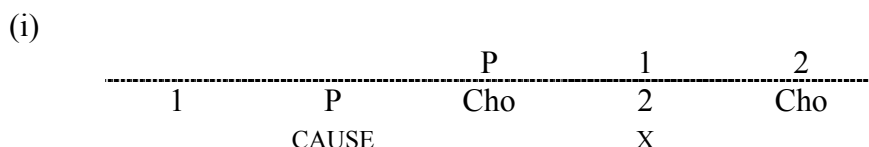
36. Grizzanese has a Feature Harmony Condition which is more rigid than that of Italian. Wherever the Italian version makes agreement optional, the Grizzanese version disallows agreement.

37. This section draws upon La Fauci and Loporcaro 1991, a more detailed analysis of Bonorvese centering especially on impersonal constructions. Data appear in La Fauci and Loporcaro's transcription, which is broadly phonetic, and reflects the main sandhi phenomena. The plural marker, phonemically /-s/, appears as [s], [z] or [l], depending on the following segment.

38. Formally, the notion of 'first  $GR_X$ ' is defined as follows: a nominal  $a$  is the first  $GR_X$  of clause  $b$  iff there is an arc origin  $[GR_X(a,b)\langle c_k \rangle]$  and no arc origin  $[GR_X(d,b)\langle c_j \rangle]$ , where  $j < k$  and  $a \neq b$ .

Other rules referring to the notion of 'first  $GR_X$ ' have been proposed by Gibson 1980 and Harris 1981.

39. In the chart, the innermost two conditions on controllers stand in a relationship of logical implication: if a PTCP initializes  $C$  as 2, then  $C$  is necessarily a P-initial 2 of the PTCP. However the next two conditions are not related in that way: if  $C$  is the P-initial 2 of a PTCP, this does not entail a priori that  $C$  is the first 2 of its clause. A contrary case could arise in a causative of the following form, where the inner 1 revalues to 2. Then nominal  $X$  is then a P-initial 2 of the causative verb but is not the first 2 of its clause:



This structure is well-formed from the viewpoint of universal grammar, and is known to occur in a number of languages (see Davies and Rosen 1988:70 ff.). But it does not occur in the Romance varieties considered here (nor anywhere in the Romance family to the best of our knowledge).

So, in effect, P-initial 2-hood does entail first 2-hood, not logically, but in terms of the structures actually existing in Romance. In the chart, the sets of PTCP agreement environments in these five Romance varieties can therefore be represented as nested sets.

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