

The Unaccusative Hypothesis and participial absolutes in Italian: Perlmutter's generalization revised.*

Michele Loporcaro

The syntax of participial clauses has been an important issue in syntactic theory, especially since Perlmutter (1978) put forth the Unaccusative Hypothesis. This is the object of a lively debate, one of the most controversial aspects being whether unaccusativity effects are better explained in syntactic or semantic terms (cf. e.g. Sorace 2000). Focusing on Italian, this paper argues that participial clauses are subject to both syntactic and semantic constraints and that, contrary to the claims of semanticist approaches to unaccusativity (à la Van Valin 1990), the former take precedence over the latter. Demonstrably, an Aktionsart constraint requiring that the predicate involved be telic operates in a different fashion for the two classes of unaccusatives vs. unergatives. This fact, however, becomes clear only once a commonplace is refuted: Italian unergatives are not altogether ungrammatical in participial clauses, as currently assumed in the wake of Perlmutter (1989). They are so only within a syntactically defined subset thereof, that of non-controlled participial constructions, while in the complementary subset of controlled participial clauses, occurrence of unergatives is syntactically allowed and semantically constrained. This indicates that the two constructions obey distinct syntactic conditions. Formalization of these, carried out in Relational Grammar, automatically solves a number of problems, within Italian and across Romance. Most notably, it affords a natural solution to the problem of the voice of Romance participial constructions. It also allows a proper understanding of the Romance facts under discussion against the background of a cross-linguistic typology of alignment systems.

1. Introduction

The aim of this paper is to reconsider one of the central pieces of evidence for the Unaccusative Hypothesis in Romance syntax, viz. the so-called participial absolute constructions, as exemplified in (1a-b) with Italian data:

- (1) a. Partiti i manifestanti, tornò la calma
'The demonstrators having left, quiet returned'
- b. Arrestati i manifestanti, tornò la calma
'The demonstrators having being arrested, quiet returned'

I will show that none of the analyses of these Italian constructions provided so far is entirely satisfactory, and develop an alterna-

tive account. The paper is organized as follows. In §2 I summarize Perlmutter's discussion of the syntax of Italian participial clauses within the framework of the UH. §3 shows that, in the literature, the term 'absolute' is used in an ambiguous way, a fact that has consequences for the analysis. In §4 I review current approaches to the voice of Italian transitive participial clauses, and show that they are inconclusive. In §§5-6 I develop my own proposal. I first show that Perlmutter's account is empirically incorrect because it fails to consider a semantic constraint that interferes with the grammaticality of PAbs (§§5.1-5.2). Having factored out the role of semantics, §§5.3-5.5 expound the crucial empirical questions still to be solved in order to arrive at a syntactic generalization on Italian participial clauses. §6 answers these questions. Crucially, it shows that the two structural subclasses of controlled vs. non-controlled participial clauses obey two different syntactic conditions and have different properties with respect to voice. Finally, §§7-8 sketch some implications of this account for Romance comparison and for the relationship between the UH and the typology of alignment systems.

The paper is cast in the theoretical framework of Relational Grammar (RG), in the version incorporating Davies & Rosen's (1988) theory of Predicate Union.¹ This does not imply that contributions couched in other frameworks are ignored. On the contrary, taking a cross-theoretical perspective, I will strive for a comparative evaluation of the descriptive merits of all the (quite extensive) literature on the topic.

2. The Unaccusative Hypothesis and participial absolutes in Italian

David Perlmutter's UH is well-known. It assumes that the set of intransitive predicates divides into two subsets, exemplified in (2a-b) with the few initial items from the lists in Perlmutter (1978:162), to which their Italian counterparts and two Italian examples are added:

- | | | | | |
|-----|----|------------------------------------|---|---------------------|
| (2) | a. | <i>burn, fall, drop, sink ...</i> | (It. <i>bruciare, cadere, affondare</i>) | |
| | | e.g. <i>Maria è caduta</i> | 'Mary fell down' | unaccusative |
| | b. | <i>work, play, speak, talk ...</i> | (It. <i>lavorare, giocare, parlare</i>) | |
| | | e.g. <i>Maria ha lavorato</i> | 'Mary worked' | unergative |

The two classes are defined in purely syntactic terms. In the former (2a), the argument of the (monadic) intransitive predicate is represented as an underlying direct object (initial 2, in RG notation), in

the latter (2b) as an underlying (or initial) subject, as shown in the relational diagrams in (3a-b):²

- (3) a.

2	P
1	P
1	P
1	P

 Maria è caduta
- b.

1	P	P
1	P	Cho
1	P	Cho
1	P	Cho

 Maria ha lavorato

The UH had a dramatic impact on research, on several language families and on different structural components. For Romance syntax, its consequences were explored by Perlmutter in lectures at MIT in 1976-77 (Pullum 1988:585), whose main bulk appeared in print much later (as Perlmutter 1983a, 1989). In Perlmutter (1989), the analysis of Italian PAbs stands out in a prominent position. The title of one of the initial sections reads ‘*Argument One: Participial Absolute*’. The argument – exemplified here with Perlmutter’s own data – runs as follows. In Italian a PtP may occur, with or without an overt nominal, as the only predicate of a subordinate clause, obligatorily preceding the main clause:

- (4) a. Cadute dall’albero, le arance rimasero a terra **unaccusative**
‘Having fallen from the tree, the oranges remained on the ground’
b. Uscite le donne, gli uomini hanno cominciato a litigare
‘The women having left, the men began to quarrel’
- (5) a. Perduti i soldi, non c’era niente da fare **transitive**
‘The money having been lost, there was nothing to be done’
b. Perduti i soldi, Giorgio cercava mezzi di sussistenza
‘Having lost the money, Giorgio was looking for some means of subsistence’
c. Mangiati i polli, non c’era niente da fare
‘The chickens having been eaten, there was nothing to be done’

The construction is grammatical with unaccusative and transitive predicates. In initially transitive clauses, moreover, the nominal accompanying the PtP must be the initial object, not the initial subject, as apparent from the gloss in (5c): *Mangiati i polli*, cannot mean *‘the chickens having eaten’. Crucially, the argument of unergative predicates behaves like the transitive subject, in that it cannot occur in a PAbs:

- (6) a. *Gridato ai bambini, Giorgio è uscito **unergative**
‘Having shouted to the children, Giorgio left’
b. *Starnutito all’improvviso, Giorgio non sapeva cosa fare
‘Having sneezed unexpectedly, Giorgio didn’t know what to do’

Consequently, the behavior of PABs turns out to be one of the many features of Romance syntax (along with auxiliary selection, PtP agreement, the syntax of causatives or of the ‘partitive’ object clitic *ne* etc.) which receive a simple formalization under the UH. Given the structural representations in (3a) vs. (3b),³ a straightforward generalization becomes available:

- (7) PARTICIPIAL ABSOLUTES IN ITALIAN (Perlmutter 1989:68)
“A participial absolute can be formed on a nominal heading a 2-arc”.⁴

3. *Participial clauses: taxonomy and terminology*

Perlmutter’s contribution conditioned all following research. Behind his crucial insights, however, a substantial error in the analysis of PABs has gone unnoticed so far. This error is crucially intertwined with the taxonomy of participial constructions and with the terminology used to label them. Let us address the terminological issue first.

The class of constructions under scrutiny was denoted by a variety of labels in the literature. Along with the classical label ‘participial absolutes’, used by Perlmutter and others, one can mention at least ‘Absolute Small Clauses’ (Belletti 1990, 1992, 1999), ‘Participial Absolute Small Clauses’ (Egerland 1996), ‘Absolute Adjunct Constructions’ (Cinque 1990), ‘Absolute Phrases’ (Dini 1994). All of these terminological conventions share one common property: they use ‘absolute’ in the first of the two senses contrasted in Tables 1-2 (henceforth referred to as **absolute**₁), taking it to mean, roughly, ‘occurring without a finite (auxiliary) verb’.

Table 1. **Absolute**₁ as a superordinate term.

participial absolute (= absolute ₁)	
non-controlled	controlled

Table 2. *Absolute*₂ as a hyponymic term.

participial circumstantial complement (= PCC)	
absolute ₂	dependent

This is by far the prevailing option: the list of authors using *absolute* in the first sense includes, along with those just cited, e.g. Hernanz (1991:79), Hualde (1992:252), La Fauci (2000:76ff), Legendre (1987:97), Loporcaro (1998:19 fn. 37, 35), Müller (1999:218), Schmitt (1998), Stowell (1992), Torrego (2002:349-351), Vinet (1989) and a host of others.

The other sense (**absolute**₂) is found much more rarely in the current literature in theoretical syntax (e.g. Rosen 1981 [1988]:59, Legendre 1987:87-104). It is exemplified in the following quotation from Carol Rosen's dissertation:

"A reduced clause, with the verb in participial form, can appear as a circumstantial complement to another clause. These participial complements fall into two classes, *dependent* and *absolute*. In the dependent type there is a coreference linkage between the participial complement and the higher clause, while in the absolute type there is none" (Rosen 1981 [1988]:59).

In the first, more widespread, terminology, **absolute**₁ is a superordinate label for the two subsets of constructions distinguished by the absence vs. presence of a coreference linkage with the higher clause. To be sure, it is not the case that this contrast is missed by linguists using *absolute* in the first sense. It is merely that the contrast is considered irrelevant to the purpose of assessing the syntactic distribution of the two subclasses of constructions involved. These are labelled differently, as the following passage from Perlmutter (1989:67) shows:

"While (17) and (18) [i.e. (5a) and (5b) here, M.L.] are superficially alike, they differ in that the participial absolute in (18) is controlled by *Giorgio* in the main clause. That is, in (18) it is Giorgio that has lost the money. One can thus speak informally of the participial absolute in (18) as involving *Equi* controlled by a nominal in the main clause."⁵

For the sake of simplicity, examples of controlled participial clauses discussed throughout this paper (see (4a), (5b) etc.) will be

limited to the clearest case, the one in which the controller is the subject of the matrix clause. Actually, as observed by Dini (1994), it is possible for the controller to be an argument ((8a)) or even an adjunct ((8b)) of the matrix clause:

- (8) a. Solitamente apprezzato dal capufficio, quell'improvviso licenziamento lo stupì moltissimo
'Having been usually praised by the head clerk, the sudden firing struck him:DO.CLIT very much'
- b. Odiato dai figli, la casa era per lui un inferno
'Being hated by his children, his home was a hell to him'

It is also (marginally) possible for the controller to be only contextually given, in previous textual material (9a) (an option unavailable with passives, (9b)):

- (9) a. Maria si diresse all'appuntamento senza ombrello. Purtroppo, scesa dal taxi, cominciò a piovere.
'Maria went to the date without umbrella. Unfortunately, (once she) got out of the taxi, it started raining'
- b. *Odiato dai figli, la casa era un inferno
'Being hated by his children, his home was a hell'

Discussion of this and similar evidence leads Dini (1994:68) to weaken the control requirements and to conclude that "*some* semantic condition on index anchoring [...] has to be taken into consideration", without specifying it any further.

While the facts in (8)-(9a) are genuine, they are rather marginal. In terms of text frequency, control by the matrix clause subject is by far the most common case. In any case, the grammaticality of (8)-(9) will not exempt us from acknowledging the contrast between the two subcategories (see Tables 1-2), the former free from coreference, the latter bound (in some way). The crucial (terminological) point in this section is that, for all the authors mentioned so far with the exception only of Rosen (1981 [1988]) and Legendre (1987), *absolute*₁ is a superordinate term covering both of these categories, while for Rosen (and Legendre) *absolute*₂ only denotes the subclass without coreference linkage. This simple, and at first sight innocuous, terminological difference will indeed prove essential in assessing the correctness of competing analyses.

Rosen's terminology, while rather isolated in contemporary theoretical syntax, corresponds quite closely to the one familiar from the classical tradition. Latin grammarians of the Middle Ages, starting

from the 11th century (cf. Serbat 1979:341-2, Maiocco 2002:316 fn. 1), began to use the term *ablativus absolutus* to label a well-known syntactic construction of Classical Latin that could contain a perfect participle and is the diachronic source of the Romance constructions under scrutiny. In school grammars of the following centuries, this construction was usually defined in terms of lack of coreference linkage to the matrix clause. On the other hand, Rosen's 'participial dependent' corresponds to those participial constructions which Latin grammars term *participium conjunctum*, *conjunctum* meaning 'linked' to the matrix clause via coreference.

I propose that we should adopt the second terminology. The reason to prefer it is not just traditionalism but a more substantial one. We will see that the use of the terminology in Table 1 correlates with analyses which are demonstrably wrong. Avoiding the confusing terminology will help us to avoid making factual errors as well. Thus, in what follows, *participial absolute* (PAbs) and *participial dependent* (PDep) will consistently refer to the hyponymic classes of syntactic constructions in Table 2, whereas 'participial circumstantial complement' (PCC) will be used as a superordinate term.⁶ The coreference facts in (8)-(9) are easily accommodated by modifying somewhat Rosen's definition. The subcategory to be specified is the one of PAbs, while PDep is the elsewhere case:

- (10) PARTICIPIAL CIRCUMSTANTIAL COMPLEMENTS [DEFINITION]
A reduced clause with the verb in participial form is a:
a. PARTICIPIAL ABSOLUTE
if its final subject is free from coreference linkages;
b. PARTICIPIAL DEPENDENT
otherwise (i.e., if it is *not* free from coreference linkages).

Specification of the presence vs. absence of a coreference linkage must be restricted to the *final* subject of the participial clause, because the final subject is the Equi victim (i.e. the phonologically null controllee, see fn. 5 above). This was demonstrated for French by Legendre (1987:94-96), who formulated condition (11), supported by evidence like that reproduced in (12):

- (11) CONDITION ON EQUI VICTIMS
Only a final 1 can be an Equi victim.
- (12) a. Arrêté par la police avant d'avoir pu s'enfuir à l'étranger, Pierre subit une longue interrogation
'Having been arrested by the police before having been able to flee abroad, Peter underwent a lengthy interrogation'

- b. Mort prématurément sans avoir eu le temps de contacter son avocat, son père n'avait pas laissé de testament
'Having died prematurely without having had time to contact his lawyer, his father had not left any will'
- c. Parti avant l'aube en ayant dormi au maximum quatre heures, Pierre est arrivé le jour même à destination
'Having left before dawn while having slept at most four hours, Peter arrived to destination that very same day'

Since only nominals bearing the 1 RG at some stratum can control adverbial infinitival or gerundial phrases, the grammaticality of (12a-c) proves that the initial 2 must be a 1 in the clause. Evidence for the same conclusion is available for Italian as well, since (12a-c) literally translate into the following grammatical sentences:

- (13) a. Arrestato dalla polizia prima di aver potuto fuggire all'estero, Pietro subì un lungo interrogatorio
- b. Morto prematuramente senza aver avuto il tempo di contattare il suo avvocato, suo padre non aveva lasciato testamento
- c. Partito prima dell'alba avendo dormito al massimo quattro ore, Pietro è arrivato il giorno stesso a destinazione

This proves that the same condition on Equi victims (11) can be extended to Italian PDeps, while (14) shows that the argument has subject properties in PABs too:

- (14) a. Arrestato Gianni dalla polizia prima di aver potuto fuggire all'estero, la refurtiva fu recuperata
'Gianni having been arrested by the police before having been able to flee abroad, the stolen goods were recovered'
- b. Morto Gianni senza aver avuto il tempo di contattare il suo avvocato, non vi fu alcun testamento
'Gianni having died without having had time to contact his lawyer, there was no last will and testament'

(13)-(14) also prove that both PDeps and PABs must comply with Perlmutter & Postal's (1983) Final 1 Law, requiring that every basic clause contain a 1-arc in the final stratum. The crucial difference between the two classes is that, in PDeps, the final subject (the Equi victim) is interpreted via coreference with an antecedent. The exact definition of this antecedent and of the coreference domain, albeit important, is not essential for our present concerns and will not be pursued any further here.⁷

4. Italian transitive participial clauses and voice

Perlmutter's conclusion was accepted by all subsequent research on these syntactic constructions. Thus, virtually all scholars writing on participial clauses in Italian have assumed that these can be built on the DO of transitive or unaccusative predicates, whereas unergative and transitive subjects are categorically excluded.⁸ For this empirical contrast, several structural accounts have been proposed in different frameworks. Consider for instance Cinque (1990). Elaborating on Haider (1984) and Hoekstra (1987), Cinque (1990:25) assumes that PtP themselves, both in the active and in the passive, are "verbal forms which 'suspend' or 'block' the externalization of the external θ -role". PtPs, consequently, lack differential properties which could account for the contrast in acceptability in (4) vs. (6). This contrast must therefore be traced back to the (lack of the) auxiliary. Unergatives and transitives take auxiliary *to have*, that has the property of 'deblocking' "the externalization of the suspended external θ -role". This property is not shared by the auxiliary *to be*, which is normally assigned to unaccusatives. Therefore in participial clauses, where the auxiliary is absent, only an internal argument is grammatical, viz. the argument of unaccusatives or the transitive DO. ('Internal argument' translates Perlmutter's 'initial 2'.)⁹

While the unacceptability of unergative predicates in participial clauses was assumed as unproblematic, there has been some discussion on a point which Perlmutter did not touch upon, viz. the voice of PCCs built on transitive predicates.¹⁰ On this topic, opinions diverge dramatically, as all of the positions in (15a-d) have been argued for in the literature.

- (15) THE VOICE OF ITALIAN PARTICIPIAL CLAUSES
- a. the issue is irrelevant/undecidable;
 - b. PCCs involving a transitive predicate are always active;
 - c. PCCs involving a transitive predicate are always passive;
 - d. PCCs involving a transitive predicate are either active or passive, depending on some other structural property of the clause.

Position (15a) is argued for by Cinque (1990). It follows from the assumption that all syntactic properties of PtPs are determined by the auxiliaries they get assigned in finite clauses. Therefore, a PtP in

itself is neither active nor passive, and so must be, logically, a construction which contains a PtP without any auxiliary. This opinion, however, seems hard to maintain, since transitive participial clauses display many (argument marking) properties which are diagnostic for voice in finite clauses. Thus, the question is legitimate, and was in fact explicitly asked by Belletti (1990:102, 1992:31): “An obvious question immediately arises. Are participial clauses [...] active or passive constructions?”.

Belletti’s own answer belongs to category (15d). She discusses evidence such as that reported here in (16a-b):

- (16) a. Salutata me, si è accorto che c’era molta altra gente
‘Having greeted me:ACC, he realized that there were many more people’
- b. Salutatata, si è accorto che c’era molta altra gente
‘Having greeted her:DO.CLIT, he realized that there were many more people’

Based on this evidence, she concludes that “transitive ASCs [= Absolute Small Clauses] are not instances of passive” (Belletti 1990:104), since they display accusative marking on the pronoun in (16a) and cliticization of the DO in (16b), both typical for active voice (see (17) vs. the passive counterparts in (18)):

- (17) a. Gianni ha salutato me/*io
‘Gianni has greeted me:ACC’
- b. La polizia ha arrestato i manifestanti
‘The police arrested the demonstrators’
- c. La polizia li ha arrestati
‘The police arrested them:DO.CLIT’
- (18) a. Io/*Me sono stata salutata da Gianni
‘I:NOM have been greeted by Gianni’
- b. I manifestanti sono stati arrestati dalla polizia
‘The demonstrators were arrested by the police’
- c. *Li sono stati arrestati dalla polizia
‘Them:DO.CLIT were arrested by the police’

Further evidence is provided by *ne*-pronominalization. As first pointed out by Perlmutter (1983a:155, 1989:72), this is only allowed if the argument involved bears the DO relation and does not bear the subject relation in the clause. (Or, in Belletti’s terms, if the nominal does not move to Spec-IP.) Therefore, the grammaticality of (19b)

proves that the nominal, which is the initial DO, is not the subject. Ergo, the structure cannot be passive:

- (19) a. Arrestati tre manifestanti, ...
 ‘Having arrested three demonstrators, ...’
 b. Arrestàtine tre, ...
 ‘Having arrested three of them, ...’

The list of relevant evidence gathered by Belletti also includes the contrast (20a-b). As shown in (20a), a PCC cannot contain a nominal with the prepositional marking encountered on passive agents (see (18b)):

- (20) a. *Salutata Maria da Gianni, tutti uscirono
 ‘Greeted Maria by Gianni, everybody went out of the room’
 b. Salutata da tutti, Maria lasciò la sala
 ‘Greeted by everybody, Maria left the room’

(20b), however, shows that some instances of transitive PCCs must indeed be passive. As she puts it: “A passive ASC becomes perfect if no lexical NP follows the past participle” (Belletti 1990:116). Summing up, Belletti’s generalization can be schematically represented as follows:

- (21) TRANSITIVE PARTICIPIAL CLAUSES IN ITALIAN (Belletti 1990, 1992)
 i) In a transitive PCCs the two arguments of a transitive verb may not be lexically realized at the same time.
 ii) As to voice, a transitive PCC is:
 a) passive iff the internal argument is not lexically realized;
 b) active otherwise.

For unaccusatives, Belletti assumes that the internal argument moves to subject position and hence receives nominative Case, as shown by the evidence in (22):

- (22) Arrivata io/*me, Gianni tirò un sospiro di sollievo
 ‘(When) I arrived:FSG, Gianni gave a sigh of relief’

Consequently, unaccusative participial clauses are assimilated to the subset of transitives described in (21ii-a), in that they share the structural property of movement of the internal argument to Spec-IP. For the same reason, they contrast with the other subset of transitive PCCs described in (21ii-b), in which movement to Spec-IP does not

take place.

Belletti's discussion of voice in participial clauses had a certain impact on research, as documented by the following observation by Stowell (1992:49):

"This, I think, is the chief significance of Belletti's analysis for the dispute over passives, since it implies that 'passivization' is a syntactic rather than a lexical process (apart from morphophonemic details). I submit that it is almost impossible to account for her facts in a principled manner in terms of a theory that rejects all movement rules and that treats passive and unaccusatives as lexical and syntactic intransitives in every respect."

Belletti's account was also criticized, though. Egerland (1996: 229-263), developing insights by Cinque (1990) and Kayne (1989:97), puts forward a "Unified Account of Transitive and Ergative PASC" [= Participial Absolute Small Clauses] (1996:233). He assumes that the internal argument of all PCCs, both unaccusative and transitive, *always* appears in Spec-IP at S-structure, and that "V-to-Comp and Spec Head Agreement" account for all the morphosyntactic properties of PCCs. This proposal exemplifies category (15c). It boils down to the claim that *all* instances of PCCs involving a transitive PtP are instances of passive: the internal argument of all transitive predicates is claimed to undergo the same structural fate as the internal argument of unaccusatives.

This hypothesis, however, must face a considerable burden of proof: it requires a reanalysis of the empirical evidence seen above in (16), (19b), etc., showing that (many instances of) PCCs cannot be passive. Egerland's (1996:262-3) line of reasoning is as follows: (His examples (112) and (113) are reproduced here as (23a-b).)

"As for the enclisis of pronouns [...], it is true that this is not possible in the passive, but neither is it possible with the active participle. (112) and (113) are equally excluded [...]. Thus, the cliticization of the pronoun does not offer a criterion for establishing passive-hood".

- (23) a. *Ho fattolo
 'I have done it:DO.CLIT'
 b. *Sono statolo
 'I have been it:CLIT'

To this argument, two objections can be raised. First, in (23b), the clitic *lo* is not a pronominal DO clitic but the homophonous pro-

predicate clitic, which can substitute for a predicate of any form, either verbal or nominal, when this is accompanied by the auxiliary/copula *essere*:

- (24) a. Sono stato imbrogliato/magro/presidente del club per anni
'I have been cheated/thin/president of the club for years'
b. Lo sono stato per anni
'I have been it:CLIT for years' ('cheated/thin/president of the club')

Therefore, the piece of data mentioned in (23b) does not bear on the issue of ascertaining the voice of participial clauses, since the pro-predicative clitic *lo* can never occur (no matter in which position) in such constructions for an entirely independent syntactic reason: all perfective auxiliaries (as well as copulas) are always ungrammatical in all types of PCCs (see (47b), §5.3, (48), §5.4). As for the ungrammaticality of enclisis with either DO ((23a)) or pro-predicate clitics ((23b)), on the other hand, this is the product of a well-known independent prosodic constraint which – after the change that led to the abolition of the Tobler-Mussafia position in the late Middle Ages – requires that the clitics should be proclitic, not enclitic, to all finite verb forms except in the imperative mood. *Ho fatto* and *Sono stato* in (23a-b) are finite verb forms (indicative compound perfect), hence the clitic must precede them: *L'ho fatto*, *Lo sono stato*. Thus, the empirical evidence in (23) is inconclusive, and cliticization remains a reliable test for voice.

Moreover, the logic of the argument is defective. The grammaticality of (en)cliticization in PCCs ((16b)) is generally taken to prove that the clause must be active, since in finite clauses a DO clitic can occur in the active, not in the passive (see (17c) vs. (18c)). This, however, by no means implies that *every* active clause containing a PtP must allow the enclisis of the DO clitic. Consequently, it cannot be falsified by showing that *some* active constructions are incompatible with enclisis.

Note finally that Egerland does not provide any alternative analysis for DO-encliticization and *ne*-pronominalization in PCCs:

“Presumably, the contrast between (103) and (112)/(113) [respectively, examples of PCCs with DO cliticization such as (16b), vs. the unacceptable (23a-b), M.L.] is due to the lack of relevant functional structure in periphrastic tenses” (Egerland 1996:263).¹¹

As to *ne*-cliticization (seen above in (19b)), Egerland (1996:233 fn. 3) questions its diagnostic validity and, although he recognizes that “the issue is of course *also* an empirical one” [italics added], concludes: “I have no explanation for this but will follow the conclusion I take to be theoretically warranted”. Namely, the conclusion that the internal argument of all sorts of PCCs must move to Spec-IP. This conclusion, I have demonstrated, is unwarranted, both empirically and theoretically.

This shows that positions of type (15c) are inconsistent, a fact that becomes even more evident if one considers Salvi’s (1988) contribution to Renzi’s (1988) reference handbook of Italian syntax. In two passages on participial clauses, the author appears to endorse position (15c):

“i participi passati dei verbi transitivi, quando usati attributivamente o *assolutamente*, hanno *sempre significato passivo*” (Salvi 1988:86); [the PtPs of transitive verbs, when used attributively or absolutely, always have passive meaning; italics added]

“Il participio passato usato nella costruzione assoluta ammette solo l’interpretazione passiva:

(493) Chiusa la porta, Piero si allontanò” (Salvi 1988:90).

[the PtP used in the absolute construction only admits a passive interpretation:

(493) Having shut the door, Piero went away]

However, by the third edition of the book (Renzi 1991³), the second passage is modified to read as follows:

“Il participio passato usato nella costruzione assoluta ha *interpretazione attiva e non passiva* [italics added], come mostra l’uso del clitico accusativo:

(493) Una volta chiusa la porta, Piero si allontanò. / Una volta chiusa*la*, Piero si allontanò.” (Salvi 1991³:90).

[the PtP used in the absolute construction has active, not passive, interpretation, as shown by the occurrence of the accusative clitic:

(493) (Once) Having shut the door, Piero went away. / Once having shut it:DO.3PSG.CLIT, Piero went away.]

The crucial piece of evidence that causes Salvi’s revision is cliticization of the DO. Based on this evidence (discussed at length in Belletti 1990, that had appeared meanwhile), Salvi (1991³:90) claims that transitive PCCs are *always* active. Thus, he seems to argue in favor of position (15b). Note, however, that the first passage is not

deleted or correspondingly modified in Salvi (1991³:86). Consequently, after the modification, Salvi's paper contains a contradiction concerning the voice of PCCs, since the same class of constructions is once said to "always have passive meaning" (in keeping with position (15c)), once to "have active, not passive, interpretation" (in line with position (15b)). Obviously, both claims cannot be true at the same time. Actually, the evidence surveyed so far shows that they are both false.

Thus, we are left with position (15d) as the only reasonable option. The account to be developed here belongs in this category, the same exemplified above with Belletti's account. According to Belletti (1990:116), the voice of transitive PCCs depends on whether or not the initial DO is lexically realized ((21ii-a)). In Belletti (1992:40) the same point is made with explicit reference to passivization: "A passive past participle clause becomes perfect if no lexical NP subject is present". Note however that, given what we independently know about Italian grammar, such a constraint on passivization seems rather suspect. The evidence actually shows that it is empirically incorrect. It is not true that for a passive PCC to be acceptable, the initial DO nominal may not be lexically realized. This is proved by the acceptability of (25) (from Dini 1994:65):

- (25) Letto il discorso dal presidente, scoppiarono gli applausi
'The speech having been read by the president, applause burst out'

I will return later on to the reasons why (25) is acceptable, while Belletti's example (20a) is not (see fn. 26).

5. Beyond Perlmutter's generalization

Although it paved the way for all subsequent research on the topic, Perlmutter's generalization on PABs in (7) was wrong on a crucial point: the ban on unergatives. Since Perlmutter is using *absolute* as 'absolute₁' (Table 1), his generalization is supposed to cover all PCCs, both controlled (PDeps) and non-controlled (PABs). For the latter, the generalization is correct, since no unergative predicate is ever allowed in PABs (*stricto sensu*: i.e. absolute₂, Table 2):

- (26) a. *Starnutito Giorgio, si creò un clima d'imbarazzo
 'Giorgio having sneezed, this caused some embarrassment'
 b. *Vendemmiati/-o i contadini, l'uva fu radunata in grossi tini
 'The farmers having harvested, grapes were gathered in big
 tubs'

However, this categorical ungrammaticality does not extend to PDeps. The two examples of PCCs with unergative predicates in Perlmutter (1989:68) (quoted above in (6a-b) and repeated here in (27a-b)) are instances of the PDep construction. They in fact happen to be ungrammatical, like many other examples commented on elsewhere in the literature (e.g. (27c-d)):

- (27) a. *Gridato ai bambini, Giorgio è uscito
 'Having shouted to the children, Giorgio left'
 b. *Starnutito all'improvviso, Giorgio non sapeva cosa fare
 'Having sneezed unexpectedly, Giorgio didn't know what to do'
 c. *Nuotato, Gianni si stese sulla riva
 'Having swum, Gianni lay down on the shore'
 d. *Lavorato, Gianni si riposò
 'Having worked, Gianni took some rest'

However, as was shown convincingly by Dini (1994:66), PDeps are perfectly grammatical in Italian with at least some unergative verbs:¹²

- (28) Vendemmiato, i contadini lasciarono il paese
 'Having harvested, the farmers left the town'

To account for the difference in acceptability between (28) and (27), Dini (1994) proposes a semantic (Aktionsart) constraint (to be discussed in §5.1) that prevents atelic predicates from occurring in these constructions.¹³ The tricky fact about unergatives is that, from the point of view of Aktionsart, the overwhelming majority of them are durative and atelic. For this semantic reason, most unergatives happen to be unacceptable in PDeps, as is in fact the case in (27). By Perlmutter (1989) – and in the whole line of research initiated by his seminal paper – the ungrammaticality effect following from this semantic constraint was mistaken for a categorical syntactic ban. It was consequently viewed as one of the effects of the (syntactic) generalization (7), covering both PABs and PDeps at the same time.

In the final analysis, the acceptability of (28) proves that Perlmutter's generalization on PABs (= absolute₁) in (7) is incorrect:

unergatives, while being categorically excluded from PABs, are not (syntactically) excluded from PDepS. Before we go on to find a genuine syntactic generalization, however, we have to factor out the role of semantics in constraining the acceptability of PCCs (§§5.1-5.2).

5.1. PCCs and the syntax-semantics interface

Dini's (1994) account of PCCs is cast in the framework of HPSG, a theory providing for explicit semantic as well as syntactic representations. The analysis crucially focuses on the semantics of PCCs. I first address its merits and then I argue (§5.2) that, nevertheless, we are still in need of a (purely) syntactic generalization on the distribution of PCCs.

The semantic constraint proposed by Dini (1994:66) is formulated as follows:

- (29) AKTIONSART CONSTRAINT
"AAPs' heads *have* to be non additive (telic)"

This is claimed to hold true for only one of the two subsets of PCCs distinguished by Dini (1994:55), that of Absolute Aspectual Phrases (AAPs), which he contrasts with Absolute Predicative Phrases (APPs). The two categories are defined in (30a-b) and exemplified in (31) vs. (32), respectively:

- (30) a. AAPs: "sentence initial participial phrases whose links with the matrix clause are rather loose and whose main semantic import is constituted by a relation of temporal precedence";
b. APPs: "analogous phrases which act mainly as predicates over one of the matrix clause participants".
- (31) a. *Maltrattato Gianni, Carla partì*
'Having mistreated Gianni, Carla left'
b. *Partita Maria, la mia vita cambiò*
'Maria having left, my life changed'
c. *Vendemmiato, i contadini lasciarono il paese*
'Having harvested, the farmers left the town'
- (32) a. *Ammirata da tutti, Carla pronunciò il discorso*
'(Having being) admired by everybody, Carla uttered her speech'
b. *Solitamente vissuto in miseria, Gianni non era abituato a mangiare troppo spesso*
'Having usually lived in poverty, Gianni was not used to eat too often'

As apparent from the examples, Dini's semantic categories cut across syntactic clause types: AAPs can be transitive, unaccusative or unergative, while APPs are restricted to passives used duratively and to stative unaccusatives, i.e., to a semantically defined subset of the range of clause types encountered in AAPs (1994:72-74). In addition, "APPs cannot have an expressed NP" (1994:71 fn. 30): while APPs are always PDepS, never PAbS (see (32)), AAPs can belong to either category (see (31a, c) vs. (31b), respectively).¹⁴

AAPs and APPs are crucially distinguished by the fact that only the former, but not the latter, are subject to constraint (29), formulated in terms of Verkuyl's (1989, 1993) notion 'additivity':

"an additive event is such that, if it takes place at an interval I_i , and it takes place at an interval I_j , adjacent to I_i , the same event holds for I_{j+i} , too." (Dini 1994:69)

An additive event is contrasted with a non-additive one in (33a-b):

- | | | |
|------|--|---|
| (33) | a. I ate from four to five
I ate from five to six
⊃ I ate from four to six | b. I ate a sandwich from four to five
I ate a sandwich from five to six
⊃ I ate a sandwich from four to six |
|------|--|---|

Dini (1994:71) suggests that AAPs "*have* to be non additive (telic)" while APPs "*can* be additive (atelic)". This hypothesis allows a unified account of a number of empirical properties of PCCs. Take for instance the ungrammaticality of PCCs with an indefinite argument in (34a-b):

- | | |
|------|---|
| (34) | a. *Mangiato salame, Gianni riprese il cammino
'Having eaten salami, Gianni set off again' |
| | b. *Cadute pietre, la strada è rimasta bloccata
'(Some) rocks having fallen, the road was blocked' |

A non-telic transitive verb denotes an additive event. If the DO is indefinite, as in (34a), the predicate is not telicized and the PCC is consequently ruled out by (29). On the other hand, a telic predicate such as the unaccusative *cadere* 'fall' is detelicized when its argument is an indefinite nominal: this renders the PCC in (34b) ungrammatical. Constraint (29) also accounts for the ungrammaticality of negation in PCCs (AAPs, in Dini's terms) such as those in (35). Negation, in fact, makes all verbal events durative (and atelic):

- (35) a. *Non mangiato (il) salame, Gianni riprese il cammino
 ‘Not having eaten salami, Gianni set off again’
 b. *Non arrivata Maria, la festa cominciò
 ‘Maria not having arrived, the party began’

Belletti (1990:95, 142 fn. 18) developed distinct explanations for these facts. She takes the ungrammaticality of (34b) to follow from the impossibility for bare NPs to occupy the subject position in Italian: **Pietre cadono* ‘Rocks fall down’. This explanation is less economical, since the unacceptability of (34b) already follows from the independently motivated semantic constraint (29) and thus does not require a separate account.¹⁵ Furthermore, Belletti’s proposal cannot account for the fact that stative transitive predicates with a definite DO give rise to ill-formed PCCs:

- (36) *Posseduta quella villa, Gianni si trasferì
 ‘Owned that villa, Gianni moved’

While a stative predicate like *possedere* cannot be telicized even by a definite DO, durative predicates like *mangiare* can. This is why the counterpart of (34a) with a definite DO becomes grammatical ((37a)). Of course, also a telic unaccusative such as *cadere* is grammatical (as opposed to (34b)), if its argument is definite ((37b)):

- (37) a. Mangiato tutto il salame, Gianni riprese il cammino
 ‘Having eaten all the salami, Gianni set off again’
 b. Cadute le pietre, la strada è rimasta bloccata
 ‘The rocks having fallen, the road was blocked’

Belletti (1990:95) explains the unacceptability of the examples (35), containing negation, with the assumption that PCCs lack a NegP, so that *non* ‘not’ cannot occur in the appropriate structural position (Spec of NegP). This assumption is contradicted by (38):

- (38) Non vista dai genitori, Maria strozzò il gatto
 ‘Not (having been) seen by her parents, Mary choked the cat’

Obviously, it cannot be the case that *non* is structurally incompatible with PCCs altogether for merely configurational reasons. In Dini’s (1994:73) account, (38) is an APP, and hence is not subject to the constraint (29).

To sum up, Dini’s semantic constraint (29) appears effective, in that it solves a number of descriptive problems concerning PCCs. It is

also plausible on theoretical grounds, since telicity requirements are widespread cross-linguistically in the syntax of PtPs, far beyond the specific case of (Romance) PCCs. For instance, attributive use of PtPs is restricted to telic unaccusatives (to the exclusion of stative ones) in a number of languages including e.g. English (**the remained boy*, **an existed solution*; cf. Cetnarowska 2002) or Dutch (**de gebleven jongen*; cf. Zaenen 1993).¹⁶

5.2. *Why semantics is not enough*

After this discussion of the semantic constraint (29), a question naturally arises: what is the status of this constraint relative to the syntax of PCCs? Since the latter is in turn one specific piece of evidence for the UH, the question immediately expands into a more fundamental one: is unaccusativity to be defined primarily in syntactic or in semantic terms? For intransitives, a correlation between initial 2-hood and patient-like semantics of the argument was highlighted by Perlmutter (1978). On the exact nature of this correlation, a lively discussion ensued: cf. Sorace (2000:878-886) for a recent survey of the conflicting positions. These range from strictly syntactacist approaches à la Rosen (1984), who claims absolute autonomy for the syntax of unaccusativity and underscores the many (cross-linguistic and language-specific) mismatches between GRs and semantic roles, to radically semanticist ones, à la Van Valin (1990), claiming that unaccusativity effects can be exhaustively derived from the lexical semantics (Aktionsart) of the predicate and the thematic status of the argument, dispensing with the two syntactic categories 'unaccusatives' vs. 'unergatives'. In between there are a number of proposals which admit the relevance of both components to the unaccusativity effects, advocating different views of the syntax-semantics interface.¹⁷

While this complex issue cannot be dwelt on here, I discuss in this section evidence supporting the idea that a) the syntactic behavior of Italian PCCs is primarily determined by syntactic structure (à la Perlmutter 1989), and that b) semantic constraints (in our case, the Aktionsart constraint (29)) operate on an input that has been syntactically defined. I will show that, while the effects of syntactic restrictions on PCCs are categorical, those of the semantic constraint (29) are fuzzier and, crucially, are sensitive to the unaccusative/unergative contrast. Models for which unaccusativity is exhaustively derived from (and hence parasitic on) the semantics of Aktionsart, it is argued, would have trouble accommodating this evidence.¹⁸ Although Dini (1994) deals with both the syntax and the semantics of

Italian PCCs, his approach is in line with the radical semanticist ones mentioned in fn. 18 for two reasons. First, he assumes the (semantically based) AAP vs. APP distinction ((30)) as criterial for an account of the syntax of PCCs.¹⁹ Secondly, he assumes the Aktionsart constraint (29) to be categorical.

A first observation concerns Dini's bipartition of PCCs into AAPs vs. APPs, and its relation to the telicity/additivity constraint (29). This holds for AAPs, not for APPs, which *can* be additive. However, the definition of the class of APPs turns out not to be motivated independently from the constraint itself, since this class of constructions consists of the two subsets of "passives used duratively and stative unaccusatives" (Dini 1994:72) (see (32)). This raises classification problems that become apparent for examples such as (39a):

- (39) a. Vissuta ^{??}(in povertà), Maria morì il 2 febbraio 2002
'Having lived in poverty, Maria died on February 2, 2002'
b. Scivolata ^{??}(sul ghiaccio), Maria morì il 2 febbraio 2002
'Having slipped on ice, Maria died on February 2, 2002'

Vivere 'live' is a stative unaccusative, hence compatible with APPs, but (39a) qualifies as an AAP by the 'temporal precedence' criterion (30a). Therefore, constraint (29) predicts (39a) to be ungrammatical. Contrary to this prediction, (39a) is just as acceptable as (39b) containing a telic unaccusative predicate.²⁰ Consider now (40a-b):

- (40) a. Trastullatosi ^{??}(per tre ore/a lungo), Gianni tornò finalmente a casa
'Having amused himself (idly) for three hours/for a long time, Gianni finally went back home'
b. *Corso/*Telefonato (per tre ore/a lungo), Gianni tornò finalmente a casa
'Having run/phoned for three hours/for a long time, Gianni finally went back home'

They contain verbal predicates that are *per se* non-telic (i.e. additive). Both constructions, in Dini's terms, are AAPs and are consequently predicted to be incompatible with an additive (non-telic) semantics. However, only (40b) is indeed unacceptable, while (40a) is not, in spite of its being additive. To this one could object that (40a) becomes really natural only if an adverbial adjunct such as *for x time* is added, which has a "delimiting capacity" and is "able to circumscribe the described process, changing it into a non-additive event" (Dini 1994:72; see the references quoted there, e.g. Herweg 1991). But

if Aktionsart really took precedence over syntax in determining the grammaticality of our constructions, we would expect collocation with an appropriate adverbial to suffice to rescue (40b) just as well. This is not the case, however: unergative predicates react to the semantic constraint (29) in a much sharper way than unaccusatives.

This is not to say that unergative predicates cannot be ‘helped’ to form PDepS by inserting appropriate adverbials. Simply, they need more effectively telicizing ones; for instance, those occurring in (41), such as *una volta* ‘once’ (+ PtP), or such as a prepositional complement denoting a goal:

- (41) a. Una volta telefonato a Gianni, possiamo partire
‘Having phoned (once we have phoned) up Gianni, we can leave’
- b. Una volta telefonato a tutte le persone sulla lista, Gianni stracciò il foglio
 ‘Having phoned (once he phoned) up all people on the list, Gianni tore up the sheet of paper’
- c. Bussato alla porta, Gianni entrò
 ‘Having knocked at the door, Gianni went in’

That both semantics and syntax – in particular the syntactic contrast established by the UH – play an independent role in constraining the behavior of PCCs, is further illustrated by the data in (42):

- (42) a. Arrivata Maria, la festa poté cominciare
 ‘Maria having arrived, the party could begin’
- b. Svegliatasi Maria, la festa poté cominciare
 ‘Maria having woken up, the party could begin’
- c. (?)%Trastullatasi Maria, la festa poté cominciare
 ‘Maria having amused herself (idly), the party could begin’
- d. *Telefonata Maria, la festa poté cominciare
 ‘Maria having phoned, the party could begin’

(42a) vs. (42d) exemplify the familiar grammaticality contrast between (plain) unaccusatives and unergatives. Under radical semanticist approaches (including Dini’s), (42c) should be ungrammatical on a par with (42d), since both involve an activity (i.e. an additive predicate). However, in contrast to (42d), some speakers find (42c) unacceptable and other speakers do find it acceptable, albeit odd (as indicated by the percent sign). This reduced acceptability cannot be due to syntactic structure, since (42c) has the same representation as (42b), which is fully grammatical.²¹

- (43) a. Maria si è trastullata/svegliata
'Maria has amused herself (idly)/woken up'

b.

	2		P
	2,1		P
	1		P
	1	P	Cho
	Maria	si è	trastullata
	Maria	si è	svegliata

Given Perlmutter's generalization, the syntax of PABs constructions licenses the three sentences (42a-c) without any difference. The contrast, then, must be due to semantics: (42c) is less natural than (42a-b) because it contains a non-telic predicate. However, semantics alone (and reductionist approaches to unaccusativity) cannot explain why the gradient in acceptability in (42b-d) becomes a sharp binary contrast in (44a-b) vs. (44c):

- (44) a. Svegliatasi in ritardo, Maria si affrettò a uscire
'Having woken up late, Maria hurried up to get out'
b. Trastullatasi a lungo, Maria rientrò infine a casa
'Having amused herself (idly), Maria eventually went back home'
c. *Telefonato/-a in ritardo/a lungo, Maria uscì
'Having phoned too late/Having spoken on the telephone for some time, Maria went out'

As I have argued, the Aktionsart constraint affects the unergative more than the unaccusative constructions; and, among the latter, it affects PABs more than PDepS. This evidence militates in support of the approach to the syntax-semantics interaction advocated for here.²²

Summing up, we saw that the semantic constraint (29) interacts with the syntactic conditions on PCCs, blurring the final output to some extent. For this reason the effects of (29), which do not concern all unergatives but only a semantically defined subclass thereof (see (27)) and are gradual in nature (see (41)), have affected the identification of the appropriate syntactic condition(s) on PCCs. After Dini's (1994) clarifying scrutiny of the empirical evidence, we know that unergative predicates are not categorically excluded from PCCs on the whole, contrary to Perlmutter's conclusion. As a consequence, the crucial empirical fact of the full grammaticality of (28) and (41) forces us to pursue our search for an effective syntactic account of PCCs.

5.3. Back to syntax: Rosen on PABs

Since unergatives are not categorically ungrammatical in PDepS, while they really are in PABs, PDepS must be expunged from the scope of Perlmutter's generalization. This is precisely what Carol Rosen (implicitly) does. Her generalization is reported in (45), in two versions:²³

- (45) PARTICIPIAL ABSOLUTES (C. Rosen)
- a. "It will require the final nuclear term to head an initial 2-arc" (1981 [1988]:61);
 - b. "The verb in participial form is accompanied by a nominal which [is] its P-initial 2" (1997:187).

As to the difference in wording, note that (45b) refers to the revised representation of clause structure put forth by Davies & Rosen (1988) (see (3a-b) above and (46b) below): hence, the arc-metaphor is not employed. More importantly, the notion 'P-initial (2)' is introduced, referring to a nominal that bears the given GR (here, 2) in the first stratum of the P(redicate)-sector of the given predicate. (Cf. the definition of P-sector in fn. 2.)

Apart from this difference, both formulations in (45a-b) seem at first glance to be identical to Perlmutter's (7). However, a moment's reflection reveals that this is not actually the case. Given Rosen's terminology (see Table 2), the scope of (45) is limited to participial absolutes (in the restrictive sense: 'absolute₂'). This yields the correct prediction: as we already saw, in PABs unergative predicates are indeed categorically ungrammatical. Here is where the full importance of a seemingly idle terminological question (see Tables 1 vs. 2, §3) comes to light. Due to terminology alone, (45) is correct while (7) is wrong, despite their identical wording.

Rosen's generalization (45) also rules out PABs in which the PtP is that of an auxiliary, regardless of the relational structure of the initial predication (i.e., also with unaccusatives). Take for instance an unaccusative clause such as (46a):

- (46) a. Le arance sono cadute dall'albero
'The oranges have fallen from the tree'

b.	2		P	Obl
	1		P	Obl
	1	P	Cho	Obl
	Le arance	sono	cadute	dall'albero

Given the structural representation in (46b), the nominal *le arance*, while being a 2 in the clause, is the P-initial 2 of the lexical predicate *cadute*, not of the auxiliary. This is why a PAbs can be formed with the PtP of the lexical predicate ((47a)) but not with the PtP of the auxiliary ((47b)):

- (47) a. *Cadute le arance dall'albero, nessuno le raccolse*
'The oranges having fallen from the tree, nobody picked them up'
b. **Stata cadute le arance dall'albero, nessuno le raccolse*
'The oranges having been fallen from the tree, nobody picked them up'

It is clear, by now, that we have to prefer Rosen's generalization over Perlmutter's. Nevertheless, (45) leaves two crucial empirical questions for us to solve.

5.4. First problem: auxiliaries and participial dependents

Firstly, the advantage of Rosen's generalization (45) is that it does not have scope over PDeps, and thus does not rule out initially unergative PDeps. The disadvantage, however, is that we are left without a condition on PDeps. In fact, these constructions are also subject to clear-cut syntactic constraints. Auxiliaries of all sorts are disallowed here too, as apparent from the examples in (48), containing perfective auxiliaries, and (49), containing modal (semi)auxiliaries (Rosen 1997:196):

- (48) a. **Avuta presa la sua decisione, Maria partì*
'Having taken her decision, Maria left'
b. **Stata colpita da Gianni, Maria reagì violentemente*
'Having been struck by Gianni, Maria reacted fiercely'
- (49) a. **Dovuta improvvisamente partire, Maria non diede più sue notizie*
'Having had to leave unexpectedly, Maria didn't give news about herself anymore'
b. **Voluta improvvisamente partire, Maria non diede più sue notizie*
'Having wanted to leave unexpectedly, Maria didn't give news about herself anymore'

This is our first empirical problem: why are PDeps ill-formed

with auxiliaries? To solve this problem, we will have to formulate anew a syntactic condition constraining the well-formedness of PDeps in Italian. However strange this may appear, such a syntactic condition has never been proposed before.

5.5. *Second problem: the voice of participial absolutes*

The second problem left open by Rosen's generalization concerns PAbs. The generalization (45b) has an empirical gap, since it does not rule out sentences such as (50a-b):

- (50) a. *Arrestati i manifestanti la polizia, il tumulto cessò
 'The police having arrested the demonstrators, the riot ceased'
 b. *(?)Arrestati la polizia i manifestanti, il tumulto cessò
 'The police having arrested the demonstrators, the riot ceased'

(50a-b) are initially transitive PCCs that formally satisfy (45b), since the PtP is accompanied by a nominal (*i manifestanti*) that is its (P-initial) DO. Despite this, (50a-b) are ungrammatical in present-day standard Italian.²⁴ To be sure, both Perlmutter and Rosen discuss this fact. However, they formulate separate constraints to account for it:

- (51) a. "No more than one final nuclear term is allowed to appear in a participial absolute" (Rosen 1981 [1988]:59)
 b. "at most one nominal unmarked by a preposition can appear in a participial absolute" (Perlmutter 1989:111 fn. 6)

The two formulations are equivalent. Rosen's version ((51a)) tackles the data from the point of view of syntactic structure: the notion 'nuclear term' defines the set of subjects and DOs. Perlmutter's version ((51b)) refers to morphological manifestation: (final) subjects and DOs do not receive prepositional marking. Neither version of the constraint excludes the occurrence within a PAbs of both (P-)initial nuclear terms of a transitive predicate, provided that the initial subject is marked by the preposition *da*. This prediction is borne out by the data, as shown by the grammaticality of (52), parallel to (25) above:

- (52) Arrestati dalla polizia tutti i manifestanti, i tumulti cessarono
 'The demonstrators having been arrested by the police, the riot ceased'

Note that the prepositional marking is the same occurring with chômeurized initial subjects in the passive voice, a fact that can hardly be coincidental. Apparently, the two PCCs in (50) and (52) stand in the same relation as the finite clauses (17b)-(18b), whose structural representations are shown in (53a-b):

(53)

a.

1	P		2
1	P	Cho	2
La polizia	ha	arrestato	i manifestanti

b.

2	P		1
1	P		Cho
1	P		Cho
1	P	Cho	Cho
1	P	Cho	Cho
I manifestanti	sono	stati	arrestati dalla polizia

The two constructions share the same argument grid, the only difference being one of voice: in (53b) passivization takes place.²⁵ Given this striking surface parallelism between the pairs of finite clauses (53a-b) and PCCs (50)-(52), it seems plausible to analyze the latter pair as differing in voice just as well. This difference, in turn, becomes a natural candidate for the explanation of the difference in acceptability. Neither Perlmutter nor Rosen draw this conclusion, though: they limit themselves to state the constraint in (51), which is *ad hoc* and does not relate to the generalization in (45) in any interesting way.²⁶

Thus, to solve the empirical problem posed by the contrast in acceptability between (52) and (50), we will have to resume the discussion about the voice of transitive PCCs begun in §4. The solution to the voice problem will naturally follow from the revision of Rosen's generalization on PABs. This has to be made more restrictive by adding some further condition which can account for the ungrammaticality of (50) while not ruling out (52).

6. The syntax of Italian PCCs

The account of the syntax of Italian PCCs developed in this section capitalizes on the premises laid in §§2-5. Having demonstrated that Italian PDepS and PABs obey different syntactic constraints, I now provide a formalization of these constraints.

6.1. A condition on participial dependents

I will first tackle the empirical question formulated in §5.4: why are PDep's out with auxiliaries? We have already seen that auxiliaries cannot occur in any PCC, either absolute ((47b)) or dependent ((48)). The two facts have never been distinguished up to now: rather, the unacceptability of auxiliaries in both constructions was (implicitly) put on the bill of Perlmutter's generalization, since the argument of the PtP is not the DO of the auxiliary (technically, it is not its P-initial 2, see (45)). But this explanation, while perfect for PAbs (Davies & Rosen 1988:69, Rosen 1997:188-9), is obviously not available for PDep's, since in the latter construction unergative predicates can also occur. Consequently, a ban on nominals that only bear the subject relation would be too restrictive. What we need is a formulation that excludes only auxiliaries from occurring in PDep's while permitting unergatives as well as active transitives. The latter, in fact, are out in PAbs (as seen in (50)), but are fine in PDep's, as shown by the grammaticality of DO-cliticization:

- (54) a. Arrestati i manifestanti, la polizia poté sedare il tumulto
'Having arrested the demonstrators, the police could suppress the riot'
b. Arrestatili, la polizia poté sedare il tumulto
'Having arrested them, the police could suppress the riot'

Furthermore, an appropriate generalization on PDep's will have to be permissive enough to allow for serial and causative predicates to occur in such a construction. This is in fact the case, as shown by the grammaticality of (55) and (56), respectively: (For the structural definition of these classes of predicates see below, (58b-c).)

- (55) a. Rimasta ferita nell'incidente, Maria ebbe una faticosa convalescenza
'Having been injured in the accident, Maria made a painful recovery'
b. Divenuta famosa, Maria perse la testa
'Having become famous, Maria lost her head'
c. Fintasi sorda, Maria poté ascoltare indisturbata i loro discorsi
'Having pretended to be deaf, Maria could listen undisturbedly to their talks'
- (56) a. Fatte riempire tutte le carte, Gianni e Maria poterono infine sposarsi

- ‘Having gotten all the papers filled in, Gianni and Maria could finally get married’
- b. Fatta scappare la suocera, Gianni si godette un po’ di tranquillità
 ‘Having gotten rid of his mother-in-law, Gianni could enjoy some peace’

The account I propose elaborates on Rosen’s (1997:112) formalization of the notion ‘Auxiliary’:

- (57) AUXILIARY (Rosen 1997:112)
 “*Auxiliaries* are a lexically designated closed class of verbs whose defining property is that they inherit a 1.”

Definition (57) corresponds to the syntactic configuration (58a), which can be contrasted with those of serial ((58b)) and causative ((58c)) predicates:

- (58) a.
$$\begin{array}{c} 1 \\ \hline 1 \quad P \\ \text{Auxiliary} \end{array}$$
- b.
$$\begin{array}{c} 2 \\ \hline 2 \quad P \\ 1 \quad P \\ \text{Serial} \end{array}$$
- c.
$$\begin{array}{c} *1 \\ \hline 1 \quad P \\ \text{Causative} \end{array}$$

Rosen’s definition of auxiliary formalizes a time-honored idea: an auxiliary is a syntactically and semantically inert predicate (see e.g. Ramat 1987:13).²⁷ Once an auxiliary appears in the clause, no other syntactic process may take place. If a predicate inherits its subject, then it will not contribute in any respect to the argumental and syntactic structure of the clause.

On the contrary, serial predicates reinitialize their final subject. This is inherited from the initial (unaccusative) verbal or nominal predicate as a 2, not as a 1. The advancement to subject takes place in the P-sector of the serial (see Rosen 1997:184-5). Rosen distinguishes two categories of serial predicates in Italian, exemplified in (59a-b) and analyzed in (60a-b):

- (59) a. Maria è diventata famosa
 ‘Maria became famous’
 b. Maria si è finta sorda
 ‘Maria pretended herself deaf’

(60) a.	2				P			
	2				P			
	1				P			
	1				P			
	Maria	è	diventata	famosa				

b.	2				P			
	1,2				P			
	1				P			
	1				P			
	Maria	si è	finta	sorda				

In the former type, exemplified in (59a) by *diventare* ‘become’ (and also instanced by predicates such as *risultare* ‘prove’, *rimanere* ‘remain’, *restare* ‘remain’, *sembrare* ‘seem’), the argument is inherited as a 2 and is re-initialized in the same GR in the first stratum of the serial’s P-sector. The latter type is exemplified in (59b) with *fingersi* ‘pretend oneself’ (*considerarsi* ‘consider oneself’, *credersi* ‘believe oneself’, *dichiararsi* ‘declare oneself’, *sentirsi* ‘feel’ are only some of the verbs that belong in this class). Here the argument, inherited as a 2, is re-initialized as a 1 in the serial’s P-initial stratum. This gives rise to 1,2 multiattachment, which is then resolved by cancellation of the 2 relation. As a consequence, the finite verb acquires reflexive morphology (Rosen 1997:181). As already shown in (55), both types of serials can occur in PDepS.²⁸

The last structural class of predicates represented schematically in (58c) is that of causatives. By definition, a causative introduces into the clause a new 1 that cannot coincide with the 1 of the lexical (initial) predicate. An example of a causative construction is given in (61):

(61) a.	Gianni ha fatto riempire tutte le carte							
	‘Gianni got all the documents filled in’							
b.	P				2			
	1				2			
	1				2			
	1				2			
	Gianni	ha	fatto	riempire	tutte	le	carte	[unspec.]

The correct generalization on PDepS has to exclude only auxiliaries, while allowing PDepS to be formed with serials and causatives, as well as with all types of initial predicates: transitives, unergatives, unaccusatives. This generalization can be formulated as follows:

- (62) PARTICIPIAL DEPENDENTS IN ITALIAN
The controlled final subject of a participial dependent is a non-inherited 1.

In (62), the perspective of Perlmutter’s generalization (7) on

PABs is reversed. While that is a condition on (P-)initial GRs, (62) refers to the *final* subject. This is why it is capable of accounting for the fact that PDepS (unlike PABs) are acceptable not only with unaccusatives but also with active transitives ((54)) and, contrary to Perlmutter's claims, with unergatives ((28), (41)).

6.2. The structural representation of participial dependents

All of our arguments on PCCs have been developed up to now with reference to the structural representations of the corresponding finite clauses, where the PtP is accompanied by an auxiliary. I have not presented explicit structural analyses of PCCs so far, since in work on Italian PCCs in RG structural representations were seldom provided, and were limited to the initial stratum of PABs. (63b) reproduces the partial representation of an unaccusative PABs in La Fauci (2000:82) (irrelevant details omitted).²⁹

- (63) a. Partiti i manifestanti, tornò la calma
 'The demonstrators having left, quiet returned'
- b. P 2
 Partiti i manifestanti

We are now in a position to give a fully explicit structural representation, including all subsequent strata up to the final one, of Italian PCCs, both transitive and intransitive, both dependent and absolute. We will begin with PDepS. We have already seen in §3, following Legendre's (1987) analysis of French, that PDepS must have a final subject which corresponds to the phonologically null controllee. The analysis of PDepS provided so far is in full agreement with this basic tenet. Condition (62) refers to the notion 'non-inherited 1', and since it must be possible for (62) to rule out auxiliaries (see (48)-(49)), clause structure must contain all strata preceding auxiliation. As apparent from the structural representations given so far, this in turn implies that unaccusative 2→1 advancement has to take place, since by the appearance of the clause's first auxiliary predicate, all syntactic processes must have been accomplished (as required by Rosen's 1997:192 'compactness' and 'closure' principles).

This is further confirmed by the fact that (62) is not sensitive to the contrast between unaccusatives and unergatives. If, by hypothesis, the structure of an unaccusative PCC were limited to what is shown in (63b) (and involved no 2→1 advancement), generalization

(62) as it stands could not be maintained, since it would wrongly predict initially unaccusative PDeps to be ungrammatical, whereas they are perfectly well-formed (see (4a)). For these reasons, initially intransitive PDeps ((64a), unaccusative and (64b), unergative) will be assigned the structural representations (65a-b) respectively:³⁰

- (64) a. Arrivata in ritardo, Maria si scusò
 'Having arrived with delay, Maria apologized'
 b. Vendemmiato, i contadini lasciarono il paese
 'Having harvested, the farmers left the town'
- (65) a.

	Obl		1,2	P
	Obl		1	P
			Maria	si scusò
P		Obl	2	
P		Obl	1	
Arrivata		in ritardo		
- b.

	Obl	1	P	2
		i contadini	lasciarono	il paese
P		1		
Vendemmiato				

Initially transitive PDeps, on the other hand, can be either active or passive: (54a), here repeated as (66a), is active because its DO can undergo cliticization (as in (66b)); (66c) is passive, as shown by the propositional marking of the initial subject.

- (66) a. Arrestati i manifestanti, la polizia poté sedare il tumulto
 'Having arrested the demonstrators, the police could suppress the riot'
 b. Arrestatili, la polizia poté sedare il tumulto
 'Having arrested them, the police could suppress the riot'
 c. Arrestati dalla polizia, i manifestanti furono tradotti in carcere
 'Having been arrested by the police, the demonstrators were brought to jail'

The different types of initially transitive PDeps will be assigned the structural representations in (67a-c):

(67)	a.	<hr/>				<hr/>			
		Obl				1		P	2
		Obl				1	P	Cho	2
						la polizia	poté	sedare	il tumulto
		P		2	1	<hr/>			
		Arrestati		i manifestanti					
b.		<hr/>				<hr/>			
		Obl				1		P	2
		Obl				1	P	Cho	2
						la polizia	poté	sedare	il tumulto
		P		2	1	<hr/>			
		P			1				
		Arrestatili		[3mpl]					
c.		<hr/>				<hr/>			
		Obl				2		P	Loc
		Obl				1		P	Loc
		Obl				1	P	Cho	Loc
						i manifestanti	furono	tradotti	in carcere
		P		1	2	<hr/>			
		P		Cho	1				
		Arrestati		dalla polizia					

The representations in (65) and (67) can be checked against the generalization in (62), which accounts for the acceptability of all the corresponding PDep clauses. Ungrammatical PDepS like (48a-b), on the other hand, built on the PtP of an auxiliary, would be represented as in (68a-b), which are ill-formed, by (62), since their final 1 is inherited from the previous P-sector:³¹

(68)	a.	<hr/>				b.	<hr/>			
		P	1	2			P	1	2	
		P	Cho	1	2		P	Cho	1	
		*Avuta presa PRO la sua decisione ...					P	Cho	Cho	1
							*Stata colpita da Gianni PRO ...			

Note that, in proposing the structural representations in (67a-c) we have automatically tackled (and solved, for PDepS) the voice problem. We started from the simple assumption that PDepS must obey the Final 1 Law and that their unrealized (controlled) nominal must be the final 1 (see (10b) above). Trivially enough, as a consequence, in drawing the relational networks in (67) we had to decide whether the final 1 coincides with the initial 1 or the initial 2, a decision that proved very easy. Thus, if properly analyzed, the data from PDepS provide no justification at all for the dramatically diverging opinions on the voice of PCCs found in the literature and exemplified above in §4. As will become apparent directly, these divergences arose precise-

ly from the lack of distinction between PDeps and PAbs: once this is consistently respected, difficulties evaporate.

The difficulties depend on two reasons. First, we are analyzing Italian, and in Italian the syntactic behavior of PCCs turns out to be more complex than in, say, French. Secondly, we met with a number of unsolved difficulties while reviewing in §4 different statements on the voice of Italian PCCs found in the literature in GG. Had we started from French and from RG, rather than GG, we would have realized that the solution is quite easy. (65a) and (67c) were already proposed by Legendre (1987:94-95) to analyze parallel French data such as those already reported in (12) above, here partially repeated in (69):

- (69) a. Arrêté par la police, Pierre subit une longue interrogation
'Having been arrested by the police, Peter underwent a lengthy interrogation'
b. Parti avant l'aube, Pierre est arrivé le jour même à destination
'Having left before dawn, Peter arrived to destination that very same day'

The crucial empirical difference between French and Italian is that in French the counterparts to the Italian grammatical sentences in (64b) and (66b) would be ungrammatical:

- (70) a. *Vendangé, les vigneronns quittèrent le village
'Having harvested, the farmers left the town'
b. *Arrêtés-les/*Les arrêtés, la police a pu calmer les émeutes
'Having arrested them, the police could suppress the riot'

Due to these stronger empirical limitations, Legendre's generalization on French PDeps is more restrictive than the one I have proposed for Italian in (62). More precisely, contrary to Italian, French puts the very same grammaticality requirements on both PDeps and PAbs. We will return to this, once we will have completed the Italian picture. Our next step is now to go back to Italian PAbs, assign them an explicit structural representation and propose a generalization that properly constrains their grammaticality. The latter will be based on Perlmutter's (and Rosen's), but will also have to account for the facts concerning voice pointed to in §5.5.

6.3. *Participial absolutes: transitive*

Moving on to consider PAbs, the null hypothesis is that PAbs also fall under the scope of the Final 1 Law and, more specifically,

that their structural representations coincide with those already proposed for PDepS. By definition (10), the syntactic contrast between the two classes of PCCs only resides in the fact that the final 1 of PDepS is obligatorily controlled, while the final 1 of PABs cannot be controlled. In what follows, we will check this hypothesis against the available empirical evidence.

Perlmutter's generalization (7) was shown to be incorrect because it did not keep apart the two classes of constructions PABs vs. PDepS. This is precisely the advantage of Rosen's generalization (45) which crucially, however, does not account for the contrast in acceptability between the two initially transitive PABs (50) vs. (52). It has already been observed (§5.5) that – except for the difference in acceptability – the contrast resembles quite closely the one found in finite clauses between active and passive. It seems natural, therefore, to assign initially transitive PABs the same structural representations already proposed for PDepS, the only difference being the nature of the final subject (referential nominal vs. controlled abstract pronominal):³²

- (71) a.
- | | | | | |
|------------|------------|----------------------|--|--|
| P | 1 | 2 | | |
| *Arrestati | la polizia | tutti i manifestanti | | |
- | | | |
|-----|------------|-------|
| Obl | 2 | P |
| Obl | 1 | P |
| | il tumulto | cessò |
- b.
- | | | | | |
|-----------|---------------|-------|----------------|--|
| P | 1 | 2 | | |
| P | Cho | 1 | | |
| Arrestati | dalla polizia | tutti | i manifestanti | |
- | | | |
|-----|------------|-------|
| Obl | 2 | P |
| Obl | 1 | P |
| | il tumulto | cessò |

This elementary representational hypothesis, centering on the voice contrast (71a) vs. (71b), enables us to achieve our ultimate goal, viz. the revision of Perlmutter's generalization on PABs in Italian. This will now read as follows:

- (72) PARTICIPIAL ABSOLUTES IN ITALIAN (PRELIMINARY VERSION)
 The verb in participial form is accompanied by a nominal which is
 i) its P-initial 2
 ii) the final 1 of the participial clause.

For a nominal to be allowed to appear in a PABs, it is first of all

required that it be the P-initial 2 of the PtP ((72i)). This condition, already identified by Perlmutter and Rosen, while necessary, turns out not to be sufficient. A further condition must be obeyed, prescribing that the initial DO advance to subject and be the final 1 of the participial clause. The two conditions (72i-ii) thus imply that the structure must be either unaccusative, as we have known from the outset (e.g. (4b)), or that it be passive. In other words, initially transitive PABs in contemporary standard Italian involve *obligatory passivization*. Addition of condition (72ii) accounts for the empirical contrast in acceptability observed in (71a-b) and renders the formulation of a separate constraint such as that in (51a) (Rosen) or (51b) (Perlmutter) superfluous: since any PABs in Italian *must* contain a 2→1 advancement, and since in initially transitive clauses this means passivization, the ban on the co-occurrence of two (prepositionally unmarked) final terms follows automatically.

At this point, we can repeat the same remark made above in §6.2 concerning PDepS. To arrive at (72), a long demonstration was needed because we are analyzing Italian. In fact, (72) turns out to be very similar to the generalization on French PCCs proposed by Legendre (1987:87):

(73) PARTICIPIAL CLAUSES IN FRENCH (EQUI AND ABSOLUTES)

A PCC is well-formed only if there is 2-1 advancement in the clause.

(73) extends to French Perlmutter's analysis of Italian PCCs. (The French version is more restrictive, since in Italian it is only required that the nominal involved be a 2.)³³ It might seem paradoxical, at this point, that Perlmutter's account, as applied to French by Legendre, is correct, while we have just proven it to be incorrect for Italian (see §5). Yet, this follows directly from the empirical asymmetry between the two languages, highlighted above in (70) vs. (64b)/(66a-b). While Italian admits unergative and finally transitive PDepS, French lacks these constructions: therefore, one and the same generalization legitimately covers both PDepS and PABs in French, not in Italian.

A further consequence of the account of Italian PABs developed here is that it correctly rules out the possibility for the initial DO to cliticize. DO-cliticization, while possibile in initially transitive PDepS, is always ungrammatical in PABs. This is illustrated by the contrast in acceptability between (66b) (here repeated as (74a), a PDep) and (74b), a PABs:³⁴

- (74) Erano scesi in piazza diecimila manifestanti in tumulto.
 ‘Ten thousand riotous demonstrators were in the streets’
 a. Una volta arrestatili, la polizia poté sedare il tumulto
 ‘Having arrested them, the police succeeded in suppressing the riot’
 b. *Una volta arrestatili, il tumulto cessò
 ‘Having arrested them, the riot ceased’

This constraint was already observed by Rosen (1981 [1988]:59), who used the cliticization test to show that the two subclasses of PCCs (PABs vs. PDeps) have distinct distributional properties. However, she did not draw the structural conclusion this evidence points to: an initially transitive PABs is subject to obligatory passivization, in compliance with condition (72ii). This is why cliticization is out.

The voice dilemma illustrated in §4 is thereby solved. It was announced, at that point, that the account to be developed in this paper would be of type (15d), i.e. an account showing that initially transitive PCCs in Italian can be either passive or active, depending on some other structural property of the clause. We are now in a position to locate this property: it is the contrast between PABs and PDeps, as defined in (10a-b). While the latter can be either active or passive, the former can only be passive.

6.4. Participial absolutes: unaccusative

We now move on to consider initially unaccusative PABs. In the analysis of these, we will take the same route as with transitives. Given our null hypothesis (both sorts of PCCs obey the Final 1 Law and share the same structural representations), we will simply extend to unaccusative PABs (see (63a), (22)) the same analysis proposed in §6.2 for PDeps, viz. (65a). This amounts to completing the partial representation in (63b) as shown in (75):

- (75)
- | | | |
|----------|-----------------|-----|
| P | 2 | |
| P | 1 | |
| Partiti | i manifestanti, | ... |
| Arrivata | io, | ... |

This simple move yields several positive results. Given representation (75), unaccusative PABs automatically fall under the scope of the generalization on PABs that was independently established

through the study of the voice contrast in initially transitive PABs. Another positive implication is that, given representation (75) and condition (72ii), nominative case marking in 1sg and 2sg personal pronouns is automatically predicted. The argument is the final 1, hence nominative is required, and accusative is ungrammatical:

- (76) a. Partita io/*me, Gianni tirò un sospiro di sollievo
left:FSG I:NOM/me:ACC, Gianni gave a sigh of relief
‘When I left, Gianni gave a sigh of relief’
b. Arrivata tu/*te, Gianni tirò un sospiro di sollievo
arrived:FSG you:2SG.NOM/you:2SG.ACC, Gianni gave a sigh of relief
‘(When) you arrived, Gianni gave a sigh of relief’

At this point, however, a problem arises. The assumption that the initial 2 advances to 1 has to be tested against relevant diagnostics for 2-hood and 1-hood. Consider *ne* pronominalization. A synthetic generalization on the distribution of the Italian so-called partitive clitic *ne* was first proposed by Perlmutter (1983a:155) as one of the fallouts of the UH:

- (77) PARTITIVE *NE* IN ITALIAN
A nominal can be the source of partitive *ne* iff it is:
a. a 2;
b. not a final 1.

Given (77), if a nominal can be the source of the clitic *ne*, this is evidence that it bears the 2 GR and is not the final 1. Belletti (1990:101) claims that *ne*-pronominalization is ungrammatical with initially unaccusative PCCs. The claim obeys a theoretical expectation: since the (internal) argument of unaccusatives always moves to subject position, it is incompatible with *ne* (given the translation of (77) into GG by Belletti & Rizzi 1981). Note that the facts as presented by Belletti would follow straightforwardly from the theory developed here: movement to subject position is the GG notational equivalent of 2→1 advancement. However, if Belletti were right, we would be confronted here with a striking exception. While *ne*-pronominalization, *ceteris paribus*, is always possible with both unaccusative and transitive DOs, PCCs would be the only domain of Italian syntax in which an asymmetry would be observed, since *ne*-pronominalization is fully grammatical (as Belletti 1990:104 also observes, see (19b) above) in initially transitive PCCs, a fact to which we will return later on (see (84)).

This striking exception, however, does not actually exist. Belletti's claim is contrary to fact, as *ne*-pronominalization in initially unaccusative PCCs is indeed grammatical in Italian:

- (78) a. Partitine molti, i manifestanti residui furono accompagnati in caserma
'Many of them having left, the remaining demonstrators were accompanied to the police station'
b. (delle case di quella via) Crollätene tre per il terremoto, le restanti furono demolite
'(Of the houses of that street) three of them having collapsed due to the earthquake, the remaining ones were demolished'

But this constitutes a problem for our analysis as well. Our generalization (72), as it stands, cannot in fact account for the grammaticality of *ne*-pronominalization if unaccusatives PCCs receive the structural representation (75). This, however, is in turn well motivated on general theoretical grounds (see §3 and §6.2) as well as empirically, because of the case marking facts discussed above.

To solve this (seeming) paradox, we have to introduce three more elements into our discussion. Firstly, I briefly comment on a well-known aspect of the syntax of grammatical (verbal and pronominal) person, viz. the asymmetry between 1st/2nd and 3rd person. Secondly, I introduce Perlmutter's (1983a) theory of impersonal constructions and, thirdly and finally, I show that La Fauci & Loporcaro's (1997:25) account of the relation between (im)personality and (in)definiteness allows us to constrain the representation of unaccusative PABs so as to accommodate the evidence from *ne*-cliticization.

6.5. (In)definiteness and (im)personality in Italian unaccusative PABs

A considerable body of research, started by Benveniste's (1946) seminal paper, has concentrated on the asymmetries between 1st and 2nd person, on the one hand, and 3rd person, on the other, claiming that the 3rd person is the unmarked one. This is why it is precisely the 3rd person that emerges by default in impersonal contexts, in both pronominal (expletive) and verbal forms.

In Perlmutter's (1983a) theory, an impersonal construction is defined as a clause whose final subject is an expletive (*dummy subject*) or, symmetrically, as a clause that "has no nonexpletive subject" (Perlmutter & Moore 2002:622). I have argued that PCCs must have

a final subject. From this, the possibility immediately arises that (some of) these constructions can be impersonal, in case their final subject is an expletive. Given what is independently known about Italian syntax, this assumption does not appear unreasonable. In particular, Italian differs from French, English or German in that it lacks a phonetically realized expletive (dummy) subject. The dummy in impersonal constructions, in Italian, is silent, as exemplified in (79a), where the nominal bearing the initial 2 GR follows an unaccusative predicate. (79a) is structurally analyzed as in (79b):

- (79) a. Sono arrivati molti manifestanti
 ‘Many demonstrators have arrived’
- b.
- | | | | | |
|---|------|----------|-------|--------------|
| | | P | 2 | |
| 2 | | P | Cho | |
| 1 | | P | Cho | |
| 1 | P | Cho | Cho | |
| D | sono | arrivati | molti | manifestanti |

As Perlmutter (1983a) points out, this analysis allows us to account for the well-formedness of *ne*-cliticization. Only a postposed nominal, as in (79a), can be the source of *ne*, while a preposed subject cannot, as shown by the contrast in (80a-b):

- (80) a. Ne sono arrivati molti
 ‘Many of them have arrived’
- b. *Molti ne sono arrivati
 ‘Many of them have arrived’

In (80b) the potential source of *ne* is preverbal (*Molti manifestanti sono arrivati*), which makes the impersonal analysis unavailable. The nominal *molti manifestanti* is consequently a final 1 (due to unaccusative advancement; see the representation (3a)) and this renders *ne*-pronominalization ungrammatical by (77b).

Back to PCCs, a first observation is that their argument is always postverbal in Italian. This, in keeping with Perlmutter’s theory, is compatible with an impersonal analysis such as the one in (81):

- (81)
- | | | | | |
|---|---------|-------|--------------|--|
| | | P | 2 | |
| 2 | | P | Cho | |
| 1 | | P | Cho | |
| D | Partiti | molti | manifestanti | |

Given this structural representation, the acceptability of *ne*-pronominalization is predicted by (77). Note that for the first time we have introduced for PAbs a representation which diverges from that assumed for the PDep counterpart. There is a strong empirical reason to do so: *ne*-pronominalization was exemplified in (78) for initially unaccusative PAbs, whereas it is excluded in initially unaccusative PDeps. This has a straightforward explanation: in an initially unaccusative PDep the initial 2 must be the Equi victim (i.e. the controlled nominal lacking lexical realization), and this must in turn, by definition (see (10b) and condition (11)), be the final 1. Hence, given (77b), it cannot possibly be the source of *ne*.

Elaborating on Perlmutter's theory, La Fauci & Loporcaro (1997:25) conclude that in Italian the impersonal analysis is available exclusively for clauses whose argument is an indefinite nominal in the 3rd person. On the contrary, definite (3rd person) nominals pattern with 1st and 2nd person pronouns in that they are incompatible with an impersonal structure. Their occurrence in postverbal position is simply the product of what has been termed a 'stylistic inversion':

- (82) a. Sono arrivati tutti i manifestanti
'All the demonstrators have arrived'
b. Sono arrivato io
'I have arrived'

c.

	P	2
	P	1
P	Cho	1
Sono	arrivati	tutti i manifestanti
Sono	arrivato	io

The representational contrast (79b) vs. (82c) is compatible with the crucial evidence from *ne*: *ne*-pronominalization is correctly predicted to be acceptable in the former, and ungrammatical in the latter. As argued in La Fauci & Loporcaro (1997), the contrast in (im)personality (79b) vs. (82c) provides a formal explanation for the so-called 'definiteness effect'. This is manifested at the surface in a clear way, most notably in existentials, in Romance languages such as French, Spanish or Sardinian. Although in a language like Italian such *prima facie* evidence is missing, the *ne* facts suggest that the same structural contrast is present underlyingly, if less evident in its surface manifestations.

Applying this theory of impersonals to PCCs immediately yields the desired solution. Given the two different structural representations (75) vs. (81) (parallel to those assumed for finite clauses), all empirical facts will follow: (75) accounts for nominative marking on the personal pronoun and correctly rules out *ne*-pronominalization with definite nominals. The grammaticality of *ne* with indefinites, on the other hand, correctly follows from (81).

To conclude, the only further adjustment required is that we modify our generalization on PABs ((72)) so as to cover impersonal constructions. In impersonal unaccusatives, in fact, the initial 2 is not the final 1 but its brother-in-law, viz. the nominal put *en chômage* by the dummy (Perlmutter & Zaenen 1984:186):

(83) PARTICIPIAL ABSOLUTES IN ITALIAN

The verb in participial form is accompanied by a nominal which is

- i) its P-initial 2
- ii) the final 1 of the participial clause or its brother-in-law.

Our generalization has thereby taken its definitive form.

6.6. Transitive PABs again: *ne*-cliticization and case marking

Ne-pronominalization and case marking in initially unaccusative PABs led us to the revision of condition (83ii). We now have to check the consequences of this revision with respect to initially transitive PABs. As for *ne*-cliticization, this can occur in initially transitive PCCs as was shown above in (19b). Following Belletti (1990, 1992), the relevant data were presented in context-free form, so that it was not apparent whether *ne*-cliticization really occurs in all sorts of PCCs. It is now time to solve this ambiguity. Much like definite DO-cliticization (see (74) above), also *ne*-pronominalization in Italian is grammatical in PDeps, not in PABs:

(84) Erano scesi in piazza diecimila manifestanti in tumulto.

‘Ten thousand riotous demonstrators were in the streets’

- a. Arrestàtine molti, la polizia poté sedare il tumulto
‘Having arrested many of them, the police succeeded in suppressing the riot’
- b. *Arrestàtine molti, il tumulto cessò
‘Many of them having been arrested, the riot ceased’

The grammaticality of *ne*-pronominalization in (84a) shows that the source nominal bears the 2 relation and is not the final subject.

This is the case in initially transitive PDeps, as predicted by (62) which does not impose any restrictions on the relational career of the arguments of a PDep, apart from the fact that the final 1 cannot be inherited as such.³⁵ The ungrammaticality of (84b), however, would be unexpected if the PCC were represented as impersonal since in this case, the initial 2 would not advance to 1; consequently, *ne*-pronominalization should be allowed. To account for the data, then, we must assume that the impersonal option is available only for initially unaccusative ((81)) but not for initially transitive PCCs.³⁶ If (84b) is represented as personal, its ungrammaticality follows from our generalization on PAbs. (83ii) imposes that the initial 2 (the potential source of *ne*) be the final subject: this rules out *ne*-pronominalization.

Case marking displays a somewhat more puzzling picture. It is usually maintained in the literature (cf. e.g. Belletti 1981:8, 1992:32, Kayne 1989:97) that Italian permits only accusative personal pronouns in transitive PCCs. Yet, while this is surely true of PDeps ((85a)), it is far from certain for PAbs ((85b)):

- (85) a. Conosciuta me, Gianni smise di bere
 ‘Having met me:ACC, Gianni gave up drinking’
 b. ?Conosciuta me/*io, il tempo volò
 ‘Having met me:ACC, time flew past’

Here, my approach faces a potential problem since, given the representation in (71b), it would predict the occurrence of the nominative pronoun in (85b) and similar constructions. Contrary to this prediction, *io* in (85b) is even worse than *me*. However, the nominative seems to fare much better in examples like the following:

- (86) a. Una volta arrestato tu/te, la banda si dissolse
 ‘Once you were arrested, the band dissolved’
 b. Una volta cacciato io/?me dal partito, la situazione peggiorò radicalmente
 ‘Once I was expelled from the party, the situation worsened radically’

Admittedly, this domain of data appears quite shaky, especially if contrasted with the sharp judgments native speakers are able to provide concerning the case form of personal pronouns in unaccusative PAbs (see (76)). I suspect that some extra-syntactic factors may play an important role here. Note first that PCCs on the whole are rather learned constructions, more frequent in written than in spoken lan-

guage. Among such constructions, those in the 1st and 2nd person are a (textual) minority. Within this quantitatively restricted domain, unaccusative PCCs display a much more straightforward situation than transitive. For the former, an overt 1st or 2nd person pronoun can occur in only one syntactic structure, the PABs: thus, no case marking problem can possibly arise. For transitives, on the contrary, two different structures are available in principle, PABs and PDep, with conflicting case-marking requirements. Among the two, the latter is much more robust in terms of frequency, since a total freedom from coreference linkages, while quite easy to reproduce in *in vitro* syntactic material such as that usually discussed in papers in theoretical syntax, is much rarer in actual texts and/or conversation.

Given this situation, it is possible that native speakers tend to perceive as awkward nominative pronouns in all kinds of transitive PCCs, both PABs and PDep, due to the fact that PDep, the construction in which the accusative form is syntactically justified (given the representation (67a)), occurs far more frequently. The fact remains, though, that *io*, *tu* are, if marginally, possible in (86), and become the only grammatical option – to the absolute exclusion of *me/te* – when the PCC explicitly qualifies as passive by the presence of an overt agent:

- (87) a. Arrestato (?)*io/*me* dai carabinieri, la banda si dissolse
 ‘Once I was arrested by the Carabinieri, the band dissolved’
 b. Bersagliato (?)*io/*me* da tutte le critiche, la situazione divenne
 insostenibile
 ‘Once I was bombarded by all the criticism, the situation
 became unbearable’

The very fact that even in (87), where the accusative pronoun is definitely ungrammatical, the nominative does not sound entirely natural either, is further proof of the fact that this kind of construction (passive PABs in the 1st or 2nd person) is in itself rather marginal and thus, apparently, all the more prone to the extra-syntactic disturbing factors highlighted above. On the whole, scrutiny of initially transitive PCCs in the 1st and 2nd person does not provide any compelling reason to revise our conclusions, summarized in the two generalizations on PDeps and PABs in (62) and (83) respectively.

7. Romance implications

In this section, I will show that the analysis of Italian PCCs developed here is buttressed by comparative evidence from other Romance languages (§7.1). I will also show, by discussing some selected examples, that this analysis is more economical than those currently available in the literature on Romance syntax from competing theoretical frameworks (§7.2).

7.1. PCCs in the Romance languages

All other Romance languages – apart from Romanian (cf. Meyer-Lübke 1899, III:455: “Der Rumäne kennt das absolute Partizipium kaum” [the Romanian (speaker) scarcely has the participial absolute]) – possess PCCs, inherited from Latin. Yet, none of them ever allows cliticization of the DO, neither in PAbs nor in PDeps. This was already observed for French in (70b) and is exemplified for Catalan in (88): (The same test can be replicated for Spanish and Portuguese, as in Loporcaro *et al.* 2004.)

- (88) a. Acabada la classe, el professor va marxar
‘The class having (been) finished, the professor left’
b. *(Un cop) acabàdala, el professor va marxar
‘Having finished it:DO.3FSG.CLIT, the professor left’

This has a straightforward implication: all other Romance languages lack finally transitive (i.e. active) PCCs altogether. In other words, any initially transitive PCC in French, Spanish, Portuguese, Catalan, is obligatorily passive. This claim is supported by abundant empirical evidence, some of which is briefly enumerated in what follows.³⁷

In Portuguese, many transitive verbs have double PtP forms, one occurring in the passive, the other in the active voice:

- (89) a. O presidente foi eleito/*elegido
‘The president was elected’
b. Esta assembleia tem elegido/*eleito muitos presidentes nos últimos meses
‘This assembly elected many presidents in the last months’

In all sorts of PCCs (not only in PAbs but also in PDeps), only one of the two PtP forms is grammatical. It is the same used in the passive (Loporcaro *et al.* 2004):

- (90) Eleito/*Elegido o presidente, a assembleia aplaudiu
 ‘The president having been elected, the assembly applauded’

Spanish has prepositional marking of the specific DO in finally transitive clauses ((91a)). As shown in (91b), prepositional marking is excluded in all PCCs (both PDepS and PABs). This is clear proof that *Maria* in (91b) has advanced to subject (Mendikoetxea 1999:1585):

- (91) a. Juan conoció a María
 ‘Juan met María’
 b. Conocida (*a) María, Juan decidió abandonar la bebida
 ‘Having met María, Juan decided to abandon the drinking’

This is further confirmed by the Spanish case marking pattern in 1st and 2nd person pronouns, which minimally contrasts with the Italian one in (85a). Nominative is obligatorily selected in Spanish, also in PDepS such as (92) (Torrego 2002:351).³⁸

- (92) Conocida yo/*a mí, Juan dio un suspiro de alivio
 ‘Having met me, Juan gave a sigh of relief’

The existence of active (finally transitive) PCCs in Italian, limited to PDepS, goes hand in hand with the existence of initially unergative PDepS (see (28), (41)). It will then come as no surprise that no other Romance language, apart from Italian, has unergative PDepS either. This further confirms that Perlmutter’s generalization, while being wrong for Italian, is correct for the rest of Romance, once it is complemented with a second condition parallel to (83ii), accounting for the obligatory passivization. Contrary to Italian, however, this condition will not have to mention the *brother-in-law* relation, since no impersonal structures must (nor can) be assumed for PCCs in the other Romance languages. The empirical proof is two-fold. On the one hand, *ne*-pronominalization (the decisive piece of evidence for impersonality in Italian unaccusative PCCs) is ungrammatical in PCCs in both French ((93b)) and Catalan ((93c)), the only two languages preserving the Proto-Romance pronominal clitic corresponding to Italian *ne* (which has disappeared in modern Spanish and Portuguese).³⁹

- (93) a. (case) Cadutene tre, le altre rimasero in piedi
 b. (maisons) *Trois en tombé(es)/tombé(es)-en, les autres restèrent debout
 c. (cases) *Caigudes-ne tres, les autres continuaven dretes
 ‘(houses) Three of them having fallen, the others were still standing’

For French, the ungrammaticality of *en*-cliticization is in agreement with the fact that no expletive pronoun ever occurs in PCCs, whose linear order, contrary to Italian, requires that the nominal precede the PtP, as shown in (94) (from Vinet 1989:180):

- (94) a. A peine Jean sorti, elle s'est levée
'Jean having just left, she stood up'
b. Une fois le café bu, on est parti
'Once having drunk the coffee, we left'

Summing up, Romance comparative evidence fits quite naturally into the picture drawn in §6. The generalization on PCCs in Romance (except Italian) will be formulated as follows.

- (95) PARTICIPIAL COMPLEMENT CLAUSES IN ROMANCE (ABSOLUTE & DEPENDENT)

The verb in participial form is accompanied by a nominal which is

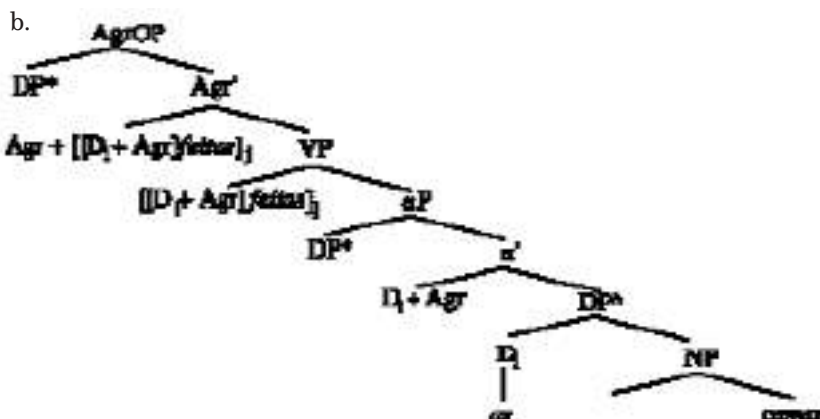
- i) its P-initial 2
- ii) the final 1 of the participial clause.

With this I have simply extended to Ibero-Romance the generalization formulated for French by Legendre (1987:87) (see (73) above), based in turn on the application to French of Perlmutter's account of Italian PCCs.⁴⁰ Perlmutter's ideas and analyses prove once more to have far-reaching consequences, far beyond their original empirical scope. Based on them, we have developed a systematic account of the Italian and Romance evidence, which yielded a very simple generalization: transitive PCCs throughout Romance, with the sole exception of Italian PDeps, necessarily involve passivization.

7.2. Comparison with alternative accounts

This claim is easily falsifiable. Its simplicity, moreover, can be compared with the complex descriptive machinery applied to the same Romance data within other research programs. This complexity, along with the questionable descriptive results, was already documented for Italian in §6. For the rest of Romance, the situation is not significantly different. Consider for instance Schmitt (1998:296), who provides the structural representation (96b) for initially transitive PCCs (both PAbs and PDeps) in Portuguese:

- (96) a. Feitas as camas, ...
'(With) the beds made'



Clearly, since the DO nominal only raises up to AgrOP and does not reach the subject position, (96b) is not an instance of passive. This structural representation, as elaborate as it is, does not account for central empirical facts like the ungrammaticality of DO-cliticization ((88)) or the selection of the passive form of the PtP in PCCs ((90)). These are not discussed by Schmitt (1998) and clearly require some separate account.

The same is true of radical semanticist accounts discussed in fn. 18 above. It is not at all clear how the semantic explanations for Italian auxiliary selection proposed by Van Valin (1990), Sorace (2000) or Bentley & Eythórsson (2003) can possibly interact, say, with the ungrammaticality of DO-cliticization in French, Catalan, Spanish and Portuguese ((88)), with the occurrence of short PtPs in Portuguese PCCs ((90)), with the lack of object marking in Spanish PCCs ((91)), or with the occurrence of nominative case marking, in Spanish, in both PABs and PDepS, to be contrasted with the accusative case in Italian PDepS ((92) vs. (85a)). For this contrast, Torrego (2002:351) recently proposes the following explanation:

“Since small ‘v’ [the locus of accusative Case checking, M.L.] in Italian is structurally below the copula *be*, but in Spanish small ‘v’ is above the copula *be*, the structure of participial absolute clauses lacks small ‘v’ in Spanish, and contains small ‘v’ in Italian. As a result, accusative Case is not licensed in Spanish participial absolute clauses, but can be licensed in Italian”.

The account is based on the structural representations in (97a-b):

- (97) a. $[_{VP} v [_{be} [D [_{VP} V OBJ]]]]$ Spanish
 b. $[_{VP} be [D [v [_{VP} V OBJ]]]]$ Italian

None of the explanatory factors invoked is empirically observable at the surface: the mutual position of the functional categories small 'v', the abstract Aspect head D, and the abstract copula *be* is a matter of speculation.

Of course, voice is also a linguists' construction, not a material entity. Yet, all the arguments discussed in this paper relate to observable evidence in a much simpler and more direct way. With minimum descriptive machinery, we arrived at the discovery, as stated in (95), that all the features listed above are but different manifestations of one and the same structural reality: the passive nature of Romance PCCs.

8. Typological implications

The analysis of Romance PCCs developed here offers a better understanding of these data from a cross-linguistic perspective. The field of typological research which is crucially involved is the cross-linguistic study of alignment systems. For this study, the UH has important consequences, a point that is still worth emphasizing, since it has been repeatedly questioned in the literature (see fn. 41 and 42). After doing this in § 8.1, in §8.2 I will finally return to the Romance facts.

8.1. The UH and the typology of alignment

Under the UH, it becomes possible to represent alignment systems, differing in the matching of morphological marking and GRs across clause types, in terms of a simple binary contrast.

Table 3. Alignment systems and the UH.

	transitive	intransitive		transitive	← clause type
		unergative	unaccusative		
	1	1	2	2	← argument's GR
a. ergative	ERG	ABS	ABS	ABS	← morphological marking
b. active	ACT	ACT	INA	INA	
c. accusative	NOM	NOM	NOM	ACC	

As Perlmutter (1989:104-6) points out, alignment properties do not characterize languages as a whole. Rather, internal to a given language, different morphosyntactic features may display different options. Thus, definitions such as ‘Andi (North East Caucasian) is an ergative(-absolutive) language’ (Harris & Campbell 1995:240) must always be complemented with reference to the specific feature(s) considered. Given this premise, finite verb agreement and/or argument marking in, say, Andi, Basque and Latin can be said to instance, respectively, types (a), (b) and (c) in Table 3.⁴¹ In the ergative and accusative types there is a marked case: one kind of argument (the transitive subject and the transitive object, respectively) is singled out by a specific marking. In the active type, on the other hand, marking is evenly distributed across the four types of arguments in Table 3.

From the table, it becomes clear that Perlmutter’s terminology could not have been the other way round: an intransitive 2 in an ergative system could not be termed **unabsolutive* because it receives *absolutive* marking; symmetrically, an intransitive 1 in an accusative system could not be termed **unnominative* because it receives *nominative* marking.⁴² This terminological point makes clear that the UH is typologically grounded, on the one hand, and makes a substantial contribution to the formalization of alignment systems, on the other. Note that this simple formalization is possible only with the assumption that syntax works in terms of *two* primitive grammatical relations, viz. subject and direct object. Dissolving ‘subject’ into two primitives (S and A), as is done in the Dixonian approach currently adopted in (functionally oriented) linguistic typology, makes this result unattainable.⁴³

8.2. Romance PCCs and the typology of alignment

The main thrust of Perlmutter’s UH was the claim that the unaccusative/unergative contrast is a syntactic universal. Empirical support for this claim comes from the identification, in a number of languages, of syntactic patterns which were previously thought to be confined to the active/inactive alignment type.⁴⁴ The spirit of Perlmutter’s (1989) analysis of Italian PCCs is perfectly in line with this basic intuition, in that his generalization (7) highlighted a similarity in the syntactic distribution of transitive DOs and the argument of unaccusatives. However, the concrete implementation of the analysis of Italian PCCs was less consistent with this fundamental insight, since Perlmutter’s generalization captured together all of the

clause types seen above in (4)-(5) and repeated here (partially and without glosses) in (98a-d):

- (98) a. Cadute dall'albero, le arance sono rimaste a terra
unaccusative PDep
 b. Uscite le donne, gli uomini hanno cominciato a litigare
unaccusative PAbs
 c. Perduti i soldi, non c'era niente da fare
transitive passive PAbs
 d. Perduti i soldi, Giorgio cercava mezzi di sussistenza
transitive active PDep

The labels on the right-hand side reflect the structural classification capitalized on in the account developed here. Note that in Perlmutter's original formulation, these different constructions were simply distinguished as unaccusative vs. transitive: their status as PDep vs. PAbs was not deemed to entail any crucial contrast in syntactic behavior, and the voice contrast was not addressed at all. This limitation is in keeping with the fact that Perlmutter's generalization only refers to the initial stratum: at this level, 2-hood is indeed a trait shared by (98a-d). But an effective treatment of alignment cannot be limited to (P-)initial (i.e. argumental) GRs. For alignment contrasts, the complete syntactic structure is relevant, so that active and non-active transitive clauses cannot come down on the same side of the fence.

The fact that they are grouped together, under Perlmutter's account, resulted in the creation of a spurious class (98c-d), containing an intruder, viz. the active transitive PDep. That this construction is an intruder has been demonstrated above: it is peculiar to Italian and, along with unergative PDeps, also peculiar to Italian, provided the decisive piece of evidence leading us to formulate for Italian a generalization on PDeps distinct from the one on PAbs. Once the special status of Italian PDeps is acknowledged, they can be expunged from the set of Romance evidence for the UH and the picture regains entirely its typological plausibility.

We are in a position to recognize, despite the intricacy of the data, the neat binary opposition familiar from languages displaying active/inactive alignment (option (b) in Table 3). In this binary opposition, there can be no natural class such as (98a-d), grouping unaccusatives together with all initially transitive clauses. Rather, as shown in Table 4, initially and finally transitive clauses (i.e. plain active transitives) pattern with unergatives, whereas only initially

Table 4. (In)transitivity in active-inactive alignment.

	active	inactive
transitive	initially and finally	initially, not finally
intransitive	unergative	unaccusative

Table 5. Active-inactive alignment and the UH.

2 → 1 advancement:	–	+
transitive	active	(anti)passive
intransitive	unergative	unaccusative

transitive clauses which are finally de-transitivized (often, in active-inactive languages like Basque, under the form of antipassive; cf. Aldai 2000) pattern with unaccusatives (or inactive intransitive predicates).

The structural property defining the binary contrast in Table 4 is the one identified by the UH: the presence vs. absence of advancement to subject of the initial direct object (Table 5). This advancement defines unaccusatives as well as all sorts of de-transitivized initial transitives: passive, antipassive, or reflexive.⁴⁵ As I have shown, 2→1 advancement is categorically involved in Italian PABs and in all PCCs found in the rest of Romance. These constructions, therefore, fit perfectly into the active/inactive alignment picture.

9. Conclusion

This result was reached by inspecting the available evidence with the theoretical machinery of Relational Grammar. The fact that it was possible to achieve such a radical simplification of the complex set of empirical data under scrutiny testifies to the effectiveness of the framework and to the fruitfulness of an approach to the theory of syntax which assumes Grammatical Relations as syntactic primitives.

Nevertheless, it would be wrong to view the results achieved here as strictly theory-internal. In my opinion, any good theory of syntax should seriously take into account and be capable of putting to the test empirical claims such as the ones made here: e.g. ‘all initially transitive PABs in contemporary Standard Italian are

instances of passive'. At least if, as Bernard Comrie once put it, "linguistics is about languages, after all".

Address of the Author:

Romanisches Seminar, Universität Zürich, Zürichbergstrasse 8, CH-8032
Zürich, Switzerland <loporcar@rom.unizh.ch>

Notes

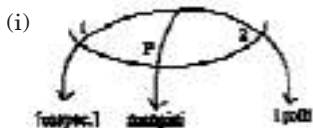
* Parts of this paper were presented orally in talks at the Universities of Konstanz (June 2002), Siena stranieri (November 2002), Perugia stranieri (April 2003) and Naples Federico II (November 2003), and at the Scuola Normale Superiore di Pisa (February 2004). I am indebted to Josep Alba-Salas, Pier Marco Bertinetto, Michela Cennamo, Michele Gulina, Georg Kaiser, Lorenza Pescia, Frans Plank, Carol Rosen, Christoph Schwarze, Rosanna Sornicola and Paola Vecchio, as well as to two anonymous referees, for advice and discussion. I also thank Mary Ann Picone and Iman Makeba Laversuch for proof-reading my English. Of course, I am solely responsible for the content of the article, including shortcomings and errors which may have persisted past their friendly comments. The following abbreviations will be used: **DO** = direct object, **GB** = Government & Binding (theory), **GG** = Generative Grammar, **GR** = grammatical relation, **PAbs** = participial absolute, **PCC** = participial complement clause, **PDep** = participial dependent, **PtP** = past participle, **RG** = Relational Grammar, **UH** = Unaccusative Hypothesis.

¹ In-depth familiarity with this framework is not assumed: all theoretical notions introduced will be defined, most of them with reference to an introductory handbook (Blake 1990).

² Representations from (3a-b) on adopt the tabular style introduced by Davies & Rosen (1988). Grammatical relations are expressed through the following conventions: **1** = subject, **2** = direct object, **P** = predicate, **Cho** = *chômeur* (i.e., 'the relation held by a nominal that has been ousted from term status'; Blake 1990:2). Under Davies & Rosen's theory, *chômage* also affects predicates, as apparent in (3a-b) where the initial (lexical) predicate is put en *chômage* by the auxiliary. Both representations in (3a-b) are *multistratal*, consisting of more than one **stratum** (three and two, respectively). On the other hand, both contain two **P(predicate) sectors**, defined as the set of strata in which a given predicate bears the P-relation (cf. Davies and Rosen 1988:57).

³ The independent evidence for these representations is omitted here. The intransitive predicates in (4) vs. (6) contrast systematically in a number of syntactic properties, as abundantly shown in a rich literature (cf. e.g. Perlmutter 1989:72ff).

⁴ The expression "heading a 2-arc" is synonymous with "bearing the 2 GR" (or, in theory-neutral terms, "direct object"). This terminology is motivated by the classical arc-notation exemplified in (i) (replaced in this paper by the tabular one introduced by Davies & Rosen 1988):



⁵ In Perlmutter's (1984a:308-311) terminology, the subject of the controlled PtP in (5b) is an 'Equi victim', defined as the nominal of an Equi construction that has no surface realization. A number of other terminologies have been used to label the contrast between the two constructions, the simplest being "one with [...]" and the other without an overt subject" (Cinque 1990:24). Also, the nature of the abstract (non-overt) subject in the second subclass has been analyzed either as a case of obligatory control (Perlmutter 1989, Rosen 1981 [1988]:59; controlled PRO for Belletti 1992:34-5) or as a non-obligatorily controlled abstract nominal: Belletti (1981:21ff) argues that participial clauses without an overt subject are instances of pro-drop; also Dini (1994:67-69) claims that no obligatory control is involved.

⁶ However, while reviewing other authors' accounts of the data, I will be occasionally quoting their generalizations with the original terminology: e.g. 'Perlmutter's generalization on PABs' will be mentioned as such, although it actually is a generalization on PCCs.

⁷ For French, Legendre (1987:139) proposes the following condition:

(i) CONDITION ON EQUI CONTROLLERS IN PARTICIPIAL CONSTRUCTIONS

Only a matrix clause *working 1* designating an animate can control Equi into a participial clause. [Where *working 1*, a notion proposed by Perlmutter (1984a), is 'a 1 at some level and a final term', Blake (1990:138).]

While this assumption is well motivated for French, the acceptability of (8)-(9) proves that a similar definition of the controller would be too strong for Italian. Nevertheless, for Italian as well, it is possible to view (i) as a 'core condition', covering the vast (textual) majority of PDEps.

⁸ A remarkable exception is Dini (1994), to be discussed in §5.1. Some unsystematic observations on the (marginal) acceptability of (some) PABs with unergative predicates are scattered in the literature: e.g. Cinque (1990:26 fn. 25), Kayne (1985: fn. 19), Burzio (1981:536), Manzini (1983:128).

⁹ Note in passing that this is an *ad hoc* account for Italian that does not extend to the Romance languages of the Iberian peninsula. All of them have generalized one auxiliary (Sp. *haber*, Cat. *haver*, Pg. *ter*), yet retain the PCC construction with the very same pattern of grammaticality seen for Italian in (4)-(5) vs. (6) (although with some differences, to be considered in §7).

¹⁰ Note that Perlmutter (1989:111 fn. 8, discussing example (5c)), does not touch upon voice, in spite of what his glosses would seem to suggest (the starred gloss is active, the good one passive). His conclusion is strictly limited to the initial GR of the nominal involved: "The overt [...] nominal in a participial absolute cannot be the initial 1". The same is true of Rosen (1984:48), who also discusses similar examples with English glosses along the same lines.

¹¹ This accessory hypothesis is *ad hoc*. There are Romance varieties other than Standard Italian in which pronominal clitics do encliticize to the PtP: cf. the data from the franco-provençal dialects of Vallée d'Aoste discussed in Loporcaro (1998:18-19).

¹² One referee observes that providing more examples of PDEps with unergative predicates would be useful here. However, for reasons of lexical semantics which

will be made clear in §§5.1-5.2, it is extremely difficult to find unergative predicates that are compatible with this construction. As shown in (ia-b), acceptability improves if telicizing adverbials are added (see (41) below). The list can be expanded by including telic predicates such as *risolvere* 'to solve' which usually occur with a transitive initial stratum but can also sometimes be used as unergatives:

- (i) a. Mangiato a sazietà, Maria ordinò il caffè
'Having eaten her fill, Mary ordered the coffee'
- b. Una volta risolto, possiamo partire
'Once we have fixed everything, we can leave'

¹³ Dini was not the first to observe the existence of Aktionsart-based restrictions on PABs: cf. e.g. Bertinetto (1986:266-7) (and the previous literature discussed there, e.g. © *abru* 1963), Rosen (1987), Legendre (1987:97), Van Valin (1990:239), Hernanz (1991), and many others. However, his study provides the most systematic discussion of this topic.

¹⁴ Beside constraint (29), Dini formulates two distinct lexical rules for AAPs vs. APPs (see fn. 19 below). In what follows, I assume Dini's semantic constraint and move on to formulate syntactic conditions on PABs vs. PDepS. As I repeat, these two classes of constructions are not coextensive with Dini's AAPs vs. APPs.

¹⁵ The *ad hoc* nature of Belletti's account is further confirmed by a comparative observation by Schmitt (1998:289). She points out that PCCs such as (34a-b) are ungrammatical also in Brazilian Portuguese (see (ia)). Unlike Italian, however, this language freely admits bare NPs in subject position ((ib)):

- (i) a. *Resolvidos problemas, podemos viajar
'Having solved problems, we can travel'
- b. Crianças alimentaram peixes no lago
'Children fed fish in the lake'

¹⁶ Developmental data further evidence the prototypical relationship between PtPs and telicity. As shown by Antinucci & Miller (1976), in an early phase of acquisition (1;6-2;6), Italian children show complementary distribution of telic and non-telic predicates across tenses/moods. In describing past events, they tend to employ the PtP of telic predicates (e.g. *caduto* 'fallen'), not of non-telic ones, which occur in the imperfect form (imperfective past; e.g. *piangeva* '(s/he) was crying'). At that stage, a temporal contrast has not developed yet: the telic PtP is the first kernel of what is going to become, later on, the (perfective) past tense, to be generalized to non-telic predicates too.

¹⁷ These intermediate positions have been grouped into two classes: projectionist (e.g. Levin & Rappaport Hovav 1995) vs. constructional (e.g. Zaenen 1993) models.

¹⁸ Among the many syntactic features amenable to a unitary solution by Perlmutter's UH, semanticist approaches especially concentrated on auxiliary selection with intransitives (cf. Centineo 1986, Van Valin 1990, Kishimoto 1996:§4.2, Bentley & Eythórsson 2003). Van Valin (1990:233, 256) formulates two rules:

- (i) a. AUXILIARY SELECTION WITH INTRANSITIVE VERBS
Select *essere* if the LS [= logical structure, M.L.] of the verb contains a state.
- b. AUXILIARY SELECTION FOR ITALIAN VERBS
Select *avere* if the subject is an unmarked actor (with respect to the Actor-Undergoer Hierarchy [...]), otherwise *essere*.

Rule (ia), holding for intransitive verbs only, is identical to the one proposed by

Parisi (1976), although Van Valin (1990) does not quote Parisi's account nor Perlmutter's (1989:98-99) objections to it. Rule (ib), formulated in an appendix in response to the need to account for auxiliation in reflexives, is more inclusive and is meant to predict auxiliation in all clause types. Both formulations are problematic. Selection of *avere* with unergatives follows either from their being activities, the only (semantic) class of verbs lacking a STATE predicate in its LS ((ia)), or from the fact that their subject is an unmarked actor ((ib)). Yet, the (syntactic) class of unergatives also includes stative verbs such as *credere* 'believe': selection of *avere* with this verb is at odds with Van Valin's rule, in either formulation. Similar cases could be multiplied, and the same argument can be replicated for transitives. Thus, Van Valin's approach does not escape criticism leveled at earlier semantically based approaches by Rosen (1984), Perlmutter (1989:95-99), and the same is true for more recent semantically based accounts like Bentley & Eythórsson (2003:468), who propose no less than three distinct rules for auxiliary selection in Italian: (i) auxiliary *have* with transitives; (ii) auxiliary *be* with reflexives; and (iii) auxiliary *have* or *be*, depending on the semantics, for intransitives only. Perlmutter's rule is simpler (select *essere* if the clause contains a nominal that is both a 1 and a 2), has much more general consequences, and is also typologically more plausible than Van Valin's rule (ib). The latter presents *essere*, occurring in the passive, as the "unmarked auxiliary". This is hard to maintain, for a language like Italian, which displays a mixed alignment pattern, mostly accusative/nominative with many active/inactive features (cf. La Fauci 1988).

¹⁹ Dini provides two distinct lexical rules for AAPs vs. APPs. These, in the form of syn-sem representations, also include syntactic structure ([CAT]), which translates into HPSG Perlmutter's generalization (7). Thus, the ungrammaticality of finally unergative PABs is accounted for by assuming for this construction the valence representation [SUBJ < >, COMPS *REST*] implying that there is no (underlying) subject and that the 'less oblique' complement is deleted. This translation, however, directly depends on the GB version of the UH, and consequently shares the same problems, a fact that becomes apparent with reflexives. Their "(lexical) valence/argument structure" is [SUBJ < >, COMPS <NP_{[2]REFL}>] (1994:67). In a PDep like (i), the index [2] is controlled by *Gianni*:

- (i) Elogiatosi, Gianni stappò una bottiglia di champagne
'Having praised himself, Gianni uncorked a bottle of Champagne'

This corresponds to the underlying structure of reflexives in e.g. Kayne (1993): PRO_[vp] elogiare_[pp] Gianni-si]. Neither Dini's nor Kayne's representations, however, can account for the ungrammaticality of (iia):

- (ii) a. *Elogiatosi, il treno scomparve in lontananza
'Having praised itself, the train disappeared in the distance'
- b. *Elogiato Gianni, il treno scomparve in lontananza
'Having praised Gianni, the train disappeared in the distance'
- c. Elogiato il treno, Gianni scomparve
'Having praised the train, Gianni disappeared'

This is due to a semantic restriction the verb *elogiare* 'praise' imposes on the initial (i.e. argumental) subject, which must be [+human] (cf. (iib) vs. (iic)). However, in Dini's (and Kayne's) representation of reflexives, there is no thematic subject for this restriction to apply to, since the underlying subject position is empty. This and other shortcomings of the reflexives-as-unaccusatives hypothesis in GB are discussed in Alsina (1996:81-147), Loporcaro (1998:214-5). Given the original RG account of reflexives (cf. Perlmutter 1989:81), (iia) would be correctly ruled out, since the nominal is initially (hence, argumentally) multiattached (1,2). The problem arises from casting GRs into the configurational mold.

²⁰ As is generally the case for PDepS, both sentences are rather infelicitous if no circumstantial adjunct is added, independently from their semantics.

²¹ Both *trastullarsi* 'amuse oneself idly' and *svegliarsi* 'wake up' are inherent reflexives (or, in Rosen's 1981[1988], 1982 terms, initially unaccusative predicates with retroherent advancement, see (43b)). Despite their Aktionsart difference, they both pattern with unaccusatives on all syntactic diagnostics (auxiliary selection, PtP agreement, *ne*-pronominalization etc.).

²² The evidence discussed in this section is hard to reconcile with approaches reducing syntactic unaccusativity to lexical semantics. A recent example is van Hout (2004:60). The author views "unaccusativity as telicity checking", claiming that "lexical-semantic properties *determine* unaccusativity" [emphasis added].

²³ Carol Rosen dealt with the data under discussion in a number of important contributions (see especially Rosen 1987, 1990, 2001, Davies & Rosen 1988:69). In quotations, I privilege the first one (Rosen 1981 [1988]), for reasons of chronological precedence, and the last (published) one, for it provides the most recent, widely accessible, formulation of her invaluable work on this topic.

²⁴ Old Italian was less restrictive in this respect, permitting constructions such as (50) (cf. the Old Italian examples collected in Egerland 1996:186ff). This diachronic fact clearly indicates that the condition on PAbs has changed over time in the history of Italian. For reasons of space, the issue will not be pursued any further here.

²⁵ (Transitive) passive is formally defined as 2→1 advancement with chômage of the nominal bearing the initial 1 relation; cf. Perlmutter & Postal (1977), Perlmutter (1984b).

²⁶ Even though it is *ad hoc*, constraint (51) (in either formulation) is descriptively adequate, and hence superior to Belletti's (1990, 1992) constraint (21ii-a). The latter, in fact, would incorrectly rule out (52), owing to the occurrence of the lexical nominal *tutti i manifestanti*. Since (52) is perfectly grammatical, Belletti's example (20a), on which constraint (21ii-a) is based, must be ungrammatical for some independent reason. Note that the initial subject in (20a) is a proper noun, viz. a nominal that is high on the animacy/definiteness (or, in other terminologies, accessibility/indexability) hierarchy. A well-known cross-linguistic constraint disfavors passive constructions in which the demoted initial subject scores high on the hierarchy: many languages of the world exclude altogether passives such as *My friends are worried by me*, that are somewhat marginal in Standard Average European as well. (See Croft 2001:289ff for a recent overview of languages disallowing passives with agents in the 1st and 2nd person.) While this constraint in Italian does not affect 'core' passives (i.e. passive clauses with overt morphology, under the form of a passive auxiliary), it might be thought to play a role in the PAbs construction, which is in itself more marginal.

²⁷ More precisely, the semantic inertness concerns true (i.e. temporal-aspectual) auxiliaries. (Modal) semiauxiliaries, while being auxiliaries in the configurational sense defined in (57), (58a), do re-initialize their argument and are consequently not asemanic (cf. Davies & Rosen 1988:66, Rosen 1997:198). The term 'initialization' (cf. Dubinsky 1985) indicates the attribution of an initial GR by a predicate to an argument, which also entails at the same time the assignment of a semantic role. A different view, with thematic relations represented as distinct from GRs, is proposed within RG by Farrell (1991 [1994]). This difference is not germane to our present concerns.

²⁸ Since their argument always is their P-initial 2, serials can occur in PAbs too, in compliance with generalization (45b) (cf. Rosen 1997:199).

²⁹ The structural representation in (63) is reproduced without including La

Fauci's proposal of a split of the lexical predicate into two P-sectors. This proposal, while promising in other respects, is immaterial to our present discussion of Italian PCCs. Relevant here is only the fact that no further stratum is represented and hence no unaccusative (nor passive) advancement may be represented either.

³⁰ In (65) and (67) Davies & Rosen's (1988) representational style is adopted: cf. e.g. Blake (1990:91) for examples of the classical arc-notation and La Fauci (1997) for a similar tabular notation of inter-clausal dependency for other types of subordinate clauses. Coreference linkage ("control") is graphically represented by the line linking the final subject of the PDep to the subject of the superordinate clause.

³¹ The representations in (68a-b) are simplified, as they do not include the matrix clause. The notation PRO is an abbreviatory convention for what is technically represented as two arcs with the same head (i.e. headed by the same nominal) but with different tails (i.e. referring to GRs held by the same nominal in two distinct clauses), as shown in (65) and (67).

³² Representation (71b) extends to Italian the one proposed for French initially transitive PABs by Legendre (1987:100).

³³ The difference in formulation between (72) and (73) has interesting consequences for the syntax of reflexive PCCs that cannot be dealt with here for reasons of space.

³⁴ As apparent in (74), DO-cliticization is ungrammatical if an antecedent for the PCC's subject is not available. This antecedent, as Dini (1994:68) correctly observes, need not be the matrix clause subject but can also be given contextually:

(i) Gianni riuscì finalmente a riparare l'ombrello, e fu una fortuna perché, aggiustatolo, cominciò a piovere.

'Gianni finally succeeded in fixing his umbrella, and that was lucky because, (once he) fixed it:DO.3MSG.CLIT, it started raining'

The modified version of Rosen's definition of PCCs, in (10a-b) above, accommodates this fact. By (10a), the PCC in (i) qualifies as a PDep, hence cliticization is expected. Dini (1994:68 fn. 15) also points out that Belletti's (1990, 1992) approach would rule out (i) as a case of uncontrolled PRO in Spec-AgrP. Belletti makes an absolute structural constraint out of what is indeed a textual preference. Indeed, DO-cliticization in PDep is much more frequent when the antecedent is the matrix clause subject (as in (74a)) than when it is simply, and more loosely, contextually given (as in (i)).

³⁵ The structural representation of the PDep (84a) is similar to that shown in (67b): in neither does the initial 2 advances to 1.

³⁶ We have already seen in fn. 26 for example, that, for passivization, initially transitive PCCs are subject to more severe constraints than plain transitive finite clauses. Impersonality in Italian is incompatible with final transitivity in finite clauses (**Ha arrestato la polizia i manifestanti*). Apparently, in PCCs, it is ruled out altogether.

³⁷ This is true of the standard Romance languages in their contemporary stage. In the Middle-Ages, finally transitive PCCs existed throughout Romance (cf. fn. 24 on Old Italian). This means that the conditions on PCCs have been subject to diachronic variation, a point I cannot dwell on here. The same is true for another feature of PCCs: they invariably display PtP agreement in all modern Romance languages. Since the rules accounting for PtP agreement in perfective periphrastics differ greatly, the corresponding language-specific rules (surveyed in Loporcaro 1998) obviously cannot cover the occurrence of agreement in PCCs. For reasons of space, however, this issue must be left for further research.

³⁸ Note that (91)-(92) are PDepS. However, the element of the participial clause that is bound through coreference is not the final 1 (*María* in (91b), or *yo* in (92)) but rather the initial 1. This requires that condition (10) be appropriately relaxed, so as to also include initial 1s chômeurized through passivization:

(i) PARTICIPIAL CIRCUMSTANTIAL COMPLEMENTS [DEFINITION]

A reduced clause with the verb in participial form is a:

- a. PARTICIPIAL ABSOLUTE
if its acting 1(s) is/are free from coreference linkages;
- b. PARTICIPIAL DEPENDENT
otherwise (i.e., if it is *not* free from coreference linkages).

(“The notion **acting** term covers a final term and its corresponding chômeur”, Blake 1990:137.)

³⁹ See Wanner (1987:40) on the occurrence of *en*-pronominalization in Old Spanish. The fact that all branches of Romance attested in the Middle Ages possess this clitic warrants its reconstruction for Proto-Romance.

⁴⁰ Also here, the difference in formulation between (95) and (73) is neglected for reasons of space, although it is relevant to account for the cross-linguistic contrasts in the behavior of reflexives.

⁴¹ Eguzkitza & Kaiser (1999:199) mention Basque to support their criticism of Perlmutter’s terminology: “a look at Basque shows that the use of the term unergative is misleading”, because in Basque the argument of (some) intransitive predicates (qualifying as unergatives by the UH; Mejías-Bikandi 1990) is marked ergatively ((i)): (Data are from the quoted sources; cf. also Aldai 2000, Manandise 1987:320f.)

- | | | | | | |
|--------|------------------------------|-----------|-------------|---------------|-------------------|
| (i) a. | Izarr-ak | dirdiratu | du | | unergative |
| | star:SG.ERG | shine | AUX.3SG.ERG | | |
| | ‘The star shined’ | | | | |
| b. | Irrati-ak | ez | du | funtzionatzen | |
| | radio:SG.ERG | not | AUX.3SG.ERG | function | |
| | ‘The radio doesn’t function’ | | | | |

As seen in (ii), in a larger subset of intransitive clauses (unaccusatives, by the UH), the argument has absolutive affixal morphology:

- | | | | | | |
|---------|----------------|-----------|-------------|--|---------------------|
| (ii) a. | Gizon-a | etorri | da | | unaccusative |
| | man:SG.ABS | come | AUX.3SG.ABS | | |
| | ‘the man came’ | | | | |
| b. | Ni | etxe-an | nengo-en | | |
| | I:ABS | house:LOC | I-was | | |
| | ‘I was home’ | | | | |

The contrast (i) vs. (ii) proves that, in spite of its traditional definition as an ‘ergative’ language, Basque in its present form does not display ergative-absolutive but rather active-inactive alignment (option (b), Table 3). Hence, there is no inconsistency in labeling ‘unergative’ the verbs in (i): the inconsistency resides rather in the traditional Bascologists’ labels for morphological marking. Aldai (2000:35 fn. 3) recently mentions the issue and insists on maintaining the traditional terminology, with the argument that the ergative marking on the nominals in (i) seems to have arisen fairly recently in the history of the language. This somewhat weaker embeddedness is confirmed by the fact that – as G. Kaiser kindly pointed out to me (p.c. July 5, 2002) – many of the predicates which cross-linguistically tend to belong in class (2b) and would consequently be candidates for type (i) morphological marking, are not lexicalized as verbs in Basque. This fact is duly men-

tioned in grammars: “Pleuvir se traduit par “faire pluie”: *Ebi egin*. Tonner: *ühül-gü egin*. Rire: *Erri egin*. Pleurer: *Nigar egin*. Soupirer: *Hasperen egin*. Eternuer: *ürsañ egin*. Bâiller: *Aharausi egin*. Tousser: *Eztül egin*. Mentir: *Gezur erran*.” (Mispiratzeguy 1936:131). All of the French verbs in the list are unergative (just like their English counterparts: *rain*, *thunder*, *laugh*, *cry*, *sigh*, *sneeze*, *yawn*, *cough*, *lie*). The picture is clear. Type (i) exists in contemporary Basque; in fact, it seems to be productive (cf. Levin 1989:57-8). Consequently, compliance with terminological standards in the study of alignment systems (cf. e.g. Harris & Campbell 1995: ch. 9) forces us to conclude that Basque has active/inactive alignment in its present-day synchronic state. On the other hand, if (and/or when, in the past) examples of type (i) did not exist at all, the language would be a truly absolutive(-ergative) language, with ergative case-marking never occurring in any intransitive clause. Be that as it may, the objection to Perlmutter’s term *unergative* vanishes.

⁴² The rationale for this terminology is stated clearly by Pullum (1988:582), who claims responsibility for suggesting it to P. Postal (in October 1976):

“if a 1 in a stratum with a 2 is an ergative, a 1 in a stratum with no 2 should be called an *unergative* 1, and likewise, if a 2 in a stratum with a 1 is an accusative, a 2 in a stratum with no 1 should be called an *unaccusative* 2”.

The two terms – *pace* Van Valin (1990:222), who finds them “not perspicuous” – are motivated by the markedness relations existing in two distinct types of alignment systems: (a) vs. (c) in Table 3. Pullum also documents the period of about one decade during which the UH was ascribed to Burzio (1981) in most of the literature in Generative Grammar, although Burzio himself had admitted Perlmutter’s primacy in the acknowledgments (“I must thank David Perlmutter for suggesting to me the single most important idea in this book, the one that he later termed the “Unaccusative Hypothesis””, Burzio 1986:xiii). This was partly due to the success of the alternative terminology coined by Burzio (1986:26ff), who replaced *unaccusative/unergative* with *ergative/intransitive*, motivating the proposal with alternations such as *Il nemico ha affondato la nave* ‘The enemy sank the boat’/*La nave è affondata* ‘The boat sank’. In language after language, the argument of unaccusatives often occurs as the object of a lexically identical transitive predicate, a situation that, Burzio suggests, is reminiscent of ergative languages. The choice of ‘ergative’ to denote these intransitive constructions was characterized by Pullum (1988:585) as “a truly crackbrained piece of terminological revisionism”: in ergative languages, the argument of monadic intransitives displays absolutive, not ergative, morphology. Meanwhile, this terminological flaw has been widely recognized, although some authors (e.g. Schmitt 1998, Belletti 2000) still employ a mixed system (*unaccusative* vs. *intransitive*), which seems infelicitous, since both unaccusatives and unergatives formally qualify as intransitive (cf. Perlmutter 1989:65).

⁴³ See Harris (1997:362) for criticism of Dixon’s (1994) three-primitive system.

⁴⁴ Sapir’s (1917:73) analysis of active/inactive syntax in Amerindian languages was one of the main sources of inspiration acknowledged by Perlmutter (1978:186).

⁴⁵ For the structural representation of passive see (53b) above; for reflexives, cf. fn. 19 above and Rosen (1982); for antipassives Davies & Sam-Colop (1990).

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