# 3 *Sentential negation: adverbs*

The currently standard approach to the structure of negation (in Romance) was inaugurated by Pollock (1989), who proposed that negation adverbs such as *pas* in French fill the Spec position of a NegP projection generated below the I position targeted by the verb. The head of NegP can in turn be filled by a negative clitic like *ne* in French, whose higher inflectional position depends on movement, i.e. cliticization. In other languages, which include colloquial French, no negative head is present. Belletti (1990) applies the same theory to Italian, which only has a negative head; the latter originates in the Neg position and moves higher as a result of cliticization.

A more complex set of data, involving Northern Italian varieties, is considered by Zanuttini (1997), who proposes that there are several Neg positions. Specifically, a Neg position is generated above I, while below I there are three Neg positions. The inflectional Neg position hosts negative clitics in languages like Italian which do not require a sentential negation adverb. In contrast, languages which require a sentential negation adverb generate it in one of the lower Neg positions; if a clitic combines with the adverb, it is generated in the head of the relevant Neg position and moves to the inflectional domain via cliticization. In other words, for Zanuttini (1997) preverbal clitic negations are associated with two different structures, according to whether they negate alone or combine with a negative adverb. In turn, the lower Neg positions are defined in relation to the general hierarchy of adverbs proposed by Cinque (1999); according to Zanuttini (1997), her $Neg_2$, $Neg_3$ and $Neg_4$ positions occur within the aspectual adverbial series, while they do not interact in any significant way with either the temporal or the modal series. $Neg_1$ corresponds to the negative clitic position in the inflectional domain.

According to Cinque (1999: 106), the aspectual adverbial series is ordered according to the hierarchy partially reproduced in (1a). The three adverbial negation positions proposed by Zanuttini (1997: 99) are ordered with respect to this hierarchy as in (1b). The three different Neg positions correspond to three different types of sentential negation adverbs, which Zanuttini individuates in

Northern Italian varieties on the basis of their distribution. The higher adverbial Neg position $Neg_2$ corresponds to sentential negation adverbs such as *pa* in Piedmontese varieties or the optional *mica* of standard Italian. In the same Piedmontese varieties in which *pa* occurs as $Neg_2$, the $Neg_3$ position is filled by sentential negation adverbs of the *nen* type. In turn, the lowest adverbial negation position $Neg_4$ corresponds to the Lombard type *no*.

(1) a. [$_{\text{Tanterior}}$ *already* [$_{\text{AspTerminative}}$ *no longer* [$_{\text{AspContinuative}}$ *still* [$_{\text{AspPerfective}}$ *always*…[$_{\text{Voice}}$ *well*
b. [$Neg_2$ [*already* [$Neg_3$ [*no longer* [*still* [*always* … [*well* [$Neg_4$

In closely related literature, the functional category Neg also plays a role in explaining interpretive facts, specifically 'negative concord', whereby two negative elements in the sentence do not give rise to a double negation, but rather are interpreted as instantiations of a single logical negation. Consider, for instance, a Romance language like Italian which has a negative clitic; the latter combines with a negative argument or adverb (*niente* 'nothing', *mai* 'never', etc.) to yield a single logical negation. Haegeman and Zanuttini (1991) explain this phenomenon on the basis of a Neg Criterion, modelled on the *Wh*–Criterion of Rizzi (1996). On the basis of the Neg Criterion, the negative clitic in the head position of a NegP requires a Neg operator in its Spec and vice versa. The head-Spec configuration is in turn read as an agreement relation, yielding a single negation interpretation.

This analysis presupposes that *niente*, *mai* and the like – i.e. *n*-words – are negative quantifiers. A consistent body of literature on Romance languages argues for a different conclusion, namely that Romance *n*-words are negative polarity items (Rizzi 1982; Laka 1990; Longobardi 1992; Acquaviva 1994). In other words, *n*-words have no intrinsically negative properties, but are simply existentials, or free variables in the terms of Heim (1982), which are interpreted in the scope of the negation or another polarity operator. The most immediate argument in favour of the polarity status of *n*-words in Romance comes from the fact that they occur in modal environments (questions, hypotheticals) without any implication of negative meaning. The argument that is often advanced in favour of a negative quantifier status for *n*-words, namely that they appear in fragments (Zanuttini 1997), depends on the fact that fragments are the result of ellipsis – and that they interpretively correspond to a full sentential structure, obviously capable of hosting an abstract negative operator. In what follows we assume that *n*-words are negative polarity items (and not negative quantifiers). This entitles us to (provisionally) disregard the role played by NegP in negative concord. We shall return to negative concord in chapter 4, where we shall also consider the sentential negation clitics which enter into it.

In this chapter we focus on sentential negation adverbs. Specifically, in section 3.1 we note that sentential negation adverbs either take the same form as negative arguments such as 'nothing' or are bare nouns. We argue that treating them as nominal elements, specifically connected to the internal argument of the predicate, allows for an explanation of data such as the fact that they trigger the partitive, or their sensitivity to the person (1st/2nd vs. 3rd) of the internal argument itself. Correspondingly, we abandon the Neg categorization in favour of a reassignment of sentential negation adverbs to a nominal, argument-related category, tentatively labelled Q.[1]

In section 3.2 we examine the distributional phenomena targeted by the hierarchy in (1) – keeping in mind also the fact that recent literature (Ernst 2002; Svenonius 2002; Nilsen 2003) argues that they are sensitive not to syntactic hierarchies but to semantic constraints on selection and/or scope. In particular, we reassess the sub-hierarchy in (1) in the light of our treatment of sentential negation adverbs as both nominal and argumental. We conclude that the adverbs of the sub-hierarchy in (1) are attached to the eventive domain of the sentence in accordance with LF selection requirements and that they are ordered within this domain according to the same macrocategories encountered in the argumental and inflectional domains – i.e. roughly by quantificational (Q), deictic (Loc) and nominal/argumental (N) properties.

In section 3.3 we briefly reconsider another major distributional pattern concerning the position of adverbs with respect to verbs. Cinque (1999) and Zanuttini (1997) predict that any verbal head appearing internally to the hierarchy of adverbs in (1) merely cuts it into two segments, without any reordering of the adverbs relative to one another. We argue that if the ability of non-finite verbs to appear in the middle of the sequence in (1) is construed as an indication of their low position, then the fact that they notably precede pronominal clitics (i.e. inflectional material) remains unexplained. We conclude that the non-finite verbs are quite high in the sentence (participles also define independent sentences as in Kayne (1993)). The adverbs in (1) attach even higher because the lack of tense specifications allows for an eventive treatment of the higher projections of the sentence (along the lines of the flexible matching of syntactic and interpretive projections proposed by Svenonius (2002) and Ernst (2002)).

Overall, then, we devote this chapter to providing a recategorization of sentential negation adverbs; the alternative account of their distributional properties is meant to establish the compatibility of this recategorization with known facts. As anticipated, we leave the recategorization of negation clitics and the reappraisal of negative concord for chapter 4.

### 3.1 Sentential negation adverbs are nominal and argumental

In several Northern Italian varieties, notably Piedmontese ones of the type also studied by Zanuttini (1997), the sentential negation adverb has the same form as the negative argument for 'nothing'. This is true of *nɛŋ* as in (2), *nɛint(a)* as in (3), *nota* as in (4), and *rɛŋ* as in (5), as well as *nia* in Ladin varieties, as in (6). As a result of the variable valency of the verb, the (b) examples are ambiguous between the argumental and sentential negation interpretations; specifically, since the verb can be construed both transitively and intransitively, the negative item can fill the internal argument slot, or it can have a reading equivalent to a sentential negation. Conversely, it is only the valency of the verb that disambiguates the sentential negation readings in (a) and the argumental readings in (b).

(2) *Montaldo* (Piedmont)
   a. i ʀu tʃam nɛŋ
      I him call not
      'I don't call him'
   b. i mɔɲdʒ nɛŋ
      I eat nothing/not
      'I don't eat (anything)'

(3) *Oviglio* (Piedmont)
   a. a n ɛl vig nɛinta
      I not him see not
      'I don't see him'
   b. u n maɲdʒa nɛinta
      he not eats nothing/not
      'He doesn't eat (anything)'

(4) *Quarna Sotto* (Piedmont)
   a. tʃamu not -ɐt
      I.call not you
      'I am not calling you'
   b. jɐ vɔg nota
      I see no/nothing
      'I don't see (anything)'

(5) *Stroppo/Macra* (Piedmont)
   a. lu tʃamu rɛŋ
      him I.call not
      'I don't call him'
   b. al fai rɛŋ
      he does nothing
      'He does nothing'

(6) *La Pli de Mareo* (Alto Adige/South Tyrol)
a. i ne le kɛrdi nia
I not him call not
'I don't call him'
b. ju ne li nia
I not read not/nothing
'I don't read (anything)'

The common lexicalization of the sentential negation adverb and negative arguments is recognized in the historical literature, specifically in connection with what is taken to be a 'grammaticalization' process changing the negative argument into a functional category Neg. Thus, Roberts and Roussou (2003) mention 'negative quantifiers/pronouns' as one of the 'principal sources for clausal negators' (English *not* is an example of this). In fact, there are many Northern Italian varieties in which the types *nen*, *neinta*, etc. for the sentential negation do not have the same form as 'nothing', so that the connection between the former and negative arguments appears to be purely etymological. However, varieties of the type in (2)–(6) seem to point to a bona fide lexical identity of negation and negative argument. Therefore we may wonder whether the best theory is one which posits two lexical entries for them, with the negation associated with the category Neg and the argument with the category N/Q.

In fact, only a subset of the negative elements reviewed so far contains the negative morphology *n-*; thus, the type *rɛŋ* is etymologically connected to a bare noun (<Latin *rem* 'thing'). Bare nouns represent another major class of non-*n* sentential negations, including in particular minimizers – i.e. nouns denoting the smallest possible unit of something – of the type of *mi(c)a* or *briza* 'crumb', *bu(ka)* 'piece', *pa* 'step', as in (7).

(7) a. *Trun* (Grisons)
ɛlts dɔrmʉŋ bʊk(a)
they sleep not
'They don't sleep'
b. *Pramollo* (Piedmont)
a drøm pa
he sleeps not
'He doesn't sleep'
c. *Premana* (Lombardy)
el fo: miɣɛ
it I.do not
'I don't do it'
d. *Finale Emilia* (Emilia)
i n dɔram briʑa
they not sleep not
'They don't sleep'

Interestingly, in relation to sentential negations of the type in (7) Meyer-Lübke (1899: §693–4) proposes that what we describe as sentential negation adverbs originate in a partitive construction. In support of his proposal he quotes Old French examples such as (8), in which the 'negative adverb' *mie*, a bare noun 'minimizer', overtly co-occurs with the partitive.

(8) de s'espee ne volt mie guerpir (Chanson de Roland 465)
of his sword not he.wanted not to abandon
'He didn't want to abandon his sword'

This type of data recalls the phenomenon described by Pesetsky (1982) for Russian whereby the accusative object in non-negative contexts alternates in negative contexts with an object morphologized either in the accusative or the partitive, as in (9).

(9) a. Ja ne polucal pis'ma
I not received letters(acc.pl.)
'I didn't receive letters'
b. Ja ne polucal pisem
I not received letters(gen.pl.)
'I didn't receive letters'

Considerable interaction between the negation and case assignment to the internal argument of the verb is also found in Northern Italian varieties. Given its potential relevance for the status of the negation (purely functional or still nominal), we shall review it next. In one group of languages, which includes the Piedmontese varieties in (10), the negation triggers the partitive even in the presence of a definite interpretation. Thus, the partitive clitic in (10) doubles the proper name in topic position, and indeed can normally alternate with an accusative, as in (10a). It will be noted that the languages exemplified are characterized by enclitics in declarative finite sentences (cf. Tortora 2002). However, the variety from *Quarna Sopra* exemplified in (15) combines the same phenomenon with proclisis on the finite declarative verb, showing that it cannot depend on enclisis.

(10) a. *Trecate* (Piedmont)
(a mmarju) tʃamum -ru/ -na mija
the Mario we.call him/of.him not
'We are not calling Mario'
b. *Cerano* (Piedmont)
Marjo tʃama -n mea
Mario call of.him not
'Don't call Mario!'

The data in (10) shed a new light on a different, but fairly obviously connected phenomenon that has long been known for French. Thus, as discussed

by Kayne (1984), in negative environments French allows for indefinite noun phrases (bare plurals and bare mass singulars) introduced by *de*; these same forms are not allowed in the absence of negation, as illustrated in (11). The same phenomenon is fairly widespread in Northern Italian varieties, as shown in (12).

(11) Je *(ne) veux pas de cadeaux
I not want not of gifts
'I (don't) want gifts'

(12) a. *Casorezzo* (Lombardy)
al maɲdʒa miŋga da biskɔti
he eats not of biscuits
'He doesn't eat biscuits'

b. *Casei Gerola* (Lombardy)
u bevɜ miɜ d vi
he drinks not of wine
'He doesn't drink wine'

c. *Cravagliana* (Piedmont)
al maɲɟa mia da busku'ti
he eats not of biscuits
'He doesn't eat biscuits'

d. *Stroppo/ Macra*
al beu rɛŋ de viŋ
he drinks not of wine
'He doesn't drink wine'

For the object noun phrase in (11), Kayne (1984) proposes a structure including a non-lexicalized negative quantifier Q followed by the partitive *de cadeaux*, yielding a structure of the type *je ne veux pas* [ Q [*de cadeaux*]]. The presence of the empty Q quantifier means that the noun phrase as a whole is subject to the Empty Category Principle (ECP) of Chomsky (1981); this in turn predicts a generalization that appears to hold at least of French, namely that noun phrases of the type under consideration are restricted to the object position. This proposal of Kayne (1984) can be considered a predecessor of his recent ideas about 'silent' categories (Kayne 2006, 2008a). Manzini and Savoia (2009a, 2010) and Savoia and Manzini (2010) argue in some detail against this conception on grounds of restrictiveness of the theory, as well as on specific empirical grounds. Here we note only that Chomsky's (1981) ECP is formulated for empty categories whose content is determined in that framework by the computation, not by the lexicon – so that the extension of the ECP to empty Qs of the type in Kayne (1984) in fact represents a substantial revision of the theory.

In at least one of the languages in (12), namely *Stroppo* in (12d), the sentential negation adverb *rɛŋ* has the same form as the negative argument, as illustrated in (5). This suggests an alternative analysis of the partitive in (12). Suppose that we take the fact that 'not' and 'nothing' in languages like *Stroppo* have the same form not to be just a matter of homophony (eventually to be explained on diachronic grounds), but rather as an indication of the fact that a single lexical entry (with non-disjunctive properties) is involved. If we take the negative argument content to characterize the lexical entry of *rɛŋ* as a whole, we obtain the Logical Form in (13) for (12d); this is endowed with the interpretive properties indicated by Kayne (1984), but without any recourse to silent Q elements. Quite simply, we can assume that the role of the negative quantifier licensing the partitive is played by *rɛŋ* itself. To be more precise, *rɛŋ* introduces the polarity variable existentially closed within the scope of the polarity (here negation) operator.

(13) *Stroppo/ Macra*
al beu [$_{Q}$ rɛŋ] [de viŋ]

For the data in (10), we envisage an analysis along the lines of that provided for (12). In fact (10) represents a generalization of the structures already proposed for (12), where no definiteness restriction applies. On the contrary, we must assume that the elements that can enter into the partitive construction in (12) are sensitive to the same constraints that generally restrict the occurrence of (object) bare nouns in Romance to plurals and mass singulars. The proposal in (13) raises many questions, some of which can be settled on the basis of fairly standard assumptions. For instance, the fact that *rɛŋ de viŋ* in (13) is not a constituent can be viewed as a result of the fact that *rɛŋ* as a sentential negation is in a Q-floated position. Other questions require more articulated answers. In particular, one may wonder what the difference is between 'He doesn't drink' and 'He drinks nothing' if 'not' and 'nothing' coincide in the lexicon; we shall return to this question in section 3.1.2. Genitive of negation in Russian (9) arises with a negative clitic, rather than with a negative adverb; the reason will become apparent when we discuss negation clitics in chapter 4.

In short, we have argued that the lexical formal identity between negative arguments and sentential negation adverbs in (2)–(6) supports a single lexical entry for these elements. We have further argued that this analysis provides an explanation of why sentential negations license partitives, as in (10)–(12). More generally, our idea is that the same analysis applies to all sentential negation adverbs – and not only to those of which the relevant phenomena hold.

If negations of the type of *nɛn*, *nɛinta*, *nuta* illustrated in (2)–(4) have the referential content of the negative argument 'nothing' (with which they may lexically coincide), one may wonder what the referential content may be for *mia* in (12a–c), (10) and for similar minimizers (*briza*, *pa*, etc). In fact, they have the only reference independently known to be compatible with bare singular count Ns, i.e. again that of negative (polarity) items. To illustrate, bare singular Ns, though generally excluded in Romance, become possible in the scope of a negative operator, as illustrated in (14) for standard Italian. Note that what is crucial for the argument in the text is that bare count singulars are allowed only in negative (polarity) contexts; it is not crucial that all negative (polarity) contexts should license all bare count singulars.[2]

(14) a. *(Non) si muove foglia
not M/P moves leaf
'Not a leaf stirs'

b. *(Non) alzò ciglio
not he.raised eyebrow
'He didn't raise an eyebrow'

c. *(Non) proferì parola
not he.said word
'He didn't say a word'

### *3.1.1 Further evidence*

Before we proceed with a discussion of the proposal we are putting forward, and the various issues it raises, we will review some more complex evidence relating to the interaction of sentential negation adverbs with the argument structure of the predicate. The varieties of *Quarna Sopra* and *Quarna Sotto* both alternate between a 'nothing'-type adverb, i.e. *nota*, and a bare-N adverb, namely *mia*, as illustrated in (15) and (16) respectively. Consider first *Quarna Sopra* in (15). In this language, *nota* appears in intransitive (unergative) contexts, as in (15a), as well as in the middle voice (reflexive), as in (15b). In transitive contexts, *nota* appears when the internal argument is a 1st or 2nd person pronoun, as illustrated by (15c). With 3rd person internal arguments, *nota* co-occurs with accusative lexical objects and clitics, as in (15d–d'), whilst with partitive clitics and with lexical objects introduced by the partitive preposition *di* 'of', we find *mia*, as in (15e). Note that the partitive (15e) has an interpretation that makes it equivalent to the accusative (15d).

(15) *Quarna Sopra* (Piedmont)

a. iɐ drɔm/ ət drum/ əɣ drɔm/ iɐ drumɐma/ iɐ druˈmi/ əi drɔmɐn nɜtɜ
I sleep/ you sleep/ he sleeps/ we sleep/ you sleep/ they sleep not
'I don't sleep' etc.

b. ɐm lau nɜtɜ/ ət lavət nɜtɜ/ əs lava nɜtɜ
me I.wash not/ you you.wash not/ himself he.washes not
'I don't wash myself' etc.
c. əm/ət vəgɐn nɜtɜ
me/you they.see not
'They don't see me/you'
d. əi camɐn nɜtɜ əu te friɐl
they call not the your brother
'They don't call your brother'
d'. əu vəgɐn nɜtɜ
him they.see not
'They don't see him'
e. nə camɐn mia d əu te friɐl
of.him they.call not of the your brother
'They don't call your brother'
e'. nɐ vəgɐn miɜ
of.it/of.them they.see not
'They don't see (of) it/them'

In the variety of *Quarna Sotto* in (16), *nota* appears with intransitive (unergative) verbs, as in (16a), and in the middle (reflexive), as in (16b). Interestingly, unaccusatives, as in (16c), can split between *nota* and *mia* according to person, so that 1st and 2nd person co-occur with *nota*, while 3rd person co-occurs with *mia*. In transitive contexts, *mia* and *nota* again split according to person. Thus, *nota* occurs with 1st and 2nd person objects, as in (16d), while *mia* co-occurs with 3rd person objects, either in the form of a partitive, as in (16e) and (16f'), or of an accusative lexical object, as in (16f). Accusative clitics do not occur in negative contexts. For enclisis of the clitic to declarative finite verbs, we refer the reader to the brief discussion of this phenomenon in relation to the examples in (10).

(16) *Quarna Sotto*
a. jɐ drɔmma/ ɐd drumma/ əɣ drɔmma/ jɐ drumoma/ jɐ druˈmi/ drɔmu nota
I sleep/ you sleep/ he sleeps/ we sleep/you sleep/ they.sleep not
'I don't sleep' etc.
b. jɐ lau notɐ-m/ ɐd lɛu notɐ-t/ əɣ lava notɐ-s
I wash not-me/ you wash not-you/ he washes not-himself
'I don't wash myself/ you don't wash yourself/ he doesn't wash himself'
c. sum/ t i/ soma/si ɲu nota
I.am/you are/ we.are/you.are come not
'I haven't come' etc.
c'. i mia ɲu/ ɲu nota
he.is not come/ come not
'He hasn't come'

d. ɐɣ vɔg notɐ -m/ -t/ -u
he sees not me/ you/ you(pl)
'He doesn't see me/you'

e. ɐɣ vɔg miɐ-n
he sees not-of.it/them
'He doesn't see it/ them'

f. lavu mia ɐʎ kaˈmiz
they.wash not the shirts
'They don't wash the shirts'

f'. ɐɣ beu miɐ d viŋ
he drinks not of wine
'He doesn't drink wine'

Person split phenomena are pervasive in the Romance languages. For instance, in the clitic system, 1st and 2nd person forms distinguish at most between nominative and non-nominative; 3rd person forms are the only ones to register any difference between accusative and oblique, both in the morphology and in the position of the clitic.[3] Similarly, it will be seen from (15b) and (16b) that only the 3rd person has the specialized middle (reflexive) marker *si*. We surmise that, although a 1st or 2nd person element and a 3rd person one can equally serve as arguments of a predicate, they do so through different syntactic means. In particular, the position and the morphology of 1st and 2nd person arguments are not necessarily sensitive to their anchoring in the event structure (i.e. whether they are the first or second internal argument of a ditransitive, etc.). In this sense, we speak of 'discourse-anchored' elements, i.e. elements whose position and morphology are sensitive only to their denotational content. By contrast, the morphosyntactic properties of 3rd person elements reflect their argumental role (accusative vs. dative marking, specialized middle marking by *si*, etc.). In this sense, we speak of 'event-anchored' elements.[4]

Let us consider *Quarna Sotto* in (16). In present terms, *mia* selects for event-anchored internal arguments. The latter include 3rd person accusatives and partitives, as well as the 3rd person nominative arguments of unaccusatives. In turn, *nota* appears in the complementary set of environments, i.e. those where there isn't an event-anchored internal argument. Therefore it combines with discourse-anchored (i.e. 1st and 2nd person) internal arguments and with predicates, i.e. unergatives, that either have no internal argument or, as we assume here, have an incorporated one (Hale and Keyser 1993). Reflexives are of particular interest; if the distribution of *mia* and *nota* was simply sensitive to a person split, we should expect the reflexive to have *nota* in the 1st and 2nd and *mia* in the 3rd – whether reflexives are unaccusative structures (Marantz 1984) or transitive structures, with the reflexive clitic playing the role

of the internal argument (Burzio 1986) (cf. chapters 5–6). On the other hand, many independent (for instance distributional) facts point to the conclusion that *si* patterns with 1st and 2nd person object clitics rather than with 3rd person accusatives. The notion of discourse anchoring is meant to capture this fact as well; specifically, *si* is characterized as the free variable of the system (as in chapters 5–6 here) and is dissociated from the event-anchored set on the basis of its indefinite/quantificational nature. Therefore we account for the fact that 3rd person reflexives will pattern with 1st or 2nd person internal arguments in being selected by *nota*.

The interaction of the negation adverb with the person split is hardly expected if the adverb corresponds to a functional category Neg – whose content presumably is that of the logical connective of negation. In other words, it is hard to find a reason why the logical operator of negation would be lexicalized in two different ways according to the argument structure of the verb. We are not saying that the interaction of the negation adverb with the argument structure of the verb cannot be stated in terms of a conventional theory treating the adverb as an instance of logical negation. What we are saying is that any such connection would remain a pure stipulation. Suppose, however, that, as outlined in section 3.1, the sentential negation adverb is in reality a nominal element bearing a particularly close relation to the internal argument of the verb (with which it can lexically coincide). Suppose, furthermore, as also suggested in section 3.1, that the negative adverb can be interpreted to the extent that it forms a partitive structure with the internal argument – eventually triggering an overt partitive case on it, as seen in *Quarna Sotto* itself. From this perspective, connecting the so-called sentential negation to the nominal, argumental set of categories, its interaction with the argumental structure of the predicate is not surprising and in fact expected.

Consider *Quarna Sopra* in (15), then. In this language, *mia* is found in structures with 3rd person partitive internal arguments, while *nota* occurs in all other structures, including those with 3rd person accusatives, 1st/2nd person objects, intransitives (unergatives) and middles (reflexives). Because partitive structures are restricted to 3rd persons, it is evident that the distribution found in *Quarna Sopra* presupposes a person split analogous to the one examined for *Quarna Sotto*; in other words, *Quarna Sopra* further restricts the distribution of *mia* observed in *Quarna Sotto* to event-anchored (i.e. 3rd person) partitives. The distribution of *mia* in *Quarna Sopra* again argues in favour of the nominal, argumental status of the sentential negation. Thus, although it can be stipulated that two different Neg functional categories, whose content is presumably that of logical negation, are inserted depending on the presence of a partitive, 3rd

person internal argument or on its absence, there is no connection between the two sets of facts, and hence no explanation why such a state of affairs holds. By contrast, an explanation of this state of affairs follows from the view of negation that we are developing here, which connects the so-called sentential negation to the nominal, argumental set of categories.

### *3.1.2 Sentential negation adverbs as nominal arguments*

On the basis of the preceding evidence, so-called negation adverbs are nominal categories.[5] Furthermore, the interactions of the sentential negation with the internal argument of the verb reviewed above (the fact that the negation is lexicalized differently according to the person of the internal argument, the partitive under negation, the ambiguity between adverbial and argumental reading of 'nothing') point to the conclusion that the negation is connected to the internal argument slot. This conclusion is supported by the fact that from a purely truth-functional perspective, negating the internal argument, as in, for example, *I ate nothing*, is equivalent to negating the sentence, e.g. *I didn't eat*. At the same time, negating the internal argument and negating the sentence as a whole cannot simply be identified.

Consider the simple case in which the sentential negation co-occurs with lexicalization of the internal argument by a noun phrase, as in *I didn't eat the apple*. The analysis that we propose is based on languages in which the negation selects a partitive rather than an accusative internal argument. In this case it is evident that the sentential negation can be construed as introducing a quantification over the internal argument – which correspondingly is lexicalized as a partitive. As already sketched in section 3.1, in connection with (13), we extend this analysis to all cases where the sentential negation co-occurs with an overt lexicalization of the internal argument. Thus we take it that examples such as (16d–e) from *Quarna Sotto*, independently of the actual presence of a partitive, have the same Logical Form, as schematized in (17a) and (17b). In (17), N labels the partitive and P labels 1st /2nd person. In accordance with reasonable assumptions about the nature of elements selecting the partitive, we impute to the negation the (nominal) categorization Q, which characterizes weak quantifiers in the structure of DPs, as we have already done in (13). The logical negation operator in whose scope the polarity elements *not* ɐand *mi ɐ* are interpreted is notated by ⌐·.

(17) *Quarna Sotto*

a. [⌐ [$_{D}$ ɐɣ [$_{I}$ vɔg [$_{Q}$ notɐ [$_{1/2P}$m]]

b. [⌐ [$_{D}$ ɐɣ [$_{I}$ vɔg [$_{Q}$ miɐ[$_{N}$ n]]

On the basis of the analysis in (17), we also expect that the sentential negation interpretively combines with the internal argument of unaccusatives, despite the fact that this is lexicalized as the EPP argument. As for as the contrast mentioned above between *I ate nothing* and *I didn't eat*, the crucial observation is that two different argumental frames of *to eat* are involved. The *nothing* example implies a transitive argumental frame, where *nothing* satisfies the internal argument. On the other hand, the *not* example involves unergative *to eat*, which, following Hale and Keyser (1993), we construe as a concealed transitive with an incorporated internal argument. From this perspective, *not* again introduces a quantification over the internal argument, which in this case is incorporated. We can make this more precise if we assume, along the lines of Hale and Keyser (1993) and Chomsky (1995), that an unergative predicate and more generally a transitive predicate (of which the unergative is a subtype) consists of two layers. The most embedded layer (headed by V in Chomsky (1995)) corresponds to an elementary event, while the outer layer (headed by v in Chomsky (1995)) corresponds to a causation imputed to the external argument. Thus the incorporated internal argument of unergatives is the elementary event to which the external argument applies.

But if so, transitive structures also include an elementary event to which the external argument applies, which can be construed as an internal argument as well. The only difference with respect to unergatives is that the internal argument of the elementary predicate becomes the internal argument of the transitive predicate as a whole, much as in overt incorporation structures such as Romance (or better Bantu) causatives. This allows us to refine the account proposed for sentences like (17) or English *I didn't eat the apple* – which we now predict to be ambiguous. If the negation quantifies over the internal argument of the elementary event, we obtain the reading 'It was not the apple that I ate' or 'No situation of me eating anything was a situation of me eating the apple'. If the negation quantifies over the elementary event, we obtain the reading 'It was not eating the apple that I did' or 'No situation of me doing anything was a situation of me eating the apple'. As we shall see in section 3.2.2, this type of ambiguity characterizes quantificational adverbs in general, and, following de Swart (1993), quoted by Ernst (2002: 347), it is connected to the focus structure of the sentence. Since unaccusatives reduce to elementary events, according to Hale and Keyser (1993) and Chomsky (1995), the latter is of course what is quantified over – or rather, its internal argument.

In the present approach, as a rule, we avoid building interpretive structure into the syntax in the absence of independent morphosyntactic evidence. Now, no such evidence seems to us to be forthcoming in the case of the v-V structure

of Chomsky (1995) or the incorporation of V into v. For instance, all evidence pertaining to the postverbal subject in Italian, i.e. the *in situ* subject under the VP-internal subject hypothesis, seems to indicate that it shares the same predicative low domain of the sentence with the internal (and other) arguments. In other words, we object to the functional category v very much on the same grounds as we object to (much) functional structure in the rest of this work – namely that it simply provides a syntactic encoding for what is in reality an interpretation. In this sense it is at best redundant – and at worst it potentially obscures the real nature of the phenomena it seeks to capture. Therefore we maintain a syntax in which the elementary event corresponds to the verb, or the verb plus its internal argument – while the complex predicate (causative) reading simply arises by composition of the external argument with the elementary predicate.

## 3.2 Ordering sentential negation with respect to other adverbs

Suppose that sentential negations are nominal in nature and attached to the internal argument position of the verb – as argued in section 3.1. The question still arises of how the present theory can accommodate the evidence presented by Zanuttini (1997) and Cinque (1999) concerning the relative order of several types of adverbs and other adverbial material. As mentioned at the outset, Zanuttini and Cinque seek to account for the data by postulating three Neg positions ordered within the aspectual adverb (sub)hierarchy as in (1). The evidence is somewhat complicated by the fact that many varieties have at least two different sentential negation adverbs, which Zanuttini characterizes as presuppositional vs. non-presuppositional. In general, it seems to us that such a distinction is difficult to maintain, given that all instances of negations, and more generally of focus, must have a presupposition as part of their interpretation. In what follows we will simply refer to what Zanuttini calls the presuppositional adverb as the *mica*-type adverb, since *mica* lexicalizes this type of adverb in standard Italian.

We begin by reviewing the data – the reader interested in the analysis can skip directly to the table in (38) and to section 3.2.1. In some varieties, negation adverbs precede the aspectual series including 'already', 'any longer', 'still/yet' and 'always'. A case in point are varieties like *Castellazzo* in (18), in which this position characterizes the *mica*-type adverb *mɛjɒ* in (18b) as well as the ordinary sentential negation adverb *nɛitɒ* in (18a). Other varieties have a single sentential negation adverb to cover the two contexts – and once again this occurs before the entire aspectual series of adverbs.

This is illustrated in (19) for a variety in which the negation adverb is *mia* and in (20) for a variety in which it is *pa*. Quite straightforwardly, all of these adverbs would correspond to the $Neg_2$ position of Zanuttini (1997) and Cinque (1999).

(18) *Castellazzo Bormida* (Piedmont)

a. a ŋ l uɔ nɛitɒ zɒ/ pi/ aŋkurɒ/ d løŋk fa:tʃ
I not it have not already/ any longer/ yet/ always done
'I haven't done it already/ any longer/ yet/ always'

b. a ŋ l uɔ mɛjɒ zɒ/ pi/ aŋkurɒ/ d løŋk fa:tʃ
I not it have not already/ any longer/ yet/ always done
'I haven't done it already/ any longer/ yet/ always'

(19) *Pozzaglio* (Lombardy)

a. ɛl dɔrma mia pø/ ɲaˈmɔ/ sɛmper/ bɛ:
he sleeps not any longer/ yet/ always/ well
'He doesn't sleep any longer/ yet/ always/ well'

b. ɛl g a mia bɛle durˈmi:t
he Loc has not already slept
'He hasn't already slept'

(20) *Pomaretto* (Piedmont)

a. a drøm pa bəŋ/ pi/ ŋkarɔ/ sampre
he sleeps not well/ any longer/ yet/ always
'He doesn't sleep well/ any longer/ yet/ always'

b. al a pa dʒɔ dyrˈmi
he has not already slept
'He hasn't already slept'

The evidence becomes less straightforward when we consider sentential negation adverbs that appear inside the aspectual series. The hierarchy in (1) leads us to expect that, insofar as they instantiate $Neg_3$, they will follow 'already' and precede the lower adverbs. In reality, in a language like *Cantoira* in (21), in which the sentential negation adverb follows 'already', we observe that it also follows 'any longer' in (21a) and (21c), and 'still/ yet' in (21a') and (21c), while preceding 'always' and 'well'. The *mica*-type adverb is unproblematic, since it has the distribution already observed in (18)–(20); i.e. it could correspond to $Neg_2$ in Zanuttini's (1997) terms. The relevant examples are given in (22).

(21) *Cantoira* (Piedmont)

a. u dyərt dʒɐ pi ɲiŋ
he sleeps already any longer not
'He already doesn't sleep any longer'

a'. u miɲdʒunt aŋˈku ɲiŋ
they eat yet not
'They don't eat yet'

b. u miŋndʒunt ɲiŋ biŋ/ sɛmp
they eat not well/ always
'They don't eat well/ always'

c. u l ont pi/ aɲˈku ɲiŋ tʃaˈma:
they him have any longer/ yet not called
'They haven't called him yet/ any longer'

d. u l ont ɲiŋ sɛmpe tʃaˈma:
they him have not always called
'They haven't always called him'

(22) *Cantoira*

a. u l ont pa pjy/ ɲku/ sɛmpe tʃaˈma:
they him have not any longer/ yet/ always called
'They haven't called him yet/ any longer/ always'

a'. u l ont pa dʒə miɲˈdʒa
they it have not already eaten
'They haven't already eaten it'

Zanuttini (1997: 74) considers the ordering of *nen* 'not' after *pi* 'any longer', arguing that *pi nen* 'no longer' is a single constituent, placed in the position otherwise occupied by 'any longer' alone. However, even if Zanuttini (1997) was right about *pi nen*, we would be led to conclude that the sentential negation adverb is lower in the hierarchy in (1) than $Neg_3$ – on the basis of the fact that it also follows *(a)nku* 'still/yet'. This conclusion somewhat diminishes the interest of discussing the issue of whether *pi nen* is in fact a constituent, because, on the basis of a lower ranking of *nen* in the hierarchy, we would automatically predict that it follows *pi*. However, Zanuttini (1997) deploys a number of arguments in favour of the single constituent status of *pi nen*, which deserve some discussion.

A classical constituency test applied by Zanuttini involves the impossibility of inserting any lexical material between *pi* and *nen*. But in infinitival contexts, where the negation adverb is in preverbal position, *pi* and the like can actually follow the verb, as seen in (23) for *Cantoira* itself, as well as other varieties. Of these, *Margarita* and *Mezzenile* have the same pattern as *Cantoira* in finite sentences.[6] As for *Montaldo*, a comprehensive set of data is provided in (36)–(37) below. Note that our argument cannot simply be dismissed by noting that the string in (23) is *nen … pi* rather than *pi … nen*, as we are arguing for the possibility that these two elements represent separate constituents, irrespective of their relative order.

(23) a. *Cantoira*
dʒi t e dit ət ɲiŋ tʃaˈma-lu pjy
I to.you have said to not call-him any longer
'I told you not to call him any longer'

b. *Mezzenile* (Piedmont)
t ɛi di t ɲint tʃaˈma pjy ɲy:n
to.you I.have said to not call any longer anybody
'I told you not to call anybody any longer'

c. *Margarita* (Piedmont)
j ø di-te øt nɛŋ tʃaˈmɛ-ɾu pi
I I.have told-you to not call-him any longer
'I told you not to call him any longer'

d. *Montaldo*
i sɔɲ kuntɛnta yd nɛŋ avɛi pi paɾˈlɒ
I am happy to not have any longer spoken
'I am happy not to have spoken any longer'

Furthermore, it is true that some varieties feature an incorporated form of *pi nen*; Zanuttini cites *pin* for Bollengo, while our data include, for instance, *pjiŋ* in *Piverone* (Manzini and Savoia (2005)). However, the argument could be turned against Zanuttini's proposal. Thus, only a *pin*-type form can be rightly considered as a single lexicalization of 'no longer'. By contrast, a language which has the combination *pi nen* can be argued to lexicalize the negative adverb 'no longer (no more)' literally by combining two constituents, namely 'more' (*pi* or *più* in standard Italian) and the negative adverb. Working within the framework of Zanuttini (1997), it is also possible to describe the fact that the negative adverb precedes *anku* 'still/yet' by saying that *anku* is incorporated into the negation. The proposal is no less plausible than the idea that *pi* incorporates, since in many Northern Italian varieties there exists a negative counterpart of 'still/yet', represented here by *ɲamɔ* in *Pozzaglio*, as in (19) (to be compared with non-negative *amɔ* in *S. Angelo*, as in (27d)).

Yet one may wonder why Zanuttini (1997) doesn't simply reformulate the hierarchy in (1) by positioning $Neg_3$ further down, below 'still/yet'. The answer has largely to do with the distribution she observes in infinitives. In her data, the negation adverb of the *nen* type can only precede the infinitive, while *pi nen* can either precede or follow. She takes this to indicate that *nen* is higher in the adverb hierarchy than *pi nen* (treated as a single constituent). Thus, if the infinitive is positioned between $Neg_3$ and the 'any longer' Asp position, the order *nen* – infinitive – *pi nen* is derived. The fact that *pi nen* can also precede the infinitive simply means that the verb can move slightly lower.

In proposing this analysis, Zanuttini (1997) extends to Piedmontese varieties the schema of explanation proposed by Pollock (1989) for French infinitives; for, according to Pollock, the fact that French infinitives follow *pas* means that they move to a relatively low position, lower in any event than the position of the finite verb (which precedes *pas*). One difficulty with this extension, as

already noted by Kayne (1991), lies in the fact that while French has proclisis on the infinitive, Piedmontese varieties have enclisis, as illustrated in (23) for *Cantoira* and *Margarita*. The simplest account for this fact is that the infinitive (like other modal forms of the verb, e.g. the imperative) fills a relatively high, C-related position. But if so, the ordering of adverbs with respect to non-finite verbs cannot be explained by the low position of the verb within the adverb hierarchy. We return to these matters in section 3.3.

What is also directly relevant here is that in our data, for instance the *Margarita* examples, *nen* can occur not only before the infinitive, as noticed by Zanuttini (1997), and illustrated here in (24a), but also after the infinitive, as in (24b). Since *pi nen* can also occur before the infinitive, again as noticed by Zanuttini and illustrated here in (24c), this means that even if we adopt Zanuttini's (1997) analysis of the position of the infinitive, the language provides no evidence in favour of *pi nen* occurring in a lower position than *nen*.

(24) *Margarita*

a. j ø di-te øt nɛŋ tʃaˈmɛ-ɾu
I have told-you to not call-him
'I told you not to call him'

b. j ø di-te øt tʃaˈmɛ-ɾu nɛŋ
I have told-you to call-him not
'I told you not to call him'

c. j ø di-te øt pi nɛŋ tʃaˈmɛ-ɾu
I have told-you to any longer not call-him
'I told you not to call him any longer'

In short, the evidence reviewed seems to provide no support for Zanuttini's (1997) conclusion that the position of *nen* inside the aspectual string corresponds to the $Neg_3$ position in (1). As far as we can see, it can be made compatible with such a hypothesis, given, for instance, a high enough degree of optionality in the movement of the non-finite verb, in order to account for the data in (24). But, of course, making the movement of the non-finite verb highly optional reduces the predictive power of the model, eventually turning it into a series of descriptive statements.

An equally (or more) problematic case is represented by the third class of negations individuated by the hierarchy in (1) – which, according to Zanuttini (1997), corresponds to *no* adverbs found in the Milan and Pavia varieties. In particular, in varieties like Milan or *Casorezzo*, the latter of which is illustrated in (25), the sentential negation *no* precedes relatively high aspectual adverbs such as 'always' and 'still/yet' in (25a–c'), while it follows an adverb like 'well' in (25a), which is much lower in the hierarchy in (1). The logic of the

hierarchy, of course, is that an element like *no* which follows 'well' should follow other aspectual adverbs. This unexpected distribution combines with another property not observed before, namely that *no* is not positioned between the auxiliary and the participle as in the varieties considered so far (cf. for instance (18), (22)). Rather, it follows the participle, as in (25c).

(25) *Casorezzo*

a. al dɔrmi ben nɔ: se:mpɐr
he sleeps well not always
'He doesn't always sleep well'

b. ly la vedi ben nɔ ŋkaˈmo
he it sees well not yet
'He doesn't see it well yet'

c. l a dɔrˈmi ben nɔ:
he has slept well not
'He hasn't slept well'

c'. l a dɔrˈmi nɔ ŋkaˈmo
he has slept not yet
'He hasn't slept yet'

Zanuttini (1997) argues that the overall pattern of Milanese (or *Casorezzo*, as illustrated here) can be explained by assigning *no* to the $Neg_4$ position, lower than 'well'. An argument in favour of this conclusion is provided by the participle. According to Zanuttini, this moves to a position immediately higher than 'well', leaving the low $Neg_4$ negation to its right. Other adverbs, which are higher in the hierarchy, appear to the left of the participle, i.e. between the participle and the auxiliary. Zanuttini acknowledges the problem represented by the positioning of *no* in front of 'always' and 'still/ yet' as in (25a–b). In these examples, she proposes that *no* actually fills a different position, namely the $Neg_2$ position associated with the negation adverbs in (18)–(20) and with the *mica*-type adverb in varieties like (22). Interestingly, she argues that a *no* appearing in $Neg_2$ is interpreted as a *mica*-type adverb. Yet this analysis would lead us to expect that when *no* precedes 'always' or the aspectual adverbs, it also precedes 'well'. Data of this type are indeed attested, as in (26). But the data already reported in (25a–b) show that the orderings of *no* after 'well' and before 'still/yet'/'always' can also be combined.

(26) *Casorezzo*

a. al dɔrmi nɔ se:mpɐr be:
he sleeps not always well
'He doesn't always sleep well'

b. ly la vedi nɔ ŋkaˈmo be:
he it sees not yet well
'He doesn't see it well yet'

Furthermore, we note that in at least some of the varieties with a *no* negation of the relevant type, a separate *mica*-type negation is also present. A case in point is *S. Angelo* in (27), in which the negation follows 'well' as in (27a) and the participle as in (27c), but a *mia* negation is also present, as in (d). This tends to discount Zanuttini's (1997) idea that the *no* negation may play the role of the *mica*-type negation in contexts like (27b), where it is ordered in front of other low adverbs, as opposed to preceding them.

(27) *S. Angelo Lodigiano* (Lombardy)
a. ɛl dɔrme bɛŋ nɔ
he sleeps well not
'He doesn't sleep well'
b. ɛl dɔrme nɔ sɛmper
he sleeps not always
'He doesn't always sleep'
c. i m aŋ tʃamade nɔ
they me have called not
'They haven't (yet) called me'
d. ɛl tʃami mia nɔn aˈmɔ
him I.call not yet
'I am not calling him yet'

A further set of varieties which display a *no* negation is exemplified here by *Viguzzolo* in (28). The distribution of *no* in these varieties overlaps with that described here for *nen*, *mia*, etc. in the languages in (18)–(20). Thus, *no* precedes all adverbs in the aspectual series, as in (28a), and it normally appears together with these between the auxiliary and the participle, as in (28b–b'). The language of *Viguzzolo* also has a *mia* negation which has the same distribution as *no*, as illustrated by (29).

(28) *Viguzzolo* (Piedmont)
a. a nn al tʃameŋ nɔ ŋku/ ɕempər/ be
they not him call not yet/ always/ well
'They don't call him yet/ always/ well'
b. a l aŋ nɔ (semper) tʃaˈma
they him have not always called
'They haven't always called him'
b'. aŋ nɔ ŋku maɲˈdʒa
they.have not yet eaten
'They have not yet eaten'
c. u nn a nɔ druˈmi be
he not has not slept well
'He hasn't slept well'

(29) *Viguzzolo*

a. a nn al tʃameŋ mejæ py
they not him call not any longer
'They don't call him any longer'

a'. u n drɔmæ mejæ ŋku
he not sleeps not yet
'He doesn't sleep yet'

b. u n l a mejæ py det
he not it has not any longer said
'He hasn't said it any longer'

b'. a nn aŋ mejæ ŋku/ʑa maɲˈdʒa
they not have not yet/already eaten
'They have not already/ yet eaten'

Zanuttini (1997) is aware that in some varieties, the *no*-type negation appears before the participle, and illustrates this distribution for Pavia. In her analysis, however, *no* in Pavia still occupies the $Neg_4$ position. Her independent evidence in favour of this low position resides in the fact that in Pavia, *no* can also appear after the participle. The fact that *no* precedes the aspectual series is analysed, as before, as an effect of its optional appearance in the *mica*-type negative position, i.e. $Neg_2$. As for sentences in which *no* precedes rather than follows the participle, this is analysed as a consequence of the fact that the participle moves to a lower head position. A variety present in our data which illustrates the variable order of the *no* negation with respect to the participle is *Castiglione* in (30b–c), in which (as in *Viguzzolo*) the negation also precedes 'well', as in (30a–b). Furthermore, *Castiglione* has a separate *mica*-type negation, illustrated in (30d).

(30) *Castiglione d'Adda* (Lombardy)

a. el dɔrm nɔ beŋ/ sɛmper
he sleeps not well/ always
'He doesn't always sleep/ sleep well'

b. i aŋ durˈmi:d nɔ (beŋ)
they have slept not well
'They haven't slept (well)'

c. i aŋ nɔ (semper) durˈmi:d
they have not always slept
'They haven't (always) slept'

d. el dɔrm miɣa beŋ
he sleeps not well
'He doesn't sleep well'

Since in both *Viguzzolo* and *Castiglione* the negation precedes 'well', as it does other adverbs, the simplest analysis for these languages is one that assimilates their *no* negation to the high negations in (18)–(20). But this, in turn, implies that the post-participial position of the negation in *Castiglione* is entirely unconnected to its supposedly low position in the adverb hierarchy. Indeed, the order participle – *no* – 'well' in (30b) is not predicted by Zanuttini's (1997) analysis, since, if the post-participial position of *no* depends on its filling $Neg_4$, then it should precede 'well' and not follow it. Similarly, the order *no* – participle – 'well' in (28c) cannot be explained by the claim that *no* is pre-participial because the participle is even lower than *no* – for in that case *no* ought to follow 'well'.

Zanuttini's (1997) analysis of the post-participial position of *no* proves equally problematic for Milanese-type varieties, represented here by *Casorezzo*. In Zanuttini's own terms, though *no* is supposed to be quite low when it follows 'well', it is also supposed to raise to a higher position when preceding aspectual/quantificational adverbs. But now observe that *no* follows the participle independently of which adverbs it combines with and in which orders, as in (25c–c'). Thus, by Zanuttini's own logic it must be the case that the participle is high enough to precede the whole adverbial string in (1). But if so, of course, the post-participial position of the negation does not tell us anything about whether it in fact appears low in the adverbial string – which is, quite strikingly, exactly the same conclusion we reached for *Margarita* in (24). We provide our own analysis of the position of adverbs with respect to verbal heads in section 3.3, and we disregard this issue altogether in the rest of this section.

More questions concerning Zanuttini's (1997) model arise when we consider that the patterns reviewed so far are not the only ones created by the interaction of negation with the aspectual series. The *nen* pattern in our data that provides the best match with Zanuttini (1997) is illustrated in (31). This has 'already' and 'any longer' preceding the negation, and the other relevant adverbs following it. The pattern is predicted by Zanuttini on the basis of the incorporation analysis of *pi nen*. The data in (32) provide a comparison with the *mica*-type negation in the same language.

(31) *Mombercelli* (Piedmont)

a. u dɾøm nɛŋ aŋkuɾa/ bɛ
he sleeps not yet/ well
'He doesn't sleep yet/ well'

b. u drøm ʒa/ pi nɛŋ
he sleeps already/ any longer not
'He doesn't sleep already/ any longer'

c. i lu tʃɔmu nɛŋ sɛmp
they him call not always
'They don't always call him'

(32) *Mombercelli*
a. i dɾømu pa py
they sleep not any longer
'They don't sleep any longer'
b. i aŋ pa ŋku/ sɛmp/ ʑa dɾuˈmi
they have not yet/ always/ already slept
'They haven't slept yet/ already/ always'

But now consider *Pamparato* in (33), in which 'already' precedes the *nen(t)*-type negation, which is therefore a candidate for $Neg_3$, as in (33d). As expected under the hierarchy in (1), *nen(t)* precedes 'any longer', as in (33a) and (33c). What is not expected is that *nen(t)* follows 'still/yet', as in (33b) and (33d). The data in (34) provide a comparison with the *mica*-type negation.

(33) *Pamparat*o (Piedmont)
a. i døɾmu naint tʃy
they sleep not any longer
'They don't sleep any longer'
a'. u dørm naint saimp
he sleeps not always
'He doesn't always sleep'
b. i døɾmu ŋku naint
they sleep yet not
'They don't yet sleep'
c. i aŋ naint tʃy døɾˈmi
they have not any longer slept
'They haven't slept any longer'
d. i aŋ ŋku/ ʑɒ naint døɾˈmi
they have yet/ already not slept
'They haven't yet/already slept'

(34) *Pamparat*o (Piedmont)
a. i døɾmu pɒ tʃy / ŋku
they sleep not any longer/ yet
'They don't sleep yet/any longer'
b. i aŋ pɒ ŋku/ ʑɒ døɾˈmi
they have not yet/ already slept
'They haven't slept yet/ any longer'

Other languages that share with *Pamparato* in (33) the property of having a negation that precedes 'no longer' while following 'still/yet' include Romansh varieties. A case in point is *Mustér* in (35), in which the negation is of the

*bu(ka)*, bare-N type. In other words, the ordering pattern is not tied to the morphological 'nothing'-type negation. As shown in (35a, c), *bo* in *Mustér* precedes 'any longer' – but, as shown in (35b, d), it follows 'still/yet'.

(35) *Mustér* (Grisons)
a. jau dɔrməl bo pli/ adina/ bain
I sleep not any longer/ always/ well
'I don't sleep any longer/ always/ well'
b. jau dɔrməl aun bo
I sleep yet not
'I don't sleep yet'
c. i aŋ bo duʀˈmiu pli
they have not slept any longer
'They haven't slept any longer'
d. i aŋ auŋ bo duʀˈmiu
they have yet not slept
'They haven't slept yet'

A further pattern attested in our data is illustrated in (36) (the data in (37) provide a comparison with the *mica*-type negation). In (36), *nɛŋ* precedes 'already' – which, in terms of the hierarchy in (1), would have to mean that we are in the presence of an exponent of $Neg_2$. Yet again *nɛŋ* follows both 'any longer' and 'still/yet', which would once again have to constitute cases of incorporation into negation.

(36) *Montaldo*
a. i ɾu tʃam pi nɛŋ
I him call any longer not
'I don't call him any longer'
b i ɾu vɛg nɛŋ sɛmp
I him see not always
'I don't always see him'
c. iɾ ø ŋku nɛŋ fɒ-ɾu
I have yet not done-it
'I haven't yet done it'
d. iɾ ø nɛŋ dʒɒ fɒ-ɾu
I have not already done-it
'I haven't already done it'
e. iɾ ø nɛŋ dørˈmi bɛŋ
I have not slept well
'I haven't slept well'

(37) *Montaldo*
a. i ɾu vɛg pæ pi/ sɛmp
I him see not any longer/ always
'I don't see him any longer/ always'

b. iɾ ø pɒ ŋku/ dʒa fɒ-ɾu
I have not yet/ already done-it
'I haven't done it already/ yet'

In the table in (38), we summarize the data we have provided concerning the relative position of the negation and the other adverbs in the sub-hierarchy in (1). It seems to us, from looking just at the distribution of the negation adverb with respect to these other adverbs, that there are two major patterns, rather than three. Thus, in varieties of the type in (38a), the negation always precedes the relevant subset of adverbs. On the other hand, in varieties of the type in (38b), their relative order is somewhat variable.[7] It will be noticed that when it comes to the patterns in (38b), practically any relative order of the negation adverb with respect to 'already', 'still/yet' and 'any longer' is attested – with one striking exception. What is not attested in our data is the order which should be the basic one given the hierarchy in (1), with 'already' preceding the adverb, and all other members of the hierarchy following it. This absence is significant, and would be so even if we wanted to follow Zanuttini's (1997) line of explanation with respect to the possible permutations – i.e. that the reordered substring roughly reflects cases of incorporation. Indeed, we notice that sometimes 'still/yet' is reordered, and sometimes 'any longer' – in other words, in neither case is reordering necessary, which means that there is no independent reason why the supposedly basic order should be excluded. Therefore the fact that it is not found should at least cause some perplexity.

(38) Relative position of negation and other adverbs

| | | already | no longer | still | always | well |
|---|---|---|---|---|---|---|
| a. | | | | | | |
| **Castellazzo B.** | nɛ̃itɒ (18a) | – zɒ | – pi | – aŋkurɒ | – d løŋk | |
| | mɛjɒ (18b) | – zɒ | – pi | – aŋkurɒ | – d løŋk | |
| **Pozzaglio** | mia (19) | – bɛle | – pø | – ɲamɔ | – sɛmper | – bɛ̃: |
| **Pomaretto** | pa (20) | – dʒɔ | – pi | – ŋkarɔ | – sampre | – bəŋ |
| **Viguzzolo** | nɔ (28) | | | – ŋku | – ɕempəɾ | – be |
| | mejæ (29) | – ʑa | – py | – ŋku | | |
| **Castiglione d'A.** | nɔ (30) | | | | – sɛmper | – beŋ |
| | mɪɣa | | – py | | | – beŋ |
| b. | | | | | | |
| **Cantoira** | ɲiŋ (21) | dʒɐ | pi – | aŋku – | – sɛmp | – biŋ |
| | pa (22) | | – pjy | – ŋku | – sɛmp | |
| **Mombercelli** | nɛŋ (31) | ʑa – | pi | aŋkuɾa | – sɛmp | – bɛ |
| | pa (32) | – ʑɒ | – py | – ŋku | – sɛmp | |
| **Pamparato** | naint (33) | ʑɒ – | – tʃy | ŋku – | – saimp | |

| | | already | no longer | still | always | well |
|---|---|---|---|---|---|---|
| | pɒ (34) | –zɒ | – tʃy | – ŋku | | |
| **Mustér** | bo(35) | | – pli | aun – | – adina | – ain |
| **Montaldo** | nɛŋ (36) | –dʒɒ | pi – | ŋk u – | – sɛmp | –bɛŋ |
| | pɒ (37) | – dʒɒ | – pi | – ŋk u | – sɛmp | |
| **Casorezzo** | nɔ (25)–(26) | | | – ŋkamɔ | – sɛ mper | be (ŋ) – |
| **S.Angelo L.** | nɔ (27) | | | | – sɛ mper | bɛ ŋ– |
| | mia | | | | | |

*3.2.1 The order of negation with respect to aspectual adverbs*

Summarizing so far, the functional hierarchies for negation adverbs, and adverbs more generally, proposed by Zanuttini (1997) and Cinque (1999) do not seem to be sufficient to account for the spread of variation observed in Italian varieties. A separate question is whether they are necessary. The alternative generally suggested is that 'adverb attachment is driven by interpretation' (Svenonius 2002: 209), essentially as in the earliest treatments of adverb placement in generative grammar (Jackendoff 1972). Specifically, Ernst (2002: 92) claims that 'the most important determinant of adjunct licensing is an adjunct's scope (and other selectional) requirements, encoded as lexical requirements and verified at LF, rather than syntactic feature licensing, as in Cinque (1999) and other current work'.

As Nilsen (2003: 13) observes, according to Ernst (2002) 'adverbs can attach freely to any functional projection as long as the semantic requirements of the adverbs (FEO-calculus) are respected. Hence Ernst has it that, while adverbs are ordered by his FEO-calculus, the categories that the adverbs attach to are ordered by an orthogonal relation', i.e. the basic functional sequence. Nilsen (2003:14) argues against this approach on the grounds that (among other things) 'this set-up seems to force us to abandon the view that T has semantic import'. Indeed, according to Ernst (2002: 97), 'events and propositions are not necessarily mapped to any one particular projection … A relatively high projection like TP may represent an event as long as nothing forces it to be converted to a proposition (such as a modal auxiliary or adverb); likewise a low projection like PredP can denote a proposition if no element above it requires an event'. What is more, Nilsen (2003: 18) objects to Ernst (2002), as well as Svenonius (2002), on the grounds that 'although … the facts discussed by Cinque (1999) should ultimately be derived from more fundamental considerations, … the primary tool to do so can[not] be enrichment and manipulation of ontological

categories' – i.e. the categories (fact, event, etc.) in terms of which the selectional properties of adverbs are stated.

While it is evident that a limited repertory of conceptual entities is generally desirable, it seems to us that the flexible interpretation of syntactic categories required by Ernst (2002) is not in itself worse than a rigid interpretation of them. In fact, it is one of the overarching themes of the present work that the interface between syntax and interpretation is not rigid – in the sense both that ambiguity is not necessarily resolved syntactically and that the same interpretation can be conveyed by different syntaxes. From this perspective, we are not surprised to find that a given syntactic domain – here the I domain – potentially maps to different semantic entities, or that the opposite may happen: the same semantic entity may map to different syntactic domains.

Let us consider, then, the relative orders illustrated above in which sentential negation adverbs appear internally to the substring of aspectual/manner adverbs individuated by Cinque's (1999) and Zanuttini's (1997) work. We assume, as is standard, that the lowest verbal domain of the sentence is characterized by the closure of thematic roles by arguments. The fact that negation adverbs, and adverbs in general, precede the argumental string suggests that they are inserted outside this lower verbal domain. At the same time, several adverbs, and in particular those in the substring in (1) that directly interests us here, typically follow the finite verb, which appears in the I head of the inflectional domain. Therefore, between the lower thematic domain and the higher inflectional one there must be at least an intermediate domain, which in Manzini and Savoia (2005) we name E (suggesting Event). It is in this domain that we find the adverbial substring in (1).

We begin with the aspectual adverbs *già* 'already', *ancora* 'still/yet' and *più* 'any longer'. Ernst (2002: 341–7) construes the interpretation of 'already' in the following terms (based on work by Michaelis (1996)): 'the immediate scope of *already* denotes a state S, located at reference time, and whose inception precedes the time of an expected possible state S' of the same type as S'. Thus a sentence like *Karen has already performed* is interpreted as saying that 'S, the result state of Karen's performing … precedes another interval at which she was expected to finish performing'.

As for *still*, 'the state scoped by *still* holds at reference time, held at a previous time and its expected end e was before reference time'. Thus, in a sentence like *They still were doing it yesterday*, '*yesterday* identifies the reference time, and *still* indicates that the process was ongoing at an earlier event-time as at reference-time'. As for 'no … longer', a widely held analysis takes it to be the negative counterpart of 'still' (Löbner 1989).

In the varieties of *Montaldo*, *Pamparato* and *Mombercelli* in (38b), the negation adverb precedes only one of the aspectual adverbs, respectively 'already', 'any longer' and 'still/yet'. The rigid extrinsic ordering that characterizes Cinque's (1999) hierarchies is a clear liability here, since there is no way of interspersing Neg positions and adverb positions so as to make the different possible orders emerge. The incorporation of single adverbs (in particular *pi* 'any longer') into the negation, suggested by Zanuttini (1997) as a way of making Cinque's (1999) hierarchy compatible with the data, hints at a different type of explanation, whereby the properties of the single lexical item become relevant; in other words, the relative ordering of adverbs is conditioned by lexical idiosyncrasies. This also seems unsatisfactory to us; as we indicated when presenting the data, there is no clear evidence that the sequences that Zanuttini (1997) treats as single constituents are in fact constituents.

Our idea is that the syntactic grids determining the relative order of adverbs are much coarser grained than the functional hierarchies of Cinque (1999), and refer to the same nominal categories that are relevant for the ordering of argumental material. It is in this connection that the conclusion of section 3.1 – that the so-called negation adverb is in reality a nominal category connected to the internal argument of the predicate – becomes relevant for ordering as well. Let us begin with structures of the type in (13) or (17), where the negation adverb occupies a Q position. As we have just seen, this can be taken to be internal to an intermediate domain between V and I, i.e. E. We model the nominal arrays of verbal domains on inflectional-level clitic structures, where we independently argue for Q elements (represented in the clitic domain by the *si* variable, cf. chapters 5–6). In the inflectional clitic domain there is a restricted range of elements above Q, which includes, in particular, what we may take to be the left edge position of the theory, notated R (with a nod to Referentiality). Evidently, this left edge position could be imputed to the adverbs that precede the negation in Q, as illustrated in (39) for the Piedmontese varieties in (38b).

(39) a. *Cantoira*
[$_{R}$ dʒɐ/ pi/ aŋku [$_{Q}$ ɲiŋ
b. *Mombercelli*
[$_{R}$ ʑa/ pi [$_{Q}$ nɛŋ
c. *Pamparato*
[$_{R}$ ʑɒ/ ŋku [$_{Q}$ naint
d. *Montaldo*
[$_{R}$ pi/ ŋku [$_{Q}$ nɛŋ

If the Q position of the negation remains constant, the aspectual adverbs ordered after it occur in a lower position. Our general schema for nominal

positions recognizes a series of positions below the left edge R position and the quantificational Q position, which are essentially linked to deixis, including 1st and 2nd person arguments and locatives. We may want to assign the aspectual adverbs that follow the negation in Q to this set of positions, adopting, for instance, the label Loc in (40) – but keeping in mind that deictic relations in time, rather than in space, are being denoted.

(40) a. *Mombercelli*
[$_{Q}$ nɛŋ [$_{Loc}$ aŋkuɾa
b. *Pamparato*
[$_{Q}$ naint [$_{Loc}$ tʃy
c. *Montaldo*
[$_{Q}$ nɛŋ [$_{Loc}$ dʒɒ

In a nutshell, this analysis amounts to saying that negations of the type being investigated generally have a Q position. There they are mostly followed by adverbs of the aspectual series in a deictic position (conventionally Loc). In some varieties, some aspectual adverbs are shifted to the left edge of the domain (here R) on a lexical basis. In a sense this is the analysis that Zanuttini (1997) gives for the *pi nen* order: namely, that the relatively high position of the negation is masked by 'any longer' incorporating with it. The difference is that in the analysis that we are now developing, the reordering of the aspectual series around the negation requires no incorporation. At the same time, the existence of truly (i.e. morphologically) incorporated forms of 'no longer' and 'not yet' supports the idea that selection for particular lexical items is at stake in the reordering.

At this point we can bring into the picture another major type of language, namely the type in (38a), in which the negation adverb systematically precedes the aspectual series. In terms of the analysis being considered, they can be described as languages with the negation adverb relatively high in the R or Q position, with other aspectual adverbs following it in the deictic reference positions (i.e. Loc), as shown for *Castellazzo* in (41). Manzini and Savoia (2005), who do not entertain the possibility of a deictic (Loc) position for the aspectual adverbs, assign them to the Q position, on the basis that they imply a quantificational closure over events. At least as far as the schema in (41) is concerned, the Q and Loc alternatives yield equivalent results.

(41) *Castellazzo Bormida*
[$_{R/Q}$ mɛjɒ/ nɛ̃itɒ [$_{Q/Loc}$ zɒ/ pi/ aŋkurɒ

That two different positions, presumably R and Q as in (41), are needed for the negation is a conclusion motivated by independent evidence. In many

varieties the *mica*-type negation can actually combine with the ordinary sentential negation adverb, as in (42). In this case, the *mica*-type negation generally takes the higher position, presumably R, and the ordinary negation takes the lower position, presumably Q.

(42) *Margarita*
uɾ ɒ pa nɛŋ tʃaˈma-ɾu
he has not not called-him
'He has not called him'

In cases where two aspectual adverbs combine with the negation, both can precede it, as illustrated in (43) for varieties (*Cantoira* and *Mombercelli*) in which we have shown that each of the aspectual adverbs involved can separately precede the negation.

(43) a. *Cantoira*
u dyərt dʒɐ pi ɲiŋ
he sleeps already any.longer not
'He doesn't already any longer sleep'
b. *Mombercelli*
u dɾøm ʑa pi nɛŋ
he sleeps already any.longer not
'He doesn't already sleep any longer'

A straightforward application of the structural schemas already proposed leads us to assume that while the negation regularly appears in Q, the left edge position R of the system can be iterated for aspectual adverbs. Alternatively, adopting Manzini and Savoia's (2005) idea that aspectual adverbs can appear in Q, it is Q that turns out to be iterated, equivalently for present purposes, as shown in (44).

(44) *Cantoira*
[$_{R}$ dʒɐ [$_{R/Q}$ pi [$_{Q}$ ɲiŋ

If we put together the pattern in (42), where the *mica*-type negation precedes the ordinary negation, with the fact that aspectual adverbs precede the ordinary negation, we may expect orders like (45a), where the *mica*-type negation is followed by an aspectual adverb and then by the ordinary negation. Similarly, since aspectual adverbs can also follow the ordinary negation, we may expect the pattern in (45b), where the *mica*-type negation is highest and the aspectual adverbs are on either side of the ordinary negation.

(45) a. *Margarita*
uɾ ɒ pa pi/ ŋku nɛŋ tʃaˈma-ɾu
he has not any.longer/ yet not called-him
'He hasn't called him yet/ any longer'

b. *Montaldo*
iɾ ø pɒ ŋku nɛŋ dʒa fɒ-ɾu
I have not yet not always done-it
'I haven't yet done it already'

The distribution of the two aspectual adverbs on either side of the ordinary negation in (45b) can be predicted for *Montaldo* simply on the basis of the union of the structures (39d) and (40c). Assuming that the position of the *mica*-type negation, in turn, is R, we obtain the structure in (46).

(46) *Montaldo*
[$_{R}$ pɒ [$_{R/Q}$ ŋku [$_{Q}$ nɛŋ [$_{Loc/Q}$ dʒa

Before considering in more detail what degree of mobility the aspectual adverbs as well as the negation have, in the next section we will analyse the order of the negation with respect to a quantificational adverb like 'always', as well as with respect to the low manner adverb 'well'.

### *3.2.2 The order of negation with respect to quantificational and manner adverbs*

Accounting for the ordering of negation with respect to 'always' and 'well' implies some preliminary understanding of these adverbs. Let us first consider 'always' – and quantificational adverbs more generally. According to Ernst (2002: 347), who quotes work by de Swart (1993), 'these adjuncts quantify over subsets of events within the set denoted by their sister constituent; the precise delimitation of these sets depends on the focus structure of the sentence'. So a sentence like *John always eats pasta* can mean 'In all situations in which John eats something, he eats pasta' or 'In all situations in which John does something, he eats pasta'.

When it comes to order, according to Ernst (2002: 363) 'frequency adverbs … have fewer restrictions than aspectual adverbs'. Yet the fact to be explained is that 'always' is found obligatorily after the negation adverb in all varieties studied here or that we are aware of. It seems evident that this obligatory ordering is dictated by semantic requirements. In fact 'always' is obligatorily read in the scope of the logical negation. The Romance languages, like English, have a separate lexical item for a universal 'always' taking scope over the logical negation, i.e. *never* (standard Italian *mai* etc.). Obviously the reading in the scope of the logical negation requires 'always' to be lower than the negation adverb, i.e. the element which implies the logical negation itself.

Given the ordering of aspectual adverbs with respect to the negation adverb sketched in section 3.2.1, and the rigid ordering of the quantificational adverb with

respect to negation which we have just analysed, we predict that the three combine in a fixed order, which is what can be seen in the examples in (47).

(47) a. *Cantoira*
uj øt pi ɲiŋ sɛmp dyrˈmi
he has any.longer not always slept
'He hasn't always any longer slept'

b. *Margarita*
j ø pa pi nɛŋ sɛmpre vist-je
them I.have not any. longer not always seen-them
'I haven't always seen them any longer'

c. *Pamparato*
i aŋ ʑɒ naint saimp dørˈmi
they have already not always slept
'They haven't always already slept'

If we keep to the idea that the negation lexicalizes Q properties in the E domain, quantificational adverbs like 'always', which follow it, must appear in a lower position in the same domain. However, the deictic position(s) that we have assigned to aspectual adverbs are not consistent with the interpretive properties of quantificational adverbs, which simply denote relations between sets of events very much independent of temporal deixis. This then leaves the lowest position of the nominal sequence, namely N, which we connect to the internal argument of the predicate (cf. chapters 7–8).

In fact, we have seen at least one way in which 'always' is related to the internal argument – namely by implying a focalization on it, in one of the possible interpretations of *John always eats pizza*, namely 'whenever John eats something, he eats pizza'. Alternatively the entire elementary predicate can be in the scope of the focus operator as in the interpretation 'all situations of John doing anything are situations of John eating pizza'. As discussed in section 3.1.2, the same ambiguity is present with the quantificational adverb we are mainly concerned with here, i.e. the negation. Thus *John doesn't eat pizza* can be understood as 'It is not pizza that John eats' or as 'It is not eating pizza that John does'. In section 3.1.2 we concluded that in the latter reading the negation quantifies over the elementary event that can be construed as the internal argument of the causation (or other) property introduced by the application of the external argument. In the former reading the negation quantifies over the internal argument of the elementary predicate or equivalently of the whole transitive predicate, namely *pizza*.

If a parallel analysis is applied to non-negative quantificational adverbs, it is natural to conclude that these adverbs have at their disposal the N position connected to the internal argument. This in turn yields a straightforward structure for

the sequences in (47), as illustrated in (48) for (47c). Remember at the same time that another possibility is suggested by structures like (46) in which the negation in R or Q precedes elements (potentially) in the same types of positions. On this basis we may assume that the negation in Q precedes the quantificational adverb also in Q, where it can attach because of its quantificational content.

(48) *Pamparato*
[$_{R}$ ʒɒ [$_{Q}$ naint [$_{Q/N}$ saimp

Before we proceed further, let us introduce the last major type of adverbials included in the hierarchy in (1), namely manner adverbs like 'well'. According to Ernst (2002) manner adverbs are part of a larger class of predicational adverbs; 'the manner adverbial restricts the denotation to a set of events of V-ing characterized by their property of (manifesting) rudeness, dimness, strangeness and the like' (Ernst 2002: 259), for instance in *She left rudely* or *The bulb shone dimly*. The low point of attachment of manner adverbials reflects the fact that what they are predicated of is events (as opposed to situations/sentences).

However, Ernst (2002) does not consider the strict relation that an adverb like 'well' has not only with the event, but also with the internal argument of that event. For instance, in several Southern Italian varieties 'well' (*bene* in standard Italian) translates as the adjective for 'good' (*buono* in standard Italian). In (49a–c) we report examples in which this adjective can be seen to overtly agree with the accusative internal argument. In the same varieties, the internal argument of unaccusatives also agrees with 'well' as shown in (49a'–c'). As for unergatives, either 'well' takes an invariant form corresponding to the masculine singular, as in the *Marzano* example in (49a''), or it agrees with the external argument, as in the *Gizzeria* example in (49b'').

(49) *Marzano Appio* (Campania)
a. u/a veru bbuonu/ bbɔna
him/her I.see well.m/ well.f
'I see him/her well'
a'. issu/ essa se lava sɛmbe bbuonu/ bbɔna
he/she him/herself washes always well.m/well.f
'S/he always washes well'
a''. issu/essa a rurmitu bbuonu
he/she has slept well
'S/he slept well'

*Gizzeria* (Calabria)
b. u/ a/ i lavu bbɔnu/ bbɔna/bbɔni
him/her/them I.wash well.m/well.f/well.pl
'I wash him/her/them well'

b'. i‖u/ i‖a s a ‖avatu bbɔnu/ bbɔna
he/she him/herself has washed well-m/well.f
'S/he has washed well'

b''. i‖u/ i‖a a ddɔrmutu bbɔnu/ bbɔna
He/she has slept well/ well.f
'S/he slept well'

*Orsomarso* (Calabria)

c. (a kammisa/ i kavutsuni) aɟɟu lavæta/ lavæti bbɔna/ bbuni
the shirt.f/ the hose.pl I.have washed.f/pl. well.f/ well.pl
'The shirt/ the hose I washed well'

c'. ar arrivætu/arrivæta bbunu/ bbɔna
s/he.has arrived.m/f. well.m/well.f
'S/he has arrived well'

The same connection between manner adverbs and the internal argument can be seen in English sentences like *I ate a quick pizza*, meaning *I quickly ate a pizza/I ate a pizza quick(ly*). Similarly, it is possible to say that *John has done a job well*, or equivalently that *John has done a good job*. Therefore the manner adverb is connected to the internal argument position insofar as it is predicated either of an elementary event or of its internal argument – which is also adopted as the internal argument of the transitive predicate as a whole. This is also what makes it possible for an adjective agreeing with (or embedded under) an accusative argument to modify an entire (elementary) event.

The preceding discussion leads not only to the conclusion, shared with Ernst (2002), that manner adverbs attach to a relatively low domain in the sentence (namely the E domain here), but also that they are connected in particular to the N position of the domain. The nominal nature of manner adverbs is evident in languages like (49), but also in standard Italian and Northern Italian varieties in which *bene* is a noun, as in *il bene* 'the good' (e.g. *il bene comune* 'the common good') and so is *male* 'badly', as in *il male* 'the evil' (cf. *il bene e il male* 'good and evil').

In the light of our hypotheses it is particularly interesting to consider data that show the position of 'well' not only with respect to negation, but also with respect to aspectual and quantificational adverbs, as in (50).

(50) a. *Cantoira*
u dyərt ɲiŋ sɛmp biŋ
he sleeps not always well
'He doesn't always sleep well'

b. *Margarita*
u parla pi nɛŋ bɛŋ
he speaks any.longer not well
'He doesn't speak well any longer'

c. *Piverone* (Piedmont)
al dɔrm ŋku ɲiŋ sɛmpe bɛŋ
he sleeps yet not always well
'He doesn't always speak well yet'

In each case 'well' closes the adverbial string, which is what we expect if it takes the lowest N position in the domain. The other adverbs will then take the positions that we have suggested for them in the preceding discussion, yielding the structures in (51) for the examples in (50). Recall that in the discussion of quantificational adverbs, in particular 'always', we suggested that the Q position may be recursive, while aspectual adverbs that appear before negation are inserted in the left-edge position R.

(51) a. *Cantoira*
[$_{Q}$ ɲiŋ [$_{Q}$ sɛmp [$_{N}$ biŋ
b. *Margarita*
[$_{R}$ pi [$_{Q}$ nɛŋ [$_{N}$ bɛŋ
c. *Piverone*
[$_{R}$ ŋku [$_{Q}$ɲiŋ [$_{Q}$ sɛmpe [$_{N}$ bɛŋ

With this background, we can consider the final question implicit in the hierarchy in (1), namely the position of the *no*-type negation that follows manner adverbs. Recall that Zanuttini (1997) is led to propose the low Neg$_4$ position in (1) for these elements on the basis of two pieces of evidence: first, their post-participial position, and second, the fact that they follow low manner adverbs like 'well'. In reality, the evidence concerning the relative ordering of adverbs also shows that the *no*-type negation precedes quantificational and aspectual adverbs. Crucially, when negation is combined both with 'well' and 'always'/'yet', two orders are attested in our data. One of them has the negation preceding both the quantificational/aspectual adverb and the manner adverb, as in the *Casorezzo* example in (26a); this is consistent with Zanuttini's (1997) proposal that the relative ordering of Neg$_4$ in front of other adverbs depends on its taking a higher position. What is not consistent with her proposal is the alternative order, which has the manner adverb before the negation and the other adverbs following it, as in the *Casorezzo* example in (25b). In reviewing the data, we further indicated that the existence of a dedicated *mica*-type negation in varieties like *S.Angelo* makes it implausible that *no* should take on the role of the *mica*-type negation when it is positioned higher.

The alternative we propose is therefore simply that the *no*-type adverb has the very same position in the eventive domain string as the other negation adverbs reviewed so far, namely Q, as indicated in (52). This position is

compatible with quantificational, aspectual and manner adverbs following it, assuming that they take their canonical quantificational/deictic/nominal positions as in (52b). It is also compatible with the alternative order in (52a), in which only the manner adverb precedes *no*, on the assumption that in this case 'well' occurs in the left-edge R position of the system. Under this account, there is no difference in the positioning of Milanese-type *no* and Piedmontese *nen*; rather, there is a difference as to which types of adverbs are found in the 'left-edge' of the domain (here R), namely the manner adverb in Milanese varieties and aspectual adverbs in Piedmontese ones.

(52) *Casorezzo*
a. [$_{R}$ ben [$_{Q}$ nɔ [$_{Q/\,Loc}$ se:mpɐr/ ŋkamo
b. [$_{Q}$ nɔ [$_{Q/\,Loc}$ se:mpɐr/ ŋkamo [$_{N}$ ben

Note that it does not follow from (52) that the relative ordering with negation higher than 'well' is restricted to cases where there is an adverb of another type. For some varieties this is as it should be, since there is evidence of variation in order even in simpler strings, as in (53).

(53) *Arconate* (Lombardy)
a maŋndʒu be:n no/ no beŋ
I eat well not/ not well
'I don't eat well'

For varieties like *Casorezzo* itself in which no optional order is attested in simple adverbial pairs, we of course predict the complex order in (52a) – i.e. precisely the one that is problematic under other analyses. As for the order in (52b), we note that at least the quantificational adverb 'always' systematically precedes 'well' in the absence of negation, as in (54). We conclude that the optionality in (52) depends on whether the relative order 'well' – negation or 'always' – 'well' dictates the overall pattern; we shall elaborate on this alternative directly below.

(54) *Casorezzo*
a. ɛŋ sempɐr maŋˈdʒa: be:
they.have always eaten well
'They have always eaten well'
b. ɛŋ maŋˈdʒa: sempɐr be:
they.have eaten always well
'They have always eaten well'

Assuming that the account in (52) is on the right track, it raises the question of why there should be variation of the kind observed, with some languages putting 'well' before negation (to the exclusion of aspectual adverbs) and other

languages (i.e. the Piedmontese varieties of section 3.2.1) showing the reverse distribution. An obvious observation is that all languages that allow the order in (52a) have a negation adverb of the *no* type. This belongs to the *n-* negative polarity series but does not have the same form as any negative polarity argument. Rather, it has the same form as the deictic negation. On the other hand, the varieties that allow aspectual adverbs before negation have negation adverbs either of the 'nothing' type or of the bare N type reviewed in section 3.1.

From this perspective, the Piedmontese ordering in (39)–(40) can be described by saying that nominal negation adverbs ('nothing' or bare N type) only allow deictic adverbs out of their domain (i.e. aspectual adverbs under the characterization provided here). Since 'well' appears to be lexicalized by clearly nominal elements, such as 'good' in the examples in (50) or *bene* in standard Italian and Northern varieties, we may equivalently describe Piedmontese varieties by saying that nominal adverbs must remain in the domain of the nominal-type negation. By contrast, deictic-type, i.e. *no*-type, negations in Milanese varieties, only allow nominal adverbs, such as low manner adverbs, out of their domain. Equivalently, we may describe Milanese varieties by saying that deictic (i.e. aspectual) adverbs must remain within the domain of the deictic negation.

The generalizations just stated suggest that the parameter differentiating between Milanese-type and Piedmontese-type varieties may not need to be (entirely) stipulated. Rather, the different inherent properties of the negations involved may determine their placement relative to other adverbial subseries. As for the general principles under which the parallelism indicated may fall, they could perhaps be identified with a requirement for the negation (of a certain type) to close off certain types of adverbial subdomains. This may interact with other requirements on the adverbial sequence, such as the one in (54), whereby the manner adverb 'well', which is in the logical scope of the quantificational adverb 'always', is also in its syntactic domain. In particular, the complex order in (52b) takes this latter requirement into account. In contrast, in (52a) the composition of the negation with the quantificational adverb 'always' (read in its logical scope) evidently means that the negation determines the overall order, in particular with respect to the manner adverb 'well'. In any event, the principal aim of this discussion has been to indicate how an account of the variation between Piedmontese and Milanese-type varieties is possible if we abandon the account provided by the various Neg positions in the hierarchy in (1) – which we have shown to be descriptively inadequate.

Finally, in analysing Milanese-type varieties we disregarded the fact that *no* appears after the participle, though Zanuttini (1997) and Cinque (1999) regard this as crucial. The reason why we did not discuss this is that the post-participial

position of *no* is also found in languages like *Castiglione* in (30) in which *no* precedes 'well' and the other adverbs considered here. In other words the two phenomena are (at least partially) independent of one another. Yet the issue deserves to be considered in more detail, since it still seems to be true that there are no negations that both follow 'well' and precede the participle. Before we consider the issue in section 3.3, however, we will try to draw some general conclusions concerning the present discussion of the relative ordering of adverbs.

### *3.2.3 General discussion*

Cinque (1999), Ernst (2002) and Nilsen (2003), from opposing points of view, argue that a theory of adverb ordering that uses both semantic and syntactic requirements is less economical than one restricting itself to a single component – though in semantically based models like Ernst (2002) or Svenonius (2002), a certain degree of freedom is observed in adverb placement because it is sensitive to semantic primitives (events, facts, etc.) that are not necessarily isomorphic with syntactic ones (TP, VP, etc). More clearly, for Nilsen (2003) the positioning of sentential-level adverbs is determined entirely by the fact that they are positive polarity items that must be outside the scope of non-veridical operators. However, Nilsen (2003) does not consider the event/predicate-level adverbs studied here, while Ernst (2002) explicitly excludes negation adverbs from his discussion.

We do not doubt that notions of positive and negative polarity (Nilsen 2003) or selection for events vs. propositions (Ernst 2002) play a role in adverb placement. Yet it seems to us that Cinque (1999) is correct in concluding that purely semantic constraints are not sufficient to explain the distribution of adverbs. This is particularly clear in the case of the negation adverbs which represent the focus of the present discussion, because the scope of the logical negation is entirely independent of their surface position with respect to aspectual and manner adverbs. On the other hand, Cinque's (1999) conclusion that syntactic constraints are sufficient for adverb ordering works (to the extent that it does) only because interpretive facts are encoded in the syntax in the form of functional hierarchies. This encoding introduces a degree of rigidity absent from semantic accounts. In this respect, the discussion in this section can be read as an elaborate argument that the variation in the position of the negative adverb cannot be captured by (1) – not even allowing for the various readjustments proposed by Zanuttini (1997).

Our general diagnosis of the kind of difficulties encountered by previous syntactic analyses is the same as that presented in chapters 1–2 for complementizers, namely that categories lifted from formal semantics accounts or

descriptive (functional, typological, etc.) accounts do not necessarily yield the correct primitives on which to build the syntax. Our proposal differs from those put forward in previous literature in assuming that the positioning of adverbs in what we have called the eventive E domain of the sentence is sensitive to much the same categorizations (Definiteness, Quantification, deixis, etc.) as the placement of arguments in the inflectional domain of the sentence (clitics) or of the noun phrase.

From the present perspective, manner adverbs close the adverbial string in that they are connected to the N-internal argument – understood as the elementary event that the higher-level specifications of the sentence select, or as the internal argument of this elementary event, which is construed as the internal argument of the sentence as a whole. Next, we have argued that the aspectual series of adverbs is essentially connected to deixis, in the same way as demonstratives in the structure of noun phrases, or locatives as arguments of the elementary predicate – though in the case of aspectual adverbs the connection is to temporal rather than spatial deixis. On the basis of what we know about deictic categories in noun phrases and in arguments, we expect aspectual adverbs to appear between quantificational adverbs and manner/nominal adverbs, which they do. Alternatively or complementarily, aspectual adverbs may be construed as belonging to a macrocategory of quantificational adverbs (Manzini and Savoia 2005), in which case they are predicted to commute in position with quantificational adverbs (narrowly construed).

Incidentally, 'already', 'still' and 'any longer' typically have verbal counterparts, such as 'to continue' in the case of 'still', 'to stop' in the case of 'no longer' etc., which for Cinque (1999, 2006) also instantiate the same functional categories as their adverb counterparts. Yet we have independent reasons to believe that so-called auxiliaries in general are just ordinary verbs selecting sentences, as argued in chapters 5–6. It is also worth noting that in standard Italian there is an alternative lexicalization of *già* 'already', namely *bell(o/i/* etc.), which is clearly adjectival/nominal in nature, as in (55); in many Northern varieties this is the only lexicalization of 'already'. This adjectival lexicalization connects the aspectual adverb to the manner adverb (if anything) – and through it in turn to the elementary event/internal argument specifications.

(55) L' ho (sempre) bell' e fatto
it I.have always nice and done
I have (always) already done it'

Proceeding from bottom to top, quantificational adverbs close (or may close) the aspectual–manner range; by and large, all that needs to be said about the

sentential negation adverb is that it belongs to the quantificational series. At the same time, the (re)positioning of certain adverbs to its left, namely aspectual adverbs in Piedmontese varieties and manner adverbs in Milanese-type varieties, provides evidence for a left-edge position of sorts within the adverbial field. This (re)positioning seems to depend (in part) on the lexical shape of the negation adverb; thus, deictic negation adverbs of the Milanese type co-occur with left-edge positioning of manner (i.e. nominal) adverbs, while the nominal-type negations of Piedmontese varieties co-occur with the repositioning of aspectual (i.e. deictic) adverbs. In other words, the interplay of lexical terminals, such as adverbs in the case at hand, depends on their actual lexical make-up and cannot be predicted solely on the basis of abstract arrays of features making them up. To take other examples, it matters for the purposes of ordering whether the content of 'already' is carried by *già*, which appears at the beginning of the sequence in (1), or by *bell(o)* as in (55), which instead appears at the end of the sequence; it matters whether 'well' is the nominal element *bene* or the adjectival element *buono*, and so on. The theories of adverb ordering reviewed in this section, even when they ostensibly aim to account for a variation spread, as does Zanuttini (1997), ignore this dimension of the problem.

In a nutshell, the distribution of adverbs depends on the interaction of interpretation with the syntactic and lexical structures that restrict it in natural language. Shaping the adverbial space purely through interpretive notions of scope (Nilsen 2003) or selection for events, facts, etc. (Ernst 2002) seems to be insufficient to account for the fine variation in the positioning of the verbal range which is the focus of the discussion in Zanuttini (1997) and partly also in Cinque (1999). At the same time, a syntactic theory along the lines of Cinque (1999) or Zanuttini (1997) contains elements of rigidity that prevent it from accounting for various data – except perhaps by allowing for language-particular variations in the hierarchy whose universal nature represents the core of the theory, and therefore defeating its very purpose.

### 3.3 The interaction of adverbial and verbal positions: the participle

In the discussion of the relative positioning of adverbs in section 3.2, we omitted the evidence that according to Cinque (1999) and Zanuttini (1997) comes from the positions of adverbs with respect to non-finite verbal heads, including the infinitive and the participle. One reason that led us to factor out this evidence is that no correlation holds, say, between the placement of adverbs after the participle and their placement with respect to manner or other low adverbs,

as discussed for *Castiglione* in (30). Similarly, the conclusion of Cinque (1999) and Zanuttini (1997) that verbal heads (participles and infinitives) preceded by negation and other adverbs are particularly low in the structure is contradicted by evidence from the placement of non-adverbial material, notably (en)clitics, as seen in (23)–(24). At the same time, it appears that constraints are observed in the placement of adverbial material with respect to verbal heads – subject to cross-linguistic variation. Therefore, in this section we briefly address the nature of the observed constraints and variation, concentrating on the participle.

In section 3.2 we saw that negation adverbs are generally positioned between the auxiliary and the perfect participle in perfect tenses; yet there are languages in which the negation appears after the participle. Zanuttini (1997) and Cinque (1999) account for this pattern by assuming that the negation occupies a very low position, namely $Neg_4$, so that the participle, moving towards the left periphery of the low sentential domains, systematically leaves it to its right. However, we have already shown that the post-participial negation of *Casorezzo*, although it follows 'well' as in (25c), precedes quantificational/aspectual adverbs, as in (25c'), so that the latter are in turn preceded by the participle. This means that by Zanuttini's (1997) and Cinque's (1999) own reasoning there are no empirical grounds for claiming that the post-participial position of the negation is due to its low position in the adverb hierarchy; it could be due instead to the relatively high position of the participle.

If so, we expect to find that negations that Zanuttini (1997) considers to occupy a (relatively) high position can also follow the participle. Indeed, recall that Zanuttini (1997) attributes the *no*–aspectual adverb order seen in Milanese-type varieties, as in (25c'), to a repositioning of the negation in $Neg_2$; yet in (25c') the negation follows the participle. Another case in point is *Quarna Sotto*, which was introduced in section 3.1.1. Both *nota* and *mia* can follow the participle, as in (56a), though they are typical Piedmontese negations of the 'nothing' and bare N types assigned by Zanuttini to $Neg_3$. Furthermore, at least *mia* also appears before the participle as in (56b); and the relative order 'still/yet'–*mia* is possible with either placement of the participle. Following Zanuttini's (1997) and Cinque's (1999) own reasoning, alternations like those in (56) would prove that two slightly different positions are available for the participle, a higher one in (56a) and a lower one in (56b).

(56) *Quarna Sotto*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| a. | i | ɐŋ | ku | tʃaˈma | mi- | ɐn/ | not- | ɐm |
| | they | have | yet | called | not | of.him/ | not- | me |

'They haven't yet called him/ me'

b. i n ku miɐ/ miɐ ku ɲu
they are yet not/ not yet come
'They haven't come yet'

In general, Cinque (1999) must invoke relatively high or low positions for the participle to account for the fact that adverbs which (unlike Neg) do not have several positions at their disposal can occur to the left or right of the participle. Thus, in the examples involving auxiliary–participle structures provided so far, the adverbs in (1) mostly appear between the auxiliary and the participle, with the exception of 'well', which appears after the participle, as do the negation adverbs just discussed. Yet in Southern Italian varieties the preferred order has the adverbs in (1) following the participle, as illustrated by one example among many in (57); note that in (57a) the lexicalization of the negation is carried entirely by the clitic, on which more will be said in chapter 4. The logic of Cinque's (1999) explanation would be that in (most) Southern Italian varieties the participle occupies a higher position than in (most) Northern Italian ones.

(57) *Celle di Bulgheria* (Campania)
a. nunn addʒu vistu ccu/ aŋkɔra
not I.have seen any.longer/ yet
'I haven't seen him yet/ any longer'
b. l addʒu vistu ddʒa
him I.have seen already
'I have already seen him'

Yet, as with the infinitive briefly mentioned in section 3.2 (cf. (24)), the analysis of the relative order of adverbs and participles proposed by Cinque (1999) is contradicted by evidence concerning the order of the participle with respect to other clausal material. There is evidence (cf. here chapter 5) that perfect participles define independent sentences, as is the case for the so-called absolute (i.e. adjunct) participles of standard Italian (Belletti 1990). These participles seem to be in quite a high position in their own sentence, since enclitics can attach to them. This also shows that the sentences they define are provided with a full inflectional layer – in fact, if the high position of the participle is identified with the modal C position, they are also endowed with the C layer.

In the Piedmontese varieties studied by Zanuttini (1997) and in this chapter, clitics in auxiliary–participle constructions do not typically procliticize to the auxiliary, as in standard Italian and most other Italian (or Romance) varieties, but rather appear post-participially. The data in (45) and (47c), introduced for independent reasons and reproduced below, illustrate this state of affairs. If, following Cinque (1999, 2006), we adopt the traditional point of view that perfect tenses are monoclausal, the positioning of adverbs between the auxiliary

and the participle suggests a relatively low position for the participle – at least, lower than the position of the finite verb, which precedes them. Yet the classical account just described leaves clitics completely out of the picture. Recall that in finite sentences these appear quite high before the finite verb; hence their post-participial position would suggest that the participle is higher than the finite verb – clearly a contradiction.

(45) a. *Margarita*
uɾ ɒ pa pi/ ŋku nɛŋ tʃaˈma-ɾu
he has not any.longer/ yet not called-him
'He hasn't called him him yet/ any longer'

b. *Montaldo*
iɾ ø pɒ ŋku nɛŋ dʒa fɒ-ɾu
I have not yet not always done-it
'I haven't yet done it already'

(47) c. *Margarita*
j ø pa pi nɛŋ sɛmpre vist-je
them I.have not any.longer not always seen-them
'I haven't always seen them any longer'

The fact that the post-participial clitics of Piedmontese represent a problem for the general schema of explanation ultimately going back to Pollock (1989) is pointed out by Kayne (1991) in relation to infinitives. If, as already suggested, we take the clitic position as an indication that the participle is in a high position, say the C position, then this forces the conclusion that it defines an independent sentence. The auxiliary in turn defines an independent sentence whose complement is the participial sentence, while the monoclausal interpretation must be the result of incorporation processes applying between the matrix and embedded predicate. This general idea can be fleshed out along the lines of chapter 5 here, but allows for very different implementations, such as that of Kayne (1993).

Though the bi-sentential construal of perfect tenses yields a straightforward analysis of clitic placement, a problem now arises with adverbs, specifically those in the sub-hierarchy in (1), which would be expected to appear systematically after the participle in C, given that they appear systematically after the finite verb in the lower I position. Here the theory of semantic selection for adverbs argued for by Svenonius (2002) and Ernst (2002) will help us to resolve the paradox.

Participles may define full sentences on the evidence of the inflectional material they are able to associate with, yet traditional monoclausal treatments of perfect tenses embody an important interpretive intuition about participles,

namely that they lack independent temporal reference (though they may have aspectual/modal properties corresponding to their placement in C). The lack of temporal properties, while not interfering with the inflectional argumental domain (represented by clitics), allows very high syntactic projections like C to preserve a semantic characterization akin to that of lower predicational/eventive projections in tensed sentences. If so, while post-participial adverbs can be connected to the positions they occupy in finite clauses, pre-participial adverbs can be construed as attaching to domains higher than C, which are unavailable to them in ordinary finite clauses.

In short, we assume that the participle is inserted in a fixed C position on the basis of equally fixed aspectual/modal properties. The variable order with respect to adverbs, both within a given variety and cross-linguistically, becomes a question about adverbs themselves, some of which will appear in the low eventive domain (after the participle) and others will attach to the higher modal C field (before the participle).

One of the arguments that Cinque (1999) deploys in favour of his construal of the evidence is that while the position of the participle (or other verbal head) varies with respect to the adverbs, the latter maintain their order with respect to one another. A good example of this line of argumentation is provided by the relative position of 'well' in the hierarchy, following aspectual and quantificational adverbs. Though in Northern Italian varieties negation, aspectual and quantificational adverbs are generally found before the participle, as seen for instance in the data in (45) and (47c) reproduced in this section, 'well' follows the participle, as shown in (58).

(58) *Castellinaldo* (Piedmont)

a. uɾ ɔ pi / aŋkura naŋ maɲˈdʒɔ baŋ
he has any.longer/ yet not eaten well
'He hasn't eaten well yet/ any longer'

a'. uɾ ɔ naŋ sampre maɲˈdʒɔ baŋ
he has not always eaten well
'He hasn't always eaten well'

*Fontane* (Piedmont)

b. j aŋ pi / ŋkɔ ɲent dɾyˈmi bɛŋ
they have any.longer/ yet not slept well
'They haven't slept well yet/ any longer'

b'. j aŋ ɲent sɛmp dɾyˈmi bɛŋ
they have not always slept well
'They haven't always slept well'

For Cinque (1999) the contrast between (45) and (58) implies that the participle is inserted between 'always' and 'well' in the fixed hierarchy in (1). For

us, the data require a different analysis – namely that the very same properties that typically associate 'well' with the lower position in the adverb rank also associate it with the core eventive domain. In other words, in order to adequately describe the split between the 'well' adverb positioned after the participle and other adverbs positioned before the participle, all we need is the notion that manner adverbs like 'well' hook on to a nominal N position while other adverbs appear in deictic/quantificational slots. Yet nothing in principle prevents an N adverb from appearing before the participle in the high C domain, which counts as an eventive domain in the absence of temporal specifications. This way of putting things is therefore less restrictive than Cinque's (1999), for any rearrangement of the hierarchy in (1) is disallowed (at least in principle) by the fact that it is part of the computational system. As far as we can tell, the flexibility of the present theory is precisely what is required by the data.

Specifically, 'well' is described by Cinque (1999) as occupying a Voice projection. This predicts that 'well' does not appear before active participles, while it will appear in front of passive participles that can move to the Voice head. In reality, our intuitions on standard Italian are that both examples in (59) are acceptable, so that pre-participial 'well' is independent of voice. In present terms, pre-participial occurrences of 'well' need not be restricted to low projections, but may equally appear in higher projections, as long as selection for events is respected.

(59) a. La commissione ha bene accolto la nostra proposta
The committee has well received the our proposal
'The committee received our proposal well'

b. La nostra proposta è stata bene accolta dalla commissione
The our proposal is been well received by the committee
'Our proposal has been well received by the committee'

As for quantificational and deictic (i.e. aspectual) adverbs, Southern Italian varieties of the type in (57) seem to require the fewest stipulations, since all adverbs of the low range in (1) follow the participle exactly as they follow the finite verb, in both cases appearing in the low eventive domain. In Northern Italian varieties of the type in (58), what seems to be happening is that quantificational/deictic adverbs are preferably inserted in the highest possible eventive domain, i.e. the C domain delimited by the participial projection. This parameter in turn seems to be just a manifestation of a very general variation scheme in natural languages.

To take another example close at hand, in the perfect tenses of Piedmontese varieties like (45) and (47), the clitic occupies the post-participial position

corresponding roughly to its lowest possible position (in the inflectional domain of the predicate with which it has a direct selectional relation). In contrast, in standard Italian, as in most Italian and Romance varieties (French, Spanish, etc.), the clitic in the same structures occupies the highest position available to it (in the inflectional domain of the highest verb of the verbal complex formed by 'restructuring', i.e. roughly event unification). As far as we can tell, there is a complete parallel in all other respects between the Piedmontese perfects and, say, the standard Italian ones. In general, certain lexical items select certain domains of lexicalization in certain languages – without any correlation with meaning, or other properties of the grammar. This is precisely the situation with (quantificational and deictic) adverbs, which are restricted to the postverbal lower range of the sentence by the presence of tense specifications in finite clauses, but in untensed clauses can range from lower to higher domains.

In itself, our construal of the adverb placement parameter with respect to non-finite (and finite) verbs is neither simpler nor more complex than Cinque's (1999) account in terms of the placement of the participle, for the lower or higher functional head to which the participle moves does not appear to be determined by general principles. We have seen that for Cinque (1999) the crucial argument in favour of the participle moving – and adverbs staying in place – is that when a participle interrupts a sequence of adverbs, so that some are to its right while some are to its left, the two subsequences are still predicted by the hierarchy in (1). However, we have presented more than one counterexample to this prediction. Thus, the examples relating to *Castiglione* in (30) or to *Quarna Sotto* in (56) show that the negation can appear post-participially, and aspectual adverbs before the participle, though aspectual adverbs are (or can be) preceded by the negation when they all occur in the same domain.

Further discussion would require us to increase the already rich repertory of facts in this chapter, at least by adding data concerning the position of adverbs, including the negation, in infinitival sentences. At the same time it is evident that for infinitival sentences we could adopt the same principles of analysis explored here for participles, since the latter are treated here as independent sentences as well. Thus, consider the data in (23)–(24), of which we reproduce below just the *Margarita* examples. The post-infinitival position of the clitic (shared with many Romance varieties, including standard Italian) leads us to associate the infinitive with a high C projection (Kayne 1991). If so, the ordering of the negation and aspectual adverb before the infinitive represents a shifting of their position with respect to the tensed sentence – parallel to the one discussed for participial sentences.

(23) c. *Margarita*
j ø di-te øt nɛŋ tʃaˈmɛ-ɾu pi
I I.have told-you to not call-him any longer
'I told you not to call him any longer'

(24) c. *Margarita*
j ø di-te øt pi nɛŋ tʃaˈmɛ-ɾu
I have told-you to any longer not call-him
'I told you not to call him any longer'

Under the present analysis, we expect the relative order of adverbs to reproduce the hierarchy observed in finite sentences when they occur in the same domain, as in (24). But nothing prevents them from occurring in different domains – and this will create what appear to be reorderings of the (underlying or superficial) hierarchy, as in (23). This type of evidence represents a direct counterexample to Cinque's (1999) and Zanuttini's (1997) strongest prediction – and is in fact difficult to account for within their analysis, except by stipulation.

# 4 *Sentential negation: clitics*

Many Romance languages have a negative clitic which stands alone (for instance standard Italian) or is doubled by a negative clitic (for instance French). Since Pollock (1989) these have been modelled by a NegP projection in which the negative clitic and the negative adverb occupy the head and Spec position respectively. According to Zanuttini (1997), who extends this model to Italian dialectal variation, languages which require a sentential negation adverb generate it in one of the lower Neg positions; if a clitic combines with the adverb, it is generated in the head of the relevant Neg position and moves to the inflectional domain by cliticization. By contrast, negative clitics in languages like Italian which do not require a sentential negation adverb are hosted by a Neg position generated above I, $Neg_1$.

In other words, for Zanuttini (1997) preverbal clitic negations are associated with two different structures, according to whether they stand alone or combine with a negative adverb. Moreover, she detects a correlation between these structures and the ordering of the negative clitic with respect to subject clitics in languages that have both of them. In her terms $Neg_1$, hence the standalone negative clitic, will precede inflected subject clitics, though it may follow vocalic uninflected subject clitics. Counterexamples to this generalization are Tuscan varieties in which the standalone negative clitic precedes 1st/2nd person subject clitics but follows 3rd person ones (cf. *Càsola* in (7) below). Zanuttini (1997: 37) recognizes that these varieties require two different positions for subject clitics – not only one following $Neg_1$ but also one preceding it. Yet this is not sufficient to account for a more direct counterexample like *Vagli* in (2) below, in which the standalone negation follows all inflected subject clitics.

In turn, according to Zanuttini (1997) the negative clitic doubled by a negative adverb follows all subject clitics. Yet there are several examples of negative clitics doubled by negative adverbs in which the negative clitic also precedes the 1st/2nd person subject clitic while following 3rd person ones; *Oviglio* in (20) below is a case in point. Zanuttini (1997: 39) suggests

that this should be explained in terms of two different positions occupied by (inflected) subject clitics, one following and one preceding the negative clitic. But again there are more direct counterexamples in which the negative clitic doubled by the negative adverb precedes the entire series of inflected subject clitics.[1]

From this evidence we conclude that there is no necessary correlation between the order of the negative clitic with respect to subject clitics and whether it doubles a sentential negation adverb or not. Correspondingly, in the rest of the chapter we discuss negation clitics without taking into account whether they stand alone or combine with an adverb.

At the same time, there is a lot of literature which takes the clitic to instantiate the logical negation operator (Rizzi 1982; Longobardi 1992 on Italian); this makes negative clitics natural exponents for the functional category Neg, on the assumption that its content coincides with the logical negation itself. Yet in chapter 3 we concluded that sentential negation adverbs (which can also stand alone) are nominal constituents and negative polarity items; this led us to recategorize them from exponents of the Neg functional category to quantificational (Q) elements in the eventive (adverbial) domain of the sentence. In this chapter we argue that clitic negations are also best construed as nominal elements, anchored in the argument structure of the verb, and specifically the (nominal or eventive) internal argument. Correspondingly they do not instantiate the specialized functional category Neg, but rather they instantiate nominal categories independently necessary for hosting pronominal clitics in the inflectional domain of the sentence. Like negation adverbs, they are simply negative polarity items, which need to be read in the scope of the negation (or other polarity operator) – and therefore imply the introduction of a logical negation operator at the interpretive interface. If we are correct, the latter is never lexicalized in the languages at hand (and possibly in natural languages in general).

The evidence to be presented concerns first of all the distribution of negation clitics with respect to subject and object clitics. In section 4.1 we consider data which involve copying of the negative clitic on either side of a subject clitic, as well as the classical distributions studied by Zanuttini (1997) and Poletto (2000). In section 4.2 we consider copying of a negation clitic on either side of an object clitic, and then we move on to simple instances of a negation clitic inside the object string – both phenomena also observed by Parry (1995, 1997).

In both cases the doubling of the negation clitic is sensitive to the so-called person split, roughly between 1st/2nd person and 3rd person. On these

grounds we argue that clitic doubling could not be a result of purely phonological processes (of the type envisaged by Harris and Halle (2005)), because the notion of person split that it is sensitive to is a syntactic one. Similarly, readjustment rules at Morphological Structure (in the sense of Halle and Marantz (1993)) would have to import this same syntactic notion (and others) into a separate morphological component – which, even if possible, would amount to a description, rather than an explanation of the phenomena. As for analyses of doubling based on head-Spec configurations and subsequent movement, we note that a base-generated head-Spec configuration is not sufficient to account for multiple copies of the clitic, since there is a unique head position that the clitic can fill. The surface distribution of the clitic copies, sensitive only to the nature of other elements of the clitic string, also casts doubt on the idea that they are spell-outs of clitic traces, since it remains to be shown that general principles of movement and spell-out could determine such a distribution.

Our own analysis is based on the assumption that clitics are base-generated in the positions where they surface, being connected to their copies or other lexical material by the interpretive calculus at the LF interface, as in so-called representational models (Brody 2003). The sensitivity of negation clitics to the person split is explained in accordance with the conclusions of chapter 3 on the similar sensitivity displayed by negation adverbs – namely as a result of their nominal character and their connection to the overall argument structure of the sentence. Section 4.2.1 considers potentially problematic cases where one of the apparently negative copies also surfaces in positive contexts.

Because we treat the so-called sentential negations as nominal elements, connected with the argument structure of the sentence, in section 4.3 we are led to conclude that doubling of sentential negations is an instance of negative concord. We deal with the latter by assuming, as anticipated, that negations are negative polarity items, so that negative concord amounts to closure of two or more negative polarity items by the same logical negation (or by the same existential quantifier in the scope of the logical negation). We also briefly consider what lack of negative concord amounts to – or, equivalently, mutual exclusion of negative polarity elements in the negative concord reading. We suggest an account modelled on mutual exclusions elsewhere in the grammar, for instance between pronominal clitics. This account correctly predicts that mutual exclusion (lack of negative concord) facts are domain sensitive.

### 4.1 Interactions of negation clitics and subject clitics

Let us consider a case of doubling of the clitic negation on either side of a subject clitic, as seen in the Northern Tuscan variety of *Viano* in the 2nd person singular in (1ii). In the other persons, reported in (1) under the corresponding roman numbers, the negative clitic simply follows the subject clitic. The examples in (1ii) show that the doubling of the negative clitic is entirely indifferent to the composition of the object clitic string.

(1) *Viano* (Tuscany)

i. a nə dɔrmə
I not sleep
'I don't sleep'

ii. a. a n tə nə dɔrmə
ClS not you ClS sleep
'You don't sleep'

b. n tə (nə) mə camə
not you not me call
'You don't call me'

c. n tə nə l camə
not you not him call
'You don't call him'

d. n tə n tə lavə
not you not you wash
'You don't wash yourself'

e. n tə ŋ gə l dɛ
not you not there it give
'You don't give it to him'

iii. i/ la nə dɔrmə
he/she not sleeps
'S/he doesn't sleep'

iv. a nə dorˈmjaŋ
we not sleep
'We don't sleep'

v. nə durˈmi
not you.sleep
'You don't sleep'

vi. i/ la nə ˈdɔrmənə
they.m/they.f not sleep
'They don't sleep'

The pattern in (1) is connected to the fact that cross-linguistically a negative clitic can appear either before or after the subject clitic, as illustrated here in (2)–(3), again with varieties from Northern Tuscany. To be more precise, in a

variety like *Vagli* in (2), the negative clitic follows the subject clitic, while in a variety like *Sillano* in (3) it precedes the differentiated subject clitic and it follows invariable *e*.

(2) *Vagli di Sopra* (Tuscany)

| | | |
|---|---|---|
| i | nun | dɔrmɛ |
| tu | n | dɔrmɛ |
| i/ ɛ | nun | dɔrmɛ |
| | nun sə | dɔrmɛ |
| | nun | durmitɛ |
| i | nun | ˈdɔrmənə |
| I | not | sleep etc. |

'I don't sleep' etc.

(3) *Sillano* (Tuscany)

| | | | |
|---|---|---|---|
| (e) | n(o) | i | dɔrma |
| (e) | non | tu | dɔrma |
| (e) | no | llə | dɔrma |
| (e) | non | | dorˈmjaŋ |
| (e) | non | | durmiddə |
| (e) | no | llə | dɔrməŋ |
| ClS | not | I | sleep etc. |

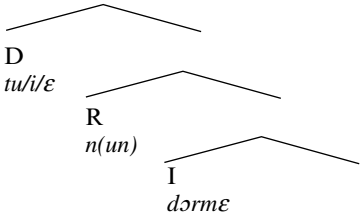
'I don't sleep' etc.

Poletto (2000) accounts for data similar to (2)–(3) by assuming that both subject and negation clitics have more than one position available to them. To begin with, in (3) the invariable subject clitic is higher than the inflected one, since the negation occurs between them. Furthermore, the negation in (3) is higher than the negation in (2) since the former precedes the inflected subject clitic, while the latter follows it. This yields a hierarchy roughly of the type: SCl (invariable) – Neg – SCl (inflected) – Neg.

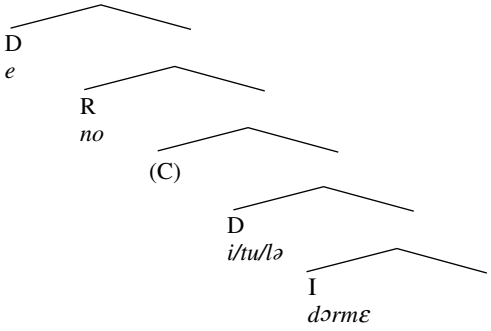
We adopt the conclusion that the two subject clitics in (3) correspond to two different subject clitic positions. Similarly we accept that there are two different positions for the negations, preceding the inflected subject clitics in (3) and following them in (2). Following the intuition of Chomsky (1995) as to the nature of the EPP argument, we notate the subject clitic as D. More importantly, we do not identify the position of the negative clitic with a dedicated functional projection Neg, though nothing would prevent us in principle from doing so. Rather, given the existence of an independent hierarchy for pronominal clitics, we simply assume that the negation fits into it – and specifically corresponds to the R slot (generically suggesting Referentiality), which occurs immediately

after the subject clitic and immediately before object clitics. Furthermore the two different positions of the subject clitic and the two different positions of the negation clitic do not correspond to different functional positions, but simply to two different instantiations of the same D and R positions – internal to the I and C domains respectively. On these grounds we assign the structures in (4) and (5) respectively to, say, the 2nd person singular of the paradigms in (2) and (3).

(4) *Vagli di Sopra*

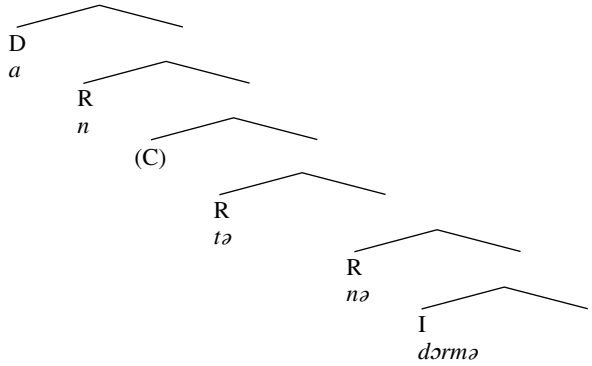



(5) *Sillano*




The structures in (4)–(5) amount to the proposal that *Vagli* and *Sillano* differ as to whether the negation is inserted in the domain immediately above C, as in *Sillano*, or in the domain immediately above I, as in *Vagli*.[2] If the C- and I-domain positions of the negation in (4) and (5) are both instantiated, we derive the doubling of *Viano* in (1ii), as illustrated in (6).

(6) *Viano*




The question now arises of why the pattern in (6) is restricted to the 2nd person singular. A connection can be established with another pattern which singles out 2nd person clitics in their interaction with the negation. As illustrated in (7) with *Càsola*, again a Northern Tuscan variety, invariable subject clitics precede the negation, as expected; on the other hand, inflected subject clitics split, in that only 2nd person clitics follow the negation, while 3rd person clitics precede it. Notice that both *Càsola* in (7) and *Viano* in (1) lack inflected clitics for the 1st person. Therefore we may equally well describe the facts by saying that in *Càsola* in (7) the negation precedes all inflected 1st and 2nd person subjects and follows 3rd person subjects; similarly, in *Viano* in (1) doubling opposes all inflected 1st and 2nd person subjects to 3rd person subjects. In other words, both types of language can be described as instantiating a classical person split between 1st /2nd person and 3rd person.

(7) *Càsola* (Tuscany)

| | | | | |
|---|---|---|---|---|
| a | n | | ðɔrm | |
| | n | tə | ðɔrm | |
| i/la | nə | | ðɔrm | |
| a | nə | | ðurmiˈaŋ | |
| a | n | və | ðurˈmi | |
| i/la | nə | | ˈðɔrmənə | |
| ClS | Neg | ClS | sleep | etc. |
| ‘I don’t sleep’ | | | | etc. |

The structures proposed for the negation clitic that follows the inflected subject clitic, as in the *Vagli* example in (4), or precedes it, as in the *Sillano* example in (5), suggest an account of the alternating pattern of a language

like *Càsola* along the lines of (8). In (8a) the negation is inserted within the I domain and therefore follows the 3rd person subject clitic. In (8b), assuming that the position of 1st and 2nd person subject clitics remains constant, the negation precedes them in that it is inserted in the C domain.

(8) *Càsola*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| a. | | | | [$_D$ i/a | [$_R$ nə | [$_I$ ðərm |
| b. | [$_R$ n | [C | [$_D$ tə | | | [$_I$ ðərm |

In chapter 3 we analysed the interaction of the person split with the adverbial negation on the basis of the assumption that the so-called adverbial negation is neither adverbial nor, strictly speaking, negative; rather, negative adverbs are nominal elements interpreted as negative polarity items. Furthermore, we suggested a characterization of 1st and 2nd person arguments as 'discourse-anchored' and 3rd person arguments as 'event-anchored'. Now, the pattern in (8), far from appearing arbitrary, can be seen as a more abstract version of the *Quarna* split in chapter 3. In other words, the negation (here the clitic) has two different lexicalizations (here, positions) depending on the presence of a 1st/2nd or 3rd person argument (here the EPP argument).[3]

The *Viano* example in (6), repeated here in (9b), is a variant of the *Càsola* example in (8b). Thus, in (9b) a copy of the C-domain negation is inserted when the subject clitic is 1st or 2nd person. By contrast, the I-domain copy is the sole lexicalization of the negation with the 3rd person subject clitic in (9a). From another perspective, *Càsola* and *Viano* in (8)–(9) are sensitive to the same parameter between the I-domain and C-domain lexicalizations of the negation as *Vagli* and *Sillano* in (4)–(5), except that one of the two negations is generalized to the whole paradigm in (4)–(5), whereas they split according to person in (8)–(9).

(9) *Viano*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| a. | | | | [$_D$ i/la | [$_R$ nə | [$_I$ ðərmə |
| b. | [$_D$ a | [$_R$ n | [C | [$_D$ tə | [$_R$ nə | [$_I$ ðərmə |

In the theory proposed by Poletto (2000), where data of the type in (7) are also considered, the relative order of subject clitics and the negation depends on a clitic hierarchy of the type described above, roughly ClS(invariable) – Neg – ClS(3rd) – Neg – ClS(2nd) – Neg. Under this account, the negation of *Càsola* as in (7) would be the middle one, since it precedes ClS(2nd) but follows ClS(3rd). This hierarchy could also correctly derive the doubling of *Viano* as in (1), where ClS(2nd) is flanked by two copies of Neg. Poletto's (2000) model predicts the impossibility of the reverse order to the one found in *Càsola*, with

the negative clitic preceding the 3rd person subject clitic and following the 1st and 2nd person clitic. This is because her clitic hierarchy, roughly ClS – Neg – ClS(3rd) – Neg – ClS(2nd) – Neg, forces any negation that precedes ClS(3rd) to also precede ClS(2nd). However, when it comes to doubling, the same hierarchy can yield the unattested string Neg – ClS(3rd) – Neg, assuming that the highest and lowest Negs of the hierarchy are instantiated.

Here, starting with the two different positions of the negation in (8), we are able to predict the doubling in (9), as opposed to the reverse order. However, we have not yet explained why the negation and the subject clitic pattern as in (8), as opposed to the reverse – since, contrary to Poletto (2000), the position of the negation with respect to 1st/2nd person clitics and 3rd person ones is not written into a hierarchy. In other words, the question is why the negation cannot be forced into the C domain by an event-anchored (3rd person) EPP argument, while remaining within the I domain in the presence of a discourse-anchored (2nd person) argument. If we construe the negative clitic as a nominal element and a negative polarity item, the generalization is that the presence of a discourse-anchored argument provokes the lexicalization of argumental material (the so-called negation clitic) in the C domain, thus indirectly linking discourse-anchoring and the C domain. On the contrary, event-anchoring is connected to the I domain.[4]

Independent evidence suggests that the connection just established is correct. Thus, in the imperatives of Southern Italian and Albanian varieties, discourse-anchored and event-anchored object clitics are found in the C and I domains respectively – the former in mesoclisis (Manzini and Savoia (2009a), and references quoted there), and the latter in enclisis. The higher position of discourse-anchored elements with respect to event-anchored ones is also confirmed for non-related languages (for instance Salish, as discussed by Davis (1999)). This casts further doubt on Poletto's (2000) hierarchy, in which the 3rd person subject clitic is higher than the 1st or 2nd person one. Crucially, the interactions of the negative polarity clitic with the person split require that it also participates in the definition of predicate–argument structure. If it was simply a logical connective, the reason for such an interaction would remain mysterious – or at the very least could not fall under the generalization just proposed.

Other interactions between the so-called negative clitic and subject clitics concern mutual exclusion phenomena which affect the combinations of subject and object clitics in Romance varieties. We observe that in some of these varieties the exclusion of the subject clitic (specifically 3rd person) is induced not only by object clitics, but also by the clitic negation. The data in (10a) show that *Agliano* has subject clitics that are obligatorily lexicalized in the absence

of either negation or object clitics. The negation in (10b) excludes the subject clitic, with the possible exception of discourse-anchored clitics (in practice the 2nd person singular). The examples in (10c–c') show that object clitics have the same effect of excluding the subject clitic – though again they optionally combine with a discourse-anchored one.

(10) *Agliano* (Tuscany)

a. (i) ðɔrmə
tu ðɔrmi
i/la ddɔrma/ðɔrma
sə ðɔrma
i ðurmitə
i/la dˈdɔrmənə/ ˈðɔrmənə
ClS sleep
'I sleep' etc.

b. nun dɔrmə
nun (tu) dɔrmi
nun dɔrma
nun sə dɔrma
nun durmitə
nun ˈdɔrmənə
Neg (ClS) sleep
'I don't sleep' etc.

c. (tu) əl/la/ mə cami
you him/her/me call
'You call him/her/me'

c'. əl/ la/ɟi / mə/ tʃə ˈcamənə/camatə
him/her/them/ me/us they.call/ you(pl).call
'They/ you call him/her/them/me/us'

Mutual exclusions between subject and object clitics are similar to a mutual exclusion more often discussed in the literature on Romance, namely that between two object clitics – for instance that between the dative and the accusative clitic in the Spurious *se* of Spanish. Current analyses in Distributed Morphology, Optimality Theory, etc. are based on the idea that there is a constraint against the co-occurrence of certain forms, and that one of them is eventually substituted for by a 'default'. We propose a different model, which does not have recourse to notions of competition or default. Rather, only one of two clitic forms is lexicalized in that this form subsumes the crucial properties of the other (the non-lexicalized one). In cases of generalized exclusion of the subject clitic by the object clitic, as in (10c–c'), we propose that any pronominal clitic, independent of its denotation, is sufficient to lexicalize D(efiniteness) properties for the entire clitic string/domain and hence to exclude the subject clitic, a pure instantiation of such properties.[5] The interest of data such as the *Agliano*

examples is that the negative clitic in (10b) behaves exactly like an object clitic in excluding the subject clitic. This is expected if the so-called negation is nothing more than a nominal element, and specifically a negative polarity item. If the negative clitic was the lexicalization of the negative operator, it would be very difficult (or impossible) to see why it should interact with the argumental clitic series in the way it does.

Another relevant property of *Agliano* is the different treatment of event-anchored and discourse-anchored subject clitics in (10b) and in (10c) vs. (10c'). As just proposed, the pure D(efiniteness) properties of an event-anchored (3rd person) subject clitic are subsumed by the lexicalization of any other element of the clitic string, yielding for instance (10c'); however, this is not necessarily the case for the deictic reference associated with speaker/hearer, which can therefore be independently lexicalized, as for instance in (10c). Incidentally, since the negation precedes the 2nd person clitic when they co-occur in (10b), we conclude that *Agliano* has the same structure as *Càsola* in (8b).

## 4.2 Interactions of negation clitics with object clitics

In the examples presented so far, the negative clitic systematically precedes object clitics, as is usual in Italian varieties. However, cases in which the negative clitic appears inside the object clitic string are noted in the literature, in particular by Parry (1997) for Cairo Montenotte, in which the negative clitic precedes 3rd person objects but follows 1st and 2nd person ones. What is more, Parry (1997) observes that in some varieties of Liguria and Piedmont the negative clitic can appear both to the right and to the left of the 1st and 2nd person clitic. Zanuttini (1997: 18) suggests that only languages with doubling of the negative clitic by an adverbial negation allow this doubling. In reality, the Northern Tuscan varieties that we exemplify below are a counterexample to this generalization.

Let us begin by considering the relatively simple case of *Bedizzano* in (11), in which only one instance of the negation appears, following 1st and 2nd person object clitics and preceding 3rd person ones. This positioning of the negative clitic within the object clitic string is insensitive to the person of the verbal paradigm, as can be seen from the comparison between 2nd and 3rd person in (ii) and (iii) respectively.

(11) *Bedizzano* (Tuscany)

ii. a. tə mə nə camə
you me not call
'You don't call me'

b. tə nə l camə
you not him call
'You don't call him'

c. tə mə nə l/n da
you me not it/of.it give
'You don't give me it/any of it'

d. tə n i l da
you not to.him it give
'You don't give it to him'

iii. a. i ttə/ssə/vvə nə l/n da (prə ɲent)
he you.sg/us/you.pl not it/of.it gives at all
'He doesn't give it/any of it to you/us'

b. i n i ʎ da
he not to.him it gives
'He doesn't give it to him'

c. i n i/sə da kwɛst
he not to.him/to.us gives this
'He doesn't give this to him/us'

Doubling data are provided in (12) for *Colonnata*. The negative clitic follows all subject clitics and precedes 3rd person object clitics, both accusative and dative (as in (iiib)). At the same time, the negative clitic both precedes and follows 1st and 2nd person clitics as well as the *se*-type clitic (as in (iiia)).

(12) *Colonnata* (Tuscany)

i. a. a n tə nə weðə
I not you not see
'I don't see you'

b. a n tə nə l 'dag
I not you not it give
'I don't give it to you'

c. a nə l veðə
I not it see
'I don't see it'

ii. a. tə n tə nə lavə
you not yourself not wash
'You don't wash yourself'

b. tə nə l veðə
you not it see
'You don't see it'

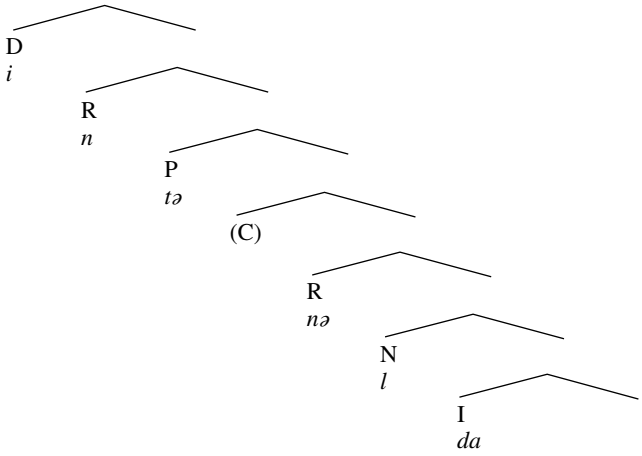
iii. a. i n sə nə lavə
he not himself not washes
'He doesn't wash himself'

b. i n i l da
he not to.him it gives
'he doesn't give it to him'

c. i n tə nə l da
he not you not it gives
'He doesn't give it to you'

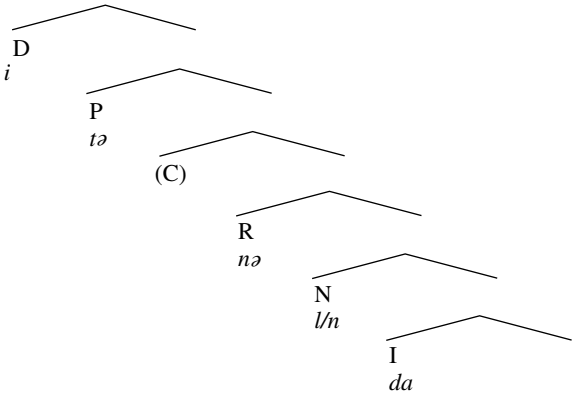
We approach the doubling data of *Colonnata* in (12) assuming that the negative clitic is doubled because it is inserted both in the C and in the I domain; the possibility of a negative clitic being inserted in either domain has been independently motivated in section 4.1, and its doubling in both domains allowed us to account for the doubling on either side of a subject clitic. We can account for the *Colonnata* data if we assume additionally that 1st and 2nd person clitics (P in the present notation, to suggest Person) insert in the C domain, so that they precede the lower copy of the negation and follow the higher copy, as in (13). This analysis furthermore requires all subject clitics to be generated within the C domain. Note that we notate 3rd person accusative clitics as N (cf. here chapters 7–8).

(13) *Colonnata*




If we apply the approach in (13) to the non-doubling data of *Bedizzano*, we obtain structures like (14), which display the person split between 3rd person (N) clitics in the I domain and other clitics in the C domain, so that the former follow and the latter precede the negation in the I domain.

(14) *Bedizzano*




The question is what explanatory value the structures in (13)–(14) have. It appears that the relevant generalization is the same as that formulated in the conclusions of section 4.1, namely that event-anchored clitics are associated with the I domain, while discourse-anchored ones are associated with the C domain. In (13), the negation splits along the same lines as object clitics, namely one copy occurs in the I domain and one copy in the C domain. Note that in this analysis, all subject clitics are in the C domain – we may take this to be due to their EPP nature, potentially extraneous to the event- vs. discourse-anchored contrast. Recall that even in the varieties of section 4.1, all inflected subject clitics occurred in the same domain (the I domain in that case) – and it was the negation that eventually split between two domains. In other words, the behaviour of the negation is closer to that of object clitics than that of subject clitics.

In Southern Italian and Albanian varieties in which discourse-anchored and event-anchored object clitics occur in imperatives in the C and I domain respectively, locatives and the *si*-type clitic pattern with 1st and 2nd person. The same is true of *se* in the *Bedizzano* example in (11iiia). Descriptively speaking, this is the 3rd person reflexive, but in present terms it is the free variable of the argumental clitic system (cf. here chapters 5–6). Therefore the split must involve something like the present notion of discourse- and event-anchoring rather than just the opposition of 1st and 2nd person vs. 3rd person.

It is important to recall that what we are seeking to analyse is finely structured parametric space. What we find is a set of universal categorial distinctions. One such distinction is that between the C and the I domain. This interacts with the person split either directly, so that event-anchored complement clitics have an I lexicalization and discourse-anchored ones have a C lexicalization, or

indirectly, so that the C negation associates with the discourse-anchoring of the EPP argument and the I negation with its event-anchoring. Despite the unpredictable way in which the relevant distinctions show up in a given language, what we find is that the patterns they give rise to may not be reversible. Thus it is always discourse-anchored elements that are higher than event-anchored ones – more precisely, that trigger the lexicalization of the C domain (for instance by the negative polarity clitic) as opposed to the lexicalization of the I domain in combination with event-anchored elements.

The fact that negative clitic doubling interacts with LF interface notions such as that of person split excludes the possibility that it could be a purely morpho(phono)logical phenomenon. For instance, the copying and displacement processes targeted by Distributed Morphology (Halle and Marantz 1993), or more recently by Harris and Halle's (2005) theory of metathesis, can affect clitic material entirely comparable to negative *n*. In other words, since the negative clitic is clearly part of the clitic cluster, there is no reason why its copying (or displacement) should not be handled at the morpheme structure/phonological form (MS/PF) interface as that of argumental clitics routinely is. However, if the preceding discussion is correct, the notions necessary to account for the present data are syntactic/LF notions, such as those of person split or I vs. C domain. To be more precise, it is possible to import the primitives necessary to state the correct distribution of the negative clitic (1st/2nd vs. 3rd person, and so on) at the MS/PF interface. The problem, however, is one of explanatory adequacy. On the one hand, a theory in which the relevant notions are available in more than one component must surely count as more complex than a theory in which they are handled in a unified (morphosyntactic) component. More importantly, if the interaction between the person split and the placement of the negation is to be understood in terms of the lexicalization of the relevant clitics in I and C domains, then this essential aspect of our explanation cannot be reproduced at MS/PF at all. In our view, this type of consideration argues against any attempt to reduce negative doubling to an MS/PF process, and it also indirectly casts doubt on MS/PF accounts of pronominal clitics – whose parallels with negative clitics seem to call for a unified analysis.

Next, in (15) we report data similar to those in (11), but taken from a variety (*Càrcare*) of the type studied by Parry (1997), with the negative clitic doubling a negative adverb identical to the argument for 'nothing'. It will be noted that the sentential negation adverb is in complementary distribution with other negative adverbs, as in (15iib–c), and arguments, as in (15iiib), and in fact appears to be altogether optional, as in (15iiic). Regarding this last example, we assume that (true) optionality simply reflects the presence of different

grammars in the competence of the same speaker. As for the question of negative concord, i.e. the possibility (or impossibility) of combining two or more given negative forms with a single negation meaning, we return to it in section 4.3 – in connection too with the more general problem of how to interpret a doubled clitic, or the doubling of phrasal material by a clitic.

What is relevant here is that in (15) the negation is expressed by a triplet consisting of a negative adverb or phrasal argument doubled by a pair of clitics. The position of these is the same as that observed in (12); thus, they precede and follow P clitics and *si*-type clitics, in all cases preceding accusative/partitive ones. Subject clitics generally precede the higher copy of the negative clitic. However, they can either follow or precede the 2nd person singular subject clitic, as in (15iib) and (15iic) respectively. What is more, these two potential positions of the negative clitic can combine, much as observed in (1); thus we obtain sentences of the type in (15iia), in which three copies of the negative clitic are present alongside the negative adverb.

(15) *Càrcare* (Liguria)

ii. a. ɛŋ t ɛŋ t ɛŋ ləvi nɛ:nt
not you not yourself not wash nothing
'You don't wash yourself'

b. ɛt ɛŋ m ɛŋ tʃəmi məi
you not me not call never
'You never call me'

c. ɛŋ t ɛm ɛŋ lɛ dəi məi
not you me not it give never
'You never give it to me'

iii. a. u ŋ s ɛŋ ləva nɛ:nt
he not himself not washes nothing
'He doesn't wash himself'

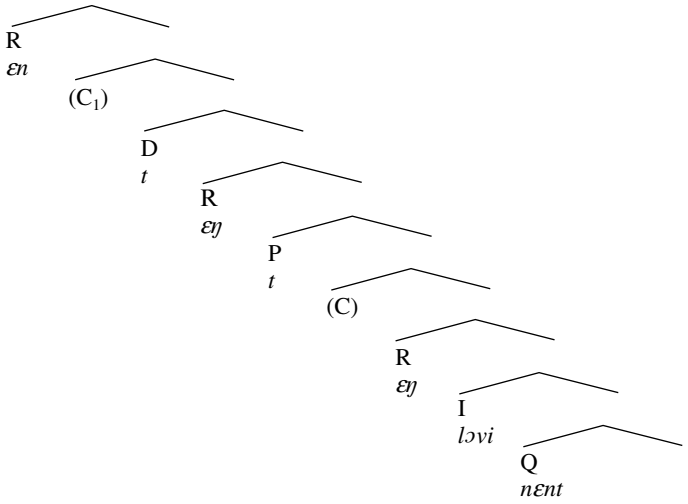
b. u ŋ m ɛŋ də nɛ:nt
he not me not gives nothing
'He gives me nothing'

c. u ŋ m ɛŋ lɛ/nuŋ də
he not me not it/of.it gives
'He doesn't give it/any of it to me'

We can extend to varieties of the *Càrcare* type the same treatment already proposed for *Bedizzano* or *Colonnata*. Specifically, the lower negative clitic appearing after the P object clitic can be lexicalized within the I domain, as in (16) below, while the object P clitic itself and the copy of the negation preceding the P clitic are found in the C domain. As we have seen, an interesting property of *Càrcare* is that the negative clitic can in fact be trebled, with its highest copy appearing in front of the subject clitic. Since the doubling of the negation on either side of the subject clitic is sensitive to a person split, as in

*Viano* (discussed in section 4.1), it is natural to extend to the cases at hand the analysis proposed in section 4.1. The problem is that in *Viano* the discourse-anchored subject clitic was in the I domain, so the copy of the negation that preceded it could be in the C domain. But since, for the reasons just reviewed, the discourse-anchored subject clitic is in the C domain in (16), the highest copy of the negation must be lexicalized in a still higher domain. More specifically, we can assign it to the domain immediately above C in a split-C analysis of the type proposed by Rizzi (1997); this is $C_I$ in (16) below.

(16) *Càrcare*




It seems to us that there is no way of accounting for the data (or for their variation) in terms of a base-generated head-Spec configuration to which movement subsequently applies. Apart from general concerns regarding the status of the head-Spec configuration (Starke 2004; Chomsky 2008), important counterevidence is represented by the possibility of having more than one negative clitic, hence more than one potential head of the construction. It is true that doubling could be analysed as the result of multiple spell-out of the copies that a single clitic head leaves behind in the course of the derivation. However, the distribution of negative clitics is constrained exclusively by the distribution of other material in the clitic string. In no case is there any evidence that the surface distribution depends on the presumed base-generated head-Spec configuration. The latter therefore represents an empirically unmotivated enrichment of the theory. Similarly, an explanation of doubling in terms of copying and

multiple spell-out presupposes that the placement of the clitic copies can be determined on the basis of general constraints on movement, and their morpholexical properties on the basis of PF rules. It seems to us that the burden of proof falls squarely on the proponents of such a theory – on both counts.

### *4.2.1 Non-negative* n

A potential problem for the analysis of negative clitic doubling comes from the fact that in varieties of Liguria and Piedmont, P clitics can be followed by *n* morphology even in positive contexts. As it turns out, there are indications that in these contexts as well, the distribution of *n* is syntactically determined. Thus, in *Dego* in (17), the 1st person singular alternates between *m* if an accusative clitic is present and *m-ɛŋ* in accusative-less contexts. The alternation cannot be phonologically governed, since both the verb in (17a) and the accusative in (17b) are monosyllabic forms with an initial consonant. A similar contrast is noted by Parry (1997) for Rocca d'Arazzo.

(17) *Dego* (Liguria)
a. t m-ɛŋ tʃɒmi
you me call
'You call me'
b. u m li/ ɾa/ i dɒ
he me it-m./it-f./them gives
'He gives it/them to me'

Furthermore, the *n* morphology that is in complementary distribution with the accusative in (17) appears after the P clitic in negative contexts, irrespective of the presence or absence of an accusative. Thus, in negative contexts, *m* followed by *ɛŋ* combines with the accusative as well as with the partitive, as in (18). If we take *ɛŋ* in these contexts to instantiate the negation, then this reproduces the distribution studied for the varieties of section 4.2 (without doubling), for instance *Bedizzano*.

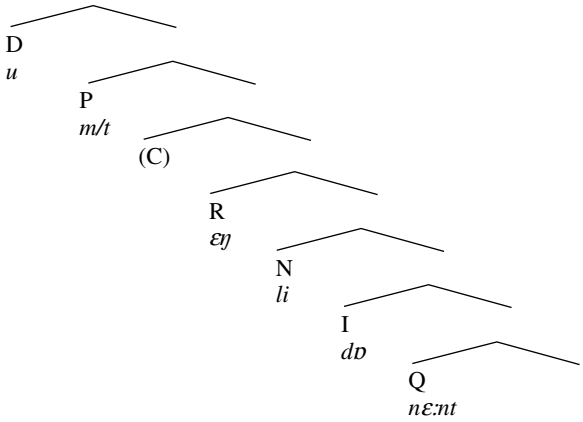
(18) *Dego*
a. u m/t ɛŋ li dɒ nɛːnt
he me/you not it gives nothing
'He doesn't give it to me/you'
b. u m ɛŋ naŋ dɒ niˈʃyŋ
ClS me not of.it gives nobody
'Nobody gives any of it to me'

Following the conclusions of the preceding section, we assume that the negative (polarity) *ɛŋ*clitic in *Dego* is inserted in the R position of the pronominal clitic string, as shown in (19a), where it yields no mutual exclusion effects. On

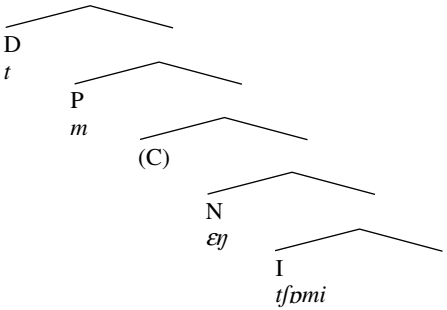
the other hand, the mutual exclusion between the *ɛŋ* segment and the accusative in the positive contexts in (17) can be accounted for by assigning it to the lowest position in the clitic string, otherwise occupied by the elements with which *ɛŋ* is in complementary distribution, i.e. the accusative and partitive. In our notation this position is N, as in (19b).

(19) *Dego*

a.




b.




If the occurrences of the *ɛŋ* morphology in the two contexts in (19) involve two different lexical entries, then not only their homophony but also their similar interaction with P clitics remain purely coincidental. Thus, negative *ɛŋ* yields person split structures like (19a), where P clitics are inserted in the C domain and N clitics in the I domain. In the same way, positive *ɛŋ* appears to be selected by P clitics. Assuming, then, that there is a single lexical entry for *ɛŋ*, its differing distribution and interpretation in negative and positive contexts need to be accounted for.

Before considering this question, we introduce evidence from the variety of *Oviglio*, in which the complementary distribution between *n* morphology and the accusative is observed in negative contexts. In *Oviglio*, what appears to be the higher copy of the negative clitic follows an already familiar pattern, appearing after subject clitics, except for the 2nd person one, which it precedes, as in (20). In turn, what appears to be a lower copy of the negative clitic, *nuŋ*, is inserted after P clitics. However, this differs from the negative clitics considered in section 4.2 in that it is in complementary distribution with the accusative and partitive, as in (21). What is more, the data from, say, *Bedizzano* show that it is the lower negative clitic (the one inside the object string) that is obligatory in the absence of doubling. By contrast, in the *Oviglio* variety it is the higher *n* clitic that is obligatory in non-doubling examples. In all cases the negative clitic or clitic pair is obligatorily doubled by the sentential negation adverb *næint(a)* 'nothing'.

(20) *Oviglio* (Piedmont)

| | | | | |
|---|---|---|---|---|
| a | n | | drɔm | næinta |
| a | n | t | drɔmi | næinta |
| u | n | | drɔm | næinta |
| a | n | | drumuma | næinta |
| i | n | | drɔmi | næinta |
| i | n | | drɔmu | næinta |
| ClS | not | ClS | sleep | not |

'I don't sleep' etc.

(21) *Oviglio*

i. a. a n t nuŋ tʃam næinta
I not you not call nothing
'I don't call you'

b. a n t ɛl dag næint
I not you it give nothing
'I don't give it to you'

ii. a. a n t um nuŋ tʃami næinta
ClS not you me not call nothing
'You don't call me'

b. a n t um ɛl dai næint
ClS not you me it give nothing
'You don't give it to me'

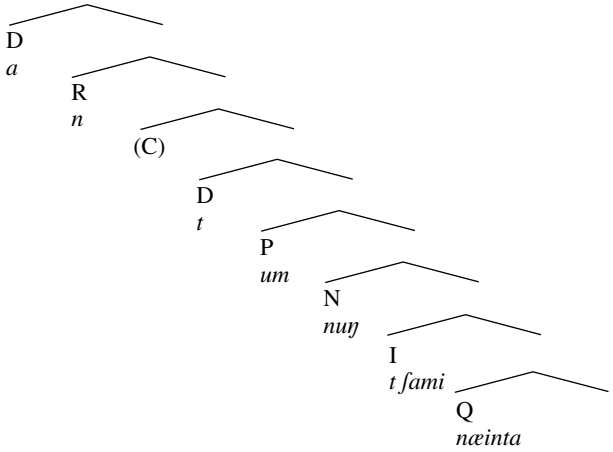
iii a. u n t nuŋ tʃama næinta
he not you not calls nothing
'He doesn't call you'

b. u n ɛl tʃama næinta
he not him calls nothing
'He doesn't call him'

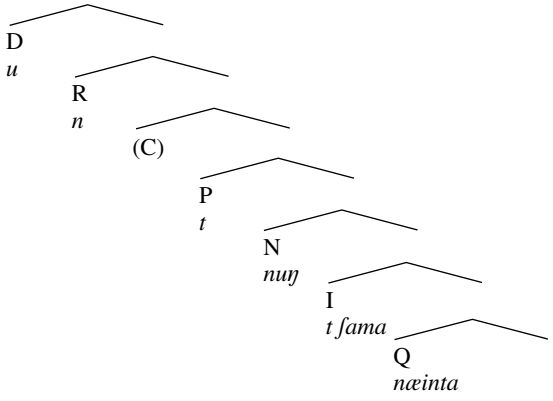
The distribution of the *n* clitic is sensitive to the familiar person split, whereby it appears before P subject clitics but after 3rd person ones. Under the analysis of section 4.1, the position following 3rd person clitics reflects the lexicalization of the negation clitic within the I domain, as in (22b). The position before the P subject clitic reflects the lexicalization of the negation in the C domain, as in (22a). In both cases the complementary distribution between *nuŋ* and accusative clitics can be accounted for if *nuŋ* is inserted in the N position.

(22) *Oviglio*

a.




b.




A further twist on this pattern is that the *nuŋ* negative form has the same form as the partitive, as seen for instance in (23a). To be more precise, partitive *nuŋ*

has an *n* alternant appearing in front of (auxiliary) verbs beginning with a vowel, as in (23a'). Similarly but not identically, while *nuŋ* lexicalizes the lower negation in (23b–c) before a verb beginning with a consonant, it does not surface in front of (auxiliary) verbs beginning with a vowel, as in (23b'–c'). Incidentally, (23c) establishes that the middle-passive clitic *si*, despite its association with the 3rd person, behaves like a discourse-anchored clitic, followed by *nuŋ*. In other words, it is not a pure person split that is relevant, but a more abstract split, such as the one encoded here through the notions of discourse and event anchoring.

(23) *Oviglio*

a. u nuŋ da doi a pr eŋ
he of.them gives two to each
'He gives two of them to each one'

a'. a n o daht∫ du a pr eŋ
I of.them have given two to each
'I have given two of them to each one'

b. a m nuŋ ɕoŋ næint laˈva
I myself not am nothing washed
'I haven't washed myself'

b'. a n t o næint t∫aˈma
I not you have nothing called
'I haven't called you'

c. u ɕ nuŋ drɔm næinta
it M not sleeps nothing
'One doesn't sleep'

c'. u ŋ ɕ ɛ næint laˈva
he not M is nothing washed
'He hasn't washed himself'

There are several reasons not to treat the formal identity of the negation and the partitive as a pure case of homophony. One of them is the complementary distribution between the negation and the partitive (more generally the N argument, including the accusative). Another reason is the otherwise unexpected restriction to contexts before verbs beginning with a consonant. Suppose then that we provide a unified lexical entry for *nuŋ*. All of the evidence we have presented suggests that we should characterize it as the partitive. This characterization is supported by the fact that – in contrast to the varieties of sections 4.1 – it is the higher copy of the negation that is obligatory in the absence of doubling; thus, *nuŋ* is not necessary for the negative interpretation of the sentences in which it occurs.

If *nuŋ* is the partitive, its distribution in negative contexts can be accounted for by assuming that it must be lexicalized in the scope of the negation, if the internal argument is a discourse-anchored element. Indeed, in chapter 3 we

observed that the negative adverb *mia* of *Quarna* selects for N objects – lexicalized as partitives when they are clitics. Similarly, in *Oviglio* the negation requires the object to be an N – inserted in the form of the partitive *nuŋ* when otherwise only discourse-anchored elements are present. In non-negative contexts, *nuŋ* is inserted under the ordinary circumstances that require a partitive form.

On the basis of *Oviglio*, we can also return to the slightly more complex case of *ɛŋ* in *Dego*. In negative contexts, *ɛŋ* has the same form as the negative polarity clitic. Now, as discussed in more detail in section 4.3, a negative polarity item is essentially an indefinite, i.e. a free variable, which gets existentially closed, and assumes its negative value by being interpreted in the scope of a negation (or other modal) operator. Suppose *ɛŋ* is such an element. By definition, in positive contexts the negative operator is not present, and *ɛŋ* in *Dego* is read existentially. Following the discussion of *Oviglio*, we further assume that in positive contexts *Dego* must lexicalize *ɛŋ* in N when the internal argument is discourse-anchored, simply because the lexicalization of the internal argument in this language requires N material – essentially as it does in *Oviglio* in negative contexts. Structurally, the negative reading of *ɛŋ* appears to correlate with the R position and the positive reading with the N position. Evidently the negative reading requires *ɛŋ* to be in a quantificational/left edge position, while N receives the ordinary internal argument interpretation.

The various dimensions of language variation implicit in the accounts for *Dego* or *Oviglio* can also be shown to be realized independently of one another, which is an important argument in favour of the present analysis. Thus, P clitics ending in *n* morphology in non-negative contexts are found in varieties which, at least descriptively, do not have any negative clitics, as in *S. Bartolomeo* in (24). The distribution of *n* is syntactically determined by the presence vs. absence of an accusative, as shown in (24a) vs. (24b). The sentential negation, involving only a negative adverb, is exemplified in (24c).

(24) *S. Bartolomeo Pesio* (Piedmont)

a. u m-ɛŋ dɒ su'si
he me gives this
'He gives me this'

b. u m lu dɒ
he me it gives
'He gives it to me'

c. i lu tʃam ɲeŋ
I him call nothing
'I don't call him'

The way we accounted for the complementary distribution of the *ɛŋ* morphology with accusatives in a variety like *Dego* was to say that *ɛŋ* is inserted in N in sentences where the internal argument is otherwise lexicalized by a P element. Data like those of *S. Bartolomeo* indicate that this type of distribution is independent of *ɛŋ* expressing the negation. In other words, though the two interpretations can coexist in the same lexical item, as in *Dego*, one is independent of the other. Not only are there very many languages in which only the negative interpretation is attested, but there are also varieties like *S. Bartolomeo* in which only the non-negative one arises.[6]

Similarly, the formal identity of what are descriptively the partitive and the negation is not an isolated phenomenon. Thus, in *Càrcare* the partitive, illustrated in (15iiic), has the same form as the lexicalization of the negation in modal contexts, such as the negative imperative (morphosyntactically an infinitive) in (25). On the basis of the proposals advanced so far, it is natural to assume that the same lexical element, associated with the internal argument, is involved both in (25) and in the partitive. We may further speculate that when it is lexicalized in the I domain, as in (15iiic), its interpretation is partitive. In modal contexts, on the other hand, it must be lexicalized in one of the domains of the articulated C field, since it precedes the verb, which itself is in C or higher. In this position it will be read as a polarity specification, as in (25).

(25) *Càrcare*
nuŋ ʃtɔ-lɛ a tʃaˈmɛ
not stay him to call
'Don't call him'

In short, the presence of elements identical to what we have characterized as copies of the negation in positive contexts might at first suggest that they correspond to uninterpretable material, whose relevance is purely prosodic or computational. In reality, the data reviewed in this section, far from supporting this conclusion, provide evidence in favour of the idea that the negation is nominal (and argumental) in nature. Thus we account for the fact that what appears to be a lower copy of the negation clitic can have the same form as the partitive (*Oviglio*, *Càrcare*) or can lexicalize the same N slot as it does (*Dego*, *S. Bartolomeo*). If instead the negation copies corresponded to the multiple spell-out of the head of a specialized Neg category, their presence in non-negative environments, and more to the point, their formal identity (lexical or distributional) with the partitive could not be accommodated. Similarly, a prosodic analysis of doubling could not account for the cases in which the so-called negation copy has the same form as a clearly contentful element, such

as the partitive. In either case, all of the lexical coincidences examined in this section would have to be treated as cases of homophony, obscuring the patterns that connect them.

### 4.3 Negative concord and negative doubling

Our analyses so far motivate the conclusion that a negative clitic is a nominal element, specifically a negative polarity item; hence it introduces not the negative operator, but simply a variable read within the scope of the negative (or other modal) operator. On this point we differ from much of the literature (Rizzi 1982; Longobardi 1992 on Italian), which takes the clitic to instantiate the negative operator. If the negative clitic is a negative polarity item, it is evident that it must itself be read in the scope of a sentential negation operator. The latter is therefore not introduced by any morpholexical constituent, but rather is semantically implied by the presence of the negative polarity clitic (or other negative polarity material). As mentioned in chapter 3, the most immediate argument in favour of the polarity status of *n*-words in Romance (Rizzi 1982; Longobardi 1992; Acquaviva 1994 on Italian) comes from the fact that they occur in modal (irrealis) environments without any implication of negative meaning. Strikingly, the argument holds not only for *n*-phrasal units but also for *n*-clitics whose non-negative occurrences have been studied in the literature as instances of 'spurious' or 'expletive' negation (e.g. Belletti 2000).[7]

Let us now return to simple examples of the type in (2)–(3) or (7), in which the sentential negation is represented by a single negation clitic. Their LF includes a negative operator, i.e. ⌐. in whose scope the negative polarity item represented by the *n*-clitic is interpreted, as in (26). If we consider negative polarity items to be indefinites, i.e. free variables (Heim 1982), we may very well assume that the variable introduced by the so-called negative clitic is existentially closed (Acquaviva 1994) in the scope of ⌐.

(26) a. *Vagli*
[⌐ [∃x [$_D$ i/ ɛ [$_R$ nun (x) [$_I$ dɔrmɛ
b. *Sillano*
[⌐ [∃x [$_R$ no (x) [$_D$ llə [$_I$ dɔrma

Consider, then, the case routinely described in terms of the doubling of a clitic negation by an adverbial one, as illustrated here by the paradigm in (20), for instance. Since the so-called negative clitic has exactly the same status as any other polarity argument in the sentence, it is evident that each time it co-occurs with one of them, the resulting configuration is one of negative concord under which all variables are read in the scope of a single negation

operator. Under the set of assumptions introduced here, negative concord is in fact the expected state of affairs. Quite simply, the variables introduced by the clitic and by the adverb are both interpreted in the scope of the same ⌐ and existential closure operators, as in (27). Thus we predict that there is a single instance of the negation at the interpretive level.

(27) *Oviglio*
[⌐ [∃x,y [$_{D}$ a [$_{R}$ n (x) [$_{D}$ t [$_{I}$ drɔmi [$_{Q}$ næinta (y)

In turn, the doubling of a negative clitic by another is identical in all relevant respects to its doubling by an adverb. Thus, consider (1) again, with simple negation in the 3rd person (1iii) alternating with the doubling of the clitic in the 2nd person (1ii). The two relevant LFs are provided in (28). (28a) contains a single variable, very much like (26), while (28b) is comparable to (27). In all cases the presence of a single negation operator returns a single negation (negative concord) reading.

(28) *Viano*
a. [⌐ [∃x [$_{D}$ i/ la [$_{R}$ nə(x) [$_{I}$ dɔrmə
b. [⌐ [∃x,y [$_{D}$ a [$_{R}$ n (x) [$_{D}$ tə [$_{R}$ nə (y) [$_{I}$ dɔrmə

Negative concord, though necessary to the interpretation of sentences like (27) or (28b), is not sufficient to derive it. There is another crucial component that enters into the reading for sentences like (27) or (28b), as opposed to the ordinary negative concord reading, which is that the two negations (whether they are both clitics or a clitic and an adverb) are understood as 'doubling' one another. In Manzini and Savoia (2007) we deal with doubling in connection with pronominal clitics. In particular, if doubling is not a morphophonological or computational (i.e. multiple spell-out) effect, then the fact that the different instances of a doubled pronominal clitic express the same argument must depend on interpretation at the LF interface. In fact, the doubling interpretation can be formalized through the notion of chain, which in representational models, in the sense of Brody (2003), is an LF primitive, and not a product of the derivation. Thus the theta-calculus at the LF interface will force all of the different instances of a doubled pronominal clitic (or of a clitic and its doubling full noun phrase) to be in a chain relation – i.e. to fill the same argument slot. If the so-called negation is a nominal, argumental element, the same solution can be applied to the cases at hand.

Specifically, the interactions of the sentential negation adverb with the internal argument of the verb reviewed in chapter 3 (the differing lexicalization of the negation according to the person reference of the internal argument, the genitive of negation, and the ambiguity between the adverbial and

argumental readings of 'nothing') motivated the assignment of the negation to the internal argument slot. There is a distinct tradition in linguistic studies which identifies the sentential negation with a negative quantification over the Davidsonian event argument of the sentence (Acquaviva 1994). However, we do not conceive of the event argument as an ordinary argument slot in the argument structure of the predicate (Higginbotham 1985), nor do we construe the so-called negation as a visible instantiation of the event argument. Rather, we have proposed that negative adverbs can introduce a variable restricted by the elementary subevent to which the external argument applies or by its internal argument, which is construed as the internal argument of the sentence as a whole.

This line of thought is compatible with what we have said so far about the negative clitic, and is applicable to it. Pursuing this, the two negative polarity items in (27), i.e. the clitic and the adverb negation, or in (28b), i.e. the two clitic negations, introduce a variable restricted by the same argument – i.e. the elementary event of the sentence, or its internal argument. This means that the two variables *x* and *y* in (27) and (28b) are effectively identified – i.e. they enter into a chain(-like) relation.

Summing up so far, the (rough) semantics that we have postulated for the so-called sentential negation delivers negative concord as a consequence, without any need for further assumptions. In turn, the latter is a prerequisite for the chain(-like) reading which underlies phenomena usually described in terms of doubling. In the present approach there is no copying (either morpho-phonological or syntactic), but rather independent insertion of lexical items – which are then identified by the argument calculus at the LF interface. The two approaches are equivalent in the interpretive component, as far as we can tell, since the chain relation, whether derived through movement or primitive, holds at the LF interface. The reason why the present analysis is to be preferred is the one we have tried to advance throughout this chapter – in short, it remains to be shown that the complex interactions of doubling with interpretation-based notions such as that of person split etc. can be captured under alternative models. What is more, our argument is that when these interactions are dealt with at the level at which they belong, i.e. the LF interface, morpholexical-level facts can also be handled in a more revealing fashion – specifically, without recourse to systematic homonymy. It is not any one fact that is compelling in our view, but rather the accumulation of apparently unrelated facts all pointing in the same direction.

For the sake of completeness, we also consider briefly how the present approach can account not only for negative concord but also for its impossibility,

i.e. for cases where two *n*-words cannot combine under a negative concord reading. These cases are potentially problematic to the extent that, as argued in relation to (27)–(28), negative concord is the state of affairs normally predicted by the present theory. Specifically, negation clitics generally combine with other negative elements; however, negation adverbs are often in complementary distribution with negative arguments and adverbs, as has been noted in passing for *Càrcare* in (15ii). Very much the same conclusion can be drawn with respect to the 2nd person singular of *Oviglio* in (20), in which 'never' is in complementary distribution with the 'nothing'-type sentential negation adverb present in all other persons.

The first relevant observation is that this pattern is by no means necessary. For ease of exemplification, we stick to the 'nothing'-type sentential negation and the combination of this negation with argumental 'nothing' and 'nobody'. In (29) we report data from the *Mezzenile* variety, in which the 'nothing'-type negation can always combine with a negative argument, whether this is 'nothing' and adjacent to the 'nothing'-negation, as in (29a), or 'nobody' and not adjacent to the 'nothing'-negation, as in (29b).

(29) *Mezzenile* (Piedmont)
a. u fɑi (ɲint) ˈɲɛnte
he does not nothing
'He doesn't do anything'
b. u j ɔnt ɲint tʃaˈma ɲyŋ
they Loc have not called nobody
'The haven't called anybody'

In other varieties, more restrictive patterns are observed. Thus, there are languages in which the combination of the 'nothing'-type negation with the negative argument 'nobody' is possible, as in (30a), though the combination with 'nothing', as in (30b), is not attested. This in turn holds when the two elements are, or would be, adjacent. Once adjacency is removed, all combinations are possible, as in (30a'–b').

(30) *Fontane* (Piedmont)
a. u i vɛŋ ɲent ɲyŋə
it Loc comes not nobody
'There doesn't come anybody'
b. e mɔŋdʒu ɲent
they eat nothing
'They eat nothing'
a'. u j a ɲent vəŋˈgy ɲyŋə
it Loc has not come nobody
'There hasn't come anybody'

b'. j aŋ ɲent maŋˈdʒa ɲent
they have not eaten nothing
'They haven't eaten anything'

Other data point to a contrast based purely on adjacency. Thus, in several varieties the sentential negation adverb is in complementary distribution with a negative argument in simple tenses, but not in perfect tenses. Incidentally, because this pattern is relatively frequent we can document it easily both in languages which have only a sentential negation adverb, like *S. Bartolomeo*, and in languages, like *Dego*, which have a negation clitic as well. The relevant contrast in *S. Bartolomeo* is between (31a–b) and (31a'–b'), and in *Dego* between (32a) and (32b). (32a') from *Dego* provides a concrete illustration of the pattern not found in these languages.[8]

(31) *S. Bartolomeo Pesio*
a. i tʃɒ:m ɲyŋ
I call nobody
'I don't call anybody'
b. i mɔɲdʒ ɲente
I eat nothing
'I don't eat anything'
a'. i ø ɲeŋ tʃaˈmɒ ɲyŋə
I have not called nobody
'I haven't called anybody'
b'. i ø ɲeŋ maɲˈdʒɒ ɲente
I have not eaten nothing
'I haven't eaten anything'

(32) *Dego*
a. i ɲ maɲdʒu ɲɛnte
they not eat nothing
'They eat nothing'
a'. *i ɲ maɲdʒu nɛnt ɲɛnte
they not eat not nothing
'They eat nothing'
b. i n aɲ nɛnt maɲˈdʒɔ ɲɛnte
they not have not eaten nothing
'They have eaten nothing'

Let us consider, then, how the present theory can account for *Dego* (32a'). Recall that the doubling of a negative clitic by another negative clitic or adverb has been treated as akin to the doubling of a pronominal clitic by another clitic or a noun phrase. If so, the mutual exclusion of the sentential negation adverb and the negative polarity argument in *Dego* (32a') is comparable to a mutual

exclusion between pronominal clitics – perhaps most famously the dative–accusative mutual exclusion that gives rise to the Spurious *se* phenomenon in Spanish. Therefore, we propose to account for *Dego* (32a') and the like along the lines suggested by Manzini and Savoia (2007) for mutual exclusions between clitics. In particular, we propose that inserting a negative polarity argument associated with the internal argument, such as *ɲɛnte* in *Dego* (32a'), is sufficient to satisfy all of the properties that would otherwise be lexicalized by the sentential negation adverb, effectively excluding its insertion. This proposal is given theoretical content by our conclusion in chapter 3 that a sentential negation introduces a variable restricted either by the internal argument of the sentence or by the elementary event that includes it. From this perspective, the negative polarity argument, i.e. *ɲɛnte*, subsumes the contribution of the negation adverb to the interpretation of the sentence because it already introduces a variable corresponding the internal argument of the sentence.

As we noted, in languages like (31) and (32), the mutual exclusion holds only when the negation and the negative argument are within the same predicative/eventive domain, for it is perfectly possible to have the same properties lexicalized twice in two different domains, e.g. by the clitic negation in the inflectional domain and by the negative polarity argument in the predicative domain in *Dego* (32a). Similarly, according to the conclusions of chapter 3, a negative adverb preceding the participle is inserted in a high C-type domain within the participial sentence, and is thus predicted to combine with a post-participial negative argument inserted in the predicative/eventive domain, as in *Dego* (32b). We also expect that the absence of mutual exclusion between elements in different domains of the sentences (as opposed to those in the same domain) has a counterpart with pronominal clitics. In fact, mutual exclusion between subject and object clitics is obviated in interrogatives, where the subject clitic remains in the postverbal (enclitic) domain while object clitics are found in the preverbal domain (as proclitics).

We further expect that, along with languages of the type in (31), there might be languages like (29) that have no mutual exclusion – pretty much because mutual exclusion between clitics is a strictly language-specific phenomenon. More to the point, we predict that, given the account we have provided for it, mutual exclusion between sentential negations and negative arguments is constrained by lexical properties. Thus, it is expected that there should be languages like *Fontane* in (30) in which the mutual exclusion is only between the sentential negation adverb and the 'nothing' argument, while the 'nobody' argument (endowed with a human restriction) does not necessarily subsume the adverb.

Delving further into the patterns of mutual exclusion is beyond the scope of this chapter, since it would require us to introduce a considerable amount of additional data. Before concluding, however, it is worth noting that if the distribution of sentential negation adverbs with respect to negative polarity arguments is sensitive to their domains of insertion, as in (31) and (32), we expect a similar effect to be observable with negative clitics. Indeed, complementary distribution with negative arguments is found in many Italian varieties, including the standard language, in the configuration in which a negative argument would precede the clitic, as in the case of a preverbal subject in (33a). This phenomenon is again parametrized; thus, the co-occurrence of the negation clitic with a negative polarity preverbal subject is attested in Old Italian texts, as noted by Meyer-Lübke (1899: §695), who quotes the example in (33b). In (33a) we can apply essentially the same analysis proposed for *Dego* (32a'). We assume that the position of the preverbal subject in null subject and clitic subject languages is in the C field (cf. here chapter 1). Inserting the negative polarity subject in the C domain or higher subsumes all modal properties otherwise lexicalized by the negation clitic. Therefore the clitic need not, and must not, be inserted.[9]

(33) a. Nessuno (*non) dorme
nobody not sleeps
'Nobody sleeps'

b. gente neuna non v' arrivava (*Novellino* 55)
people none not there arrived
'Nobody arrived there'

It is evident that the line of reasoning deployed so far can in principle be extended to mutual incompatibilities between any two negative polarity items, including two arguments, two adverbs or an argument and an adverb. Thus, we can say that the lexicalization of one subsumes (relevant properties of) the lexicalization of the other (within a given domain) and hence excludes it (i.e. a re-lexicalization of its relevant properties). In any event, the general interpretive mechanism of negative concord laid out in (26)–(28) remains in place.

# 5 *The middle-passive voice: evidence from Albanian*

Fifty years ago, Chomsky (1957: §5.4) argued that passive sentences should be excluded from phrase structure grammar and introduced instead by a transformational rule applying to active sentences. This was because introducing passives through rewriting rules would mean doubling the selectional restrictions independently imposed on actives, while a transformational rule would allow them to be stated only once. Chomsky (1965: 103–4) provides what has remained the standard conceptualization of this transformational process by proposing that

> the Manner Adverbial should have as one of its realizations a 'dummy element' signifying that the passive transformation must obligatorily apply. That is, we … may formulate the passive transformation … with an elementary transformation that substitutes the first NP for the dummy element *passive* and places the second NP in the position of the first NP.

In current practice, the *by*-phrase is independently generated by Merge; but the analysis whereby passive is defined by 'substitution' of an internal argument for the EPP position (second or internal Merge) remains at the core of generative transformational grammar.

In this chapter we propose to evaluate this analysis in the light of data from Albanian, which provides two separate and complementary phenomena of interest. On the one hand, the passive (i.e. promotion of the internal argument to the EPP position with the external argument independently interpreted) has the same lexicalization as the reflexive, the anticausative and the impersonal. The question then is whether all of these different interpretations are associated with the same underlying syntax. On the other hand, there is no single lexicalization of this cluster of meanings; rather, it varies according to tense and aspect specifications. Thus, in standard Albanian the middle-passive voice is lexicalized by a specialized (agreement) inflection in the present or imperfective past, by the clitic *u* combined with the active forms of the verb in the perfective past, and by the periphrasis *be*–participle in the present perfect and in the pluperfect. The question in this respect is whether (in the passive and in

the other interpretations) there is a single underlying syntax corresponding to all of these different morpholexical formats.

The discussion in this chapter also provides a background for the discussion of the functional category 'auxiliary' in chapter 6, since the notion of voice (together with notions of transitivity and person split) crucially enters into the determination of auxiliary selection patterns. Correspondingly, after introducing the Albanian data in section 5.1, we devote section 5.2 to the clitic lexicalization of middle-passive voice and section 5.3 to the inflectional lexicalization; however, we leave the auxiliary–participle construction till chapter 6. In section 5.3.1 we briefly examine the possibility, also attested in Albanian, of lexicalizing the passive interpretation (in all tenses) with a *be*–adjectival participle construction.

## 5.1 Data

### *5.1.1 Middle-passive morphologies*

In the present indicative, Albanian has a specialized inflection for the non-active voice, as exemplified in (1) for *Gjirokastër* (a Tosk variety, essentially like the standard) and for *Shkodër* (a Gheg variety). In (1a) we illustrate verbal bases ending in a vowel, while in (1b) we exemplify verbal bases ending in a consonant; the comparison with the active is provided in (1a') and (1b') respectively. The most complex instantiation of the middle-passive morphology can be seen in the vocalic bases of *Shkodër*, which are followed by the *hɛ* affix, which is in turn followed by inflections for person. In the consonantal bases, as well as in a possible pronunciation of the vocalic bases in *Gjirokastër*, the affix preceding the person inflections is simply *ɛ* (Trommer 2005). The comparison with the active present allows us to establish that the person inflections are themselves specialized for the middle-passive voice – very clearly so in the singular, where the active and middle-passive forms bear no relation to one another.

(1) *Gjirokastër*

a. la- (h)ɛ- m/ ʃ/ t/ mi/ ni/ n
wash- MP- 1sg etc.
'I washed myself' etc.

a'. la- i/ n/ n/ imə/ ni/ inə
wash- 1sg etc.
'I wash (something)' etc.

b. viʃ- ɛ- m/ ʃ/ t/ mi/ ni/ nə
dress- MP- 1sg etc.
'I dress (myself)' etc.

b'. vɛʃ
vɛʃ
vɛʃ
vɛʃ- im
vɛʃ- ni
vɛʃ- in
dress- 1sg etc.
'I dress (somebody)' etc.

*Shkodër*

a. lɒ- hɛ- m/ ʃ/ t/ na/ ni/ n
wash- MP- 1sg etc.
'I wash myself' etc.

a'. lɒ- i/ n/ n/ im/ ni/ in
wash- 1sg etc.
'I wash (something)' etc.

b. veʃ- ɛ- m/ ʃ/ t/ na/ ni/ n
dress- MP- 1sg etc.
'I dress (myself)' etc.

b'. veʃ- i
ve:ʃ
ve:ʃ
veʃ- im
veʃ- ni
veʃ- in
dress- 1sg etc.
'I dress (somebody)' etc.

In the simple past, Albanian resorts to a different morphosyntax for the formation of the middle-passive voice, preposing the clitic *u* to the verb, as illustrated in (2). The clitic can be taken to correspond roughly to Romance *se*; it is associated with all the different forms of the paradigm, as is also the case in some Romance varieties (in particular Romansh ones) for *se*. As for the morphology of the verb, no specialized middle-passive affix is present; furthermore, the person inflections are identical to those of the active, except for the 3rd person singular, whose active form is provided in (2a') and (2b'). Even there, the middle-passive voice is characterized simply by the omission of the inflection present in the active paradigm, not by a different inflection. We interpret affixes like *–it* in the vocalic paradigm of *Gjirokastër* or *–v* in the vocalic paradigm of *Shkodër* as connected to the expression of the perfective past.

(2) *Gjirokastër*

a. u la- it- a/ ɛ/ -/ əm/ ət/ ən
MP wash- past- 1sg etc.
'I washed myself' etc.

a'. ɛ la- it- i
it wash- past- 3sg
'He washed it'
b. u vɛʃ- a/ ɛ/ -/ əmə/ ət/ ənə
MP dress- 1sg etc.
'I dressed (myself)' etc.
b'. ɛ vɛʃ- i
him dress- 3sg
'He dressed him'

*Shkodër*

a. u lɒ- v- a
u lɒ- v- ɛ
u lɒ:
u lɒ- mɛ
u lɒ:- t
u lɒ- nɛ
MP wash- past- 1sg etc.
'I washed myself' etc.
a'. ɛ la- u
it wash- 3sg
'He washed it'
b. u veʃ- a
u veʃ- ɛ
u vɛʃ
u veʃ- mɛ
u veʃ- t
u veʃ- nɛ
MP dress- 1sg etc.
'I dressed (myself)' etc.
b'. ɛ veʃ- i
it dress- 3sg
'He dressed him'

The perfective past in (2) differs from the present in (1) both in temporal properties and in aspectual ones, under the natural assumption that the present is essentially an imperfective form. Therefore the lexicalization of the middle-passive voice could in principle be sensitive to tense or to aspect. In Tosk varieties, the imperfective past follows the pattern of the present, with specialized middle-passive morphology, as in (3); thus, the split between present and imperfective past on the one hand and perfective past on the other appears to be based on aspect. The morphological analysis of the verb shows that, as in the present, the middle-passive voice is carried by the affix *–ɛ*, which is followed by a *–ʃ* morpheme carrying the past specification; the latter is specialized for the middle-passive, as can be seen by comparing it with the active.

(3) *Gjirokastër*

a. la- (h)ɛ- ʃ- a/ ɛ/ -/ im/ it/ in
wash- MP- past- 1sg etc.
'I washed myself' etc.

a'. ɛ la- j- a
j ɛ
n- tɛ
n- im
n- it
n- in
it wash- past- 1sg etc
'I washed it' etc.

b. viʃ- ɛ- ʃ- a/ ɛ/ -/ im/ it/ in
dress- MP- past- 1sg etc.
'I dressed (myself)' etc.

b'. viʃ- j- a
j- ɛ
tɛ
n- im
n- it
n- in
dress- past- 1sg etc.
'I dressed (somebody)' etc.

On the other hand, in Gheg varieties, the specialized morphology and clitic realizations of the middle-passive voice split according to tense; thus, while the present has specialized middle-passive morphology, not only the perfective past but also the imperfective past in (4) have the *u* clitic. The data in (4) show that substituting an *ɛ* accusative clitic for the *u* middle-passive voice clitic yields the active reading with no change in verb morphology. In other words, what the *u* clitic combines with is the ordinary active morphology of the verb.

(4) *Shkodër*

a. u /ɛ lɒ- ʃ- a
ʃ- ɛ
tɛ
ʃ- im
ʃ- it
ʃ- in
MP /it wash- past. impf- 1sg etc.
'I.washed myself/ it' etc.

b. u/ ɛ veʃ- ʃ- a
ʃ- ɛ
tɛ
ʃ- im

| | | | | | |
|---|---|---|---|---|---|
| | | ʃ- | it | | |
| | | ʃ- | in | | |
| MP | /him | dress- | past.impf- | 1sg | etc. |
| 'I dressed (myself)/ it' | | etc. | | | |

The middle-passive conjugation in Albanian also includes forms consisting of an auxiliary followed by the participle, as illustrated in (5) for the present perfect. In particular, the auxiliary *jam* 'I am' followed by the participle is sufficient to yield the middle-passive voice. The data for comparison in (5a') and (5b') show that the active is formed with the same participle but with the *kam* 'I have' auxiliary. Thus, in this case it is the switch from *kam* 'I have' to *jam* 'I am' that yields the switch from active to middle-passive voice. Similarly, the pluperfect is formed with the imperfective past of the two auxiliaries followed by the participle. As for the morphology of the participle, Tosk varieties (including the standard) have a participial ending *–r*, which is not present in Gheg varieties; it is worth noting that the vocalic bases in the *Gjirokastër* examples in (5a–a') also include the perfective *–it* morphology.

(5) *Gjirokastër*

| | | | | | |
|---|---|---|---|---|---|
| a. | əʃt | la- | it- | ur | |
| | he.is | wash- | prf- | prt | |
| | 'He has washed himself' | | | | |
| a'. | ɛ | ka | la- | it- | ur |
| | it | he.has | wash- | prf- | prt |
| | 'He has washed it' | | | | |
| b. | əʃt | vɛʃ- | ur | | |
| | he.is | dress- | prt | | |
| | 'He has dressed (himself)' | | | | |
| b'. | ɛ | ka | vɛʃ- | ur | |
| | him | he.has | dress- | prt | |
| | 'He has washed him' | | | | |

*Shkodër*

| | | | | |
|---|---|---|---|---|
| a. | ɐʃt | lɒ:/ | ve:ʃ | |
| | he.is | washed/ | dressed | |
| | 'He has washed/dressed (himself)' | | | |
| b. | ɛ | kɒ | lɒ:/ | ve:ʃ |
| | him | he.has | washed/ | dressed |
| | 'He has washed/ dressed him' | | | |

### *5.1.2 The interpretation of the middle-passive morphologies*

In the preceding discussion, we have illustrated the three basic morphologies for middle-passive voice in Albanian. In each case we have chosen to illustrate the middle-passive voice with verbs which make the reflexive interpretation

particularly salient, and we have glossed our examples accordingly. In reality, each of the forms that we have exemplified is multiply ambiguous, allowing for a range of meanings that is independently attested, for instance, for the Romance counterpart of the *u* clitic, e.g. Italian *si*. In what follows, we review the various meanings, showing that they are associated with all morphological instantiations of the middle-passive voice.

The reflexive reading prominent with a verb like 'to wash', for instance, implies a single participant in the event, which is both its theme (patient, etc.) and its causer (agent, etc.). This can easily be distinguished from another reading which equally involves a single participant in the event – which we shall refer to as anticausative. This is the reading where the single participant is the theme (patient, etc.) and no external agency (cause, etc.) is expressed or implied in the event. This is evidently a salient meaning for the middle-passive predicate in (6), which we correspondingly glossed as 'to wake up'. Of course, although 'to wake oneself up' is also a possible predicate, the reading is less salient for pragmatic reasons. What is important to note is that the anticausative reading, like the reflexive reading in the previous section, is associated with all lexicalizations of the middle-passive voice, namely the specialized inflection in the present (6a), the clitic in the perfective past (6c) and the *jam*–(perfect) participle formation in the present perfect (6d); the imperfective past (6b) has the specialized inflection or the clitic, depending on the variety.

(6) *Gjirokastër*

a. zɟu- (h)ɛ- t
wake- MP- 3sg
'He wakes up'

b. zɟu- (h)ɛ- ʃ
wake- MP- past
'He woke up'

c. u zɟɔ- it
MP wake- prf
'He woke up'

d. əʃt zɟu- aɾ
he.is wake- prt
'He has woken up'

*Shkodër*

a. tʃo- hɛ- t
wake MP- 3sg
'He wakes up'

b. u tʃo- tɛ
MP wake- 3sg
'He woke up'

c. u tʃu:
MP woke
'He woke up'
d. ɐʃt tʃu:
he.is woken
'He has woken up'

The reading of the middle-passive voice that implies two participants in an event, including the theme (patient, etc.) and an external argument (agent, cause, etc.), is what is known as the passive. Again, the passive meaning is available independently of the particular morphology instantiating the middle-passive voice, as illustrated in (7). In these examples, it is really the *by*-phrase that distinguishes the passive from the other possible readings. Of course, the passive reading implies an agent, a so-called implicit argument, even when no *by*-phrase is lexicalized. Here we exemplify the present (7a), the perfective past (7c) and the present perfect (7d); the imperfective past reflects the morphology of the present (Tosk) or of the perfective past (Gheg).

(7) *Gjirokastër*
a. kətɔ kəmiʃə la- (h)ɛ- n ŋga ajɔ
these shirts wash- MP- 3pl by him
'These shirts are washed by him'
c. ata u zɟɔ- it- ən ŋga tə tiɛrət
they MP wake- prf- 3pl by the others
'They were woken by some people'
d. kətɔ kəmiʃə jan la- it- uɾ ŋga ajɔ
these shirts are wash- prf- prt by him
'These shirts have been washed by him'
*Shkodër*
a. fmia veʃ- ɛ- t pɾei nɑns
the.child dress- MP- 3sg by the mother
'The child is dressed by his mother'
a'. atɔ tʃɔ- hɛ- n ŋɒ tiɛrt
they wake- MP- 3pl by the others
'They are woken up by some people'
d. jan tʃu ŋɒ tiɛrt
they.are woken by the others
'They have been woken up by some people'
d'. ɐʃt lɑ: pɾei nɐns
he.is washed by the mother
'He has been washed by his mother'

It comes as no surprise that middle-passive voice morphology can attach to unergative verbs in Albanian, since these are construed by current theories

(Hale and Keyser 1993) as concealed transitives, where the verb effectively incorporates an object (cf. also the discussion in chapter 3). Therefore we may expect that the combination of the middle-passive morphology with such a verb will yield an impersonal meaning, essentially as a by-product of passivization, as in (8). Note, however, that in an impersonal passive we would expect it to be possible to lexicalize the external argument independently with a *by*-phrase. However, this does not seem to be possible in Albanian.

(8) *Gjirokastër*

a. ati flə- (h)ɛ- t miɾ
there sleep- MP- 3sg well
'There one sleeps well'

c. ati u fiɛt miɾ
there MP slept well
'There one slept well'

*Shkodër*

a. atjɛ flɛ- (h)ɛ- t miɾ
there sleep- MP- 3sg well
'There one sleeps well'

b. atjɛ u flɛ- tɛ miɾ
there MP sleep 3sg well
'There one slept well'

c. ktu u fje:t miɾ
here MP slept-3sg well
'Here one slept well'

d. atjɛ ɐʃt fie:t miɾ (*ŋɒ ata)
there it.is slept well (by them)
'There one has slept well'

More importantly, the middle-passive voice can also attach to unaccusative predicates – i.e. intransitive predicates once again, which cannot reasonably be construed as concealed transitives. Rather, the only argument of such predicates corresponds to their theme, e.g. the element that undergoes the change of location with motion verbs such as 'to go', exemplified in (9). With these verbs, therefore, the middle-passive voice cannot be analysed as yielding a sort of passive, albeit an impersonal one. Rather, it yields an impersonal *tout court*, which must then be entered among the possible interpretations of the middle-passive voice in Albanian; this is confirmed by the impossibility of associating such structures with a *by*-phrase. Once again, there is a parallelism with Italian *si*; however, it must be emphasized that the impersonal interpretation in Albanian is not restricted to the clitic morphology, but is equally found with specialized inflection or with *jam*–participle formations.

(9) *Gjirokastër*

a. ŋga ati dil- ɛ- t
from there exit- MP- 3sg
'One exits from there'

a'. ai del
he exits
'He exits'

b. ŋga ati u dɔð
from there MP exited
'One exited from there'

b'. ai dɔð- i
he exited- 3sg
'He exited'

c. ŋga ati ɐʃt dalə miɾ
from there it.is exited well
'One has exited well from there'

c'. ka dalə
he.has gone
'He has exited'

*Shkodër*

a. pɾej ktɛj dɛl- ɛ- t
through there go.out-MP- 3sg
'One goes out that way'

a'. ai dɛl
he goes.out
'He goes out'

b. pɾej ktɛj u dɛl- tɛ
through there MP go.out- 3sg
'One went out that way'

b'. ai dɛl- tɛ
he go.out-3sg
'He went out'

c. pɾej ktɛj u do:l
through there MP went.out
'One went out that way'

c'. ai dol- i
he went.out- 3sg
'He went out'

d. pɾej ktɛj ɐʃt dɒ:l miɾ (*ŋɒ ata)
through there it.is gone.out well
'One has gone out well that way'

d'. kæ dɒ:l
he.has gone.out
'He has gone out'

### *5.1.3 The Arbëresh varieties*

The Arbëresh varieties of Albanian, spoken in Southern Italy, belong to the Tosk group, and indeed reflect the conditions of the standard (or of *Gjirokastër* here) in many respects. In particular, with vocalic bases, these varieties lexicalize the middle-passive voice with the specialized verb inflection in the present indicative and in the imperfective past, as illustrated respectively in (10a) and (10b) from *Portocannone*, in which the middle-passive morphology is *–x*; the perfective past has the clitic *u*, as in (10c). Microvariation is present at various points between the mainland varieties and Arbëresh, as well as within the Arbëresh fold. We note in particular that in *Portocannone* the perfective past, despite the presence of the *u* middle-passive clitic, maintains the middle-passive affix *–x–* of the present and imperfective past. As for the person inflections, it is not only the 3rd singular that distinguishes active and middle-passive in the perfective past, but also the 1st person singular.

(10) *Portocannone* (Molise)

a. la- xɛ- m/ ʃ/ t/ mi/ ni/ n
wash- MP- 1sg etc.
'I wash myself'

b. la- x- ʃ- a/ ɛ/ i/ əm/ ət/ ən
wash- MP- impf- 1sg/ etc.
'I washed myself'

c. u la- x- tʃ/ ɛ/ -/ əm/ ət/ ən
MP wash- MP- 1sg etc.
'I washed myself' etc.

c'. ɛ la- v- a/ ɛ/ i/ əm/ ət/ ən
it wash- past- 1sg etc.
'I washed it' etc.

A major point of variation between the middle-passive voice of Arbëresh varieties and that of mainland varieties concerns auxiliary–participle formations in the perfect. In Arbëresh varieties these involve the auxiliary *kam* 'I have', exactly as in the active, rather than *jam* 'I am'; therefore middle-passive voice is lexicalized by the *u* clitic. The *Portocannone* variety displays an interesting further parameter concerning participial morphology. In the active voice in (11b) the participle has recognizably the same form as in the *Gjirokastër* example in (5), with the verbal base *la-* followed by the perfective morphology *–it* and the participial ending *–ur*. By contrast, in the non-active voice in (11a), the participle is formed through suffixation of the middle-passive morpheme *–x*, followed by the ordinary participial ending *–ur*. Thus, in *Portocannone* and similar varieties the vocalic verb bases bear specialized

morphology throughout the paradigm, even when a *u* clitic is present, as in the pluperfect in (11), but also in the perfective past in (10c).

(11) *Portocannone*

a. atɔ kiʃən u la- x- ur
they had MP wash- MP- prt
'They had washed themselves'

b. atɔ kiʃən ɛ la- it- ur
they had it wash- prf- prt
'They had washed it'

With this morphological background, we are now in a position to consider the readings that are associated with the various forms. In the examples that we provided above, it is of course the reflexive reading that is salient. The possibility of what we have called the anticausative reading is evident in the examples in (12). In the case of auxiliary–participle formations, we provide a comparison of the middle-passive (12d) with the active (12d') – which displays the difference between the two participial morphologies. A further point of variation between *Portocannone* and other varieties (both mainland and Arbëresh) emerges in the data in (12d)–(12d'), namely that the participle can be introduced by a coordinating/subordinating particle, literally 'and'. This parameter is essentially irrelevant here (but cf. chapter 6). Another property which singles *Portocannone* out (and which is largely irrelevant for present purposes) is that the clitic is not positioned before the auxiliary, but immediately before the participle, even in the absence of the particle, as can be seen in (11).

(12) *Portocannone*

a. zɟɔ- x- ɛm
wake- MP- 1sg
'I wake up'

b. zɟɔ- x- ʃ- a
wake- MP- past- 1sg
'I woke up'

c. u zɟuɔ- tʃ
MP wake- 1sg
'I woke up'

d. ai kiʃ ɛ u tʃa- x- ur
it had and MP break- MP- prt
'It had broken'

d'. ai kiʃ ɛ ɛ tʃa- it- ur
he had and it break- prf- prt
'He had broken it'

Next, the impersonal meaning is available both with unergative predicates and with unaccusative ones, exemplified here in (13). As usual we provide the contrast between the middle-passive participle formation in (13d) and the active one in (13d').

(13) *Portocannone*

a. ktu vɛ- xɛ- t te hɔɾa
here go- MP- 3sg to the village
'This way one goes to the village'

c. ktu u va- x te hɔɾa
here MP go- MP to the village
'This way one went to the village'

d. ktu kiʃ u va- x- ur te hɔɾa
here it.had MP go- MP- prt to the village
'This way one had gone to the village'

d'. kiʃ va- t- ur
he.has go- prf- prt
'He had gone'

As we fully expect, the range of morphologies that we have considered so far can be associated with a passive reading – i.e. a reading characterized, like the transitive one, by the presence of two roles and two event participants, except that of course the theme is found in the EPP position. Relevant examples are provided in (14). It should be noted that, while in mainland Albanian *by*-phrases normally co-occur with the middle-passive morphology, as illustrated in (7), the MP-passives of Arbëresh are normally impersonal, in the sense that they only allow for an impersonal (i.e. generic) reading of the agent – that is, they do not normally combine with the *by*-phrase.

(14) *Portocannone*

a. atiɛ la- xɛ- n kəmiʃ-t
here wash- MP- 3pl shirt-the.pl
'Here shirts are washed'

c. atiɛ u la- xə- n kəmiʃ-t
here MP wash- MP- 3pl shirt-the.pl
'Here the shirts were washed'

d. atiɛ kiʃən u la- x- ur kəmiʃ-t
here had MP wash- MP- prt shirt-the.pl
'Here the shirts had been washed'

d'. kiʃən i la- it- ur
they.had them wash- prf- prt
'They had washed them'

## 5.2 The *u* clitic

We shall begin our discussion with the structures formed with *u*, which we have described throughout as comparable to Romance *si/se*. Just as the distributional properties of Italian *si* require it to be treated as a pronominal object clitic (as opposed to an affix, a subject clitic, etc.), we can argue that the same holds for Albanian *u*.

Consider, for instance, enclisis–proclisis alternations in Arbëresh varieties. These show that *u* is sensitive to exactly the same conditions as other object clitics, such as accusative *ɛ* 'him/her' or dative *i* 'to him/to her/to them', down to very fine variation. Thus, we have seen that in a variety like *Portocannone*, the auxiliary precedes both, as in (11). Another variety where the same holds is *S.Benedetto*, as in (15), which shows that there is no correlation with the possibility of the participle being introduced by *ɛ* 'and'. By contrast, in a variety like *Civita*, as in (15), the *u* clitic and the *ɛ* accusative clitic precede the auxiliary. We refer the reader to Manzini and Savoia (2007) for an analysis of the relevant parameter(s); what is relevant here is the complete parallelism between the two clitics.

(15) *S.Benedetto Ullano* (Calabria)
a. kiʃɲa ɛ paɾ
I.had him seen
'I had seen him'
b. kiʃɲa u ʎaituɾ
I.had MP washed
'I had washed myself'
*Civita* (Calabria)
a. u kiʃa zɟuaɾ
MP I.had woken
'I had woken up' etc.
b. ɛ kiʃa paːɾ
him I.had seen
'I had seen him'

Consider also the imperative 2nd person singular. As exemplified in (16) with the Arbëresh variety of *Civita*, in the positive forms pronominal clitics are found in enclisis (as a reflex of the high position of the verb); this is true both of accusatives, as in (16a), and of the *u* clitic, as in (16a'). By contrast, the presence of the negation induces proclisis (as a reflex of the verb staying in its inflectional position), and this affects the accusative and *u* clitics alike, as in (16b–b').

(16) *Civita*
a. zɟɔj ɛ
wake.up him
'Wake him up'

a'. zɟɔj u
wake.up MP
'Wake up'
b. mɔs ɛ zɟɔ
not him wake.up
'Don't wake him up'
b'. mɔs u zɟɔ
not MP wake.up
'Don't wake up'

Given this distribution, it is evident that any adequate theory of Albanian *u* must take into account the fact that it is an object clitic. Within the object clitic string itself, the *u* clitic appears to be found in a relatively low position. In particular, as shown in (17), *u* follows the 3rd person dative, as well as the 1st person clitic. Incidentally, these are examples of what we have called the anticausative interpretation; the dative adds a benefactive/malefactive specification.

(17) *Gjirokastër*
m/ i u θiɛ gɔta
to.me/to.him MP broke the.glass
'The glass broke on me/him'

*Shkodër*
m i/ u θy: gota
to.me/to.him MP broke the.glass
'The glass broke on me/him'

*Portocannone*
m/ i u tʃa- x ɲə bukjer
to.me/to.him MP break- MP a glass
'A glass broke on me/him'

The object clitic nature of *u* corresponds to a rather natural treatment of at least the reflexive interpretation. Thus, we could say that, exactly like accusative *ε*, reflexive *u* is a lexicalization of the internal argument of the verb – with the difference that while *ε* is pronominal, *u* is anaphorically dependent on the EPP argument. This is the theory proposed by Burzio (1986) for Italian reflexive *si*. However, by analysing reflexive *si* as just described, Burzio (1986) is forced to postulate the existence of at least one other homophonous *si* – i.e. an impersonal *si*, which lexicalizes the external argument of the verb as a generic. Its effect is that the EPP position is vacated and the internal argument can and must move into it, yielding the classical movement derivation for middle-passives. The problem, of course, is that if there were two different *si*'s, one would expect to be able to tell them apart through their syntactic behaviour (and not just their interpretation). In reality, Manzini and Savoia (2005, 2007) show that

Italian *si* behaves homogeneously under distributional tests, even when object and subject clitics otherwise show a split. What is more, the postulation of two *si*'s forces other principles to have a disjunctive formulation, as is notably the case for auxiliary selection. As if this were not enough, data like those from Albanian show that the cluster of meanings associated with *si* forms a natural class, showing up in many diverse languages – and with many diverse morpholexical instantiations.

The main alternative analysis available in the literature involves unifying the various *si*'s under the movement derivation classically associated with passives. Thus, let us assume that in the passive, *si* becomes associated with the external theta-role of the predicate, and this forces the internal argument to externalize, yielding the typical promotion of object to subject. Because a reflexive predicate is by definition symmetric, reflexive *si* could in principle correspond to the internal or to the external argument of the verb. Suppose that, just like passive *si*, reflexive *si* is associated with the external argument of the predicate; the derivation that ensues is then identical to that of the passive, with promotion of the object to subject position providing for a unification of the two *si*'s (Marantz 1984). Needless to say, this derivation not only unifies various interpretations of *si*, but also does so by extending the classical movement approach to all of them.

Despite what may appear to be its theoretical advantages, this analysis fails for empirical reasons. In particular, we note that authors who have espoused the unaccusative theory of middle voice have systematically considered languages like French, which does not have the impersonal (non-passive) reading of the middle voice. For a language like Italian, a theory associating *si* with movement from the object to the subject position is directly contradicted by the existence of examples like (23a) below in which *si* co-occurs with an overtly lexicalized accusative.

Another important disadvantage of this analysis is that it does not predict that the morphosyntax of *si* is consistently that of an object clitic. That this is not an idiosyncratic property of *si* can be seen precisely in the context of cross-linguistic comparison, for instance with Albanian. There is no doubt that the properties of *u* are in some respects quite different from those of Italian *si*, in that, for instance, *u* is associated with all persons as opposed to *si*, which is only associated with 3rd person (though there is great variability in Romance languages, and in Romansh the *si*-like form can be associated with all persons). Another difference is that *si* is associated with all temporal and aspectual specifications of the verb, while, as we have seen, *u* is restricted to the perfective (standard Albanian) or to the past (Gheg varieties). Precisely because of

this variation, it is all the more striking that what remains constant in the morphosyntax of *u* and *si* is that they behave like object clitics; evidently this is a central property of such forms and not merely an accidental one. But although their distribution suggests that elements like *si* or *u* are just the middle-passive counterpart of the accusative clitic, this fact cannot be captured by the treatment of middle-passive morphology in terms of movement. Note also that *si* or *u* cannot be treated as subject clitics in languages like Italian or Albanian which do not otherwise have such elements – nor can they be subject clitics in imperatives, which consistently lack such elements even in subject clitic languages.

Reinhart and Siloni (2005), basing their work on Chierchia (2004) and Reinhart (1997), introduce as many separate operations on argument structure as there are basic meanings of *si* – namely reflexive bundling, which bundles the external theta-role with some other theta-role; saturation/arbitrarization (responsible for passives/impersonals), which saturates the external theta-role through existential closure; and decausativization (responsible for anticausatives), which reduces (i.e. suppresses) an external [+cause] theta-role. The unification of these various rules by a single morphology is imputed to Case theory. The assumption is that the arity reduction operations just mentioned do not affect the Case properties of the verb, leaving an accusative (or a nominative in arbitrarization contexts) potentially unchecked; 'the clitic (or its equivalent) reduces Case' (Reinhart and Siloni 2005: 402).

As far as we can see, Chierchia (2004), and consequently also Reinhart (1997) and Reinhart and Siloni (2005), are oblivious to the existence of impersonal unaccusatives. The latter exclude the possibility that arbitrarization can simply be construed as reduction of the external theta-role, for there is no external theta-role to be reduced in unaccusatives. Furthermore, Reinhart and Siloni (2005) argue that *si* is not an 'object clitic', but their evidence really shows that *si* is not an accusative clitic (for instance not triggering *faire–à* constructions when embedded under a causative). On the contrary, Italian *si* and its Albanian *u* counterpart behave like object clitics with respect to their distribution – contrasting with subject and other clitics. In other words, any theory that does not treat *si* (or *u*) as an object clitic is forced to state all of the relevant generalizations (distributional, etc.) twice, once for object clitics and once for *si*/*u*. Here, the point is that if *si*/*u* is a bona fide object clitic, we expect it to be like any other object clitic (with which it patterns) in having not only Case properties, but also denotational and argumental ones. In this respect, Reinhart and Siloni (2005) represent a step backwards even with respect to Chierchia (1995), who identifies *si* with the variable existentially bound in passives/impersonals.

A clue that Reinhart and Siloni's (2005) theory is on the wrong track regarding the status of *si* is that it yields incorrect predictions as to the connection between *si* and auxiliary selection. In order to explain the parameter differentiating Italian, in which the middle voice is associated with *be*, and Dutch, in which it is associated with *have*, they invoke a distinction between the thematic and structural components of Case. In their account, Dutch *zich*, 'though referentially defective, occupies the complement position' where it can check structural Case, while Italian *si* cannot, leaving 'the structural accusative residue to be checked … The auxiliary "be" is used whenever there is such an accusative residue' (Reinhart and Siloni 2005: 432–3). Leaving aside any other considerations, languages like *Soazza*, reviewed in chapter 6, show that the clitic or non-clitic status of the middle morphology is completely irrelevant for the auxiliary selection parameter – thus eliminating a potential argument for treating *si* as anything but a bona fide clitic counterpart of *zich*.

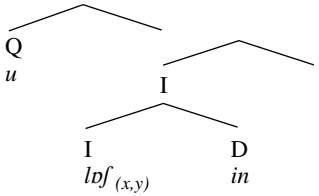
As stressed by Culicover and Jackendoff (2005), current generative theorizing is strongly biased in favour of what they call Interface Uniformity, i.e. the principle that 'the syntax–semantics interface is maximally simple, in that meaning maps transparently into syntactic structure; and it is maximally uniform, so that the same meaning always maps onto the same syntactic structure'. From such a perspective, the objections just raised may be considered of little import when weighed against the possibility of maintaining a 'uniform' movement analysis for passive. The argument pursued here is that loss of predictive power with respect to the actually observed morpholexical forms is to be taken as seriously as loss of predictive power at the LF interface. Hence the difficulty in predicting the object clitic behaviour of *si* or *u* cannot be discounted even in the face of apparent gains in 'Interface Uniformity'.[1]

We take the conclusion that *si* is a bona fide pronominal clitic as our starting point, assuming that as such it fills an argument slot of the predicate (as does its Albanian counterpart *u*, etc.). Another premise of our analysis is that the denotation of *si/u* differs from that of other pronominal clitics in that it is an indefinite, i.e. a free variable. This is proposed by Chierchia (1995) for impersonal *si* and by Manzini (1986) for all *si*; the various readings of *si* simply depend on the possible ways of closing the variable.

Consider the reflexive interpretation. In the absence of evidence to the contrary, we can assume that the structure of the reflexive sentence matches that of its transitive counterpart; in other words, *u* in the reflexive sentence occupies an object clitic position, as *ε* does in the active sentence; in (18) it is categorized as Q (as *si* is) in accordance with its variable interpretation. In turn, the EPP argument, i.e. D in present terms, is lexicalized in (18) by the verb inflection *–in*,

as is normally the case in null-subject languages like Albanian. Crucially, the referential properties of *u*, which by hypothesis are those of a variable, set it apart from other pronominal clitics. In order for the variable to be valued, it must be bound by a referential element. The reflexive interpretation is simply the consequence of the binding of the *u* variable by the closest available referring element, i.e. the EPP argument. The construal of reflexivization that we have now provided is essentially the traditional one, with the reflexive element (*u* in this case) associated with an internal argument position and bound by the EPP argument.

(18) *Shkodër*




Consider now the passive interpretation, which could equally be associated with the sentence in (18). Our proposal is that the structure of the passive sentence is identical to that of the reflexive sentence, with the *u* clitic inserted in the internal argument position. Indeed there is no evidence that the reflexive and the passive readings correspond to different underlying structures. Rather, all morphosyntactic evidence points to the conclusion that structures like (18) are genuinely ambiguous, allowing for both readings under consideration. If the same structure underlies both the reflexive and the passive readings, then passives must differ from reflexives only interpretively. Let us assume that in the passive, the dependency between the *u* variable and the EPP argument corresponds to a chain. If so, the passive is treated exactly as in classical generative grammar, as an instance of chain formation between the internal argument and the EPP argument. The only difference is that instead of a trace (i.e. an empty category or a copy), the analysis we propose has an overtly lexicalized internal argument, whose semantics is that of a variable.

There are several respects in which this analysis is at variance with standard generative frameworks, including notably the minimalist programme of Chomsky (1995). While these take a derivational view of movement, the present analysis is representational. Thus, since the two positions related by the chain in (18) under the passive reading are each independently lexicalized, there cannot be a derivational process of movement relating them; rather, movement must reduce to the notion of chain at the LF interface (Brody 2003).

Chomsky (1995) assumes, in a manner consistent with the overall derivational outlook of minimalist theory, that the verb inflection is a cluster of uninterpretable features which drive processes such as movement (agreement, etc.) because of the need for such features to be checked (valued, deleted, etc.). By contrast, our discussion of the structure in (18) presupposes a treatment of the verb inflection as an interpretable element – specifically as the morphological-level lexicalization of the EPP argument of the sentence. Finally, under (minimalist) movement, chains can be motivated by feature-checking requirements or by interpretive requirements. In present terms, they can be motivated only by interpretive requirements, i.e. in the case of the passive chain, by the need to provide a value for the variable internal argument.

The representational construal illustrated here for movement affects all transformational processes. Thus, agreement, which is the rule specifically responsible for feature checking in Chomsky's (1995) framework, is taken to be a relation which must hold if various interpretations (including the chain one) are to hold in turn. For instance, the chain in (18) requires agreement (or, to be more precise, compatibility in referential properties) between the EPP argument and the element lexicalizing the variable, though in this case the requirement is trivially met because of the presence of a variable.

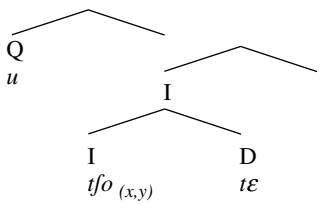
In short, we part ways with standard models of generative transformational grammar in adopting a representational model with the properties outlined in the preceding discussion. At the same time, it should be clear that in this representational form, our analysis of Italian *si* or Albanian *u* includes standard generative ideas about passive as involving a chain between the internal argument and the EPP argument. Thus, while we share the concern of Culicover and Jackendoff (2005) about Interface Uniformity, we certainly do not subscribe to their view of chain interpretations as mediated by a Grammatical Functions (GF) level of representation. The analysis we propose is no more (and no less) than a representational version of generative transformational models (specifically of minimalist ones).

We contend that, at the LF interface, the present theory maintains all of the explanatory power of conventional theories of movement. At the same time, crucial motivation for it comes precisely from the kind of considerations pertaining to morpholexical structure that we have detailed above. In the present theory, it is perfectly possible to maintain that elements such as Italian *si* or Albanian *u* are exactly what they appear to be, i.e. normal object clitics. In this respect, the crucial assumption is simply that their content is that of a variable – in other words, that the variable status is not restricted to traces (i.e. empty categories or copies) created by movement. This latter restriction seems

to us to be an artifact of strictly derivational approaches, while representational approaches can easily handle specialized lexical items with the content of variables. In short, we can maintain what appears to be the transitive structure of sentences like (18), with the clitic instantiating an object, while at the same time incorporating the core generative insight that the passive interpretation involves the chain construal of the internal argument with the EPP argument.

Consider now what we have called the anticausative reading, salient in examples like (6). This reading can be obtained on the basis of structures like (19), entirely parallel to (18) above, through the formation of a chain between the variable internal argument, lexicalized by *u*, and the EPP argument, represented by the verb inflection. This leads to the interpretation under which the EPP argument is interpreted as the internal argument of the verb (roughly the theme undergoing the waking up). Note that the argumental frame of the verb is in itself transitive; quite simply, in the anticausative reading the external argument is not interpreted. Needless to say, the passive interpretation, roughly 'he was woken up', is equally predicted to be possible in (19), on the basis of chain formation. Thus, exactly as in standard movement models, passives and anticausatives share the same core syntax. The difference is that in the passive reading, the implication is preserved that the event takes place through an external agency or cause, corresponding to the external argument of the transitive argument frame of the verb. The latter can receive independent lexicalization through a *by*-phrase, or it can be interpreted through generic binding of the argument variable – yielding a so-called 'implicit argument', while in the anticausative reading the implication is that the theme is not acted on by another agent/cause.

(19) *Shkodër*




Going back now to the reflexive interpretation, the maximally simple assumption about the nature of the dependency between the *u* variable and the EPP argument is, again, that it is a chain. This assimilation of the reflexive to the passive/anticausative does not prevent their respective meanings from being clearly differentiated. As in the anticausative interpretation, in the reflexive there is no implication of an external agency or cause, differentiating both from

the passive. At the same time, the reflexive and the anticausative are differentiated in that, in the reflexive, some degree of intentionality is associated with the argument of the *si* sentence; thus, reflexive readings are available only with EPP arguments capable of a mental state. In other words, pragmatic knowledge about the event of 'waking up' excludes the reflexive reading in (19).

The preceding discussion implies that we agree with Chierchia (2004) and Reinhart and Siloni (2005) that the external argument configurations in the middle are responsible for differences between anticausative, passive and reflexive readings. Yet it seems to us that they correspond to all and only the logically possible such configurations – and as such they do not need to be stated, but follow as a matter of logical necessity. Thus, in the anticausative the external theta-role is not interpreted. In the passive, it is interpreted through quantificational closure (passive); alternatively, it is interpreted through assignment to an adjunct, i.e. the so-called *by*-phrase. As for the reflexive, it seems to us that the arguments put forth by Reinhart and Siloni (2005) are not decisive as to whether the external argument is to be imputed to the *si* chain (reflexive). For instance, *ne* cliticization from postverbal subjects is not a reliable test of the internal or external argument status of the latter, depending instead on the presentational (focus) properties of the sentence (Belletti and Rizzi 1981; Belletti 1988; Saccon 1992, *pace* Burzio 1986). Thus, under the right conditions we accept *ne*-extraction from the inverted subjects of reflexives (varying pragmatic contextualizations are in fact a better explanation for the variability in grammaticality judgements noted by Reinhart and Siloni (2005) among Italian speakers). Therefore we side instead with Chierchia (2004) in assuming that reflexives are a subclass of anticausatives, in which agency is imputed to the sole lexicalized argument – by a meaning postulate in Chierchia (2004).

Note now that there are also verbs which display the middle-passive conjugation without having a transitive counterpart; an example is *ulɛm* 'I sit down' in (20a–c). One may legitimately wonder how these differ from active unaccusatives, i.e. predicates whose only argument is a theme (an internal argument), and which are not formed through middle-passive morphology. An example is provided by a motion verb like *dal* 'I go out', exemplified in (9) and here in (20a'–c'), which combines with the active person ending and in the present perfect with the auxiliary *kam* 'I have'.

(20) *Shkodër*

a. ul- ɛ- t
sit- MP- 3sg
'He sits down'

b. ai u ul
he MP sit-3sg
'He sat down'
c. ɐʃt u:l
he.is sat
'He has sat down'
a'. ai dɛl
he goes.out
'He goes out'
b'. ai dol- i
he went.out- 3sg
'He went out'
c'. kɒ dɒ:l
he.has gone.out
'He has gone out'

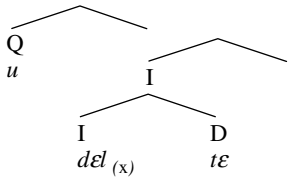
For verbs like *dal*, we simply assume that their single argument slot (a theme), as in (21a), is assigned to the obligatory argument of the sentence, i.e. the EPP argument. This yields an unaccusative reading comparable to the anticausative reading in (19) – but does not imply the presence of non-active morphology. At the same time, the grammar must provide a way to distinguish between verbs like *dal* 'I go out' and verbs like *ulɛm* 'I sit down'. A way to formalize this distinction is simply to associate the latter with an argument frame of the same type found on *ʧo-* in (19), as shown in (21b). The fact that, in (21b), the potentially transitive frame is restricted to the anticausative reading will have to be learned as a lexical property.[2]

(21) a. *dɛl* $_{(x)}$
b. *ulɛt* $_{(x,y)}$

The final reading of Albanian *u* sentences that remains to be considered is the impersonal one, most clearly present in sentences involving unaccusative predicates such as (9). Under the line of explanation pursued throughout this section, one may be led to conclude that, in the absence of distributional or morphological evidence to the contrary, the structure underlying (9) is the same as that already indicated for the other interpretations of *u* in (18)–(19), as in (22). The crucial difference is that (18)–(19) contain not only the variable *u* clitic, but also some independently referring EPP argument – even if only represented by the inflection of the verb. By contrast, (22) contains no independently referring EPP argument. Indeed, the obvious construal of the generic (or 'impersonal') interpretation associated with the EPP argument in (22) is that the *u* variable itself supplies it, through closure by a generic operator. This interpretation, in turn, can correspond to a syntax in which, just as in the

other cases considered before, the *u* clitic forms a chain with the EPP argument represented by the D inflection of the verb. We assume that a generic interpretation cannot simply be associated with the 3rd singular inflection of the verb; this necessitates the introduction of the variable, i.e. *u*, which can be bound by the generic operator, as detailed above.

(22) *Shkodër*




Recall, as we noted above, that the arbitrarization rule of Chierchia (2004) and Reinhart and Siloni (2005) (i.e. existential closure of an external argument) could not yield impersonals with unaccusative verbs. If our discussion is on the right track, this problem can be avoided simply by taking arbitrarization to correspond not to an operation on argument structure, which needs to be stated in terms of such primitives as external argument, but to an interpretation at the LF interface, which can apply to any variable not independently closed.

We also noted above that the parallel between Italian *si* and Albanian *u* is all the more interesting because the two elements also display important points of variation. A relevant observation in this respect concerns the fact that impersonal *si* in Italian can combine with accusative objects, as in (23a). This possibility is not available in Albanian – and in fact it is excluded in many Italian varieties as well, where the only possible combination between *si* and a transitive predicate is the counterpart of standard Italian (23b), i.e. a passive.

(23) a. Li si chiamerebbe volentieri
them MP would.call gladly
'One would gladly call them'

b. Si chiamerebbero volentieri
MP would.call gladly
'They would gladly be called'

In present terms, the crucial difference between the impersonal in (23a) and the passive in (23b) is that in (23b), the *si* clitic is construed as an instantiation of the internal argument slot, bound by the independently lexicalized EPP argument. On the other hand, in (23a), *si* itself satisfies the EPP position, while the internal argument is independently lexicalized by the accusative

clitic. The impossibility of the Albanian counterpart of (23a) can then simply be described in terms of a necessary association of Albanian *u* with the internal argument slot. On the assumption that the only argument slot of unaccusatives is an internal argument slot (albeit assigned to the EPP position), we still derive the impersonal reading of *u* with unaccusatives.

In conclusion, we have now provided an answer to one of the key questions raised at the beginning – namely whether a single syntax underlies all of the different meanings of the middle-passive voice. At least in the case of *si/u* sentences, what gives rise to all of the different readings is the property of *si*/*u* that it is a variable. As a result of the presence of this variable, one of the argumental positions of the predicate remains unassociated (in anticausatives/reflexives) or is interpreted only in that it is existentially closed (passives, impersonal) and/or associated with an argument which is external to the structure of the predicate (the *by*-phrase). This is not the characterization associated with (middle-)passive by standard generative theory – according to which (middle-)passive is reduced to movement from object to subject position. However, the construal of the notion that we suggest is in a way equally traditional – having to do with the non-closure (or generic closure) of the argument structure of the verb. Importantly, the grounds for this switch are entirely empirical, in particular that the standard generative construal in terms of object to subject promotion stands no chance of unifying the passive/reflexive reading with the impersonal one.[3] Needless to say, (the representational counterpart to) object to subject movement still characterizes the bound readings of the variable when construed as an internal argument (in passives, anticausatives and reflexives).

This latter fact also provides us with a key for understanding languages, like those routinely considered in the literature, in which the impersonal reading illustrated here in Italian and Albanian is not available (except perhaps in the shape of impersonal passives, with unergatives). A language like French, in which the impersonal has the specialized subject clitic lexicalization *on* ('one'), provides a good minimal contrast with Italian.[4] A good minimal contrast with Albanian is provided by Greek (Roussou 2008; Manzini, Roussou and Savoia forthcoming), in which there are specialized middle-passive inflections which split according to aspect as in Albanian, but these do not yield the impersonal reading. In terms of the present approach, the difference between the *se* of French and the *si* of Italian can be straightforwardly described by assuming that French *se* is a bound variable which does not admit of simple quantificational closure. We shall return to Greek and Albanian in the next section.

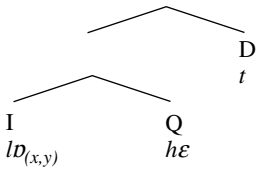
## 5.3 Specialized inflections

On the basis of the conclusions reached in section 5.2, we are in a position to consider the second key question raised at the beginning, namely whether there is a single underlying syntax corresponding to all of the different morpholexical instantiations of the middle-passive voice – or whether instead what we are dealing with is merely the interpretive equivalence of (slightly) different syntaxes.

Consider, then, the lexicalization of middle-passive voice in Albanian with specialized verb inflections, as in (1) and (3). In *Gjirokastër* and in the vocalic bases of *Shkodër*, this non-active morphology can be seen to include an invariable affix *–hɛ*. With the consonantal bases of *Shkodër*, we can take the *–ɛ* extension of the base to represent the middle-passive morphology (Trommer 2005); the same will hold for the reduced form with *–ɛ* in *Gjirokastër*. As for the person inflections, these differentiate the active and the middle-passive in the present, and more specifically in the singular; in the plural it is only the 1st person that appears to be sensitive to voice. In the imperfective past of *Gjirokastër* in (3), there is substantial identity of the person endings in the active and middle-passive voices, the only difference being that the 3rd person singular is not lexicalized in the middle-passive.

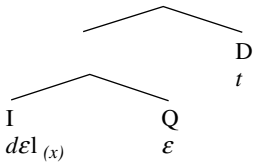
An insight into the nature of the middle-passive *–hɛ* infix is provided by the fact that in an Arbëresh variety like *Portocannone*, illustrated in section 5.1.3 above, *–hɛ* (or *–x* in *Portocannone*) systematically co-occurs with the *u* clitic in all forms of the verb in which the latter is present, hence not only in the perfective past (10c), but also in the perfect, which in Arbëresh varieties is formed with *kam* 'I have' and the *u* clitic, as in (11a). One possible conclusion suggested by this pattern is that it represents a case of doubling, whereby the *u* clitic and the *–hɛ* infix lexicalize essentially the same properties, at the syntactic level and at the morphological level respectively. If so, given the characterization provided for the *u* clitic in section 5.2, we are led to suppose that the *–hɛ* morphology represents a Q-type variable attaching to the verbal base I, as illustrated in (24) for the present indicative. The specialized *–t* person ending in turn lexicalizes the D argument of this verbal constituent.

(24) *Shkodër*



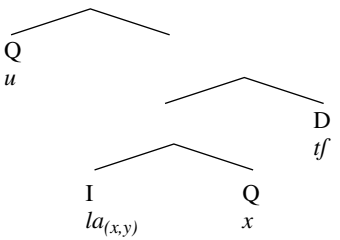
Given the structure in (24), the computation of the different meanings associated with it proceeds in the same way as detailed in the previous section for *u* clitic structures. If the *–(h)ɛ* variable, filling the internal argument slot of the predicate, is bound by the EPP argument, represented in (24), by the *–t* inflection, the passive, reflexive and anticausative readings are obtained, depending on the interpretation of the external argument. If this is generically closed, we obtain the passive interpretation, while the anticausative/reflexive interpretation depends on the external argument remaining unlinked. In the case of a predicate like 'to wash' in (24), the salient meaning is reflexive rather than anticausative because agency/intentionality is normally attributed to the only lexicalized argument. Generic closure of the *u* variable leads in turn to the impersonal interpretation, seen in connection with unaccusative predicates like *dɛl* in (25). Overall, the effect of the *–(h)ɛ* variable, just as with the *u* variable, is to associate the verb with an unsaturated or generically closed argument position – namely the external argument with transitives and the only argument with unaccusatives.

(25) *Shkodër*




As already noted, in the Arbëresh variety of *Portocannone* the *–x* morphology combines with the *u* clitic to yield an instance of doubling, illustrated in (26) for the past perfective. The distribution of the *u* clitic in *Portocannone*, as in Arbëresh varieties in general, is determined by the perfect/imperfect split, so that *u* co-occurs with the perfective forms of the verb, including auxiliary–participle constructions, formed with the *kam* 'I have' auxiliary. By contrast, the *–x* morphology enters into the formation of the entire middle-passive paradigm, including the existence, noted in section 5.1.3, of a specialized middle-reflexive participial form. These separate distributions for *–x* and *u*, when combined, yield the correct distribution of the doubling configuration (as their intersection).

(26) *Portocannone*



Assuming that the discussion of the *–hɛ* morphology is on the right track, it still remains for us to clarify the nature of the specialized agreement endings that characterize middle-passive inflectional formations. In particular, the singular *–m*/*–ʃ*/*–t* inflections of the present bear no relation to their active counterparts. In her discussion of Greek middle-passive voice, Roussou (2008) notices that in imperfective tenses, the middle-passive voice of Modern Greek is entirely realized by a series of specialized agreement inflections, which can be analysed into a thematic vowel *–e*/*–o* and specialized person endings *–me*, *–se*, *–te*, etc. for the present in (27a) or *–mun*, *–sun*, etc. for the past in (27b) (Philippaki-Warburton 1973; Ralli 1988).

(27) a. plen- ome/ ese/ ete/ omaste/ osaste/ onde
Wash- MP.1sg etc.
'I wash (myself)' etc.

a'. plen- o / is/ i/ ume/ ete/ un
wash- 1sg etc.
'I wash (something)' etc.

b. plen- omun/ osun/ otan/ omastan/ osastan/ ondan
wash- MP.1sg etc.
'I was washing (myself)' etc.

b'. eplen- a/ es/ e/ (plen-) ame/ (plen-) ate/ (eplen-) an
wash- 1sg etc.
'I was washing (something)' etc.

The middle-passive perfective tenses are formed instead by the agreement inflections of the active voice combined with the affix *–th* for the present tense,[5] as in (28a) and the affix *–th–ik* for the past tense, as in (28b); in this second case *–th* can be taken to realize middle-passive voice again, and *–ik* can be taken to realize past tense (Philippaki-Warburton 1973).

(28) a. pli -th o/ is/ i/ ume/ ite/ un
wash- MP- 1sg etc.
'I wash (myself)' etc.

a'. plin o/ is/ i/ ume/ ete/ un
wash- 1sg etc.
'I wash (something)' etc.

b. pli- th- ik- a/ es/ e/ ame/ ate/ an
wash MP past 1sg etc.
'I washed (myself)' etc.

b'. eplin- a/ es/ e/ (plin-) ame/ (plin)-ate/ (eplin-) an
wash 1sg etc.
'I washed (something)' etc.

Roussou (2008) notices that the split in lexicalization between the imperfective and the perfective has some of the same properties in Greek and in

Albanian. In particular, in both Greek and Albanian, the imperfective has specialized middle-passive agreement inflections, while the perfective has the ordinary active agreement inflections, which combine with the *–th* affix in Greek and with the *u* clitic in Albanian. On the basis of this parallelism, Roussou (2008) suggests that Greek perfective tenses involve a structure along the lines of the Albanian *u* formations, where the *–th* affix plays the same role at the morphological level as the clitic plays at the syntactic level – as a variable lexicalization of the internal argument.

Crucially, Roussou (2008) goes on to propose that while the active agreement inflections associate with the EPP argument, the middle-passive agreement inflections associate with the internal argument. In other words, while active agreement is nominative, middle-passive agreement is absolutive. Extending this analysis to Albanian, we would conclude that the difference between the active agreement inflection (in the perfective tenses) and the middle-passive agreement inflections (in the imperfective tenses) is that while the former corresponds to a nominative case configuration, the latter correspond to an absolutive one, picking up the internal argument.

At this point a potential problem arises. In Greek, specialized middle-passive agreement inflections are incompatible with *–th* morphology: thus, **pli–th–ome* or **pli–th(ik)–omun* are ruled out. Yet in Albanian, specialized middle-passive agreement co-occurs with the *–hɛ* affix, which we construe as a morphological-level counterpart of the middle-passive clitic *u*, exactly as Roussou (2008) suggests for the *–th* affix in Greek. Now, note that Roussou (2008) does not provide an analysis of the thematic vowel specialized for the middle-passive agreement endings; in fact, she adopts a segmentation that does not separate the thematic vowel from the person ending with which it combines (following Ralli 2005). However, Manzini and Savoia (2005, 2007) treat so-called thematic vowels as variables closing off the internal argument of the verb. From this perspective, the specialized thematic vowel of Greek middle-passive agreement inflections could be the real counterpart of Albanian *–(h)ɛ*. This could also mean that the mutual exclusion between the middle-passive agreement inflections and the *–th* affix of Greek should be understood as a mutual exclusion between the *–th* affix and the thematic vowel of these inflections, rather than with their (absolutive) person endings.[6]

We can now return to the distribution of the different lexicalizations of the middle-passive voice according to aspect (Tosk Albanian and Greek) or tense (Gheg Albanian). In Tosk Albanian the imperfective (including the present and the imperfective past) lexicalizes the middle-passive voice with specialized morphology, while the perfective lexicalizes it by syntactic means, i.e. through the *u* clitic. In Gheg varieties of Albanian, a split is also found, except that it

is temporally based, distinguishing the present (with specialized morphology) from the past (with *u*). The importance of the aspectual/temporal split is underscored by the comparison with Greek, which also has a middle-passive voice whose lexicalization is differentiated according to aspect. Roussou (2008) suggests that this distribution involves an ergativity split, with a set of nominative inflections (the active ones) and a set of absolutive inflections (the middle-passive ones) apportioned to the imperfective and perfective tenses respectively. Nevertheless, in other attested ergativity splits, the nominative pattern tends to associate with imperfective tenses, and the ergative pattern with perfective ones. We therefore leave this matter open, having noted its interest.

We started the discussion in this section by remarking that comparison between the lexicalization of the middle-passive with an *u* clitic, as analysed in section 5.2, and its lexicalization with specialized inflections could shed some light on the question of whether a single syntax underlies all of the forms allowing for the cluster of middle-passive interpretations. Since we have assumed that the *–(h)ε* represents a morphological-level counterpart to the *u* clitic, the answer is in a sense positive: in both cases a crucial role is played by the variable instantiation of the internal argument. Yet while one of the structures has a syntactic-level variable (in the shape of the *u* clitic), the other does not; crucially, no abstract structure, specifically no movement structure, intervenes to make these two morpholexical instantiations of middle-passive isomorphic.

### *5.3.1* Be–*participle*

The question of whether the same syntactic structure underlies the same (cluster of) interpretations, i.e. the uniformity question in the sense of Culicover and Jackendoff (2005), can equally be asked with respect to the third possible lexicalization of Albanian middle-passives, namely the combination of the *jam* 'I am' auxiliary with a participle. We delay our account of these structures till chapter 6, where they are considered in relation to other instantiations of perfect tenses. In the final part of this chapter, we consider a different lexicalization available in Albanian for the passive reading, again involving the *jam* 'I am' auxiliary. This auxiliary, however, embeds a participial form which is different from those reviewed in section 5.1, yielding passive for all of the various tenses of the paradigm. Both in being restricted to the passive reading, and in not being restricted temporally/aspectually, the relevant construction in Albanian is close to the English *be–en* passive and its Romance counterparts (*essere V–to* in Italian).

It is useful to begin by reviewing what is perhaps the most basic occurrence of *jam*, i.e. as a copula. In (29), we provide various examples of this configuration in the variety of *Shkodër*. The paradigm of adjectival embedding in (29a–b) is the same as in the standard. This requires the full adjectival

inflection, including a preposed article and a postposed inflection, both agreeing for number, gender, definiteness and Case.

(29) *Shkodër*

a. ɐʃt i kutʃ/ ɛ kutʃ-ɛ
it.is m.sg red/ f.sg red-f.
'It is red'

b. jan t kutʃ/ kutʃ-ɛ
they.are pl red/ red-f
'They are red'

The examples in (30) illustrate the embedding of participles (consonantal base) in the copular construction, yielding a structure identical to that seen for adjectives in (29). It is interesting that in the variety of *Shkodër*, the adjectival inflection is not simply added to the bare bases with which participles have been seen to coincide in (5) above. Rather, the base shows a participial inflection *–m* or *–un* depending on verbal class (vocalic and consonantal respectively). Verbal adjectives are regularly formed from transitive predicates ('to dress') as in (30a–a'), from intrinsically middle-passive ones ('to sit down') as in (30b), and from active unaccusative ones ('to come'), as in (30c). The adjective in (30d), from unergative 'to sleep', does not have the meaning of 'slept', but rather of 'asleep'. The example in (30e) establishes that the participial form with adjectival inflection is found not only in copular constructions, but also in other predicative constructions, here in a small clause embedded under *kam* 'I have'; incidentally, the same example also allows us to illustrate participles formed from vocalic bases. As shown in (30a–a'), copula–participle formations based on transitive verbs admit of the passive meaning, disambiguated here by the presence of a *by*-phrase. A comparable example is provided in (31) for *Gjirokastër*.

(30) *Shkodër*

a. ɐʃt i veʃ-un/ ɛ veʃ-un (pɾɛi s ɒms)
s/he.is m.sg dress-ed/ f.sg dress-ed (by gen mother)
'S/he is dressed up (by his/her mother)'

a'. jena t veʃ-un/ t veʃ-un-a (pɾɛi s ɒms)
we.are pl dress-ed/ pl dress-ed-pl (by gen mother)
'We are dressed up (by our mother)'

b. gɾuja ɐʃt ɛ ulun
the.woman is f.sg seated
'The woman is seated'

c. ɐʃt i arðun
he.is m.sg arrived
'He has arrived'

d. ai ɐʃt i fjetun
he is m.sg asleep
'He is asleep'

e. i kam kmiʃa-t ɛ/t lɒ-m-ɛ
them I.have shirt-s Art wash-ed-f
'I have the shirts washed'

(31) *Gjirokastër*
jan tə vɛʃur/ ˈvɛʃuɾ-a
they.are pl dressed.up/dressed.up-f.
'They are dressed up'

The data in (29)–(31) can be usefully integrated with those of Arbëresh varieties, which also have the construction in which the copula is followed by the inflected participle. This is illustrated for *Portocannone* in (32a) with a transitive predicate and in (32b–c) with unaccusative predicates. In this construction, transitive predicates associate with *by*-phrases, as in (32a); by contrast, in the discussion of (14) we saw that the middle-passive voice is normally restricted to a generic agent; i.e. it excludes the *by*-phrase. The participle that is involved in the copular construction is the ordinary active form, despite the existence in the *Portocannone* variety of a specialized middle-passive participle, as discussed in section 5.1. As shown in (32a'–b'), the same variety also admits of copular (non-perfect) *jam*–participle constructions in which the participle is uninflected.

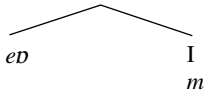
(32) *Portocannone*
a. ktɔ kəmiʃ jan/ kjetən tə la- it- ur- a (tɛ a'ta)
these shirts are/ were pl wash- prf- prt fpl (by them)
'These shirts are/were washed by them'
a'. ktɔ kəmiʃ jan/ kjetən la- it- ur (tɛ a'ta)
these shirts are/ were wash- prf- prt (by them)
'These shirts are/were washed by them'
b. iʃt i uj- ur
he.is m.sg seat- prt
'He is seated'
b'. iʃt uj- ur
he.is seat- prt
'He is seated'
c. iʃt i vdɛk- ur
he.is m.sg die- prt
'He is dead'

For bases ending in a vowel, as in (33a), the adjectival participles of *Shkodër* shows an *–m* suffix which can be analysed as the bearer of the aspectual, perfective properties of the participle. Thus, the *–m* inflection is an I head which takes the verbal base as its complement. The verbal base, including the thematic vowel, appears independently of further inflectional material as the invariable participle in (5), i.e. *lɒ*. Verbal bases ending in a consonant, in turn, form the

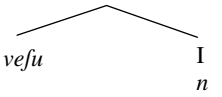
participle with a suffix *–(u)n*, as in (33b). We assume an analysis parallel to that for bases ending in a vowel, so that the *–n* inflection is an I aspectual, perfective head, which takes as its complement the verbal consonantal base combined with a thematic vowel *–u*, selected in this case by the perfective aspect itself. Entirely parallel structures can be provided for Tosk varieties (including both the standard and Arbëresh dialects, like *Portocannone*), with the only difference that *–r* is the participle-forming I inflection in these languages with both vocalic and consonantal bases.

(33) *Shkodër*

a.



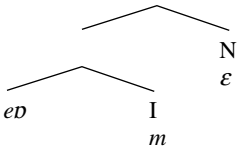

b.



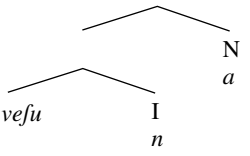

The agreement inflections following the verbal subconstituents in (33) are the same as those found in adjectives and nouns. Following the analysis of nominal inflections in Albanian in chapter 7, we assume that at least vocalic endings correspond to N inflections, whether they lexicalize so-called accusative, as in (34a) or so-called nominative, as in (34b).

(34) *Shkodër*

a.



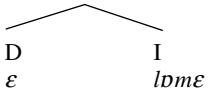

b.



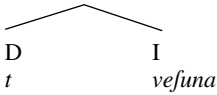
The article preceding the participle can be treated, as in standard analyses of the noun phrase, as a D element at the phrasal level, giving rise to structures like (35). In present terms, as detailed once again in chapter 7, the agreement between the determiner and the Case inflection of the participle is a reflex of the fact that they form a chain – in other words, together they satisfy the same argument slot(s).

(35) *Shkodër*

a.




b.




From the point of view of the present discussion, the crucial question concerns the passive interpretation of sentences like (30a–a'). Given the complete formal similarity to (29), we may once again begin by asking how an ordinary copula–adjective construction is interpreted. In the case at hand, it seems evident that the embedded predicate *kutʃ* 'red' has a single argument, lexicalized by its N inflection and by the determiner that it agrees/forms a chain with. Agreement and chain formation in turn hold with the D (i.e. EPP) argument of *jam* 'I am', i.e. its inflection. The overall result is, correctly, a raising interpretation, whereby the EPP argument of the matrix sentence is assigned the argument slot of the embedded (adjectival) predicate.

The same raising interpretation characterizes examples like (30a–a'), the only difference being that they involve transitive, i.e. two-place, participial predicates. In this case, the determiner and the agreeing inflection of the participle pick up its internal argument slot; this means that participial structures are absolutive, in the sense that the D argument which closes them (the determiner) is associated with their internal argument slot. The latter ends up being associated with the EPP argument of *jam* 'I am' by the same mechanism just detailed for the copular sentences in (29) – so that, from this perspective, the passive interpretation of sentences like (30a–a') (with the internal argument of the participle assigned to the EPP argument of the copula) is simply an

ordinary adjectival interpretation. The external argument slot of the participial predicate is in turn closed by an adjunct *by*-phrase or by generic quantification, in this latter case yielding the implicit agent reading.

We noted in passing that in *Portocannone*, the copular passive can either have the agreeing form in (32a) or a non-agreeing form as in (32a'). In other words, the structure of (32a') appears to be entirely analogous to that found in, say, the *Gjirokastër* example in (5) for the perfect middle-passive. Nevertheless, we maintain the conclusion that all copular passives in (30)–(32) result from a nominal embedding of the predicate; the lack of agreement in the *Portocannone* example in (32a') represents an independent parameter. By contrast, in chapter 6 we pursue the conclusion that the structure of embedding in the perfect tenses is not nominal, but sentential – so that examples like (5) have a bi-clausal, restructuring syntax.

Once again, Greek presents a constellation of facts strictly comparable to those of Albanian. The middle-passive voice of Greek includes a perfect formed by an auxiliary followed by a participle, as in (36a); (36b) provides the comparison with the active. In this case, the middle-passive configurations of Greek are strictly comparable to those of Arbëresh varieties, since the auxiliary is *exo* 'have' both in the active and in the middle-passive, and the difference between the two voices is found in the participle. In (36a) it bears the middle-passive morphology *–th*, coinciding in particular with the 3rd person singular of the middle-passive present perfective, while in (36b) it coincides with the 3rd person singular of the active present perfective. What is immediately relevant for present purposes is that Greek has another participial form which is created by attaching to the verb base the affix *–men* followed by the adjectival (nominal) agreement for gender, number and Case. The Greek copular ('periphrastic') construction formed by this participle and the copula has a passive interpretation, as in (37), under which, as discussed at length by Anagnostopoulou (2003), it systematically co-occurs with *by*-phrases.

(36) a. exo, exis, exi, etc. pli-th-i
have.1sg, 2sg, 3sg, etc. washed
'I have been washed' ('you have/he has been/ etc. washed')

b. exo, exis, exi, etc. plin-i
have.1sg, 2sg, 3sg, etc. washed
'I have washed (something)' ('you have /he has etc. washed')

(37) Afta ta pedhia ine dolofoni-mena
these the children are murder-ed
'These children are murdered'

A question that we have so far left implicit is how the copular structure relates to the generative notion of adjectival passive. All the evidence at our disposal suggests that the adjectival, i.e. stative, reading of passives can be associated with the Albanian examples in (30)–(32) involving transitive predicates, both with and without a *by*-phrase. On the other hand, the verbal, i.e. eventive, passive reading seems to be responsible for the fact that Arbëresh speakers routinely offer these structures – rather than structures like (14) above – when passive is elicited. An important line of thought in generative grammar, dating back at least to Wasow (1977), associates verbal passives with a syntactic derivation, and adjectival passives with a lexical one. The latter analysis is adopted by Terzi and Wexler (2002) for Greek. We take it that the evidence from Albanian runs counter to the traditional account of verbal vs. adjectival passives in terms of syntactic vs. lexical derivation, as also argued for Greek by Anagnostopoulou (2003). Instead, we conclude that the so-called adjectival and verbal passive are just interpretations attached to the same copular structures – which, everything else being equal, are systematically ambiguous between the two. Anagnostopoulou (2003), basing her work on Kratzer (2000), introduces in the structure of adjectival (i.e. stative) passive a category 'Stativizer' differentiating it from the verbal, i.e. eventive passive. But this at best succeeds in translating the interpretation into the syntax, without any explanatory gain, while at worst it obscures the fact that the stative/eventive opposition (i.e. in traditional generative terms the adjectival/verbal one) is precisely a matter of ambiguity at the LF interface, not corresponding to any independently observable morphosyntactic difference.

Finally, the fact that in Arbëresh, *by*-phrases, which normally occur in the copular construction (32), are incompatible with middle-passive voice forms, as in (14), is reminiscent of a restriction found in Italian (and generally in Romance) against *by*-phrases in *si*-passives. In both instances, the external argument is interpreted, but the only possible reading is through binding by a generic operator; in other words it cannot be linked to a referential noun phrase within an adjunct noun phrase. In Romance, one may be tempted to relate this restriction to the presence of *si*, which is sometimes construed in the literature as an absorber of the external theta-role. In Arbëresh, however, the impersonal reading of the passive characterizes not only the perfective forms with the *u* clitic, but also the imperfective forms with the specialized verb morphology. What is more, mainland Albanian varieties seem to allow *by*-phrases in contexts that are morphosyntactically

identical to that of Arbëresh. Therefore we conclude that there is an independent parameter defining the possibility of middle-passive forms co-occurring with a *by*-phrase – i.e. whether the external argument of a middle-passive allows quantificational closure only, or can also be closed by an adjunct (essentially a form of predication, external to the core event of the sentence).

# 6 *The auxiliary:* have/be *alternations in the perfect*

The discussion in this chapter is based on a set of data which reflect micro-variation in a closely related set of languages (Romance varieties) as well as variation between more distant languages (Romance and Albanian). In section 6.1 we present the basic evidence and review the notions of person split, transitivity and voice, in terms of which we analyse the data in sections 6.2 and 6.3. We discuss person-split systems in detail in section 6.2, and we concentrate on auxiliary selection according to transitivity/voice in section 6.3, arguing in particular that the notion of transitivity should be split from that of voice, and a characterization not based on movement should be adopted for the latter (cf. chapter 5). In section 6.4, we introduce some Italian varieties in which selection according to transitivity/voice and the person split cross-cut, as well as varieties in which the *have/be* distinction is neutralized in parts of the paradigm.

As discussed in section 6.1.1, the account we provide is crucially based on the assumption that the embedded participle does not select the auxiliary, in the sense in which a lexical category could be said to select its functional projections. Rather, the auxiliary and the participle define two independent sentences (Kayne 1993), and the selectional relation is the ordinary one from matrix predicate (the so-called auxiliary) to embedded sentence. Adopting the bi-clausal analysis just outlined for perfects amounts to eliminating auxiliaries, i.e. functional verbs, from the present grammar.

## 6.1 Evidence

We begin with the well-known evidence concerning standard Italian. As argued by Burzio (1986), auxiliary selection in Italian is sensitive to the distinction between transitive/unergative and unaccusative verbs; the former take *have* as in (1a), and the latter take *be*, as in (1b).

(1) a. Ho lavato (la camicia)
I.have washed the shirt
'I have washed (the shirt)'

b. Sono arrivato/arrivata
I.am arrived.m/f.
'I have arrived'

The most notable complication concerning Italian is that the presence of the *si* element correlates with the selection of *be*, as in (2), independently of the many readings available for *si*: namely reflexive, as in (2a), anticausative, as in (2b), passive, as in (2c) or impersonal, as in (2d). Most importantly, in the impersonal in (2d), the auxiliary *be* induced by *si* co-occurs with an overt accusative clitic – i.e. with a transitive frame. The fact that *si* cannot be treated simply as a valency-reducing morpheme (an 'intransitivizer') is underscored by examples like (2d'), where it can be seen that *si* (impersonal again) combines with an unaccusative predicate.

(2) a. Gianni si è lavato
G. MP is washed
'Gianni has washed himself'
b. Gianni si è svegliato
G. MP is woken
'Gianni has woken up'
c. Le camice si sono lavate (a secco)
The shirts MP are washed dry
'The shirts have been dry-washed'
d. Li si è mangiati
them MP is eaten
'One has eaten them'
d'. Si è arrivati
One is arrived
'One has arrived'

In (2) we have glossed *si* as MP to suggest 'middle-passive'. In fact, the closest morphology to *si* we know of is the so-called middle-passive morphology of languages like Greek or Albanian analysed in chapter 5. In (3) we reproduce the basic data showing that the middle-passive morphology of Albanian has the same range of interpretations as the *si* morphology of Italian, including reflexive (3a), anticausative (3b), passive (3c) and impersonal (3d). Note that, crucially, in (3d) the middle-passive morphology attaches to an unaccusative verb, just as *si* does in Italian.

(3) *Gjirokastër*
a. la- (h)ɛ- m
wash- MP- 1sg
'I wash myself'
b. zɟu- (h)ɛ- t
wake- MP- 3sg
'He wakes up'

c. kətɔ kəmiʃə la- (h)ɛ- n ŋga ajɔ
these shirts wash- MP- 3pl by him
'These shirts are washed by him'
d. ŋga ati dil- ɛ- t
from there exit- MP- 3sg
'One exits from there'

The comparison between the middle-passive voice of Albanian and Italian *si* is made particularly direct by the fact that, whereas in the present, the middle-passive voice of Albanian is lexicalized by the specialized inflection in (3), in the perfective past it is lexicalized by a clitic – namely *u* – which combines with normal active inflections, as shown in chapter 5 and below in (4).

(4) *Gjirokastër*
a. u la- it- a
MP wash- Prf- 1sg
'I washed myself'
b. u zɟɔ- it
MP wake- Prf
'He woke up'
c. ata u zɟɔ- it- ən ŋga tə tiɛrət
they MP wake- prf- 3pl by the others
'They were woken by some people'
d. ŋga ati u dəð
from there MP exited
'One exited from there'

There is a third way of instantiating middle-passive voice in Albanian through auxiliary selection – this is the one that concerns us directly, and we will come to it shortly. Returning to the issue at hand, namely the distribution of *have* and *be* in the Italian perfect, the descriptive conclusion is that *be* is found with unaccusatives and with middle-passives. *Have* is restricted to the complementary set, i.e. transitive/unergative actives. Looking back to the data in (2), it appears that the notions of transitivity and voice in Italian cannot be collapsed; surely, example (2d) is not intransitive, even though it is middle. Indeed it is precisely because of *si* that Burzio (1986) could not provide a unified characterization of *be*-selection, but ended up with a disjunctive statement.

As indicated at the beginning, here we shall consider the problem of auxiliary selection in a parametric context. Hence, before evaluating whether selection frames for *have* and *be* can be unified in Italian, we shall turn to other parametric settings. One of them is especially well-known from Germanic languages like Dutch or German, but is also robustly attested in Romance varieties such as *Soazza* in (5)–(6). Like Dutch, and like Italian, *Soazza* has *be* with

unaccusatives as in (5a) and *have* with unergatives/transitives as in (5b). The interesting point is that exactly the same distribution holds in the presence of *si* morphology, as in (6). Thus, the reflexive in (6a), the anticausative in (6b) and the impersonal/passive in (6c), which are formed with transitive/unergative verbs, have auxiliary *have*. Only the impersonal in (6d), formed with an unaccusative verb, has auxiliary *be*.

(5) *Soazza* (Grisons)
  a. som riˈvo/ rivada
     I am arrived.m/f
     'I have arrived'
  b. o dorˈmi:t
     I.have slept
     'I have slept'

(6) *Soazza*
  a. ɛl/la s a laˈvo/lavada
     he/she MP has washed.m/f
     'He/she has washed himself/herself'
  b. al s a ʒmorˈtso al tʃar
     it MP has gone.off the light
     'The light has gone off'
  c. s a sempro dorˈmit beŋ
     MP has always slept well
     'It has always been slept well'
  d. s e sempro riˈvo tart
     MP is always arrived late
     'One has always arrived late'

Reference to a Romance variety like *Soazza*, as opposed to better known languages like Dutch, allows us to establish a few important points. First, in comparing Italian with Dutch, one may be tempted to conclude that the different auxiliary selection with *si* and *zich* respectively is due to their different clitic vs. non-clitic status; the account of Reinhart (1997) and Reinhart and Siloni (2005) is built on this premise. However, comparison of sufficiently close languages like Italian and *Soazza* shows that different auxiliary selection properties can correlate with essentially stable properties of the middle-passive morphology. Thus, there is no doubt that the *s* morpheme in (6) has exactly the same clitic prosody, distribution etc. as its Italian counterpart. Second, Dutch *zich* and Italian *si* also differ in that *zich* does not combine with unaccusative verbs to yield the impersonal reading (again we take this to be an independent parameter). But *s* in *Soazza* is like Italian *si* in this respect – which allows us to show that *s* simply does not influence auxiliary selection. Rather, selection

is determined by verb class (transitive/unergative vs. unaccusative) in (6) as well.

Albanian is in a way the mirror image of *Soazza*, in that it displays no sensitivity to transitivity alternations, but selects *have* and *be* according to voice. Recall from chapter 5 that the present perfect of Albanian, like that of Romance and Germanic languages, is formed by a combination of auxiliary and perfect participle. In the active voice, the auxiliary is *have*, both with transitives and with unaccusatives, as in (7a) vs. (7b). However, in the middle-passive – i.e. as part of the conjugation that includes the present in (3) and the simple past in (4) – the perfect is formed with *be*. In fact, *be* followed by the very same perfect participle found in the active (i.e. without the support of either suffixal or clitic material) yields the set of middle-passive interpretations, namely the reflexive (8a), the anticausative (8b), the passive (8c) and the impersonal (8d).

(7) *Gjirokastër*

a. ɛ ka la- it- ur
it he.has wash- prf- prt
'He has washed it'

b. ka dalə
he.has gone.out
'He has gone out'

(8) *Gjirokastër*

a. əʃt la- it- ur
he.is wash- prf- prt
'He has washed himself'

b. əʃt zɟu- aɾ
he.is wake- prt
'He has woken up'

c. kətɔ kəmiʃə jan la- it- uɾ ŋga ajɔ
these shirts are wash- prf- prt by him
'These shirts have been washed by him'

d. ŋga ati ɐʃt dalə miɾ
from there it.is exited well
'One has exited well from there'

Incidentally, it may be noted that the perfect participle in Albanian never agrees with any of its arguments – though a full agreement paradigm is available for it and emerges in adjectival contexts (cf. chapter 5). By contrast, *Soazza* has the same perfect participle agreement system as standard Italian, even if the auxiliary is *have*, for instance in the reflexive in (6a). In other words, perfect participle agreement is entirely independent of the selection of *have* or *be*.

Another parametric choice attested by well-known Germanic and Romance languages (such as English or Spanish) is formation of the present perfect with the auxiliary *have* independently of transitivity and voice. In (9) we illustrate this parametric option with a Southern Italian variety which (like Spanish) shows the insensitivity of auxiliary selection to *si*; and (unlike Spanish) provides an example of the independence of participle agreement from auxiliary selection, since unaccusative participles as in (9b) agree with their argument.

(9) *Verbicaro* (Calabria)
a. ajə laßa:tə (a ˈmakənə)
I.have washed the car
'I have washed (the car)'
b. a mmuərtə / mmɔrtə
s/he.has died.m/f
'S/he has died'
c. s a llaßa:tə
MP he.has washed
'He has washed himself'

Another logical possibility, i.e. selection of the *be* auxiliary in all of the present perfect, appears to be more rarely instantiated – but can also be found in Romance varieties such as *Pescolanciano* in (10). While the selection of *be* with the unaccusative in (10a) or *si* in (10c) may be familiar from Italian, this is a language that also has *be* with transitives, as in (10b). Incidentally, it will be seen that the agreement pattern is the one familiar from Italian whereby the feminine morphology in (10b) singles out the internal argument, lexicalized by the accusative clitic.

(10) *Pescolanciano* (Abruzzi)
a. sɔŋgə mənu:tə
I.am come
'I have come'
b. la suə ccamata
her they.are called
'They have called her'
c. ts ɛ lava:tə
MP he.is washed
'He has washed himself'

Finally, there is another major pattern of the *have* vs. *be* split instantiated by Romance languages, since in some varieties auxiliary selection is sensitive to the reference of the EPP argument. The most widely known split opposes the 1st and 2nd person with *be* to the 3rd person with *have* (Kayne 1993; Cocchi 1995; D'Alessandro and Roberts 2010), as in the paradigm in (11) (in

the examples A indicates the selection of *have* auxiliary and E the selection of *be* auxiliary). This classical person split is oblivious to verbal class, as shown in (11), as well as to *si*.[1]

(11) *S.Benedetto del Tronto* (Marche)

| | | |
|---|---|---|
| sɔ | vənu:tə/ vistə | E |
| ʃi | | E |
| a | | A |
| ʃɛmə | | E |
| ʃɛtə | | E |
| a | | A |

'I have come/seen' etc.

Note that there is no intrinsic association of *be* with 1st and 2nd person and of *have* with 3rd person. Thus, varieties are found in which it is the 1st and 2nd person that are associated with *have*, while the 3rd person is associated with *be*, as in (12). This parametric choice is less robustly attested, so that in *Morcone* in (12) it only characterizes the singular, while the plural has *have* in all persons. However, the limitation of the person split to the singular is an independent parameter, since it can also be seen in a variety like (13) which in the singular has *be* in the 1st and 2nd person and *have* in the 3rd. Incidentally, the morphophonology of *Morcone* (with non-neutralized final vowels) allows us to see that the participle agreement once again follows exactly the same lines as standard Italian – namely, agreement with unaccusatives ('come') and lack of agreement with unergatives ('slept').

(12) *Morcone* (Campania)

| | | |
|---|---|---|
| addʒo | menuto/ durmuto | A |
| a | | A |
| ɛ | | E |
| emo | menuti/durmuto | A |
| ete | | A |
| ao | | A |

'I have come/slept' etc.

(13) *Bisceglie* (Apulia)

| | | |
|---|---|---|
| sɔ | drəmmi:tə/ vəni:tə | E |
| si | | E |
| a | | A |
| ɛmm | | A |
| avə:tə | | A |
| onnə | | A |

'I have slept/come' etc.