On Italian Adverbs

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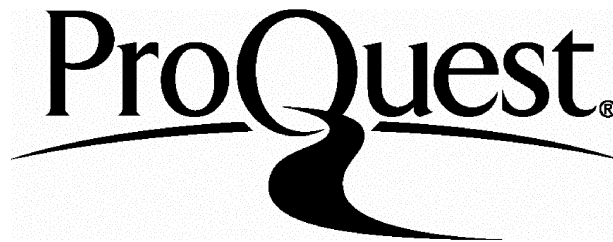
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Abstract

This work considers the properties and distribution of
adverbs in Italian sentences. The treatment afforded
to the Italian adverb by non-generative reference and
school grammars dating back to various historical
periods, but with particular emphasis on the XX
century is analyzed. This analysis clearly shows the
serious inadequacies of such treatment and points to
several problems and shortcomings. This study then
proceeds to take into account the treatment proposed
for the adverb by generative grammar in the last
twenty years. Through a comprehensive comparison
between generative grammar proposals for the adverb in
English and French, the results and predicted outcomes
are extended to Italian, in an attempt to test the
validity of their assumptions. This work clearly
confirms the validity of generative grammar proposals
across languages, but it also underlines some
significant differences displayed by the adverb in
Italian. By extending the analysis to more recent
generative grammar proposals specific for Italian,
this work shows their success in accounting for a
large proportion of adverbial facts. The same
proposals are applied with a good degree of success to
a comprehensive corpus of adverbial data taken from
works of modern Italian literature. This study then
considers the progress made in the treatment of

adverbs by Italian grammars and points to a proposed analysis in which the contribution given by non-generative and generative grammar to our understanding of the adverb is a balanced one, highlighting the advantages of a theory which goes beyond sterile classifications and promotes a closer co-operation between disciplines in the field of linguistics. Finally, this study underlines that certain aspects of the distribution of adverbs can be given a more satisfactory explanation than others, and that in some cases no solutions are yet forthcoming, or that two or more proposals can efficiently account for the same problem. In the last section of this work the problems of teaching the adverb to Italian students and foreign students of Italian are briefly addressed, and the feasibility of useful changes to non-generative school grammars of Italian is clearly shown, toward a far better account of the adverb.

Introduction

The present study has as its main objective that of analysing the distribution of adverbs in Italian sentences.

It is our opinion that this subject presents many points of interest to the linguist and, more generally, to all those who are involved in the study of the grammar of the Italian language.

This study will first present analyses of the adverb that can be found in 'traditional' or textbook grammars. Although our main field of study will be the XX century, we shall briefly comment on earlier grammars where we have found them to be of relevance.

Our analysis will then proceed with contemporary accounts of Italian adverbs, and here we shall begin to draw some parallels and differences between Italian on one hand, and other languages on the other (French and English mainly, but also regional Italian dialects in some cases). It is our hope that such a comparison could prove useful for non-Italian linguists as well.

Continuing our analysis, we shall bring our attention on generative grammars, when we comment on their different approach to adverbs as opposed to non-generative works, trying to see whether they can offer

us a tentative answer to the problems presented by the adverb within Italian (as well as other languages') grammar.

With our work, we shall also step beyond the grammatical domain from time to time, when we briefly take into account some works of literature where the distribution of adverbs is employed to create specific stylistic effects.

We shall not stop for long outside the domain of grammar, however, for we shall soon try to explain these effects strictly in syntactic terms.

The problems associated with the adverb are given a first look in Section 1 that follows:

1. The Adverb: A Story of Inadequacies

Dissatisfaction about the description given to adverbs is great among linguists - traditional and generative alike.

What reasons lead Varvaro (1981) to state that "Si suole classificare gli avverbi in un grande numero di gruppi, ma la cosa è poco utile, perché le loro differenze riguardano non l'uso grammaticale ma il valore di significato." (p.233), and Jackendoff (1972) to complain that "In the literature of generative grammar, perhaps the least studied and most maligned part of speech has been the adverb", and that "... adverbs have been maltreated beyond the call of duty" (p.47)?

Our 'problems' with the adverb begin very soon indeed, for even its traditional definition proves to be inadequate and insufficient.

In his informative monograph, Pinkster (1972) tells us that Roman grammarians were already unhappy with the adverb. We are told that in his "Ars Grammatica" Charisius (IV century AD) enters into a discussion about what term would be more suitable, 'praeverbium' or 'adverbium', according to the position of the adverb in the sentence.

And nothing has changed much since Latin. In the majority of grammars and dictionaries consulted (apart from the most recent ones in some cases), the adverb is standardly defined as follows:

Avverbio = from Latin adverbium (derived from Latin ad + verbum, and in turn from Greek epirrhema, in the sense of 'added word'), that is, next to the verb; that invariable part of speech which serves to modify or make more precise the meaning of a verb.

Our problems, and indeed the whole point of this study, will be that of the distribution of adverbs, that is, that adverbs are not solely placed next to a verb, and that they do not solely serve to modify or make more precise the meaning of a verb.

Unfortunately, however, until recently traditional grammars have presented the adverb in exactly these terms.

It would be very time-consuming (and probably pointless) to analyze each and every one of the grammars we have consulted (a list of which is given in the references appearing at the end of this work). Most of them, in fact, consider the adverb in the same terms. What we shall do instead is to give first the standard account of the adverb appearing in these

works, mentioning particular grammars only when relevant.

2. The Adverb in Latin

For this section, we shall rely on H. Pinkster's 'On Latin Adverbs' (1972), I. Michael's 'English Grammatical Categories and the Tradition to 1800' (1970) as well as on textbook grammars of Latin consulted (see References section).

Michael confirms that the early treatment given to adverbs was obscure, due to the basic difficulty of classification: sometimes the adverb was classed with the noun, sometimes with the verb.

The first definition of the adverb accessible to us is that of Dionysius Thrax dating back to the II century BC, who spoke of the adverb as an indeclinable part of speech, used to amplify or qualify a verb.

The uncertainty we spoke about earlier remained for a very long time. For the later Stoics the adverb was formally related to the noun (adjective), but structurally linked with the verb, although it could also stand alone as a sentence-equivalent. This was a feature shared with those words we now call interjections, but which the Greeks did not distinguish from adverbs.

The uncertainty about the adverb is expressed

particularly well by Donatus (IV century AD) in his
'Ars Grammatica', where he gave instances of words
from every part of speech, which might be regarded as
adverbs. For example, there was uncertainty as between
adverb and noun for 'falso', adverb and pronoun for
'qui', adverb and verb for 'pone', adverb and
conjuction for 'quando', and so on.

Donatus and Priscian (c. 500 AD), and the other Latin
grammarians of the Byzantine period, agreed closely
with Dyonisius, especially in relating the adverb
solely to the verb.

Latin grammatical works inform us that the adverb is
placed with a verb, preferably before it, just as
adjectives are placed before nouns. Adverbs may also
be postponed, with some exceptions, and they can be
grouped   in   sub-classes   (demonstratives,
interrogatives, etc.).

According to Donatus, adverbs were "pars orationis,
quae adiecta verbo significationem eius explanat atque
inplet" ('Ars Grammatica', II. 13, K. iv. 385).
Priscian (2,4,16) reports that the Stoics called
adverbs 'as it were adjectives of verbs' ("quasi
adiectiva verborum"), and that the meaning of the
adverb is added to that of a verb, or, as we would say
with similar vagueness, the adverb modifies a verb.

The adverb has no 'complete meaning' (2,4,20 -
"perfectam significationem"; 15,1,4 - "plenam
sententiam"), except when added to a verb or
participle, whereas the verb can have complete meaning
without an adverb.

Despite this, Priscian also maintains (15,5,31,
14,2,12) that adverbs differ from prepositions in that
they have a definite meaning of their own.

If one compares the definition of the adverb given by
Priscian and other Roman grammarians (viz. the adverb
is an invariable word, the meaning of which is added
to that of the verb just as the meaning of the
adjective is added to the noun[1]) with the usual
definition in modern Latin grammars - as well as in
grammars of modern languages - the main difference
turns out only to be that nowadays adverbs are said to
modify adjectives and other adverbs as well.

Pinkster (1972:55) explains that the main syntactic
criterion by which words are assigned to the category
of adverbs is that they modify other words belonging
to particular categories: verbs, adjectives, adverbs.

Apart from the ill-defined notion of 'modification',
Pinkster criticized the definition given of adverbs
because, among other things: (a) it is ambiguous and

leads to incorrect interpretation; (b) the use of the
adverb is not restricted to the modification of the
category members mentioned. Let us review the
reasoning behind (b) above, which is of more interest
to us.

If we accept the notion of modifying, what we see is
that not every adverb modifies all members of these
three syntactic categories, and indeed that it cannot
always be modified by all of them. For example:

(1)   HERI (yesterday)

      heri Apollo me servavit (yesterday Apollo saved
      me)

      * heri bonus (a yesterday good one)

      * valde heri (very yesterday)

(1) shows that 'heri' can modify a verb, but not an
adjective. Furthermore, 'heri' cannot be modified by
an adverb, nor does it modify other adverbs.

Conversely, there are adverbs which modify members of
other categories, such as prepositional phrases, as
well. This is especially the case for the sub-class of
the so-called modal adverbs. There are many
differences among the words that are usually labelled
'modal adverbs'. Many of them occur with a lot of
words or phrases belonging to various other

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categories, e.g. 'fortasse' (perhaps), as shown by the examples given below, where the underlined word is modified by 'fortasse':

(2a) hora fortasse <u>sexta</u> diei questus sum in iudicio

(perhaps at the <u>sixth</u> hour of the day I complained in a trial - Cic. Dom. 41)

(2b) Q. Pompeius ... <u>biennio</u> quam nos fortasse maior

(Q. Pompeius, perhaps <u>two years</u> my senior - Cic. Brut. 240)

(2c) innocentem fuisse reum quem fortasse <u>numquam</u> viderat

(that man whom he may <u>never</u> have seen was innocent - Cic. Cluent. 131)

(2d) haec fortasse <u>propter pudorem</u> in lege reticentur

(perhaps <u>because of shame</u>, these (lands) have not been mentioned in the law - Cic. Agr. 2,37)

Moreover, the above definition offers no room for the so-called modal adverbs which are said to express the attitude of the speaker toward the content of the utterance and have no relation to the predicate:

(3) Male reprehendunt

(it is not right for them to blame - Cic. Tusc.

3,34)

Finally, the definition does not allow for the modification of clauses by words that are regarded as adverbs:

(4) ne .... quidem
     (not even ....)

(5) Huic ne ubi consisteret quidem contra te locum reliquisti
     (you have not even left him a place where he could make a stand against you - Cic. Quinct. 73)

Michael observes that it was not until the Renaissance period that the definitions started to consider the possibility of the adverb limiting any part of speech other than the verb.

Antonio of Lebrixa (1444-1522) said it could limit the noun (adjective) and the participle. Thomas of Erfurt (fl. 1325) and Martin of Dacia (d. 1304) said that the adverb limited the verb and the participle, while Ramus (1515-1572) claimed more generally that the adverb was "vox expers numeri quae voci alii adiungitur" (Bk.II. chap.8). This notion was left so wide that it also covered the prepositions, treated separately in Ramus's syntax but apparently as a sub-

class of the adverb.

Michael acknowledges that the classification of the adverb was "one of the most elaborate features of the tradition and is still a burden to schoolchildren" (p. 101). Furthermore, when reviewing the number of adverbs contained in the lists compiled by various grammarians throughout the centuries, he explains that "because questions of vocabulary had not yet been separated from questions which are grammatical in a narrower sense a formal classification, with which the lists usually begin, slides naturally into a display of meanings, in which there can be no certitude and no finality" (p. 102).

3. The Traditional Grammar Treatment

In our first overview of the Italian adverbs, we have consulted several grammars, from as early as Roman grammars on Latin and XIX century grammars of the Italian language, up to the present day and the latest works in print.

We have found that we can roughly separate grammars written prior to 1980 from those written in later years, with respect to their treatment of the adverb.

Let us start however by explaining how Italian adverbs are indeed formed. For this purpose, we shall take 'La Grammatica Italiana' by S Battaglia and V Pernicone (1968) as our starting point, for it summarises the contents of many other grammars of similar approach.

In this grammar we are told that "l'avverbio è così chiamato perché si aggiunge al verbo.", and it is "...una parola invariabile con valore determinativo, che vale a precisare, specificare o modificare il significato del verbo, anzitutto, ma anche dell'aggettivo o di un altro avverbio." (p. 232). Examples of this can be seen in (6-8) below:

(6)   parlare bene

      (to speak well)   (V - Adv)

(7) molto bello

     (very beautiful)   (Adv - Adj)

(8) poco rispettosamente

     (not very respectfully) (Adv - Adv)

The authors then continue by stressing the great
VARIETY of adverbs, and proceed to list their
categories which, as the reader will see, are defined
semantically, that is, according to the meaning of the
various adverbs.

In Italian we thus have:

a.   <u>Avverbi Qualificativi</u> (manner adverbs), which are
     by far the most numerous, because they are
     derived from adjectives, in the following ways:

     -    by adding the suffix -mente (English -ly,
          French -ment, etc.) to the feminine forms of
          adjectives [2]: certamente (certainly) from
          'certa' (certain, sure), fortemente
          (strongly) from 'forte' (strong, loud), etc.

     -    by employing the masculine form of some
          adjectives having an adverbial use: andare
          lontano (to go far away), from 'lontano'
          (far); stare vicino (to remain nearby), from

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'vicino' (near); parlare forte (to speak loudly), from 'forte' (strong, loud); camminare veloce (to walk fast), from 'veloce' (fast), etc;

- by employing the adverbial ending -oni, to express a particular position or movement of the body, as in 'ginocchioni' (on one's knees), 'carponi' (on all fours), etc.

- by employing the so-called 'locuzioni avverbiali', i.e. preposition + masculine form of the adjective: di certo (certainly, 'of certain'), di solito (usually, 'of usual'), di recente (recently, 'of recent'), in breve (briefly, 'in brief'), etc. [3]

b. <u>Avverbi Specifici</u> (circumstantial adverbs), more limited in number than manner adverbs; they are not derived by suffixation but are instead 'primary' lexical items. In this class we can distinguish the following sub-groups:

(i)   Time adverbs, such as: ora (now), ieri (yesterday), etc.

(ii)   Place adverbs, such as: qui (here), là (there), sotto (under), etc.

(iii)   Quantity adverbs, such as: poco

(little), troppo (too much), molto (a lot), etc.

(iv)   Affirmative adverbs, such as: sì (yes), etc.

(v)   Negative adverbs, such as: no (no), etc.

(vi)   Doubt adverbs, such as: forse (perhaps), etc.

(vii)   Similarity adverbs, such as: come (as), etc.

(viii)   Relative and interrogative adverbs, such as: dove (where), etc.

... and the list could go on.

Perhaps we should all side with F.T. Marinetti, who in his 1912 Futurist Manifesto boldly wrote:

"4. **Si deve abolire l'avverbio**, vecchia fibbia che tiene unita l'una all'altra le parole. L'avverbio conserva alla frase una fastidiosa unità di tono." (p. 41).

But alas, since more than 80 years on speakers stubbornly continue to put adverbs in their speech, we have no choice but to delve deeper into the subject.

So far, we can say that all the above is without doubt

an adequate description of the adverb. As grammars tell us, there is a great variety in the adverbial class, hence all the sub-categories offered.

However, is such a listing exercise really useful, and what does it (or does it not) tell us about the distribution of the adverb?

Well, not much. We already have problems with descriptions such as the above, as we will explain shortly below.

As a minor point, one which will not form a substantial part of our discussion, we could cast doubt on the 'invariable' nature of the adverb.

Donna Jo Napoli (1975) actually challenges the claim that no adverb undergoes gender/number agreement, at least in some particular environments.

She argues in fact that few Italian adverbs agree in number and gender with Noun Phrases (NPs) in certain cases. These adverbs are not -mente adverbs, but have corresponding adjectives. One of the adverbs of this class, which she refers to as Advectives (because they share some characteristics of adjectives and adverbs), is the adverb 'svelto' (quick, fast).

Her basic observation is related to sentences of the following type:

(9) a. Maria parla svelta

     b. Maria parla svelto

         (Mary speaks fast)

Her question is how many lexical items 'svelto' a speaker of Italian has. She argues that no speaker has a -mente adverb with 'svelto' as its root, for *sveltamente is not used colloquially in Italian.

Furthermore, she says rightly that many Italian speakers have an adverb 'svelto', derived standardly from the masculine form of the adjective, which never undergoes agreement (9b). These speakers will find (9a) unacceptable. Many other speakers have an adjective 'svelto' that obligatorily undergoes agreement. For them, the above judgements are reversed - their reading of (9a) will be roughly 'Mary speaks in such a manner that her words come out in quick succession'.

However, some speakers have two separate lexical items: $svelto_1$, an adjective which obligatorily agrees, and $svelto_2$, an adverb which never agrees. For them both (9a) and (9b) are well-formed, but have different readings. (9a) has the manner reading given above,

while (9b) roughly has the reading 'Mary speaks in
such a manner that the duration of time in which she
talks is short', that is, 'Mary speaks briefly'.

Finally, Napoli notes that there is yet another group
of speakers who have an advective 'svelto', which
agrees. Many of them also have a non-agreeing adverb
'svelto', and they regard (9a) and (9b) as acceptable
and having the same semantic reading. Consider:

(10) Maria parla svelta/svelto, anche se ci vogliono
     due ore ogni volta che apre la bocca
     (Mary speaks fast, even if it takes two hours
     every time she opens her mouth)

(11) Maria parla così svelta/svelto che è difficile
     distinguere tutte le sue parole
     (Mary speaks so fast that it's difficult to make
     out all her words)

For these speakers, (10) and (11) are well-formed with
and without gender/number agreement on 'svelto'.

So, one could question the term 'invariable' assigned
to adverbs, or at least require a more precise
formulation.

But quite apart from these side comments, we wish to question the definition that 'adverbs are so called because they are added to the verb', and the assumption that they 'affect' verbs primarily, but also adjectives and other adverbs.

More specifically, in (12) what does the adverb 'specify'?

(12) Stranamente, Paolo ha ballato

    (Strangely, Paolo danced)

It seems clear to us that the adverb here is neither modifying the verb, nor an adjective nor another adverb. We could see this if we consider (13):

(13) Paolo ha ballato stranamente

    (Paolo danced strangely)

Now, (12) and (13) do not have an identical meaning. Semantically, in fact, (12) could be paraphrased as 'it was strange that Paolo danced', whereas (13) could only have the meaning of 'the manner in which Paolo danced was strange'.

Therefore, in (13) the adverb does indeed modify the verb, but in (12) it modifies the whole sentence.

So far, we have found our earlier definition
insufficient, or, as generative linguists would put
it, not even descriptively adequate. Moreover, one
could also see that this inadequacy does not change
with the semantic type of the adverb. In fact, in (14)
we have a 'doubt adverb' modifying yet again the whole
clause, and not just the verb:

(14) Forse Paolo non verrà

(Perhaps Paolo will not come)

(= it is in doubt that Paolo will come)

But we shall not limit our claims to what we have said
above. Indeed, we do not only claim that a semantic
definition of the adverb is inadequate; what we shall
claim is that what the adverb modifies/alters/makes
more precise will be derivable from the adverb's
position within the sentence.

But let us proceed step by step.

What do early grammars say about the position of the
adverb within a proposition? Claims vary here. It has
to be said that many grammars simply avoid the issue
altogether. Among those that consider it, many tell us
that adverbs are placed after a verb, and that when
the tenses are compounded, the adverb is put between
the verb and the participle.

Durante (1981:189-90) points out that in early Italian manner adverbs had an exclusive relationship with the verb. He looks at the 'Novellino' and Petrarch's 'Rime', and finds that the dependence of the adverb from the verb is reflected in the word order.

Durante discovers that of the 58 occurrences of -mente adverbs in 'Novellino', none modifies an adjective,

(15) Veramente è bella

(Really she is beautiful)

(16) Le pietre naturalmente sono fredde

(The stones naturally are cold)

and that to his knowledge the first to make use of the modern word order is Petrarch, for expressive effects, as we can see in the following examples:

(17) Gli atti suoi soavemente alteri, E i dolci sdegni

alteramente umili (Rime XXXVII 100-1)

(Her suavely proud actions, and the sweet, proudly humble disdain)

(18) De la sua vista dolcemente acerba (CCLXX 64)

(Of her suavely young appearance)

However, Durante (1981:190) confirms that we can find no correspondence to Petrarch's syntax in the prose of his century, and that probably it was not until the

XVI century that manner adverbs started to be associated with an adjective, starting gradually with Machiavelli and Castiglione, and becoming the norm in the language of Galileo and his school.

According to Battaglia and Pernicone (1968), "L'avverbio nella sua funzione fondamentale modifica il verbo: e rispetto ad esso può variare di posto. La sua collocazione normale è dopo il verbo.... Nell'anticipare l'avverbio prima del verbo gli si dà più risalto e maggiore espressività... Nel caso che questi avverbi siano usati a modificare una intera frase, si possono porre in principio o in fondo, di solito distinti da una virgola....ma si può anche nel corpo nella frase, sempre in posizione distinta, separata:.... S'intende che quando qualcuno di questi avverbi viene a modificare o specificare soltanto una parola, si mette allora a diretto contatto di essa... Quando l'avverbio modifica un aggettivo o un altro avverbio, si pone prima.... Quando l'avverbio modifica il verbo, se si tratta d'un predicato composto, si suole porre, a volte, fra l'ausiliare e il participio, per dargli maggiore risalto, specie in poesia." (p. 241-242). (This last claim is unclear, for the Aux ____ Participle position is a standard position available to adverbs in complex tenses, without any further emphasis being placed on the adverb, and indeed some adverbs only occur in this position).

Again, we find these descriptions to be inadequate. It is perfectly true that all the positions illustrated above are available for the adverb, as examples (19-26) show:

(19) Parla stranamente

    (He/she speaks strangely)   (V - Adv)

(20) Ha quasi finito

    (He/she has nearly finished)   (A u x - A d v -

                               Participle)

(21) Presto te ne accorgerai

    (Soon you will see)   (Adv - V)

(22) Fortunatamente, te ne sei accorto

    (Fortunately, you have noticed it)

                           (Adv-,-S)

(23) Te ne sei accorto, fortunatamente

    (same meaning as 23)   (S-,-Adv)

(24) Verrà, forse, domani

    (He/she'll come, perhaps, tomorrow)

(25) Molto bravo   (Adv - Adj)

    Very good/smart)

(26) Molto velocemente   (Adv - Adv)

    (Very quickly)

However, these are by no means the only positions where adverbs can occur. Adverbs have not only a great variety, but also a great mobility in their

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positioning.

In general, we can say that if adverbs modify an adjective or another adverb, they precede it:

(27) piuttosto grande

    (rather large)   (Adv - Adj)

(28) assai lentamente[4]

    (very slowly)   (Adv - Adv)

If they modify a verb, adverbs can precede it:

(29) Spesso ho pianto

    (I have often cried)   (Adv - V)

separate the auxiliary from the past participle:

(30) Ho spesso pianto

    (same meaning as 30)   (Aux-Adv-Part)

or follow it:

(31) Ho pianto spesso

    (same meaning as 30)   (Aux-Part-Adv)

And in some cases, when adverbs modify the meaning of an entire clause, they can be positioned at the beginning of the sentence:

(32) Onestamente, non saprei

(Honestly, I could not say)

or at the end of it:

(33) Non saprei, onestamente

(same meaning as 32)

Finally, there are adverbs whose domain is larger than one single sentence, because the adverb refers to an earlier context:

(34) Dunque, Paolo non la sposò

(So, Paolo did not marry her)

Altieri-Biagi & Heilmann (1980) keep their description of adverbs along the lines of earlier grammars. However, they also admit that the adverb's "...autonomia è amplissima" (p. 300). To illustrate this, they quote the following paradigm:

(35) a.   <u>Domani</u> parto per Roma con mio fratello

(Tomorrow I am leaving for Rome with my brother)

b.   Parto <u>domani</u> per Roma con mio fratello

(same meaning as 35a)

c.   Parto per Roma <u>domani</u> con mio fratello

(same meaning as 35a)

d.   Parto per Roma con mio fratello <u>domani</u>

(same meaning as 35a)[5]

Varvaro (1981) also refuses the restrictive description of adverbs given in earlier works, and states that "... l'avverbio è una parola invariabile che può essere collegata sintatticamente a qualsiasi elemento della frase, che abbia significato pieno (quindi a sostantivi, aggettivi, verbi o avverbi, non però a preposizioni o congiunzioni), integrando o modificando questo significato, oppure può integrare o modificare il senso della frase nella sua interezza" (p. 233).

As for the positioning of adverbs, the author goes along with other works outlined above, adding however some notes on the ordering of different types of adverbs with respect to one another.

Specifically, he explains that when two adverbs occur together, we have the following patterns:

(36) Circumstantial adverb precedes manner adverb

Assai velocemente

(very speedily)

(37) Manner adverb precedes circumstantial adverb

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Assolutamente mai

(Absolutely never)

(38) Circumstantial adverb + circumstantial adverb:

Neppure oggi

(Not even today)

We shall return to this ordering point later, hopefully succeeding in explaining some of these facts syntactically.

What matters now is to see that even this widened description of the adverb is not adequate, for it gives us no means of knowing that not all adverbs can be put in these positions. Consider in fact the grammatical judgements that follow:

(39) Forse parlerà

(Maybe he/she will talk)

(40) ? Intelligentemente parlerà

(He/she will cleverly speak)

(41) Parlerà intelligentemente

(He/she will cleverly speak)

Again, these different judgements will receive a

syntactic explanation, not a semantic one.

It is in this respect that the grammars of the last decade have been found to be more intuitively satisfactory.

Some say for example that the adverb is a 'heavy' part of speech, that is, one with meaning, but that such meaning depends on its position within the syntactic structure.

Others admit that more recent studies tend toward a new classification of adverbs, founded on essentially syntactic criteria, after noting for example that some adverbs change their meaning in relation to their position within the sentence. One example of this is 'incredibilmente' (incredibly), as in:

(42) Incredibilmente, Gianni studia

where the meaning is roughly 'it is incredible that Gianni is studying'.

However, in (43):

(43) Gianni studia incredibilmente

the meaning can only be understood as 'the manner in

which Gianni studies is incredible'.

Conversely, other adverbs do not change their meaning, whatever their position. See for example:

(44) a.   Affrettatamente Gianni uscì di casa

           (Gianni hurriedly went out of the house)

     b.   Gianni affrettatamente uscì di casa

     c.   Gianni uscì affrettatamente di casa

     d.   Gianni uscì di casa affrettatamente

More generally, it has been proposed to divide adverbs into three groups:

a.   Adverbs with an 'influence' greater than the single clause, as 'dunque', as in:

(45) Dunque, non posso essere d'accordo
     (So, I cannot agree)

where the adverb refers to a previous context.

b.   Adverbs with 'influence' on the entire clause, such as 'certamente', as in:

(46) Certamente Simona partirà
     (Simona will certainly leave)

c.   Adverbs with 'influence' on one part of the
     clause, such as 'chiaramente', as in:

(47) Mario ha parlato chiaramente
     (Mario has spoken clearly)

We can undoubtely see a move, from a semantically
based definition of the adverb to a syntactic
definition. The influence of generative grammar is
perhaps felt in the last decade.

On the front of historical reference grammars of the
Italian language, we analyzed Rohlfs's (1969) and
Tekavčić's (1980) historical grammars of Italian, with
respect to the adverb.

Here we find many familiar statements and assumptions.

Rohlfs traces the development of adverbs from Latin.
He explains that the Latin adverbs ending in -e are
seldom found in Italian (apart from some exceptions:
Tuscan 'bene', 'male', etc.). Also, the coming
together of Latin endings -o and -um in the form -o
explains the adverbial function of many adjectives
(e.g.: 'camminare piano' (to walk slowly)). Finally,
adjectives ending in -e can also have an adverbial
function (eg: 'piangevo forte' (I was crying loudly)).

In the case of adjectives used with the function of adverbs, sometimes the modern Italian forms continue an ancient adverb ('alto', 'piano', 'spesso'), whereas sometimes it is a real adjective used adverbially, not referring to the verb, but to the subject, as an element of predication (eg: 'Carlotta guardò il vecchio silenziosa e attenta' - Carlotta quietly and carefully watched the old man).

In other cases still, we have an adjective used adverbially because the adverb already anticipates the ending of the adjective (eg: 'gli occhi mezzi chiusi e mezzi aperti' - eyes half-closed and half-open [masc. plur. agreement]).

As for the position for the adverb, Rohlfs states that as the name suggests, the adverb appears next to the verb, and that originally it made more precise the meaning of the latter, thus replicating the function of the adjective with respect to the noun. In earlier centuries, this ancient link with the verb was still recognisable; in the modern language, the position of such adverbs is linked to the adjective, so we have the passage from '<u>ben</u> sei crudel' to 'sei <u>ben</u> crudele' (you really are cruel).

Other adverbs are preferably put after the verb, few

adverbs between auxiliary and participle. Finally, when stressed the adverb may be put at the beginning of the sentence.

Tekavčić calls adverbs the 'determiners of the verb', resulting from the transposition of the corresponding adjective.

He distinguishes between 'true' adverbs - derived from adjectives - and the others. Moreover, he also divides adverbs in 'performative' and 'non-performative' adverbs, both derived from adjectives + -mente, but with the difference that the performatives determine the performative component of the whole sentence ('Mario dorme probabilmente -> è probabile che Mario dorma' (Mario probably sleeps -> it is probable that Mario sleeps)), but the non-performatives determine the verb alone ('Mario dorme tranquillamente -> * è tranquillo che Mario dorma' [Mario quietly sleeps -> * it is quiet that Mario sleeps]).[6]

In the evolution from Latin into the Romance languages and Italian among them, the following processes took place:

-    Latin used four morphemes for adverbs (-e, -o, -er, -iter), so there were four morphemes carrying out only one function

(unpredictability);

- there was little formal clarity in the adverbs in -e and -o, because they were not sufficiently distinguishable from adjectives. The adverbs in -er, after the fall of the final consonant - were to fall into this category. Only the adverbs in -iter were sufficiently clear;

- following the general tendency toward paraphrases, spoken Latin substituted adverbs with a noun signifying 'way, manner' + the adjective to be transposed (e.g. LENTO MODO (lentamente - slowly)).

    Later there was another paraphrase, which has applied to all Western Romance languages, with the noun MENS, ablative MENTE, instead of modus. MENS had many meanings, among which were 'spirit', 'inclination'.[7]

As far as the adverbial position is concerned, with respect to the verb it is less fixed than that of the adjective with respect to the noun. Italian, conversely, prefers to postpone the adverb, in accordance with the Romance word order in general. Tekavčić also notes however that adverbs with their sphere of influence on the whole sentence are freer

than 'verbal' adverbs.

A further move closer to a generative grammar approach
to the adverb is seen in 'L'Avverbio' by Pecoraro &
Pisacane (1985), a monograph on the adverb which
employs several grammar tests to describe the
distribution of adverbs in Italian. From these
comprehensive tests it emerges that what is relevant
is the notion of 'domain'.

The authors classify all adverbs they consider in
terms of the definition of 'domain', and into three
groups. Although the formal definition differs from
other grammars outlined above, the result is
identical. We therefore have:

a.   Adverbs with no domain (ie. no argument);

b.   Adverbs with whole sentences as their domain;

c.   Adverbs with parts of sentences as their domain.
(p. 73).

This notion of domain is directly related to the
freedom of movement that adverbs display.
Specifically, the authors claim that adverbs with a
fixed domain, ie. that display no change of meaning
with movement, have a wide freedom of positioning, for
the logical relation with their argument is unchanged.

Conversely, adverbs with mobile domain, ie. that display change of meaning with movement, can only have limited freedom of positioning within the clause, to avoid altering the relations among the various elements. (p. 76-77).

We have now come to the end of our survey of traditional grammars. We shall return to more recent works in Section 8 of our study, to check on the latest approaches they have taken on adverbs.

We can now see that from here on, the generative grammar treatment of adverbs, first outlined in Jackendoff (1972), is at the core of the positions taken by Pecoraro & Pisacane (1985).

Albeit with a different terminology, we shall see in fact that Jackendoff's work on adverbs, about to be reviewed below, anticipates Pecoraro & Pisacane's claims by several years. What will be new in our study, however, is the explanations that generative linguists give on the distribution of adverbs, that is, an articulate syntactic formulation of the possibility of positioning and movement that the adverb displays in our speech.

It is also at this point that other languages are introduced: first English in Jackendoff (1972), then

French in the more recent works of other linguists.

Italian adverbs will be made to contrast with other languages where applicable, and in Section 6 certain conclusions will be drawn from our data to explain specifically Italian facts.

In Section 7, we shall observe the distribution of the adverb in the works of some Italian writers, in the light of the conclusions reached from previous sections.

Finally, in Section 8 some tentative proposals for Italian adverbs will be given.

4. The Generative Grammar Approach

We noted at the beginning of our study that R S Jackendoff was far from satisfied with the treatment that earlier traditional and generative linguists had given (or indeed had not given) to adverbs in the English language. This unhappy state of affairs was exactly what he set out to remedy in his book 'Semantic Interpretation in Generative Grammar' (1972:47-107).

Although his proposed solutions, as we shall shortly see, are no longer acceptable in the present generative grammar framework (see our introduction to later generative grammar works, Section 5, p. 59), his efforts have proved nevertheless very fruitful in starting a study of the adverb and in providing a comprehensive corpus of examples which other linguists have begun to elaborate.

Jackendoff noticed two main factors in the field of adverbs.

On one hand, he recognised that the attempt to make adverbs equivalent to adjectives, in that the adverb could be paraphrased as an adjective, is problematic if not fruitless.

This likening of adverbs to adjectives recurs throughout the traditional grammar literature (e.g. Trabalza & Allodoli, (1934); Altieri-Biagi & Heilmann (1980); Pugliese (1983); Fogarasi (1983), etc.).

To show the problems, let us see the examples below:

(48) ?   John completely ate his dinner --> the
          manner in which John ate his dinner was
          complete
(49) *   John is merely being a fool --> it is mere
          that John is a fool
(50)   John evidently finished --> it is evident
          that John finished.

One could also see problems with the proposed paraphrasing: Adjective - Noun --> Noun which is Adjective. Although this paraphrasing is very often possible, consider:

(51) *   A mere/complete idiot --> an idiot who is
          mere/complete

Other examples of this lack of correspondence between the -mente adverb and the adjective from which it is derived are pointed out in Serianni (1989:491):

'Finalmente' (finally) does not have the meaning of

'*in maniera finale' (in a final manner) but, says
Serianni, 'alla fine' (at the end); 'solamente' (only)
does not have the meaning of '*in maniera sola,
solitaria' (in an only, solitary manner), but is more
similar to the adverb 'soltanto' (only), etc.

Serianni (1989:492) also stresses that this lack of
correspondence is found between adverbs and 'locuzioni
avverbiali'. Here are three -mente adverbs and their
corresponding 'locuzioni avverbiali':

a.   Collegialmente = in gruppo, insieme
      (Collegially = in a group, together)
b.   Parzialmente = in parte
      (Partially = in part)
c.   Letteralmente = alla lettera
      (Literally = to the letter)

But notice now the following examples, taken from
Serianni (1989):

(52a)   Riuniamoci domani collegialmente
         (Let's meet collegially tomorrow)

 (52b)   * Andiamo in vacanza collegialmente
          (Let's go on holiday *collegially/together)

(53a)   Ho letto solo parzialmente il tuo libro

(I've read only partially your book)

(53b) * Ti sei comportato un po' in parte con lui

(You've behaved a bit *in part/partially

with him)

(54a)   Sono letteralmente distrutto

(I'm literally dead)

(54b) * Sono distrutto alla lettera

(I'm dead *to the letter/literally)

It seems therefore that we cannot defend a
paraphrasing of adverbs along these lines.

The second factor that Jackendoff wanted to stress was
that, despite the above differences, there are
nevertheless some linear analogies between adverbs and
adjectives, most notably the fact that the surface
position of the latter in noun phrases is between the
Determiner and the head, exactly parallel to the
auxiliary position of the adverb (between the subject
and the main verb). Also, analogies exist between the
position of adjectives in derived nominals and adverbs
in gerund sentences, as in:

(55) a.   John's rapid reading of the letter
     b.   John's rapidly reading the letter

Furthermore, those adjectives that can only appear prenominally, such as 'mere', are paralleled by adverbs that can only appear preverbally, such as 'merely'.

To capture these generalisations, Jackendoff began to establish his theoretical framework.

He claimed that the old division of adverbs into manner adverbs, locatives, time adverbs, etc., should be abandoned, and that a set of syntactic and semantic features in the lexicon, proposed by Chomsky in 'Aspects of The Theory of Syntax' (1965), should be adopted instead.

Jackendoff thus assumed that the base mentions a category Adv, with no structural indications such as 'Adv Manner' (now only a semantic marker).

He then observed (1972:49-51) that generally there are at least three basic surface positions in a sentence, where all the -ly adverbs can be found:

-     initial position
-     final position without intervening pause
-     auxiliary position

and he also claimed that we could distinguish between various classes of adverbs by virtue of their occurrence in combinations of these three basic positions. These are:

a. One class which can occupy all three positions, but with change of meaning. For example:

(56) John cleverly dropped his coffee cup

(56) is ambiguous, because it could mean either (57) or (58):

(57) Cleverly (,) John dropped his coffee (= it was clever of John to drop his coffee)

(58) John dropped his coffee cleverly (= the manner in which John dropped his coffee was clever)

b. Other adverbs which can occupy only initial and auxiliary positions:

(59) Probably John has lost his mind
(60) John has probably lost his mind
(61) John lost his mind, probably (acceptable only with an intervening pause)

All these examples have the same meaning: it is probable that John lost his mind.

c. Adverbs which can occupy all three positions, but with no evident change of meaning. An example of this class is the adverb 'quickly'.

d. A class of adverbs which can only appear in auxiliary and final positions. For example:

(62) * Completely John ate his dinner

(63) John completely ate his dinner

(64) John ate his dinner completely

e. Some adverbs, typically non -ly adverbs, which only occur in final position:

(65) * Hard John hit Bill

(66) John hit Bill hard

f. Finally, a class of adverbs which only occurs in auxiliary position:

(67) John is merely being a fool

(68) (*Merely) John is being a fool (*merely)

These adverbs have no adjectival paraphrase whatsoever.

To account for this rich and diversified corpus of data (albeit by no means complete yet), Jackendoff (1972:51-56) started by considering the traditional transformational accounts of adverbs. These claimed that adverbs originated from Deep Structure sources similar to available paraphrases which do not contain the adverbs, for example 'John is careless at driving his car' --> 'John drives his car carelessly'.

According to Jackendoff these approaches, however, could not be maintained. This is firstly because some of the paraphrases described above give rise to curious results, for example: 'Harry was formerly known as "The Red Death"' <-- 'The time at which Harry was known as "The Red Death" was a former time'.
Also, sometimes related adjectives exist but they cannot be used to form a convincing paraphrase, as in: 'The men were individually asked to leave' <-- *'It was individual that the men were asked to leave'.

Moreover, Jackendoff (1972:53-54) said rightly that a transformation which accounted for adverbs had to be very powerful and limited in its scope, since even for those adverbs for which an adjectival source is available (e.g. 'madly' <-- 'mad'), it would be necessary to list the adjective 'mad' in the lexicon as optionally undergoing a minor transformational rule peculiar to 'mad' alone and to a restricted class of

other adjectives, which would change the adjective into an adverb. Moreover, there would be a large number of such transformations, one for each small class of adverbs.

Clearly, if we consider that this approach was already strongly marked in Jackendoff's times, it is even more so in the framework adopted today. Moreover, by maintaining that each class of adverbs is inserted into a sentence by a different transformation, in Jackendoff's (and our) opinion there is no obvious way of expressing the surface similarities existing among adverbs.

As we can see, therefore, traditional grammars do not bear all the blame!

Jackendoff's proposal was to adopt both a base-generational and a transformational approach for the different positions in which adverbs can occur.

Let us see them in turn:

a.   The Auxiliary Position

For this position, Jackendoff (1972:60-62) claims that it is the underlying position for all -ly adverbs, for these can all appear here, and there are even some

adverbs which can <u>only</u> appear here, (e.g. 'merely',
etc.). Also, with this assumption Jackendoff could
capture the intuition that adverbs are related to
sentences (or verb phrases) as adjectives are to noun
phrases, as pointed out before.

b.   The Final Position

For all non -ly adverbs which can only occur here
(e.g. 'hard'), Jackendoff (1972:63-66) adopts a
proposal by Klima (1965), who analysed these adverbs
as intransitive prepositions, generated by the base in
the same positions as ordinary prepositional phrases
(PPs). Klima's evidence here is that these adverbs
substitute semantically for prepositional phrases, and
that they can act as prepositions, or are semantically
related to them:

(69) John ran home/into the house

Klima thus suggests that the base rule for PPs, like
that for noun phrases (NPs) and verb phrases (VPs),
contains an optional NP following the head: PP --> P -
  (NP).

In this way, he proposes, at no extra cost it is
possible to generate intransitive PPs in the base, and
to use the same projection rules to account for their

semantic relationship to the sentence (S), as one uses for PPs.

For -ly adverbs in the final position, according to Jackendoff there appear to be two possible solutions:

(i) to extend the base rule for intransitive prepositions, to include -ly adverbs; or

(ii) to add a transformation to move them into the VP from the auxiliary (aux) position.

Jackendoff here chooses the first solution. Why?

Clearly, most instances of -ly adverbs are not strictly subcategorised by the verb of the sentence. However, Jackendoff notes that there are certain verbs which require an adverbial of some sort. Consider:

(70) John worded the letter carefully

(71) * John worded the letter

(72) * John carefully worded the letter

(73) John specifically worded the letter carefully.

To account for this paradigm, by allowing the base to be enlarged instead of the transformational component, and henceby allowing adverbs to be generated postverbally, the properties of verbs like 'to word'

look like perfectly normal cases of strict
subcategorisation restrictions.

So, Jackendoff concludes that the grammar is simpler
if postverbal adverbs are generated by the base rules.

c.   The Initial Position

Phrase Structure sources or transformations? This
time, Jackendoff (1972:66-67) prefers a
transformational source, since adverbs do not always
occur in initial position in subordinate clauses.

(74) John says that (? evidently) Bob has evidently
     disappeared

As there are many well-known transformations that
apply only in main clauses, while the base is supposed
to be context-free, for Jackendoff the addition of a
preposing transformation creates fewer complications
to the grammar.

To sum up, in Jackendoff's framework, to account for
the three adverbial positions we would need:

a.   A base rule of PP --> P - (NP) for intransitive
      prepositions;
b.   A base rule [$_\alpha^X$ verb] --> ([$_\alpha^Y$ Adverb]) - X -

Complement for preverbal adverbs.

Moreover, the base rule for VP must be extended to allow -ly adverbs to be generated postverbally, and a preposing rule must be added to generate adverbs in initial position.

It is also interesting to ask how can one prevent all -ly adverbs from occupying all three positions. Jackendoff, as we will see shortly, proposed a separation of surface distributional classes on semantic grounds.

Up to now, however, we have been working on over-simplified data: -ly adverbs can in fact occur in the VP in positions other than at the end, and they can also occur between elements of the auxiliary. Consider:

(75)

a   John will send the money immediately back to her

b   John immediately will send the money back to her

c   John will probably have sent the money back to her

d   ? John will have probably been getting upset by now

Also, we have yet to account for adverbs in final

position with pause, as in:

(76) John lost his mind, evidently

In Jackendoff's opinion it would clearly be unfortunate to state a special transformation for each of these positions. So, he endorsed a proposal by Keyser (1968), that of transportability.

Keyser observes that the positions in which adverbs can occur correspond to major syntactic breaks in the derived structure. This convention allows a constituent marked [+ transportable] to occupy any position in a derived tree, as long as the sister relations with all the other nodes in the tree are maintained, i.e. as long as it is dominated by the same node. For Keyser, in English -ly adverbs are [+ transportable].

Jackendoff (1972:67-69) infers that from this convention adverbs dominated by the sentence (S) can occur initially, before the aux and finally, and these are indeed three possible sister positions to the subject and the VP. For the final position dominated by S, he presumes that it is the one with an intervening pause, as seen in (76). Adverbs dominated by the VP should then occur before the verb (V), finally (with no pause) and at various places in

between, and we find this to be the case.

Jackendoff further noticed that the only place where adverbs give particularly bad results (in English, but not at all in Italian or French, for example), is between the VP and the following NP:

(77) */? John sent immediately the money back to the girl

So, whereas Italian and French appear to conform to the transportability convention in these cases, to prevent the occurrence of (77) in English, Keyser appealed to a "surface structure tendency to prevent anything from intervening between a Verb and the following Noun Phrase".

Let us now return to Jackendoff's (1972:69-73) proposed separation of surface distributional classes on semantic grounds. The semantic structures of sentences containing adverbs fall into several categories:

a.   The first category often has a paraphrase for a sentence, in which S' is embedded as a sentential argument of a copula clause containing an adjective, and either there is no other complement in the main clause, or there is a NP

referring to the speaker.
Jackendoff refers to the adverb in this case as
NEUTRAL or SPEAKER-ORIENTED. For example:

(78) It is evident (to me) that John lied

(79) It is certain (*to me) that John lied

b.   The second major type of interpretation often has
      a paraphrase in which S' is embedded as a
      sentential complement of a main clause containing
      an adjective, but one of the NPs of the S must
      also appear in the main clause, usually the
      surface subject.
      Jackendoff calls these cases SUBJECT-ORIENTED
      adverbs. For example:

(80) John was careful to spill the beans

c.   A third semantic structure is indicated by the
      paraphrases of manner, degree and time adverbs.
      To paraphrase these, a PP must be added to the
      S', which then forms a relative clause on the
      subject of the main copula clause containing the
      adjective. For example:

(81) John speaks eloquently (the manner in
          which John speaks is eloquent)

d.   A fourth semantic structure is that associated
     with the 'merely' class of adverbs, but no
     proposals are made by Jackendoff in this case.

Jackendoff then proposed that the semantic component
of the grammar must relate the syntactic structure of
the sentences containing an adverb to the appropriate
semantic structure, and that adverbs will be marked in
the lexicon as to which of the possible semantic
structures they can enter into. For example:

(82)

CERTAINLY: predicate over a sentence

HAPPILY: predicate over a sentence + argument
                SPEAKER

CAREFULLY: (non-manner reading) predicate over a
                sentence + unspecified NP

ELOQUENTLY: semantic marker appropriate to modify
                functions   (like   'frequently',
                'completely', etc)

and so on.

For each semantic structure, concludes Jackendoff,
there will then be an associated projection rule.

The adverbs which occur in INITIAL and AUXILIARY

positions must have SPEAKER- or SUBJECT-ORIENTED semantic structures.

Those that occur in AUXILIARY and FINAL positions must only enter into MANNER-adverb-like semantic structures.

Those that occur in all three positions allow more than one projection rule to apply.

5. The Move Away From Transformations

There has been a constant effort by generative linguists to try and modify the original formulation of their grammar towards a theory that abandoned its much too powerful original statements in order to become as highly generalised as possible.

The question was how to eliminate highly construction- and language-specific rules and transformations in order to attain a very restricted number of constraints on outputs of rules (or well-formedness of constructions) which could account for a big number of different constructions, hopefully also across languages.

Case Theory and Theta Theory have provided this opportunity, and other generalised rules such as Move α, bounding rules, and in general the Government and Binding (GB) framework have achieved the greatest part of this goal. It is not excluded that they could also be absorbed by more generalised conditions, and much work is being carried out in this direction.

Moreover, when linguists tried to apply these conditions to other languages as well, they have seen, interestingly, that a language could vary from another

in the choice of an option for a certain condition,
but that the same condition could be said to be at
work in more than one language. To account for the
fact that the differences existing across languages
are not totally 'wild' or unrestricted, Chomsky
theorised a single system that could be made flexible
to accommodate them.

Chomsky's solution was to introduce the notion of
'parameters'. According to Chomsky and to generative
grammar, every newborn infant is innately 'equipped'
with a Language Acquisition Device (LAD) of some kind,
which contains parameters with a limited set of
possible values. For example, candidates for possible
parameters include 'head-first' versus 'head-final'
languages, bounding nodes, possible binders, the
AG/PRO parameter[8], etc. The learner of one language
as opposed to the learner of another language would
then 'choose' an option valid for his/her language and
compatible with the input data (his/her linguistic
environment), ie. 'fix' the parameter to the option
valid for his/her language.

For a detailed discussion of these points we refer the
reader to Chomsky (1989) and Lasnik & Uriagereka
(1988), among others. For the purposes of our study it
will be sufficient to say that the combination of more
generalized conditions and the attempt to offer

linguistic accounts valid across languages points to the shortcomings in Jackendoff's proposals, and explains why more recent studies on the adverb have moved toward a more simplified and unified formulation.

Until recently, apart from few notable exceptions like Jacobson (1978), there have not been many studies on the adverb since Jackendoff (our adverb was still unpopular, it seems), but in 1989 Noam Chomsky and Jean-Yves Pollock looked at the issues of negation and adverbs in English and French, and inspired at the same time a new interest in the adverb, which has seen a lot of new work published recently (detailed in Section 6 that follows).

Our analysis will concentrate on the adverb alone, and we will include the adverb of negation where relevant.

Both Chomsky (1989) and Pollock (1989) can be said mainly to be in agreement about the fundamental approach to the issue of adverbs (and negation): the emphasis in the treatment of the adverb should switch to the structure of the Inflection Phrase (IP).

Pollock sets out to demonstrate that all the 'theoretical machinery' we need to account for adverbs and their differences of behaviour between French and

English can be reduced to:

- the structure of UG (Universal Grammar);
- one abstract parameter dealing with the 'opacity' or 'transparency' of AGR(eement) in French and modern English, namely, that AGR is transparent in French and opaque in English.

To demonstrate these claims, Pollock proposes a more articulated structure of IP, and specifically that INFL is composed of two constituents, each being a head of a maximal projection: TP (Tense Phrase) and IP (Inflection Phrase). In line with this formulation, English and French also have a maximal projection NegP, and all those maximal projections will be potential barriers for certain types of movements.

Besides this formulation, Pollock also assumes that ECP (the Empty Category Principle), Theta-Theory and Quantification Theory[9] are sufficient to account for the core cases of the adverbs and negation in these two languages.

Pollock follows Emonds (1976) and Jackendoff in assuming that French has a compulsory rule of Verb-Raising to I(inflection), whereas in English this is limited to the so-called Have/Be Raising. In this framework, (Adv) is in both languages an optional

adverbial position that can be filled by VP-adverbs.

These assumptions are already sufficient to account
for the contrasts seen in (83) - (86):

	ENGLISH	FRENCH
(83)	* John likes not Mary	Jean n'aime pas Marie
(84)	* Likes he Mary?	Aime-t-il Marie?
(85)	* John kisses often Mary	Jean embrasse souvent Marie
(86)	John often kisses Mary	* Jean souvent embrasse Marie

Let us see how Pollock proposes to use the structure
in (87) below to account for these examples:

(87) $[_{IP}$ NP I ($[_{neg}$ not/pas]) [VP (Adv) V]]

In English, (83) is ungrammatical because the verb
would have to be moved to I (pre-negation position),
and this is only restricted to Have/Be. Conversely,
the French version of this sentence is well-formed,
for all lexical verbs in this language undergo verb-
movement.

(84) is accounted for in the same way, if we analyse the so-called 'Aux-NP Inversion' as a movement to the left of I.

(85) and (86) also follow if we assume that neither French nor English allow for Adv-movement to the right. In (85), the only way for 'often' to end up between the V and the object would be for the V to move to I, and this is unacceptable in English and acceptable in French, hence the contrast seen in (86). Conversely, to obtain (86) in French, the verb would have not raised to I, and this is unacceptable in French and acceptable in English.

Finally, assuming Kayne's view (1975) that floating quantifiers move to adverbial positions and extending this to negation, we can account for the contrast seen in the sentences below:

(88a)   Pierre n'a rien mangé

(88b)   * Pierre n'a mangé rien

(88c)   * Pierre ne rien mange

(88d)   Pierre ne mange rien

(We note here that the Italian equivalents of (a) and (c) are ill-formed, but (b) are (d) are grammatical. We shall return to this point later).

These examples show that in French 'rien' must move to the left of a participle; yet this does not apply to tensed verbs, as (c) shows. Pollock claims that these facts can receive a straightforward explanation if we assume that 'rien' has moved to the front of the VP (i.e. to the optional VP-initial Adv position), and that V-movement to I at Surface Structure conceals this move. The structure is then the one in (89):

(89) $[_{IP}$ Pierre n' $[_I$ $a_i]$ $[_{VP}$ $[_{Adv}$ $rien_j]$ e_i mangé $e_j]]$

(where e_i =   empty position created by moving V

       e_j =   empty position created by moving 'rien')

Summing up, then, Pollock follows Emond's idea that in French V raises to I, while in English I lowers to V. From this it will follow that VP-adverbs (taken to be generated under VP, adjoined to another VP) are pre-verbal in English and post-verbal in French, with the exception that English auxiliaries Have/Be behave approximately like ordinary verbs in French, as we can see in (90):

(90) a   John has completely lost his mind

     b   * John has lost completely his mind

From this it becomes clear that the real difference is not the raising in French v. the lowering in English,

but rather a factor that requires French verbs and English auxiliaries to raise, while forbidding other English verbs from doing so.

To explain these facts, Pollock, as we have stated before, assumes that the AGR element is somewhat "stronger" in French than in English. His assumption is that a weak (opaque) AGR is unable to "attract" true verbs like 'love', though it can attract auxiliaries, while a strong (transparent) AGR attracts all verbs.

The reason for this difference in behaviour, according to Pollock, is reducible to Theta-Theory: a strong AGR allows an adjoined element to head a Theta-chain, while a weak AGR does not. If indeed the auxiliaries are not Theta-markers, they can raise to AGR without violating the Theta-Criterion[10], whereas true verbs raising to a weak AGR will always lead to such a violation. Let us see how:

If a verb y raises to adjoin to an element x, we are left with the following structure, where t is the trace of y:

(91)

```
            /\
           /  \
        x /    \
         /\     \
        /  \     \
       y    x   .. t ..
```
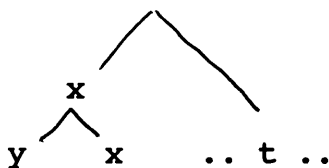
The theory of government must allow y to govern its trace t here, to satisfy the ECP, and the chain (y, t) will thus be properly formed.

Now, if y is a Theta-marker, then t will be able to theta-mark, and transmit its marking through the chain. In turn, this will be possible if AGR (x) is strong (transparent) but not if it is weak (opaque). Thus, if we adjoin y (theta-marker) to a weak AGR, we will obtain a Theta-criterion violation.

If, on the other hand, we lower x to adjoin to y, we obtain:

(92)

$$
\begin{array}{c}
\ ..t..\quad y \\
\ y\quad x
\end{array}
$$
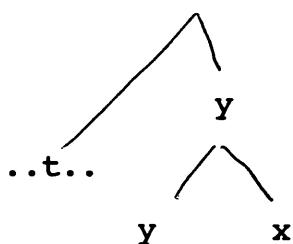
In this structure, the lower y is the head of the construction, and we will assume that whatever the character of x, y will retain all relevant relations to other elements, hence also the ability of theta-marking a complement.

Consequently, the lowering of a weak AGR to V does not bar theta-marking of the complement, but raising of the V to a weak AGR does.

While the V-raising rule in French is compulsory for
[+ tensed] clauses, it is only optional for
infinitives. Hence, we can have (94) and (95):

(93) ne pas être heureux

(94) souvent être triste

In (93), 'être' has not raised over the negation to
the [- finite] I, and in (94) 'être' has not raised
over the adverb to AGR.

We note here that the Italian equivalent of (94) would
be ill-formed, and the only possible output (in this
semantic reading) is 'essere spesso triste' (*être
souvent triste). We shall return to this later.

Before accounting for this optionality, we will pause
and note Pollock's (and Chomsky's) treatment of
sentence negation. The relevant structure is (95),
where we can see a new formulation of a <u>NegP</u> (Negation
Phrase):

```
(95)          IP
         /        \
     NP            I'
            /         \
        I              NegP
              /            \
           neg             AGRP
                    /            \
                 AGR             VP
                           /        \
                        (Adv)        VP
                                 /       \
                              V           .....
```
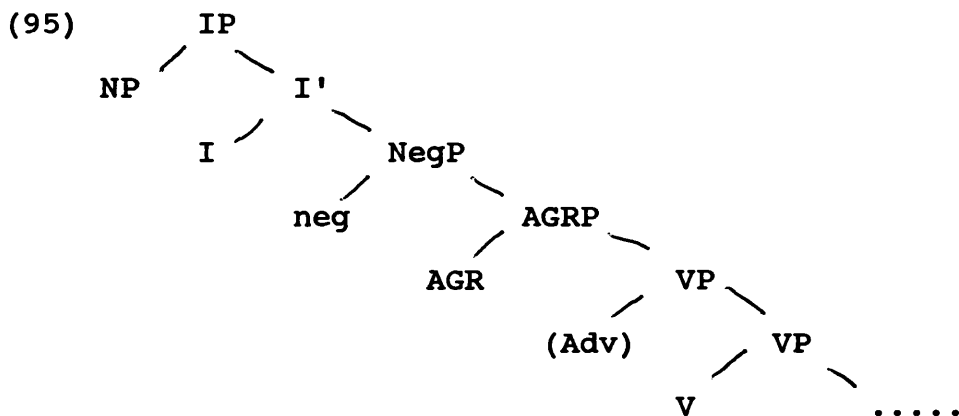
(where neg = 'not', 'pas')

If V raises to AGR, then the surface structure order
will be V - Adv - Obj (English auxiliaries, French
verbs), whereas if AGR lowers to V we have the order
Adv - V - Obj (English non-auxiliary verbs). If V
raises to AGR, and V+AGR raises to I, we have a
structure like (96):

(96) a.   John has not liked Mary

     b.   Jean n'aime pas Marie

Finally, if V raises to AGR only, then we have
examples like (97), with French 'sembler':

(97) ne pas sembler heureux

These phenomena rest on the assumption that [+ finite]
is strong (transparent), while [- finite] is weak

(opaque).

Being strong, [+ finite] allows the verb 'aime' to
adjoin to it, crossing neg ('pas' in (96b)). Being
weak, [- finite] does not allow this, hence 'sembler'
cannot cross neg in (97), although in (98) the aux
'être' can raise to weak I, like all auxiliaries can
raise to a weak AGR:

(98) n'être pas heureux

Now, let us return to the question of infinitives: why
do we find an optionality of occurrence between (97)
and (98), for example?

To try and answer this question, together with other
issues such as, for example, the reason why verb-
movement appears to be obligatory whenever it can
apply, we shall take a look at Chomsky's contribution
with respect to Pollock's framework, and in particular
his LEP (Least Effort Principle).

Chomsky (1989) assumes that raising is necessary
whenever possible because shorter derivations are
always preferred over longer ones.

In our case, the lowering of an inflectional element

INF, as with English 'true' verbs, yields an improper chain (t ..., INF), where INF is adjoined to V at surface structure to form [$_V$ V - INF], and t (trace of INF) c-commands its antecedent.

Therefore, what is needed here is the further raising at LF (Logical Form) of [$_V$ V - INF] to the position of t, in order to create a proper chain. The outcome is basically identical to that which would be achieved by the shorter raising. Therefore, by a 'least effort' condition, the latter is preferable.

Thus, in French only UG principles are applied, whereas in the case of English, a language-particular rule is used to 'save' a Deep Structure yielding no output. UG principles are intuitively 'less costly' than language-specific principles.

With this, we have come to the end of our survey of the early generative grammar works on adverbs.

We have certainly noted a marked improvement from traditional grammars, and also from the early transformational approach by Jackendoff.

Pollock's and Chomsky's studies are important because they provide a simpler and more elegant way to explain

some differences occurring between French and English adverbs.

However, the data they analysed are far from complete, since only verbal (VP) adverbs are considered. No account is given for sentential adverbs, and, although Italian was not considered, we have already noted marked differences between French and English negation on one side, and Italian negation on the other, and between French and Italian infinitive clauses.

In our next section we will first see some new and very promising theories for the adverb which have been recently published, and later we will then take our analysis deep into the Italian language, both for adverbs and negation, to try and account for the differences we have pointed out so far.

6. Recent Generative Theories:
Toward a Cross-language Approach

In this section we will consider some of the most recent proposals regarding the treatment of the adverb within generative linguistics.

We will see in due course that only some of the newly emerging theories or proposals adopt Pollock's and Chomsky's account of adverbial positions in terms of verb-movement or the absence of the same. Williams's (1989) study, for example, is directly opposed to Pollock's and Chomsky's conclusions.

It seems to us that all the works we will present in this section offer a valuable insight in the question of the adverb, and that each of them proposes good ways of answering a specific aspect of this question.

The first two theories we review, Travis (1988) and Williams (1989), deal with the adverb mainly for English and French.

The further theory we review in greater detail is that of Belletti (1990), which specifically deals with Italian, comparing it with French and English. This work, as we shall see, adopts in the main Pollock's and Chomsky's frameworks.

Finally, Zanuttini's (1989 and 1990) contributions to the negation in Italian and some Italian dialects will prove valuable in understanding some puzzling facts about negation and test the validity of Belletti's proposals with a bigger corpus of data.

It has to be pointed out that the adverb partly remains an open question, and that this is readily recognized by all linguists mentioned above. The same problem will be admitted by Lonzi (1991:408-411). The adverb has not yet been understood in its entirety, and for some of its aspects it is difficult to decide on a preferable account (for example, between Williams (1989) and Pollock (1989) proposals for the differences that English and French exhibit in the position of the adverb in the respective languages).

Also, the second underlying problem common to generative and traditional grammars is the degree with which the adverb can really be explained solely in syntactic terms, thus leaving the semantics of the adverb outside the grammatical account. Obviously, this problem is more relevant for generative linguists, whose aim has constantly been that of keeping these two modules - syntax and semantics - as separate as possible, and increasingly so with the move toward a parametrized notion of syntax.

Jackendoff's (1972) work claimed that adverbs are positioned in the sentence according to their semantic relation with parts of the clause, a relation which we may call the semantic scope of the adverb over some part or the whole of the sentence.

Pollock's and Chomsky's papers explained the placement of verb- or VP-adverbs purely in syntactic terms, according to the rules of verbal movement (or non-movement) for various languages.

Now, do these ideas find correspondents in recent theories?

For Lisa Travis (1988), the problem central to the syntax of adverbs is one of licensing, that is, of what licensing principles account for the generation and distribution of adverbs.

Chomsky (1986) introduced a Principle of Full Interpretation (PFI) to restrict the generation of phrase markers:

<u>PFI</u>

Every element of PF (Phonological Form) and LF (Logical Form) must receive an appropriate interpretation.

at PF, every phonetic segment must receive a phonetic interpretation;

at LF, non-maximal projections are licensed by X-bar Theory, while maximal projections are licensed as either arguments, traces of arguments, predicates or operators.

Consider the sentence below:

(99)   Jane will choose the present wrapped

The NP 'the present' is licensed by receiving a theta-role (object) from the verb 'to choose'. The AP 'wrapped', on the other hand, is licensed through predication, since it is predicated of the independently licensed NP 'the present'.

But how are adverbs to be licensed?

Because adverbs are not arguments, we may expect them to be licensed through predication. On the other hand, Travis argues that since adverbs also act quite differently from both the arguments of the verb (theta-licensed) and predicates (predication-licensed), a third, new type of licensing would be more appropriate. Travis further claims that thanks to this 'new' licensing mechanism we can explain why adverbs may appear in several different places within

a clause.

Travis argues that Kayser's (1968) transportability convention is not sufficient for this, not only because - as we noted earlier - not all adverbs may appear in all three positions, S-initially, between the subject and the VP and S-finally, but because even adverbs that appear in the same position (e.g. between the subject and the VP) may behave differently in the presence of auxiliary verbs and modals.

If we examine the case of the adverbs 'probably' and 'completely', both of which may appear in the same position, we can see that this apparent similarity is teased apart with the introduction of auxiliaries:

(100a)   The tornado (probably/completely) ruined John

(100b)   John (probably/*completely) is being ruined by the tornado

(100c)   John is being (*probably/completely) ruined by the tornado

A further problem well known to us, and one which Travis claims to be able to solve with her new licensing proposal, is that some adverbs receive a different interpretation depending on where they appear with the sentence. One instance of this are

passive-sensitive adverbs like 'carelessly' (from Jackendoff 1972):

(101a)   The police carelessly will arrest Fred

(101b)   Fred carelessly will be arrested by the police

(101c)   The police will arrest Fred carelessly

(101d)   Fred will be arrested carelessly by the police

The semantic judgements for these sentences are as follows:

In (101a) and (b), the adverb appears in the pre-aux position and refers to the subject of the sentence, whether or not that subject is also the agent.

In (101c) and (d), instead, the adverb is post-VP, and in this position it becomes sensitive to the agent of the sentence, whether or not the agent is also the subject. Thus, in (101c) and (d) it is the police who are being careless.

This difference is mostly evident between (101b) and (101d), because here the only difference between these two sentences is the position of the adverb, yet in (101b) 'Fred' is being careless, while in (101d) it is 'the police'. Also, it has to be noted that this

pattern does not apply to adverbs which show no discernible change in meaning, e.g. 'quickly'.

Why doesn't this relation of positioning and interpretation appear to apply to all adverbs?

Finally, there is the problem of the restriction on sequences, that is, that only certain sequences of different types of adverbs are allowed. For example, when both 'probably' and 'carefully' appear in S-initial, between subject and aux or between aux and VP, 'probably' must precede 'carefully':

(102a)   Probably Max carefully was climbing the walls of the garden

(102b)   Max probably was carefully climbing the walls of the garden

(102c)   * Carefully Max probably was climbing the walls of the garden

(102d)   * Max carefully was probably climbing the walls of the garden

To give an answer to all these problems, Travis proposes a Head Feature Licensing, which rests on three assumptions:

1   Adverbs are 'defective' categories;
2   Adverbs are 'autonymous' theta-markers;

3   Adverbs are related to a head feature;

Let us review these assumptions in turn:

For 1, this is because adverbs cannot take complements. See in fact (103):

(103)   * proudly of their achievements

Travis claims that this indicates that adverbs may not project to a phrasal category, rather they simply remain as heads. She then proposes that heads that do not project must be licensed differently from maximal projections.

For 2 and 3 above, the question is, may heads which do not project be licensed at all?

Here, Travis follows Higginbotham (1985) in proposing the possibility of theta-identification and autonymous theta-marking, i.e. two new theta-relations other than theta role assignment. Let us see how:
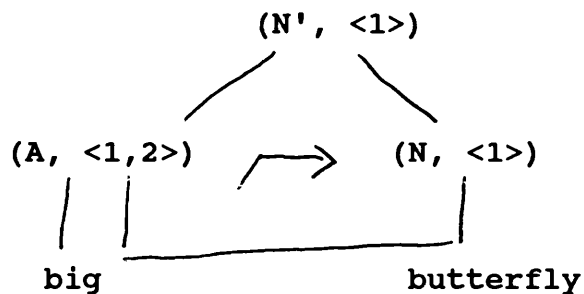
Here, theta-identification is indicated by the connecting line between the argument structure of 'big' and the argument structure of 'butterfly'. Autonymous theta-marking is indicated by the crooked arrow.

According to Higginbotham, theta-identification identifies the open position of the N with the open position of the A (i.e. the conjunction of the properties of being 'big' and being a 'butterfly'). He argues that a further relation must be indicated to account for the fact that a big butterfly may not be big in absolute terms, but only as far as butterflies are concerned. For this reason, autonymous theta-marking is proposed.

The '2' position in the argument structure of the A is satisfied by the attribute of the N, which limits the dimensions of the A. Since autonymous theta-marking occurs only under government, this sort of effect should appear only with bare adjectives which govern the noun, such as prenominal adjectives:

(104a)   The big butterfly
          (government; the range of 'big' is
          restricted by the head N)
(104b)   The butterfly is big
          (no government of N by A, thus the range of

the adjective is less restricted)

What is crucial for Travis is that there is a possible
licensing mechanism for heads, which is theta-
identification. She then claims that adjectives and
adverbs may be heads that enter into relationships
with other heads.

Travis and Higginbotham agree that adverbs and
adjectives are licensed as bare heads, but Travis,
rather than assuming that these heads identify or
autonymously theta-mark one another, proposes that it
is a feature of the licensing head (N or V) which
licenses the modifying head (adjective or adverb).

Travis then claims that:

a.   Initial and aux-adverbs are all licensed by a
     feature in the head INFL.

b.   VP-initial and VP-final adverbs are all licensed
     by a feature in the head V.

As far as the various positions at which adverbs can
appear in various languages, Travis claims that this
is due to mechanisms in the grammar that allow
features of heads to pass up and down the tree. And
since the same range of positioning is not attested in

every language, some parametrization of this must be introduced.

For English, Travis says that the effect of transportability comes about through percolation from the head to the maximal projection. In English, then, adverbs may appear anywhere along the projection line of the licensing head:

initial/
aux-adverbs

IP

NP   I'

I   VP

V'   XP

V   YP

VP-initial/VP-final adverbs
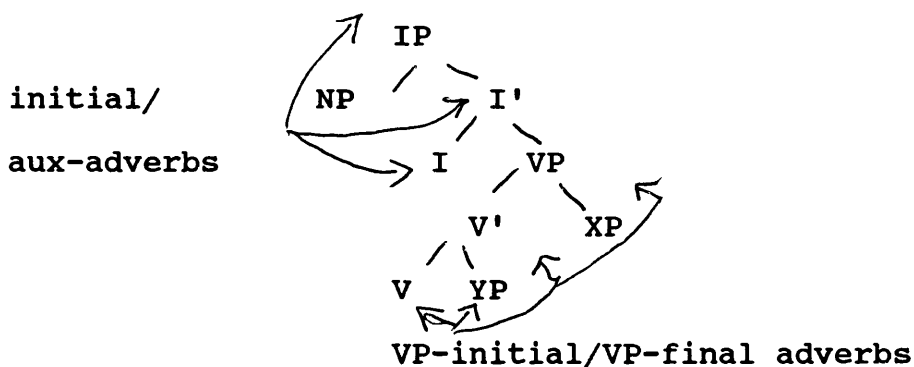
For example:

(105a)   John has probably read the book

(105b)   John probably has read the book

(105c)   Probably, John has read the book

(106a)   Mary will have slowly put the book away

(106b)   Mary will have put the book slowly away

(106c)   Mary will have put the book away slowly

The reason why only true adverbs are transportable and not adverbial PPs ('locuzioni avverbiali') is that the

latter are licensed by the VP or an IP, so that they may not appear within the maximal projection of the V or the INFL.

Also, one way of explaining the positioning of VP-final adverbs of the type 'well', etc., would be to say that they are maximal projections. In fact, many of the examples given by Jackendoff (1972) for this type are arguably PPs ('home', 'before'), says Travis, while others are more difficult to argue for ('hard', 'more'). This is left as an open question.

In the light of Travis's proposals, let us now return to the problems outlined above, and see whether they can receive a satisfactory answer.

a.   Passive-sensitive adverbs

(107a)   The police carelessly will arrest Fred
(107b)   Fred carelessly will be arrested by the police
(107c)   The police will arrest Fred carelessly
(107d)   Fred will be arrested carelessly by the police

Subject-sensitive adverbs (107 a + b) will be licensed by INFL, while agent-sensitive adverbs (107 c + d) will be licensed by V.

Travis assumes further that the relevant feature in
INFL is AGR, while the one in the V will be Manner.
This is what accounts for the fact that in (107a) the
adverb appears to be predicated of 'the police', while
in (107b) it appears to be predicated of 'Fred'.

If an adverb is licensed by the feature AGR, it will
assign an adjunct theta-role to whatever AGR it is
coindexed with. Conversely, if an adverb is licensed
by Manner, it will assign an adjunct theta-role to the
external argument of the V. This in turn accounts for
the subject insensitivity of Manner-licensed adverbs.

Interestingly, INFL has features that license two very
different types of adverbs, subject-oriented adverbs
like 'carelessly' and epistemic or sentential adverbs
like 'probably'. By specifying that adverbs are
licensed by features of the head, Travis is able to
account for this difference in interpretation.

Having already stated that subject-oriented adverbs
are licensed by AGR, Travis adds that epistemic
adverbs (Type III adverbs in her classification) are
licensed by the Event feature of INFL.

b.   Sequences of adverbs

For this point, Travis's generalisation is that speaker-oriented adverbs must precede sentence adverbs, which must precede subject-oriented adverbs, which in turn must precede manner adverbs, as shown in (108):

(108)   Speaker < S-adverb < Subject < Manner

How is the scope of adverbs assigned?

Travis makes three assumptions:

1   Scope is assigned by feature percolation;
2   Percolating features may not cross paths (but a head may contain more than one index);
3   Speaker-oriented adverbs have scope over CP
     S-adverbs have scope over IP
     Subject-oriented adverbs have scope over INFL
     Manner/agent adverbs have scope over V.

As far as Assumption 1 is concerned, Travis says that since adverbs are heads related to other heads, they use the same mechanism advocated by Williams (1984) for modals. This said that modals determine their scope domain at LF not by virtue of Quantifier Raising (QR), but by a percolation of their index from the head to the maximal projection.

Assumption 2 basically means that a feature cannot project past another feature. Consider:

(109)

a
```
        F1 <-- F1 scope
       / \
         F1
        /  \
   Adv 1    F2 <-- F2 scope
          /  \
             F2
            /  \
       Adv 2
```

b *
```
        F2 <-- F2 scope
       / \
         F1, F2   <-- F1 scope
        /  \
   Adv 1    F2
          /  \
       Adv 2
```
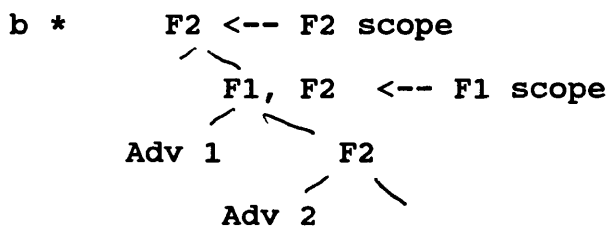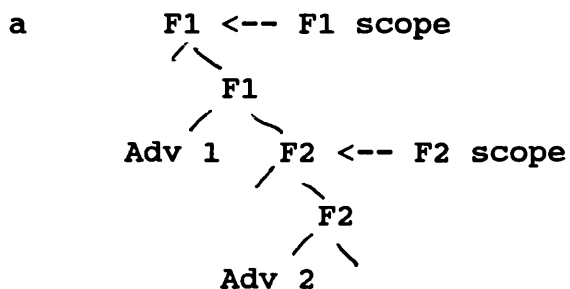
However, Travis also assumes that a head may contain two features, since a head may support two modifiers. It is only when the features begin to project that such restrictions on crossing paths hold.

c.   Prenominal adjectives

Travis argues that the parallels we see between prenominal adjectives and adverbs are due to the fact that the former are licensed in a similar fashion to the latter. Here are the similarities:

a.   Like adverbs, prenominal adjectives may not take

      complements:

      (110)   The proud (*of their achievements)

                students

b.   Prenominal adjectives may also take an adverbial

      meaning:

      (111a)   The [$_A$ beautiful] dancer

      (111b)   The dancer was [$_{AP}$ beautiful]

In (111a) there is an ambiguity between an

adjectival and an adverbial reading (beauty in

appearance v. technique), while in (111b) only

the adjectival reading is possible.

Travis argues that there is some evidence to

suggest that just as adverbs may be related to Vs

and INFLs, adjectives may be related to Ns and Ds

(Determiners). All the adjectives seen above

would be related to the head N. However, there

are others that appear to be dependent on the

type of determiner used, like 'mere', 'utter',

'virtual', etc, because:

-     they may only appear in prenominal position:

(112a)   A mere boy

(112b)   *The/*A boy was mere

-    and they may only appear in predicative NPs
     which tend to have indefinite determiners:

(113a)   He is a/* the mere boy
(113b)   The play was an/* the utter disaster

Travis argues that prenominal adjectives, like adverbs, are licensed via head feature licensing, and that this explains why: they do not take complements; they may have adverbial readings; they may be dependent on the form of the determiner.

Finally, Travis assumes that the relation of 'merely' to INFL is the same as the relation of 'mere' to D. No answer is given as to why transportability does not apply to these adverbs.

Williams's study (1989) is overtly against Pollock (1989) and Chomsky's (1989) idea of movement to explain basic features of the clause structure, particularly the inflections realized on the verb through a combination of affix hopping and verb movement.

Williams   argues   in   fact   that   an   alternative

explanation to Chomsky's and Pollock's evidence of the adverb positions in French and English is indeed available.

Pollock's (1989) reasons for verb movement in French include the placement of adverbs between the verb and the direct object in French, but not in English, that is, that French has verb raising, while English has not. Furthermore, adverbs can precede the tensed verb in English, but not in French.

Williams, however, postulates that in French, but not in English, the following (base structure) adjunction is possible:

$$V_0 \diagup^{V_0} \diagdown_{Adv}$$
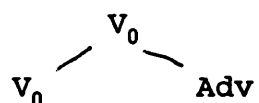
He refers to adjunctions to the head as 0-adjunctions, reserving the term 'adjunction' to refer to adjunctions to higher phrase levels.

Then French, but not English, would allow adverbs to intervene between the verb and the direct object.

But can this difference be reduced to something else? Well, it cannot be reduced to Case Theory, because the prohibition against intervening adverbs seems to hold even for arguments that are not case-marked, e.g. PPs:

92

(114a) ??   I spoke recently to him

(114b) ??   John thought rapidly of it

Is it theta-theory, then? We might suppose that in
French, but not in English, the juncture:

$$
\begin{array}{ccc}
 & V_0 & \\
\diagup & & \diagdown \\
V_0 & & Adv
\end{array}
$$
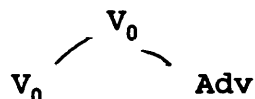
is theta-transparent, in that the argument structure
of the lower V is passed up to the higher V:

(115) V_0 (a1, a2)
                    $\diagup$ $\diagdown$
              V_0 Adv
          (a1, a2)
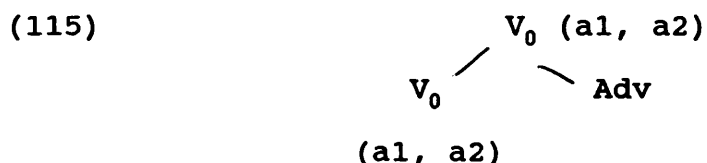
If such passing up took place, then the theta-roles of
the embedded verb could be assigned by the upper verb,
if not, not.

If, as Pollock assumes, auxiliary verbs do not have
argument structures, then it follows that (115) above
will be allowed only if V_0 is an auxiliary verb, even
in English. This is so since there is no argument
structure whose passage up would be blocked.

Now, is there any reason to think that French and
English might differ in such a way that (115) was

possible in French but not in English?

Williams claims that there is; in NPs we find a quite parallel situation. Consider:

(116a)   La destruction rapide de la ville

(116b)   * The destruction rapid of the city

(116c)   * a student proud of his country in biology

(116d)   the students of biology present

(116e)   * the students present of biology

In French, but not in English, it is possible for an adjective to intervene between the 'of PP' string and the head noun.

Again, it is unlikely that this is due to a failure of case assignment under adjacency. Rather, it would appear that (115) can be generalized to (117):

(117) X^0 (a1, a2, ...)
                              /   \
                        X^0 Adx
                    (a1, a2, ...)
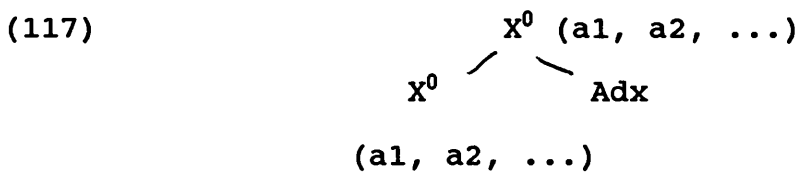
In other words, rightward theta-adjunction in French is permitted generally. So, (117) is alright in French, but not in English.

In sum, then, Williams argues that there is a

systematic difference between French and English on two (possibly more, if we look at compounds[11]) different structures, VP and NP, and that it is possible to trace them all to the viability of (117) in French, but not in English.

In a way, English is an odd case, as it displays a left-headed syntax but a right-headed morphology, and this according to Williams is the difficulty with:

(118)   * John saw recently Peter

Since there can be no right-adjuction to V_0, nothing can intervene between VP and the direct object.

If William's line is correct, then it is possible to predict whether an adverb can intervene between the head and the complement from the independent directionality of compounding and the direction of argument government in syntax. Only when they agree, as they do in French, will intervention be possible.

Now, how can Williams's generalizations be treated in a framework such as Pollock's? Consider (116a-e) above. Parallel to the raising of V to AGR in the clause, one might propose the raising of N to some position in the NP. A plausible spot is D:

(119)   DP
                       /   \
           Spec DP   /   \ D'
                     /   / \
                    D   /   \ NP
                          / |
                          /   N'
                         /   / | \
                        /   / | \
                      Adj   N   PP
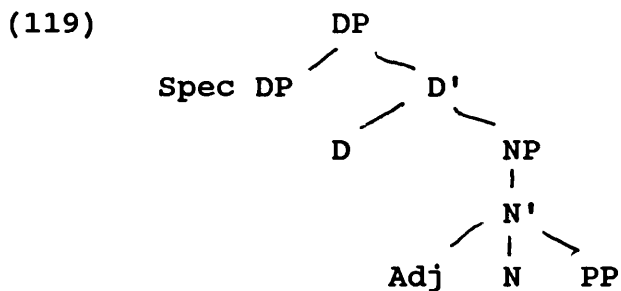
This will give the correct surface order 'la N adj
PP'.

However, notice that the movement of N to D cannot be
obligatory, because of the class of adjectives which
precede the noun. In fact, a single noun can have
adjectives in both positions, so (119) is not
adequate:

(120a)   La belle femme riche
(120b)   La fausse manipulation de la population

There are also well-known differences of meaning
between the pre- and post-noun adjectives in some
cases, as the following Italian examples show:

(121a)   Un vecchio amico

            (a long-term friend)
(121b)   Un amico vecchio

            (an elderly friend)

One could of course introduce more nodes into the

structure of NP, analogous to Pollock's introduction
of AgrP, but there is really no reason to suppose that
there is any such node, and no explanation as to why
the head-to-head movement would be forced to stop at
the particular spot that it does.

Alternatively, we could follow Williams in supposing
that in general French allows adjunction to the head,
and that the NP examples are a special case of this.

Pollock cites the following in support of the idea
that have/be movement to Tense exists and is
compulsory for English:

(122a)   * John completely is losing his mind
(122b)   John is completely losing his mind

On the assumption that auxiliary verbs are generated
to the right of all adverbial positions, in the
position of V in (123) below:

(123) [........ T .... Adv .... V]

then the movement of V to T generates the correct word
order in (122b).

Williams thinks however that there is another possible
account for the placement of such adverbs, in terms of

their semantics.

Consider what kind of relation the adverbial modification must be.

In terms of the typology proposed in Di Sciullo and Williams (1987), it must either be function composition or theta-role satisfaction. However, adverbs do not affect the theta-structure of the verbs or VPs they apply to, so according to Williams the relation must be function composition, with the adverb as functor. A functor does not affect the argument structure of what it applies to, but passes it up:

functor + A   ------> A

$\qquad$ $(e_i....e_j)$ $\qquad$ $(e_i....e_j)$

For this reason, a functor which logically could apply to the whole phrase may in fact apply only to the head; it can do so because it is transparent to theta-roles.

In English, there are functors of both types. Some, like Tense and the affix -ion, which attach to the heads of phrases they can logically take; and there are others, such as 'seems' and certain prepositions, which attach to the phrase they logically take.

The relation of function composition is a theta-theoretic relation, and it is subject to the base theta-theoretic structural relation, that is, (undiluted) sisterhood.

Adverbs serve as functors of both types, hence as head-attaching functors and phrase-attaching functors. This, says Williams, is the explanation for the contrast seen in (122 a + b) above.

Here, the adverb 'completely' modifies the VP, so it must be a sister of the VP or the verb, which it cannot be in (122a), where it is adjacent to the tensed auxiliary. A sentence-modifying adverb can appear in this position, as this position is sister to the head of S, if we take this to be Tense:

(124)   John probably is losing his mind

(124) has a different structure to (122b), where the adverb is modifying the VP. This difference in structure can be seen in the relative order of the two adverbs when they both occur in the same clause; the VP-modifying adverb must come first:

(125a)   John is probably completely losing his mind
(125b)   * John is completely probably losing his mind

Belletti's work (1990)[12] is the one which adopts more closely Pollock's (1989) and Chomsky's (1989) frameworks. It is also the one on which we will pause most, for her analysis goes deep into the Italian adverbial system.

As in Pollock's paper (1989), the relative position of the inflected verb and adverbs of various types, and negation, will be interpreted as explicit evidence illustrating the occurrence or non-occurrence of verb movement. Belletti's underlying assumptions are that no special process of adverb movement is at work in the syntax, and - specifically for Italian - that the verbal head systematically moves to the highest inflectional head position assumed, with no difference between tensed and infinitival environments.

It is our opinion that Belletti's work best explains the contrasts seen between French and English from earlier works, and the ones noted from time to time in the present study between French and English on one side, and Italian on the other. It is also the theoretical framework that relies less on semantics, a desirable result for our orientation in the grammar. Moreover, through a comparison with works by Zanuttini (1989, 1990), it will be seen that Belletti's ideas are in our opinion a better account of negation in

Italian.

Belletti agrees with Baker (1988) and Chomsky (1986)
that the verbal root with its morphology is obtained
through movement of the verbal head into the
inflectional head position(s), with a head-to-head
type of movement, subject to the general ECP. She also
recognizes that there is a further possibility (see
Chomsky 1957), that of the verb being associated with
its morphology through affix-hopping.

Three possibilities are thus open to us:

a.   The association can be made through affix
     hopping, with the affixes lowering to the verbal
     root.

b.   The association can be made in part through affix
     hopping, and in part through verb movement, with
     the verb moving to the first functional head and
     the remaining affix lowering to the same
     position.

c.   The association can be entirely made through verb
     movement, with the verb moving to the first
     functional head position and subsequently to the
     second.

As far as French and English are concerned, Belletti
argues that the association is made through verb
movement for French and affix hopping for English.

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In French tensed clauses, the verb always moves to the highest functional head position, while in infinitivals it is only allowed to move to the lowest functional head position, the first head that it meets:

(126a)   Jean n'embrasse souvent/pas Marie

versus

(126b)   Ne pas sembler heureux

Long movement to the highest functional head gives the order V pas, while to obtain the order V Adv/FQ the shorter movement to the lower functional head is sufficient. These contrasts provide direct empirical support in favour of the idea that the clause should contain (at least) two functional head positions.

For the issue of the respective order of the AgrP and TP projections in the clause structure, the order of affixes in the formed inflected verb will reveal their respective order of attachment in the tree.

In the case of Italian, Belletti argues that this order should be T ... AGR, with T lower than AGR. The evidence for this comes for example from the imperfect and future tenses of Italian, where the respective order of the affixes is clearly visible:

(127a)   legg-eva-te (you were reading/used to read)

          (T: imperfect; AGR: 2nd person plural)

(127b)   parl-er-ete (you will talk)

          (T: future; AGR: 2nd person plural)

Therefore, the preliminary sentence structure assumed
by Belletti for Italian is the following:

(128)

```
              AGRP
             /    \
          NP       AGR'
                  /    \
               AGR      TP
                          \
                           T'
                          /  \
                         T    VP

                       .......
```
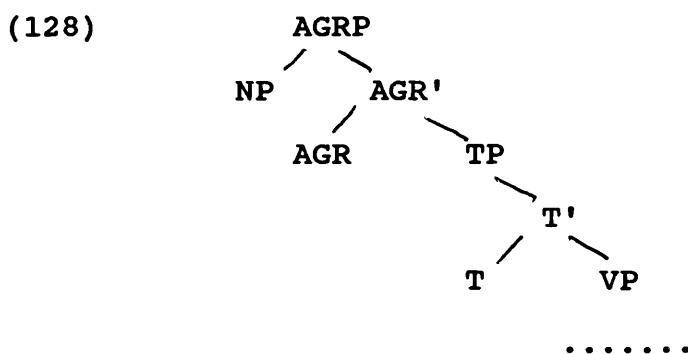

In the case of Italian tensed clauses in the presence
of verb movement, Belletti takes several topics into
consideration, starting with:

a.   Negation

Consider the following Italian negative sentences:

(129a)   Gianni non parla più

          (John is not talking anymore)

(129b)   Maria non rideva ancora

          (Maria was not laughing yet)

(129c)   Lui non diceva mai la verità

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(He was never telling the truth)

Here we see two negative elements: the negation proper, 'non', and various negative (polarity) adverbs, like 'più/ancora/mai'.

We should point out that the presence of negative adverbs is not necessary to express the simple sentential negation in Italian, and that the following examples are perfectly formed:

(130a)   Gianni non parla

(130b)   Maria non rideva

(130c)   Lui non diceva la verità

So, these adverbs are not the equivalent of French 'pas', which is obligatory in French negative sentences if no other negative adverb is present. Nevertheless, if we compare the distribution of the above Italian negative adverbs and the French sentences in (131) below, we see a total parallelism, for the order of constituents is 'non/ne   V più/ancora/mai/pas'.

(131a)   Jean ne parle pas

(131b)   Jean ne dit pas la verité

Belletti takes negative sentences of this kind as evidence of the occurrence of verb movement to the structurally highest inflectional position, i.e. AGR for Italian.

The negative adverbs fill a position to the right of the highest inflectional head AGR at deep structure. Hence, Belletti also makes the crucial assumption that there is no specific process of adverb movement, and that the order 'inflected verb ... negative adverb' can only be achieved through a V to AGR movement.

But what exact position should the negative adverbs and 'non' occupy in the tree structure?

Pollock (1989) and others, as we have seen earlier in this study, have proposed that between the two inflectional heads AGR and T a Negative Phrase be present for negative clauses. Parallel to French 'ne', Italian 'non' would then be viewed as the head of this phrase, while negative adverbs can be seen as its possible specifiers.

(132)

```
                    AGRP
                   /    \
              NP        AGR'
                       /    \
                    AGR      NegP
                            /    \
                         Adv      Neg'
                                 /    \
                              Neg      TP
                                         \
                              non         T'
                                        /    \
                                     T        VP
                                               |
                                               V
                                            . . . . . . .
```
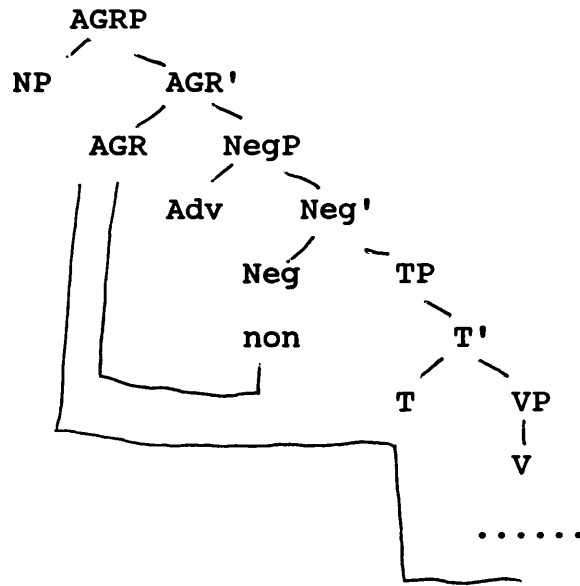
According to this proposal, the negation 'non' is a clitic, and due to its clitic nature it must move to the AGR position, with a head-to-head movement. If we assume that this is a left-adjunction to AGR, the derivation of (132) would involve a Neg to AGR movement and a V to T to AGR movement.

Still according to this proposal, the difference between Italian and French lies in the fact that the Specifier position of the NegP is obligatorily filled (by 'pas') in French, but only optionally filled by negative adverbs in Italian. The derivation of (134a) would then look like this:

(133)
```
              AGRP
             /    \
          NP        AGR'
          |          |        _____
        Gianni      AGR              \
                    /  \            NegP
                 AGR    AGR        /    \
                  |      |      (Adv)    Neg'
                non_i  parla_j  (più)   /   \
                                      Neg    TP
                                       |     /  \
                                      e_i         T'
                                                 /  \
                                                T    VP
                                                |    |
                                               e_j   V
                                                     |
                                                    e_j
```
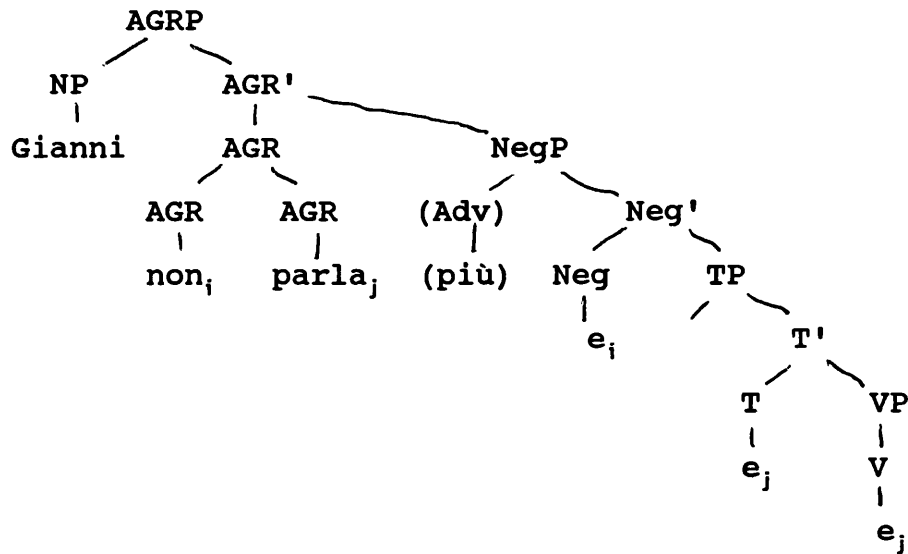
Belletti, however, points out that there are some objections to this structure. This is basically the same problem noticed in Pollock (1989), i.e. that a violation of the ECP principle seems to take place. In fact, on its way to the AGR position, the V passes over the intervening Neg head.

The solution adopted by Belletti for this problem follows proposals by Moritz (1989) for French, who claims that - although derivationally incompatible with the head movement constraint - the described derivation still gives a well-formed representation. The head movement constraint/ECP being LF principles, it is the representation resulting from the application of 'Move α' which needs to conform to it.

Belletti proposes the following implementation of

Moritz's suggestion:

As it is clear from the clause structure above, the negation-chain and the verb-chain share the same head - AGR - and this sharing of the head is the key to the well-formedness of the representation. The assumption is that the antecedent-government relation which is required to hold between any two members of a chain is defined in terms of non-distinctness from the indexation of the head of the chain. So, the relation of antecedent government holds between e_i and e_j in the clause structure below, because both ECs have an index non-distinct from that of the AGR head:

(134)

```
                AGRP
              /      \
        NP           AGR'_____
        |             |
      Gianni       AGR(i,j)              NegP
                   /    \             /      \
                AGR     AGR        Adv       Neg'
                 |       |          |       /    \
               non_i   parla_j    (più)   Neg     TP
                                           |     /   \
                                          e_i   /     T'
                                               /    /   \
                                              T    T     VP
                                              |   |      |
                                             e_j  e_j    V
                                                         |
                                                        e_j
```
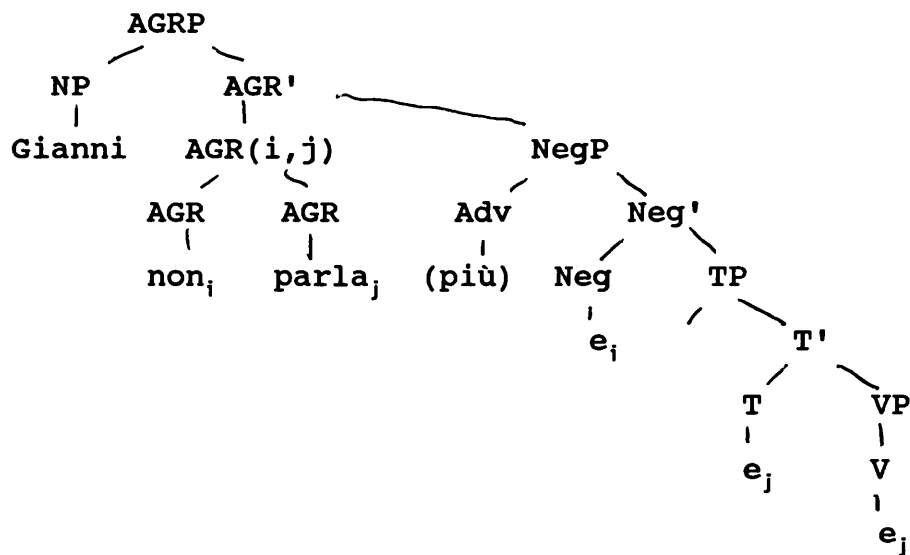
In Italian complex tenses (formed by an aspectual auxiliary and a past participle) the negation proper 'non' still immediately precedes the inflected V

carrying the tense and agreement features, e.g. the aspectual auxiliary:

(135a)   Gianni non ha parlato

          (John did not talk)

(135b)   Maria non è uscita

          (Mary did not go out)

(135c)   I ragazzi non hanno incontrato gli amici

          (The boys did not meet their friends)

When negative adverbs are involved as well, however, two possibilities exist. The negative adverb can intervene between the auxiliary and the past participle:

(136)   Gianni non ha più parlato
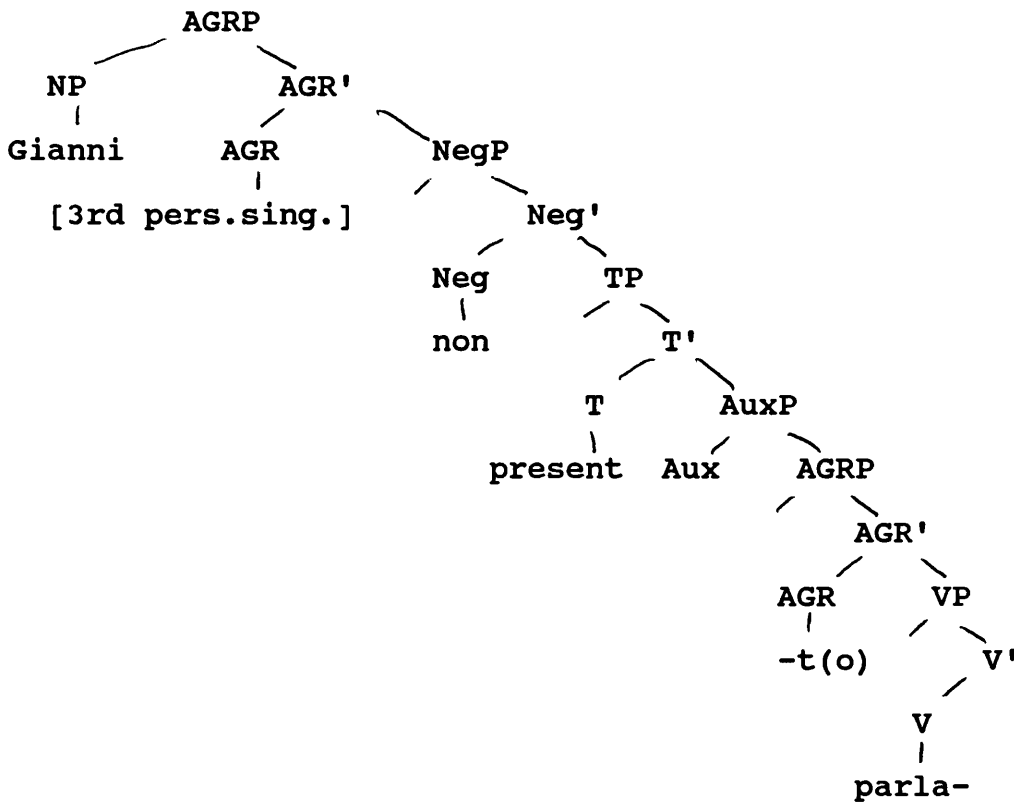

or immediately after the past participle:

(137)   Maria non è uscita mai

For our purposes, we will say that the sentences in (135 a-c) can be assigned the same structure as (132), thus without adding any new theoretical machinery, but with the absence of an overt specifier in the Spec position of the NegP and the presence of a past participial AgrP as complement of Aux:

(138)

```
                    AGRP
              _____/    \
          NP            AGR'
          |           /    \
       Gianni      AGR      NegP
                    |      /    \
              [3rd pers.sing.]   Neg'
                            /    \
                         Neg      TP
                          \      /  \
                         non        T'
                                  /    \
                                T      AuxP
                                \     /    \
                            present  Aux    AGRP
                                          /    \
                                             AGR'
                                           /    \
                                        AGR      VP
                                         |      /  \
                                       -t(o)        V'
                                                   /
                                                  V
                                                  |
                                               parla-
```

Here, 'non' must cliticize to AGR through left-adjunction, Aux must move to T and then to AGR, V must move to the past participial head.

As for (136), its deep-structure corresponds to the structure in (138), but with the Spec of NegP realized as the negative adverb 'più'. The order given is thus: 'NP non Aux più PstPrt'.

To obtain the order 'NP non Aux PstPrt mai' seeen in (138), where the Aux is immediately adjacent to the PstPrt, Belletti assumes that negative adverbs are

also allowed to fill a different position in the clause structure.

A potential candidate would be the VP-initial position, which is a possible adverbial position anyway, filled by adverbs like 'spesso' (often), among others.

If this is so, then there is no need to assume the occurrence of any special process in order to obtain the desired word order. We could assume that the NegP has no overtly realized Spec and that the negation regularly moves to the AGR position, and that the Aux as well as the verb moves to the past-participial AGR position past the VP-initial negative adverbs:

(139)
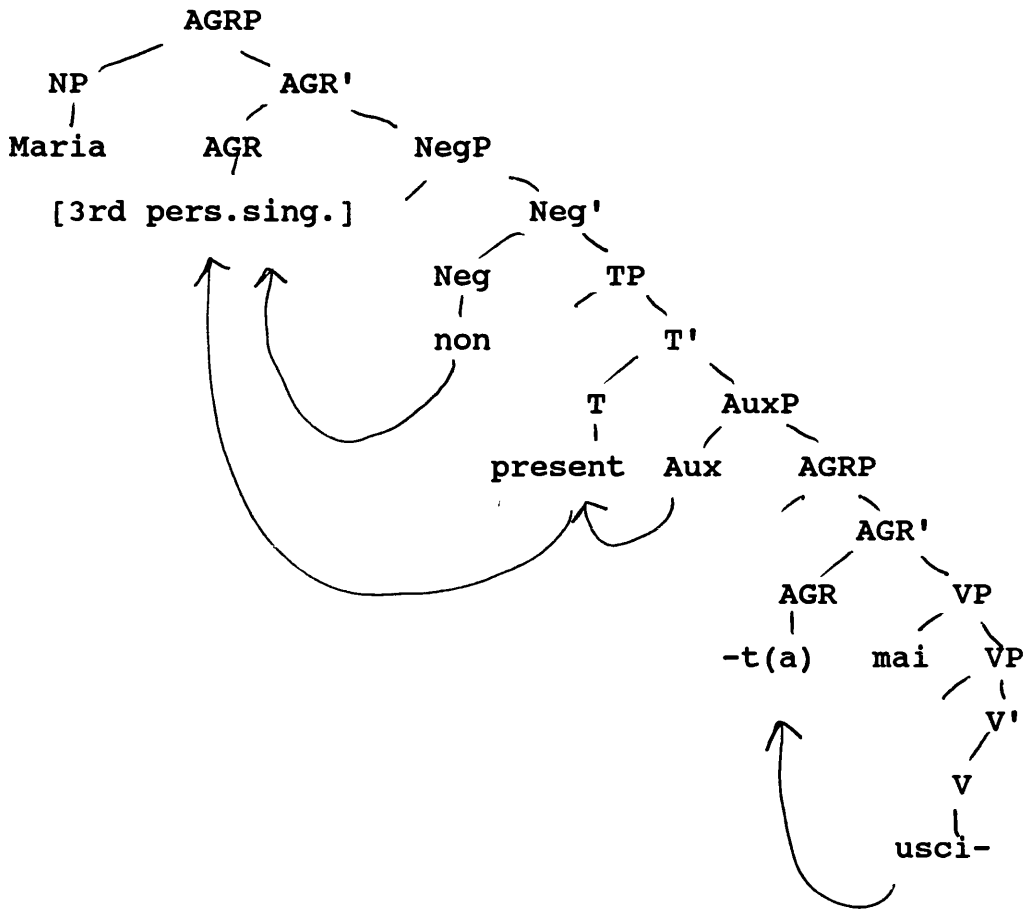
Independent evidence that negative adverbs of the type

discussed may also fill a VP-initial lower position is

provided by French data (Pollock (1989)). Consider:

(140)   Pierre dit ne manger plus/point

which contrasts with infinitival sentences involving

simple negation, where 'pas' can never follow the

infinitive:

(141a)   Pierre dit ne pas manger

(141b)   * Pierre dit ne manger pas

Of course, next to (140), (142) is also possible (and actually more natural):

(142)   Pierre dit ne plus/point manger

What is relevant for us is the contrast between the relative well-formedness of (140) and the complete impossibility of (141b). This contrast seems to indicate rather neatly that negative adverbs like 'plus' have the possibility of filling a relatively low position in the clause structure, a position lower than the one occupied by the (obligatory) negative adverb 'pas', and which could be identified with the VP-initial position.

A distribution significantly parallel to the one identified for negative adverbs is seen with a number of adverbs which have the semantic function of reinforcing the assertive value of the sentence (also discussed by Lonzi (1991) - later in this section). These are adverbs like 'già, sempre, pur, ben'.

(143a)   Maria parlava pur/ben/già/ sempre di lui
          (Mary spoke indeed/already/ always of him)
(143b)   Maria ha pur/ben/già sempre parlato di lui

Belletti proposes that the natural hypothesis to

account for the distribution of these adverbs is to claim that they are the positive counterparts of the negative adverbs discussed earlier. This leads Belletti to assume that in 'positive/assertive' clauses there is a Positive Phrase (PosP) present, whose Spec is filled by one of these adverbs. Given this hypothesis, their distribution is predicted through the same set of assumptions introduced with the discussion of the NegP.

A crucial property of the PosP, however, which distinguishes it from the NegP, is that its head is not phonetically realized.

The parallelism between NegPs and PosPs is in fact quite strict. Consider the behaviour of an adverb like 'ben(e)':

(144a)   Gianni avrà ben risposto

          (Gianni will have indeed answered)
(144b)   * Gianni avrà risposto ben(e)

          (Gianni will have answered well/*indeed)[13]

This contrast can be explained through the PosP idea, assuming that 'ben(e)' can only fill the Spec of PosP position. Indeed, the contrast seen in (144a + b) above strongly recalls the well-known contrast observed in French negative clauses like:

(145a)   Jean n'aura pas repondu

(145b)   * Jean n'aura repondu pas

We can explain this contrast by saying that 'pas' can only occur in the Spec of NegP position.

Thus, Italian seems to have an exact positive counterpart to the French negative 'pas', although 'pure/già/sempre' can also follow the past participle, in a more marked position:

(146)   Gianni avrà risposto pure/sempre/già

           (Gianni will have answered indeed/always)

The behaviour of these adverbs is then more similar to that of a negative adverb like 'più', which can also fill a relatively low position in the clause structure besides the canonical Spec of NegP position (see later).

Consider now (147), comparing it with (144b):

(147)   Gianni avrà parlato ben di lui

           (Gianni will have spoken indeed of him)

To explain this contrast we have to assume that 'ben' here is directly adjoined to the following PP 'di lui' (of him). This analysis is confirmed by the

possibility of preposing the whole string 'ben + PP':

(148)   E' ben di lui che Gianni avrà parlato

          (It is indeed of him that Gianni will have

          spoken)

A PosP and a NegP should obviously be in complementary
distribution in the clause, and this is indeed so:

(149)   * Maria non parlava più pur/ben/già/sempre

          di lui

          (Maria   was   not   talking   any   more

          indeed/always of him)

Finally, notice that 'già' and 'sempre', contrary to
'ben(e)' and 'pur(e)', can also fill the Spec of NegP
position, thus acquiring a negative reading:

(150a)   Maria non parlava già/sempre di lui

(150b)   Maria non ha già/sempre parlato di lui

(150c)   * Maria non parlava pur/ben di lui

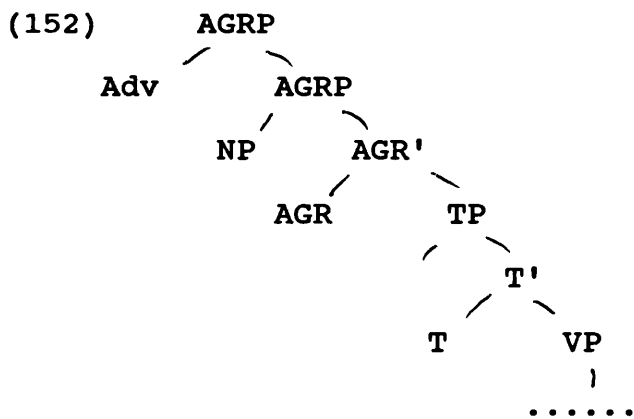(150d)   * Maria non ha pur/ben parlato di lui

The second topic explored by Belletti with regards to
Italian tensed clauses in the presence of verb
movement is that of:

b.   Sentence adverbs

Adverbs like 'probabilmente' are classified as S-
adverbs (Jackendoff (1972)), and they typically fill
a position at the very beginning of a sentence, over
which they have scope:

(151)   Probabilmente/Evidentemente Gianni partirà

          (Probably/Evidently Gianni will leave)

Sentences like these, according to Belletti, can be
given the following structure, with the adverb
adjoined to the highest functional projection of the
clause over which it has scope:

(152)   AGRP
         ╱   ╲
    Adv   AGRP
             ╱   ╲
         NP   AGR'
                 ╱   ╲
            AGR   TP
                     ╱   ╲
                        T'
                      ╱   ╲
                    T   VP
)
                         ......

Although the clause-initial position can be considered
as their typical location, these adverbs may also fill
other positions in the clause:

(153a)   Gianni probabilmente partirà

(=   immediately   following   a   preverbal
subject)

(153b)   Gianni partirà, probabilmente

(= at the very end of the sentence)

As for (153b), the comma indicates that here a pause
must occur between the adverb and what precedes it,
and so the adverb here is filling a right-peripheral
position identical to that filled by right-dislocated
phrases. In this hypothesis, therefore, sentences like
(153b) are derived structures.

As for (153a), Belletti introduces a new proposal,
that is, that sentences like these are also derived
structures: the adverb occupies its typical clause-
initial position, but the subject is in a left-
peripheral position, having been left-dislocated or
topicalized.

(154)
```
           TOPP
          /  \
            TOP'
          /    \
       TOP      CP
        |      /  \
     Gianni      C'
               /   \
              C    AGRP
               \   /   \___
               Adv      AGRP
               /       /    \
        probabilmente NP     AGR'
                      /   \
                    AGR    TP
                     |    /  \
                  partirà      T'
                             /  \
                            T    VP
                                  \
                                   ......
```
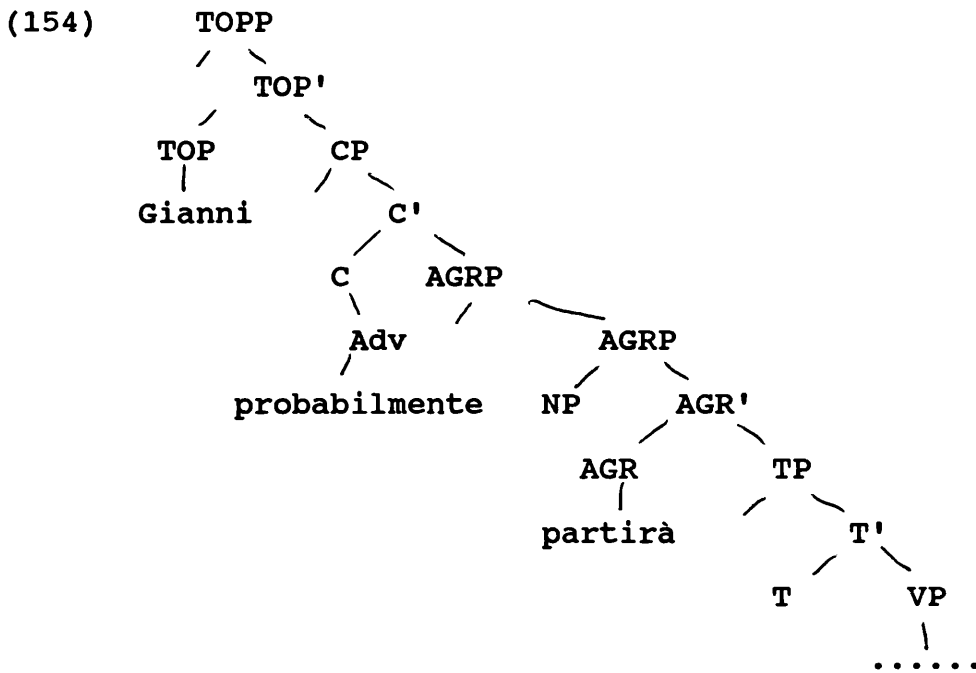
Evidence in favour of topicalization rather than left-dislocation comes from sentences the subject of which is an indefinite quantifier, like 'nessuno' (nobody).

Since an indefinite quantifier cannot be left-dislocated (*Nessuno/ognuno, l'ho incontrato ieri (*Nobody/everyone, I've met him/them yesterday)), if Belletti's hypothesis for (153a) is correct, then it follows that in the case of a 'nessuno' subject only topicalization will be available, and it seems to be in these sentences:

(155a)   NESSUNO probabilmente telefonerà alle 5

          (NOBODY will probably call at 5)

(155b)   Dicono che NESSUNO probabilmente telefonerà alle 5

(They say NOBODY will probably call at 5)

where a clear contrastive stress is required on the
'NESSUNO' subject.

What is particularly relevant for us is the conclusion
that adverbs of the 'probabilmente' type have one base
position in the clause structure - the clause-initial
position - and that no special process of verb
movement is called for to account for the different
surface orders, which are obtained through the
application of general syntactic processes, such as
topicalization, left- and right-dislocation, and not
verb movement.

To complete the picture of 'probabilmente' type
sentence adverbs, we must add that there are other
positions available in the sentence, which generally
correlate with a different interpretation.

(156a)   In vita sua Gianni leggerà probabilmente
         molti libri
         (In all his life Gianni will probably read
         many books)
(156b)   Maria discuterà la cosa probabilmente con
         altri
         (Maria will discuss the matter probably with
         others)

Here, the adverb has scope over the phrase immediately following it ((a)= NP, (b)= PP).

For these cases, Belletti proposes that the adverb be base-generated immediately adjoined to the NP/PP, or, more generally, that the adverb has the option of being generated adjoined to any argument or adjunct more or less strictly connected to the verb.

It should be pointed out here that in Italian two adverbs of this class cannot co-occur in the same clause, one clause-initial and the other adjoined to the same sentence, contrary to English[14]:

(157a)   * Evidentemente Gianni parlerà probabilmente
          con Maria
(157b)   Evidently Gianni will probably talk to Maria

Let us now turn our attention to some comparative remarks.

Pollock (1989) and Kayne (1989a) pointed out that sentences word-by-word identical to the Italian (153a) are possible in English but impossible in French:

(158a)   John probably likes linguistics
(158b)   * Jean probablement aime la linguistique

Following Emonds-Pollock's analysis of negation, Kayne assumes that the verb does not raise out of VP in English while it does so in French, hence (158b) is ill-formed because here the verb has failed to do so.

However, Kayne also noted that, as noticed in Pollock (1989), the situation is more complicated in that the same contrast is preserved with complex tenses containing an auxiliary and a past participle:

(159a)   John probably has made many mistakes

(159b)   * Jean probablement a fait plusieurs erreurs

But it is well known that auxiliaries raise out of VP both in English and in French, so the contrast in (159) is not expected, in that (159a) should also be excluded.

To account for this unexpected asymmetry, Kayne proposed a system including two assumptions, namely:

a. probably/probablement are base-generated between the first and second functional head in the clause structure;

b. auxiliaries (as lexical verbs) raise to the highest functional head position in French, but stop at the lowest one in English.

Then, in Kayne's view the different word orders in French and English are a function of the different scope of the verb movement in the two languages.

However, this hypothesis does not explain the Italian facts we have just discussed. If the order 'subject probably/probablement/probabilmente V' is a function of verb movement, then we would expect Italian to pattern with French rather than English. This is because in Italian and French the verb uniformly raises out of VP in general, contrary to English.

Nevertheless, as we saw in (159a), in these structures Italian patterns with English, not with French. If however, as Belletti proposes, the relevant word-order is not interpreted as an instance of verb movement but as one of topicalization of the subject in a sentence with a clause-initial sentence-adverb, the facts become clearer.

It is well established in fact that no topicalization is available in French, but it is in English (albeit with different characteristics). Hence, if topicalization is involved in these structures, it is not surprising that in this case Italian and English pattern together.

Turning now to the distribution of sentence-adverbs in

complex tenses - that is, sentences containing an auxiliary and a past participle - it is obvious that the sentence-initial position is still available:

(160)   Probabilmente/Evidentemente   Gianni   ha
         sbagliato
         (Probably/Evidently Gianni was wrong)

We also expect the immediately post-subject position and the clause-final position to be available, and indeed they are:

(161a)   Gianni probabilmente ha sbagliato
(161b)   Gianni ha sbagliato, probabilmente

The sentences display the same patterns as those in (153), hence they will undergo the same analysis.

However, we must point out that the range of distributional possibilities is wider in sentences containing a complex tense, for here the adverb can also appear between the auxiliary and the past participle:

(162a)   Lui ha probabilmente sbagliato
(162b)   Maria ha evidentemente sbagliato

Various options come to mind to account for this word-order, but after considering data from French and English, Belletti proposes a cross-linguistic account.

Belletti's hypothesis is that sentence-adverbs can indeed have a further base position beside the clause-initial one, and that this further position can be located between the first two functional heads of the clause. This option, however, would only be available when an auxiliary is present. More precisely, Belletti argues that when an auxiliary is present in the sentence, one further functional head can be there too. Let us see which one.

Suppose that structures containing an auxiliary exploit a possibility left open by UG, that is, the free recursion of AgrP. This is equivalent to say that an AGR head and its projection can be recursively generated.

However, only one occurrence of AGR is filled with morphological agreement-type features, and Belletti takes this to be the first (lowest) AGR in the tree structure. All other AGR heads present must therefore be empty. The subject should fill the highest Spec of AgrP position, whose AGR is lexicalized (ie. contains a verb).

It appears to be the case in general that only auxiliaries are allowed to move to an empty AGR. This claim is supported by English data on verb movement and French data on verb movement in infinitival clauses. Only auxiliaries are allowed to raise out of VP in these two classes of cases:
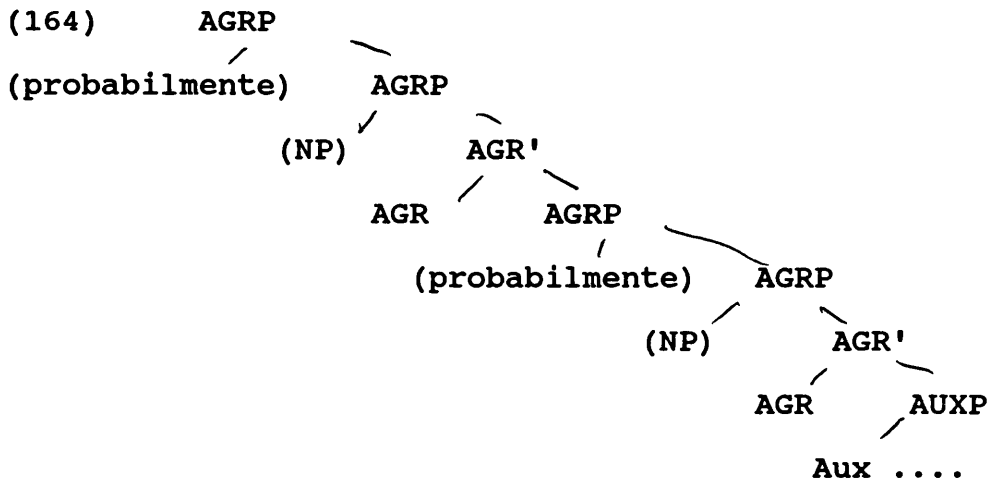
(163a)   I have not come

(163b)   * I come not

(163c)   Jean dit n'avoir pas parlé

(163d)   * Jean dit ne parler pas

Given Belletti's assumptions, then, the auxiliary movement illustrated by the above sentences is to be interpreted as movement to an empty AGR.

Now, if free recursion of AgrP is allowed, this has the immediate effect that only an auxiliary will be able to move to an empty AGR head higher than the contentive AGR. In turn, this has a direct impact on the word-order issue at stake here.

It is sufficient to state that a sentence-adverb like 'probabilmente' can freely modify any AgrPs; if it modifies the highest, the final word-order will be 'probabilmente NP_{subj} Aux PstPrt'. If it modifies an AgrP(s) lower than the highest, the word-order 'NP_{subj} Aux probabilmente PstPrt' will become available, with

Aux filling the highest and empty AGR. The resulting tree structure proposed by Belletti is as follows:

(164)   AGRP
          /   \
(probabilmente)   AGRP
                  /   \
              (NP)   AGR'
                        /   \
                    AGR   AGRP
                              /   \
                      (probabilmente)   AGRP
                                      /   \
                                  (NP)   AGR'
                                            /   \
                                        AGR   AUXP
                                                   /
                                              Aux ....

Finally, Belletti concludes her analysis of Italian tensed clauses in the presence of verb movement with:

c.   "Lower" adverbs

With this term, we refer to adverbs located lower than negation (negative adverbs) in the clause, and which do not typically appear clause-initially, contrary to sentence-adverbs.

Subtle, non-uniform distributional behaviour further differentiates the members of this wide class of adverbs. In particular, Belletti considers the case of 'completamente' (completely) and 'spesso' (often).

Observe the contrast in (165a + b), which shows that

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'spesso' is lower than a negative adverb in the clause structure:

(165a)   Non ha mai parlato spesso con te

           (He/she has never spoken often with you)

(165b)   * Non ha spesso parlato mai con te

Given a sentence with a transitive verb, both adverbs can appear between the verb and the direct object:

(166)   Quel medico risolverà completamente/spesso

           i tuoi problemi

           (That doctor will completely/often solve

           your problems)

A direct way of characterizing these data - following Emonds/Pollock's original line - is to claim that the base position for these adverbs is somewhere at the front of the VP. The word-order is then obtained through movement of V out of VP.

Both adverbs can also appear at the very end of the sentence:

(167)   Quel medico risolverà i tuoi problemi

           completamente/spesso

indicating that the sentence-final position is also a

possible base position for these adverbs. Let us assume for concreteness that they have the option of being adjoined to the right of the VP.

Two important differences, however, can be found in the distribution of these two adverbs. Specifically, 'spesso', unlike 'completamente', can also appear initially in the clause, and also in a position immediately following the subject:

(168a)   Spesso/*Completamente Gianni sbaglia

          (Often/*Completely Gianni is wrong)

(168b)   Gianni spesso/*completamente sbaglia

If we say that sentences of this kind involve topicalization of the adverb 'spesso', we would have to say that an adverb like 'completamente' seems unable to topicalize. So, how can (168b) be analyzed?

Belletti argues that, beside a topicalized 'spesso', (168b) also involves a left-dislocated subject. Of course, if an adverb like 'completamente' cannot topicalize, a sentence displaying the order in (168b) with 'completamente' cannot be obtained.

To substantiate her claims, Belletti shows us that if 'spesso' is topicalized when it is clause-initial, then we would expect that no other phrase of the

sentence following the adverb can be topicalized in
turn, because topicalization cannot affect more than
one constituent per sentence:

(169a)   * MARIA spesso Gianni incontra in vacanza

           (* MARY often Gianni meets on holiday)

           = topicalized direct object MARY

(169b)   * MARIA Gianni spesso incontra in vacanza

           (ungrammatical even if the subject 'Gianni'

           immediately precedes 'spesso')

If 'spesso' stays in its lower base position, the
resulting sentence involving topicalization of the
direct object is perfectly well-formed:

(170)   MARIA Gianni incontra spesso in vacanza

Therefore, (169a) and (169b) are ill-formed because
two phrases have been topicalized.[15]

Now, if to account for (168a) we were simply to claim
that 'spesso' could also be a clause-initial adverb,
we would be left with no explanation as to why (169a)
is ill-formed.

The location of lower adverbs in senteces containing
complex tenses makes explicit which position they fill

in the clause structure. We note the following
distribution:

(171)   Quel dottore ha risolto spesso/completamente
         i tuoi problemi

In (171), the adverbs can be analysed as VP-initial.
The order 'Aux PstPrt Adv' is directly obtained by
moving the verb to the past-participial (AGR) head. In
this movement, the adverb is left behind. This is the
same derivation Belletti proposed for obtaining the
same order with negative adverbs like (137).

The following sentence in (172) is also well-formed.
It represents a case where the adverbs are VP-final,
as the examples in (167) involving a non-complex
tense:

(172)   Quel dottore ha risolto i tuoi problemi
         spesso/completamente

Things get more complicated when we consider the
further potential location of the adverb between the
auxiliary and the past participle. We expect it to be
impossible, because if the adverb is a VP-adverb, it
should not be able to precede the past participle,
given that the past-participial morphology is located
higher than the VP. This seems to hold for 'spesso':

(173)   */? (A quella riunione) Gianni ha spesso

          parlato

          ((At that meeting) Gianni has often spoken)

'Completamente' functions differently, though. Its

location between the auxiliary and the past participle

gives a well-formed outcome:

(174)   (In   quelle   circostanze)   Gianni   ha

          completamente sbagliato

          ((In   those   circumstances)   Gianni   was

          completely wrong)

This suggests that an adverb like 'completamente',

although a lower adverb in the sense defined above,

can also fill some higher position than the VP

(initial) position, contrary to what happens to

adverbs like 'spesso'. It could be that the adverb may

be adjoined to the past-participial AGR or to the TP

projection, but this is still an open question.

Finally, we will end our analysis of Belletti's work

by reviewing the distribution of negation and sentence

adverbs in Italian infinitival clauses.

Belletti's aim here is to show that the study of the

interaction between the location of the infinitive

verb and the adverbial elements of the classes we have

seen shows a strict parallelism with the situation we have detected in tensed clauses.

a.   Negation

(175)   Gianni   ha   deciso   di   non   tornare
           più/mai/ancora
           (Gianni has decided never to come back)

This is an example of an infinitival sentence where both negation proper and a negative adverb are present. The distribution is identical to the one in tensed clauses, as shown by the examples in (134), with the negation proper preceding the verb (here in infinitival form) and the negative adverb following it.

The distribution coincides with that of tensed clauses even when the infinitival contains a complex tense:

(176a)   Gianni sostiene di non essere uscito
           (Gianni claims not to have gone out)
(176b)   Gianni sostiene di non essere più/mai/ancora
           uscito
(176c)   Gianni   sostiene   di   non   essere   uscito
           più/mai/ancora

As with tensed contexts, the movement of the verb to the highest AGR is compulsory. Next to the examples in (176) we do not find (177):

(177)   * Gianni sostiene di non più/mai/ancora
           essere uscito

A completely parallel paradigm is found with verbs which do not take any overt complementizer, like 'potere/volere/dovere' (can/want/must):

(178a)   Gianni potrebbe non aver parlato mai
           (Gianni could have never talked)
(178b)   Gianni potrebbe non aver mai parlato
(178c)   * Gianni potrebbe non mai aver parlato

Again, the same paradigm is found in subject infinitivals:

(179a)   Non aver più/mai parlato è stata una
           cortesia
           (Not to have again/ever talked has been
           kind)
(179b)   * Non più/mai aver parlato è stata una
           cortesia

Notice also that those adverbs we have dealt with before as being the Spec of a PosP present in

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assertive/declarative sentences give rise to a parallel distribution in infinitival clauses as well:

(180a)   Gianni sostiene di aver pur parlato

(180b)   * Gianni sostiene di pur aver parlato[16]

(181a)   Gianni potrebbe aver pur parlato

(181b)   * Gianni potrebbe pur aver parlato

(182a)   Aver pur detto la verità non gli è bastato

          (To have indeed spoken the truth has not

          been enough for him)

(182b)   * Pur aver detto la verità non gli è bastato

It should be pointed out that Italian crucially differs from French in this respect. Pollock's (1989) data on negation in infinitivals give in fact rise to close to minimal pairs with the Italian examples just considered:

(183a)   * Jean dit ne parler pas

          (contrasting with (175))

(183b)   Jean dit ne pas avoir parlé

          (contrasting with (177 + 178c))

Let us study (175) closer. We said that negative adverbs can also fill the VP-initial position (or, at any rate, a low position in the clause structure).

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Hence, it could be argued that sentences like (175) simply show that the infinitive must move out of the VP, but that it does not need to reach the highest AGR position; it could stop at the first functional head it meets, ie. T in Belletti's proposal. The word-order in (175) would then be obtained also with this derivation.

The consequence of this proposal - in the comparison with French - is that Italian and French differ only on the obligatoriness (Italian) versus optionality (French) of the movement of lexical verbs to T.

This, however, does not seem to be correct, because it appears that we must reach the conclusion that (also) lexical verbs do have to reach the AGR head in infinitivals as well, as we saw they do in tensed clauses.

Observe in fact the ungrammaticality of sentences like (184), which minimally contrast with (175):

(184a)   * Gianni ha deciso di non più/mai/ancora tornare

          (* Gianni has decided not ever/again to come back)

(184b)   * Gianni potrebbe non più mai/ancora tornare

(* Gianni could not ever/again come back)

Belletti has recognized that negative adverbs also typically fill the Spec of NegP position, which directly accounts for their distribution with complex tenses, particularly for their occurrence in the position between the auxiliary and the past participle. Hence, if the lexical verb were allowed to stop at the T functional head in infinitivals, (184) ought to be derivable with the V in T and the negative adverb in the Spec of NegP position.

The total impossibility of (184), which parallels that of (177) and (178c) containing a complex tense, indicates that no derivation can yield this word-order, which in turn implies that lexical verbs necessarily move out of VP up to the highest functional head AGR in Italian.

Comparatively, the contrasts that we have seen between Italian and French infinitivals are double-edged: they both concern the position where the lexical verb moves, as well as the obligatory versus optional character of this movement. The position is AGR in Italian and T in French; the movement is obligatory in Italian but optional in French.

The data which remind us of the optional character of

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the movement of V to T in French are reproduced in (185), where both sentences are well-formed in French:

(185a)   Souvent paraitre triste .....
(185b)   Paraitre souvent triste .....

(185) involves the verb-adverb 'souvent'. The order in (185a) is obtained leaving the V in its deep structure position within the VP, while in (185b) we have a V to T movement.

Notice that if 'plus', contrary to 'pas' but like Italian 'più' can also be regarded as a lower/VP adverb beside it (possibly) being the Spec of NegP, the facts reproduced in (186) are amenable to the same analysis as (185), with V to T as a general option for French infinitives:

(186a)   Pierre dit ne plus manger
(186b)   Pierre dit ne manger plus

b.   Sentence-adverbs

Given the analysis proposed by Belletti, according to which sentence-adverbs have the clause-initial (AgrP) position as their base location, we would expect that with this class of adverbs the superficial word-order 'Adv-Infinitive' should be available. Even if, as we

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said, the infinitive always moves to the highest functional AGR head exactly as the inflected tensed verb does, the adverb should nevertheless precede the verb in this case, because it precedes the entire clause.

To test this hypothesis, Belletti considers the infinitival relative clauses:

(187a)   C e r c o   u n   u o m o   a l   q u a l e
            possibilmente/forse/domani presentare Maria
            (I'm   looking   for   a   man   to   whom
            possibly/maybe/tomorrow introduce Maria)

(187b)   Ho trovato qualcuno a cui probabilmente
            affidare questo tipo di incarico
            (I've found someone to whom probably give
            this type of task)

Much as with the discussion of the equivalent word-order in tensed clauses, the fact that the adverb precedes the verb here is a neutral fact with respect to the issue concerning the verb movement process: irrespective of how the verb syntax works, the adverb should precede the verb.

It should also be pointed out that (187b) minimally contrast with (188a), where the VP-adverb 'spesso'

occurs. Here the respective word-order of the adverb and the infinitive is necessarily 'Infinitive-Adverb', as revealed by the contrast with (188b), whose ungrammaticality, in turn, minimally contrasts with the acceptability of (187b). This is of course expected given that VP-adverbs are clause-internal, contrary to sentence-adverbs:

(188a)   Ho trovato qualcuno a cui affidare spesso
          ...

(188b)   */? Ho trovato qualcuno a cui spesso
          affidare ...

This discussion can then be concluded by pointing out that the possibility of (188a) also minimally contrasts with the ungrammaticality of (189), which displays the order 'Infinitive - Sentence-adverb':

(189)   */? Ho trovato qualcuno a cui affidare
          probabilmente questo incarico

We will now continue this section of our work by examining Raffaella Zanuttini's (1989, 1990) analysis of negation in Italian, which follows a different course of investigation on the basis of evidence from Romance languages and regional dialects of Italian.

Zanuttini (1989) aims to find out whether there is a single representation of the Negative Phrase which could be valid for a group of related languages that differ on the surface, such as the Romance languages.

Here, Zanuttini examines three syntactically different ways of expressing sentential negation found within the Romance family, arguing that these differences can be analysed and explained by postulating a single underlying structure for all negative sentences in Romance.

Her proposed structure crucially differs from others presented in requiring that the NP be in a relation of c-command[17] with respect to the components of Infl, TP and AgrP.

Zanuttini claims further that this configurational relation is a reflection of a more general constraint which holds in Romance on the assignment of sentential scope to negation. This configurational constraint triggers the phenomenon of negative concord which, she suggests, can be represented via a notion of 'negative chain'.

Zanuttini explains that there are <u>three</u> ways to express sentential negation in the Romance family, all displayed in various dialects of Piedmontese. These

are:

1. A variety of Piedmontese with a strictly preverbal negation:

(190)   A n dürmiró
         CL NEG will-sleep (I won't sleep)

2. A variety of Piedmontese requiring both a preverbal and a postverb negation:

(191)   U n ae nent vera
         CL NEG is NEG true (it isn't true)

3. A variety of Piedmontese (the most common), with a post-verbal negation:[18]

(192)   A tëm nen la mort
         CL fears NEG death (he/she does not fear
         death)

The group of Romance languages in which the negative morpheme occurs to the left of the finite verb (Variety 1 above) includes Portuguese, Spanish, Catalan, Standard Italian, Central and Southern Italian dialects, Romanian and Variety 1 of Piedmontese. Zanuttini refers to these as 'Italian-type languages'.

The group of Romance languages in which the negative morpheme occurs to the right of the finite verb (Variety 3 above) includes Occitan dialects, Franco-Provençal dialect, the Gallo-Italian dialects (Lombard, Emilian to some extent and "Piedmontese-proper" Variety 3). Zanuttini calls these 'Piedmontese-type dialects'.

Standard French (like Variety 2 above) represents a language of an intermediate type, for it displays both preverbal and post-verbal negation.

The three ways of marking sentential negation just described, argues Zanuttini, represent the only strategies attested in the Romance language family at present. Moreover, Romance languages which undergo change with respect to sentential negation go through the following stages:

a.   At first, sentential negation is expressed through a preverbal negative marker. In addition, the negative marker may be reinforced with the presence of an NP or adverb inside the VP.

b.   Later, the NP or adverb loses its original emphatic function and becomes mandatory. At this point, both the preverbal negative element and the NP or adverb inside the VP are negative markers.

c.   Later still, the preverbal negative marker may be lost as a result of a process of phonetic weakening, leaving the task of expressing sentential negation entirely up to the element inside the VP.

According to Zanuttini, French is an example of this process, because its negation evolved through the following stages:

a.   French negation was firstly expressed only through a preverbal 'ne', and optionally with elements reinforcing it inside the VP, among which was 'pas'.

b.   'Pas' became grammaticalized as a negative marker, and the sequence 'ne ... pas' is the normal way to express sentential negation.

c.   In contemporary colloquial French, 'ne' is usually omitted, and 'pas' becomes the sole marker for sentential negation.

Zanuttini has shown therefore that three apparently quite different ways to express sentential negation characterize not only closely related languages, but also different diachronic stages of a single language, and different varieties of a single language (e.g. Piedmontese).

For Zanuttini, then, the question is whether these three ways translate into different syntactic structures, or whether we can explain the variety which Romance languages exhibit with respect to the expression of sentential negation, by making reference to a single underlying structure.

Zanuttini follows Pollock's (1989) suggestions regarding the clause structure. However, she and Belletti (1990) disagree in the ordering of the components of Infl. Whereas Belletti's ordering is $[_{AGRP}$ .... $[_{TP}$ ...] ....], Zanuttini has the opposite order $[_{TP}$ .... $[_{AGRP}$ .....] ....].

It has to be noted here that given Belletti's convincing evidence in the choice of TP as first (lower) element in the tree structure as opposed to AGRP

 (ie. the order of suffixes in tenses like the Italian imperfect, etc.), it is difficult to see how Zanuttini can defend her assumption. This assumption, however, is central to her proposals on negation and the NegP, so we will follow Zanuttini's proposals to their conclusions.

Zanuttini starts by examining a feature of Romance languages which correlates with differences in their chosen strategies for marking sentential negation, ie.

the possibility of negative concord - the co-occurrence of two or more negative elements in the same sentence when they do not constitute two instances of negation that logically cancel each other out.

She argues that negative concord is present when there are two (or more) negative elements in the same sentence, but semantically only a single negation.

In Italian-type languages (with preverbal sentential negation), a negative constituent inside the VP must always co-occur with another negative element in the same sentence, either with the sentential negative marker or with another constituent in a position higher than the finite verb:

(193)   <u>Non</u> ho visto <u>nessuno</u>
          (I haven't seen nobody)

In Piedmontese-type languages, on the other hand, the co-occurrence of the sentential negative marker and a negative quantifier inside the VP is unacceptable. Here is an example from Milanese:

(194)   L'a di (*no) nigot
          (He/she has (*not) said nothing)

It is important to note that the ungrammatical version
in (194) cannot simply be ruled out by invoking a
constraint against the co-occurrence of more than one
negative element in the sentence, for Piedmontese-type
languages (in (195) Milanese) exhibit negative concord
just like Italian-type languages:

(195)   Nisün l'a di nigot

          (Nobody has said nothing)

A look at languages like standard French indicates
that an asymmetry indeed exists between the marker of
sentential negation which occurs preverbally and the
one which occurs postverbally (with respect to the
finite verb). In fact, while preverbal 'ne' must co-
occur with a negative quantifier inside the VP, like
the sentential negative markers in Italian-type
languages, post-verbal 'pas' cannot, like the
sentential negative markers in Piedmontese-like
languages:

(196a)   Je n'ai vu personne
(196b)   * J'ai vu personne
(196c)   * Je n'ai pas vu personne

This suggests that the contrast noted above is to be
related to different properties of the preverbal and
postverbal negative markers.

Reviewing Pollock's (1989) analysis of negation for English and French, Zanuttini points out that there are some problems when his analysis is extended to the Romance family as a whole. These are listed below:

a.   Pollock crucially relied on the clitic nature of the negative morpheme 'ne' to explain its movement from deep- to surface-structure. However, Zanuttini argues that Italian 'non', among others, has many properties that differentiate it from pronominal clitics, namely that pronominal clitics:
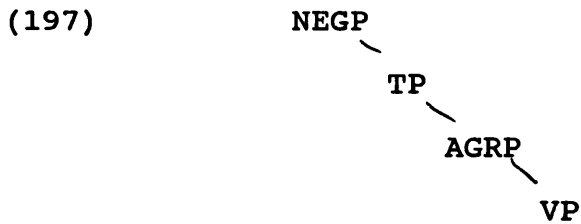
-    can bear stress;

-    can adjoin to phrasal categories;

-    clitic pronouns occur to the left of finite verbs and to the right of infinitivals. However, in Italian the sentential negative markers always occur to the left of every verbal form;

-    are subject to constraints concerning their ordering in a cluster - which varies across languages - in that a preverbal sentential negative marker always precedes any clitic pronouns.

If sentential negative markers, argues Zanuttini, were clitic elements as well, the fact that they must always precede clitic pronouns would need to be explained, hence she assumes that they are not clitics.

It has to be said at this point that again Zanuttini and Belletti disagree on this matter, for Belletti supports the clitic nature of the Italian sentential negative marker. Also, in Zanuttini (1990) we read that Italian 'non' resembles the pronominal clitics in always adjoining to the verb, and that its presence interacts with long clitic climbing, hence indicating that it is an element of the same type as pronominal clitics in terms of X-bar theory, namely a head.
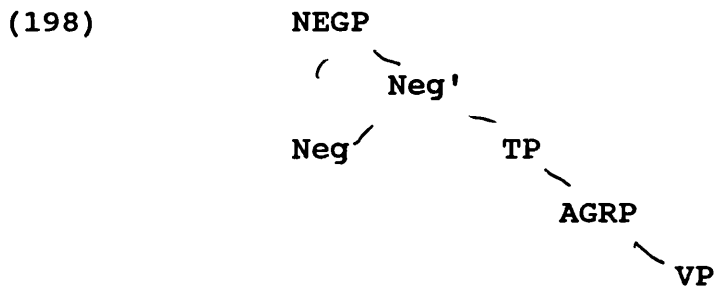
b. Zanuttini argues - still supporting the non-clitic nature of 'non' - that if we follow Pollock, we would need to explain why the negative markers which are heads of their NegPs in Italian-type languages must undergo movement from deep-structure to surface structure. Obviously this is not a problem for Belletti's analysis, or indeed for Zanuttini's in the light of the conclusions of Zanuttini (1990).

Zanuttini then tried to revise Pollock's ideas and to show that the superficial differences observed in the three strategies adopted by Romance languages for marking sentential negation can be analyzed and explained by postulating a single underlying structure for all negative sentences in Romance. In the following tree structure, the NegP is adjoined to TP:
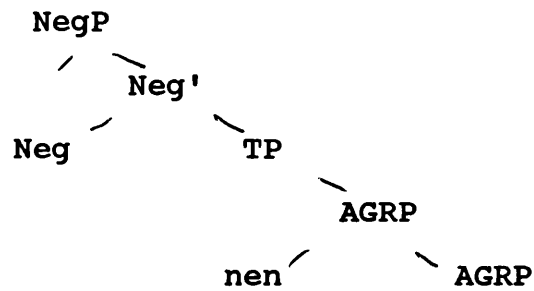
(197)   NEGP
                            ╲
                          TP
                            ╲
                            AGRP
                                ╲
                              VP

Let us see how this works.

1.   In Italian-type languages, the preverbal markers
of sentential negation are the heads of NegP:

(198)   NEGP
                     ╱   ╲
                    (Neg'
                         ╱   ╲
                    Neg╱   TP
                                  ╲
                                AGRP
                                   ╲
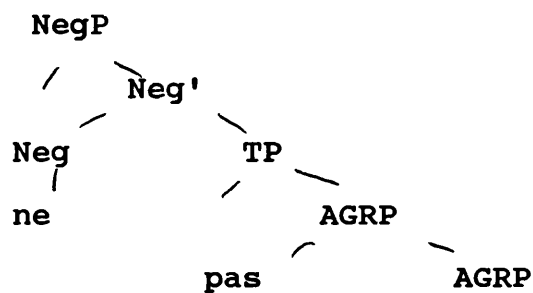   VP

2.   In contrast, in Piedmontese-like languages the
markers of sentential negation do not belong to NegP,
but are adverbial elements adjoined to AGRP. Yet,
these languages share the same structure for negative
sentences as outlined in (198) for 1. above, and they
differ from them in that the head of NegP is an
operator which is lexically empty:

(199)   NegP
              /   \
                  Neg'
                /   \
           Neg   TP
                          \
                          AGRP
                        /   \
                     nen   AGRP

3. French differs from 2. above because the head of
its NegP has lexical content ('ne') and differs from
1. because it has an obligatory negative morpheme
adjoined to AgrP ('pas'). However, the basic structure
is the same:

(200)   NegP
              /   \
                  Neg'
                /   \
           Neg   TP
            | /   \
           ne   AGRP
                          /   \
                       pas   AGRP

Zanuttini's proposal is that - in all Romance
languages - negation can take sentential scope only if
it obeys the following constraint:

Negation can take sentential scope only if - at
surface structure - it is in a position from which it
c-commands both TP and AGRP.

When a negative constituent occurs inside the VP, as
in:

(201)   * Ho visto niente/nessuno

(I have seen nothing/nobody)

even though we have a fully-fledged negative
quantifier, this is not able to assign sentential
scope to negation, because it does not c-command TP
and AGRP at surface-structure. Therefore, it must be
preceded by another negative element, specifically,
one which is in the correct configuration to fulfill
this requirement:

(202)   Non ho visto niente/nessuno

The Milanese sentence below seems to be a counter-
example to this requirement. It is grammatical even
though the negative quantifier inside the VP does non
c-command TP and AGRP at surface-structure:

(203)   L'a mangià nigot

(He/she has eaten nothing)

In fact, in Zanuttini's analysis this sentence is not
problematic, for in Piedmontese-like languages the
constraint on the scope of negation is satisfied by a
negative operator with no lexical content, thus not
audible at surface structure.

In sum, then, the difference between Italian and

Piedmontese-like languages is only apparent: both are subject to the same configuration requirement on the assignment of sentential scope to negation as all other Romance languages.

In Zanuttini (1990) the focus of discussion is again negation in Romance languages.

Here, she argues that in both Romance and English, the functional category NegP is parasitic on the functional category TP, in that a NegP can only occur in the clause if a TP is present.

In particular, she argues that in these language groups the head of the functional category NegP takes TP as its obligatory complement, and that this relation determines the ordering of these two categories in the structure; given a TP, the NegP will be generated to its left so as to satisfy the selectional requirements of its head. No other constraint needs to be specified in the grammar to explain the structural position of NegP. A NegP can be generated anywhere it can find a TP which the head Neg^0 can take as its complement.

We note again that Zanuttini's proposal relies heavily on AGRP being lower than TP in the tree structure, and that this contrasts with Belletti's proposals on this

point. Notice also that things are now more
complicated if we try to adapt Zanuttini's framework
to Belletti's (more correct in our view) ordering with
TP lower than AGRP in the tree. If NegP must be
generated to the immediate left of TP, then by trying
the order 'AGRP NegP TP' to retain Belletti's evidence
of the tense attaching first to the verbal root than
the agreement features, we would be forced to say that
the verb moves to TP, then crosses the maximal
category NegP to land on AGRP and take the appropriate
features, and then that some other ordering rule would
apply to prevent the occurrence of 'legg-te-eva' and
obtain 'legg-eva-te'. Needless to say, this account is
very difficult to maintain.

It is also crucial to Zanuttini's proposal that the
two negative elements 'non' (Italian) and 'nen'
(Piedmontese) are not both members of the functional
category NegP, so she proposes that 'non' is a clitic
while 'nen' is a negative adverb.

They are in fact different in many respects:

-       'non' occurs between the subject (if expressed)
and the verb, while 'nen' follows the verb, on a par
with adverbs like 'ancora/già/mai';

-       'non' must be immediately adjacent to the verb,

unlike Piedmontese 'nen'. The only lexical items which can intervene between 'non' and the verb are pronominal clitics;

- Piedmontese 'nen' does not interfere with clitic movement - pronominal clitics can move to the left of the finite verb:

(204)   A - m lo da nen

           (he/she won't give it to me)

The same is true for Milanese:

(205)   Me la da no

However, Italian 'non' interferes with clitic climbing, e.g. long clitic climbing:

(206a)   Devo parlar$\underline{ti}$ (I must talk to you)
(206b) $\underline{Ti}_i$ devo parlare e$_i$

But:

(207a)   * Devo non parlar$\underline{ti}$
(207b)   ?? $\underline{Ti}_i$ devo non parlare e$_i$

Hence, because 'non' - the preverbal negative marker - is a head and as such it selects a complement (TP),

but 'nen' - the postverbal negative marker - is not the head of NegP but an adverbial element, and as such it is not selected by anything nor does it select any complement of its own, Zanuttini's prediction is as follows.

Whenever a TP is missing, 'non' should not be able to occur. On the other hand, the presence or absence of TP should not affect postverbal negative markers like 'nen', since they do not take TP as their complement.

Consider:

(208a)   Maria non ha sempre pagato le tasse

          (Maria has not always paid her taxes)

(208b)   * Maria ha sempre non pagato le tasse

(208a) is well-formed, with the negative marker on the auxiliary. (208b) is impossible with the negation on the past-participle: 'non' cannot precede the past-participle here.

In Zanuttini's account this is because 'non' - the head of NegP - selects TP as its complement. Since the past participle does not have any TP associated with it, 'non' cannot be generated in a position where it can take a T^0 as its complement.

To conclude this section of our work, we will now briefly review the most recent and in-depth account of the Italian adverbs to be found, that by Lidia Lonzi (1991). Her work forms a whole chapter in a new, comprehensive grammar of the Italian language (see references), and has the advantage of having almost the character of a monograph on adverbs, hence discussing them in very great detail.

In this part of our study we will not review all Lonzi's remarks, rather we will concentrate on specific points of interest to us, that genuinely differ from the accounts proposed in earlier grammars.

Lonzi proposes a classification of adverbs that generally follows different lines from what we have seen in earlier traditional grammars. This new classification tries to take into account the long way grammar has come in recent years in the understanding of adverbs.

After describing Lonzi's proposals in some detail, we will try to evaluate the merits or disadvantages of this new type of classification, attempting to decide whether this most recent study of the adverb marks a genuine step forward or a mere reformulation of old ideas, without any new real contribution to our understanding of the adverb.

Lonzi classifies the Italian adverb along two lines.
Morphologically, adverbs are described as usual, as
being lexical or derived. Syntactically, adverbs are
classified according to the function they have with
respect to the clause structure.

Here, Lonzi distinguishes four main groups of adverbs,
subdivided in turn into sub-groups, as follows:

a.   Specifiers of the Adverbial Phrase

      i.   Specifiers
           Degree adverbs (e.g. 'slightly')
           Quantity adverbs (e.g. 'much')

b.   Adverbs of Predicate, Complement-type
      (= can have the role of complements (a) to the
      verb, or (b) modify the verb or the VP [adverbs
      of predicate])

      Adverbs of predicate are further divided into:

      ii. Place and Time adverbs;
      iii. Manner or 'verb' adverbs:
           Action adverbs (e.g. 'carefully')
           "Resultative" adverbs (e.g. 'strongly')
      iv. Adverbs of "will" (e.g. 'intentionally')

c.   Adverbs of Predicate, Specifier-type

They can be divided into:

a.   Specifiers of the auxiliary verbal group;

b.   Specifiers of the VP.

The first appear in post-auxiliary (also between two auxiliaries when present), or in pre-infinitival position.

The second prefer the post-auxiliary (or inter-auxiliary) position, but they can also follow lexical verbs. They regularly occupy the post-verbal position only when there is one verb. Finally, if this is in the infinitive form, they can also be found in pre-verbal position. These are:

v.   "Focusing" adverbs, split into:
   -   restrictives (e.g. 'merely')
   -   focalizers (e.g. 'also, only')
   -   reinforcers of statements or negation (e.g. 'indeed, proprio, ben, affatto, mica')

d.   Adverbs external to the predicate, which can be divided into:

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vi.   Circumstantial adverbs

vii. Sentential adverbs (they can be homonymous
      with Group iii., but with a different
      function), among which we have:

      -     'modal' adverbs (e.g. 'clearly')
      -     'evaluation' adverbs (e.g.
            'un/fortunately')
      -     adverbs of event (e.g. 'suddenly')
      -     adverbs of 'framing' (e.g. 'usually')
      -     adverbs of 'speech act' (e.g. 'frankly,
            personally')
      -     subject adverbs (e.g. 'cleverly')

viii. Connective adverbs (e.g. 'so, although')

In what follows, we will review those aspects of
Lonzi's work which are relevant to our discussion,
referring the reader to Lonzi (1991) for a full
account and classification of adverbial groups.

Within the Specifiers of Adverbial Phrase group, Lonzi
notes that the 'focalizing' adverbs, when they precede
the verb, display an ambiguous scope, because they
could have the whole predicate as their domain (209a,
210a), or only a part of it (209b, 210b):

(209a)   Piero ha solo <u>offerto il suo appoggio morale</u>

           (Piero has only offered his moral support)

           = he has done nothing else

(209b)   Piero ha solo offerto <u>il suo appoggio morale</u>

           = he has offered nothing else

(210a)   Maria è anche <u>andata a Roma</u>

           (Maria ha also gone to Rome)

           = beside doing other things

(210b)   Maria è anche andata <u>a Roma</u>

           = beside going elsewhere

However, this ambiguity disappears if these adverbs
precede the focused phrase:

(211a)   Piero ha offerto solo il suo appoggio morale
(211b)   Maria è andata anche a Roma

We regard the inclusion of these comments by Lonzi in
a large modern reference grammar as extremely useful,
also from the point of language learning. We will
return to this point in Section 8.

Lonzi further notes that when the Spec and the head of
the AdvP are both adverbs in -mente, the outcome is
only marginally acceptable:

(212)   ? Si muoveva estremamente lentamente

            (He/she was moving extremely slowly)

As we noted before, however, this is perfectly well-
formed in English, and it is also more acceptable than
the example quoted by Lepschy-Lepschy (1981:87).[14]

For the positions occupied by the various adverbial
types within the clause, Lonzi notes that:

-     Adverbs playing the role of specifiers all
      precede the adverbial or adjectival head ('molto
      gentile/molto gentilmente' - very kind/very
      kindly). However, see our comments in footnote
      (3);

-     the position of the adverb of predicate
      containing a Spec is preferably after the verb:

(213)   Si è scusato molto prontamente

            (He has very readily apologised)

although the preverbal position is also possible ('Si
è molto prontamente scusato').

-     Degree adverbs have a fixed position: they
      precede the adverb, and as manner adverbs they
      follow the single verb or precede or follow the

past participle:

(214a)   E' terribilmente infelice

           (He/she is terribly unhappy)

(214b)   Mi ha terribilmente disturbato/disturbato

           terribilmente

           (He/she has terribly disturbed me)

Degree adverbs cannot appear clause-initially or
in a parenthetic position.

-     Time and place adverbs can appear clause-
      initially before a pause.

Generally, adverbs are said by Lonzi to occupy the
following positions:

1   Postverbal:

      a.   after tensed or infinitive verbs

      b.   after the object or the PP

2   Preverbal:

      a.   after the auxiliary

      b.   before the infinitive verb

      c.   between two auxiliaries

3   Initial and between subject and verb

1   Adverbs of the classes ii., iii. and iv. can only
occupy the postverbal position. Lonzi distinguishes
two cases:

(a) Adverbs can be placed immediately after the verb,
     whether the verb is simple or complex:

(215)   Sente/ha sentito acutamente la sua mancanza

          (He/she has acutely felt his/her absence

          [He/she deeply missed him/her])

     Results are less acceptable with time and place
     adverbs, if they are not required by the
     predicate:

(216)   * Sente qui/a Parigi la sua mancanza

          (He/she feels here/in Paris his/her absence)

     Among the adverb of class v., only quantifiers of
     time can regularly be found post-verbally.
     Sometimes, we also have focalizers:

(217a)   E ti lamenti anche!

          (And you even complain)

(217b)   E si è anche lamentato!

          (And he has even complained)

     Lonzi actually says that this is acceptable only

if the verb is in a simple form, quoting as evidence (218):

(218)   *E si è lamentato anche!

We would rather say that (218) is marginally acceptable.

(b)   Adverbs can also occupy a position at the end of the VP, ie. after the object or the PP. This is especially true for the 'avverbi puntuali' of place and time, adverbs of will and of action:

(219a)   Mi occuperò di loro domani

           (I'll take care of them tomorrow)

(219b)   Mi sono rivolta a loro volutamente

           (I have applied to them on purpose)

(219c)   Ho guardato le foto attentamente

           (I have carefully looked at the photos)

Lexical adverbs of manner, resultative adverbs and adverbs of indefinite time all give impossible or marginal results in this position:

(220a)   * Piero ha risolto la questione male

           (Piero has solved the issue badly)

(220b)   ?? Sente la mancanza dei familiari

           acutamente

(He/she really misses his/her family)

(220c)   * Accompagna i bambini a scuola spesso

            (He/she takes often the children to school)

Again, we would rather say that (220 a + c) are
marginally acceptable, consistent with Belletti's
possible positions for "lower" adverbs.

2   All adverbs of classes ii. - iv. - except those
of place, precise time and lexical adverbs of manner -
 can also occur in the preverbal position.

Lonzi distinguishes three cases:

a.   Between the aux and the past participle, provided
        they are not strictly required (subcategorised
        for) by the verb and are not the lexical
        resultatives 'bene, male, forte', etc. In this
        position we can find: resultative adverbs of
        manner, agentives, adverbs of will that take on
        a parenthetic value, focalising adverbs.

(221)   * E' qui/bene vissuto per molti anni
            (He has here/well lived for many years)
(222a)   Avevano completamente ostruito il passaggio
            (They had completely closed the way through)
(222b)   Il lettore che mi avrà attentamente seguito

fin qui ...

(The reader who will have followed me
carefully so far ...)

(222c)   Non aveva intenzionalmente letto le
           istruzioni

           (He had not read the instructions
           intentionally)

(222d)   Avevi sempre/anche sostenuto il contrario

           (You had always/also argued the opposite)

b.   Adverbs of will can precede infinitive verbs:

(223)   Deliberatamente alterare i dati è ...

           (To intentionally alter data is ...)

In this position, manner adverbs give very marginal
results, and the resultatives (224a + b) more than
those of action (224c + d):

(224a)   *Completamente alterare i dati ...

           (To completely alter data ...)

(224b)   * Cercare di giocare senza completamente
           distruggere ...

           (To try and play without completely
           destroying ...)

(224c)   ?? Liberamente esprimere le proprie opinioni
           può costare caro

           (To freely voice one's opinions can cost

dearly)

(224d)   ?? Si era appartato per più liberamente

          leggere la lettera

          (He had gone to a quiet corner to read the

          letter more freely)

Here we would again regard (224b) as marginally
acceptable. (224d) becomes acceptable if a
restructuring verb is present:

(225)   Per poter liberamente leggere la lettera, si

          era appartato

          (To be able to freely read the letter, he

          has gone to a quiet corner)

c.   In the inter-auxiliary position, we can find the
      focalising adverbs, for which the position
      between aux and past participle is also fine:

(226)   Gli   era   (anche/proprio)   stato

          (anche/proprio) detto

          (They had even/indeed told him)

3.   Some adverbs can occupy a position at the
beginning of the clause. In this case, they are
separated from the rest of the S by a virtual pause.

If the subject is not expressed and if there are no

dislocated or parenthetic constituents, the adverb
appears immediately before the verb. To this case we
can also assimilate that of the position between
subject and verb, delimited by virtual pauses.

Adverbs of time and place can appear in this position,
as can adverbs of action and will. However,
resultative and focalising adverbs give ill-formed
results.

(227a)   * Integralmente, Lucia seguì il corso

          (Fully, Lucy followed the course)
(227b)   * Esclusivamente, Maria va al cinema

          (Solely, Mary goes to cinema)
(227c)   * Lucia, integralmente, seguì il corso
(227d)   * Lucia, esclusivamente, va al cinema

We do not find this surprising, since what we have
here are adverbs with limited domains positioned as
sentential adverbs.

Turning now to Sentential Adverbs, Lonzi classifies
these according to the value they 'extract' from the
potential logical-semantic values of the clause. For
example, they can comment on the degree of truth of a
proposition as in (228), or evaluate an event (229):

(228)   Questa è la chiave del cancello,

          presumibilmente

          (This is the key for the gate, presumably)

(229)   Stranamente, Giovanni mi ha parlato di te

          (Strangely, Giovanni has told me about you)

Lonzi argues that it is from the semantic value of the
adverb that we can derive its syntactic and pragmatic
features.   Therefore, sentential   adverbs   are
characterized according to:

-     the type of phrase in which they can appear;
-     their syntactic properties;
-     the illocutionary force associated to them;
-     their distribution inside the sentence.

Many adverbs are specialized in having a sentential
value ('probably', 'certainly'), while some adverbs of
predicate can also be used sententially ('normally',
'clearly', etc).

Lonzi subdivides sentential adverbs into:

a.   Modals (speaker-oriented), which express the
     attitude of the speaker with regards to the
     'basis' of his/her statement ('probably',
     'obviously', etc.). They can be found in every
     type of declarative sentences.

b. Valutatives (neutral), which comment the event or status quo denoted by the S as a statement of fact ('strangely', 'unfortunately', etc.). They can be found in all declarative and performative sentences.

c. Adverbs of 'Accadimento' or 'Event', that qualify the event characterized by the S ('suddenly', 'firstly', etc.) and that qualify its frequency ('often', 'rarely'). They are found in all declarative sentences, but not in performatives: (* Dapprima, rinuncio - *Firstly, I'm giving up).

d. Adverbs of 'Inquadramento', that limit in various ways the validity of the proposition expressed by the S, and more generally, by the speech act ('usually', 'generally', etc.). They can be found in declarative sentences, in initial position with interrogative sentences, but not in imperatives: (*Politicamente, commetti qualche errore! - Politically, make some mistakes!)

e. Adverbs of 'Atto Linguistico', that qualify the sentence as a speech act, by attributing to it a certain communicative characteristic ('frankly', 'personally'); and 'Expositive' Adverbs (or textual adverbs) like 'finally', 'so', etc. They appear in declarative, imperative and

interrogative sentences).

f.   Subject Adverbs (subject-oriented), which comment
     the behaviour of the subject with respect to the
     action described in the sentence ('stupidly',
     'gently', etc.). They occur in declarative and
     imperative sentences, but not in interrogatives:
     (*Imprudentemente, hai attraversato la strada? -
     Carelessly, have you crossed the road?).

According to Lonzi, the semantic value of sentential
adverbs is not automatically derived from its
positioning, but from the interpretation given to the
sentence as fact, event, behaviour, etc., with
relation to it. In fact, sentential and VP adverbs can
often occupy the same position in the sentence, so a
characterization purely in terms of positioning would
not be sufficient.

7. Evidence from Contemporary Italian Literature

As mentioned in our introduction, in this section we will leave the domain of grammar to consider a set of adverbial data taken from works of modern Italian literature. What we intend to show is that certain marked, ambiguous or emphatic results obtained by virtue of a particular positioning of the adverb in the clause can be satisfactorily explained in the light of the syntactic frameworks proposed by Belletti (1990) and Lonzi (1991), and crucially by the notion of 'scope' of the adverb.

For this purpose, we have looked at literary works by Luigi Meneghello (LM), Giorgio Bassani (GB) and Natalia Ginzburg (NG), and in the following pages we will give some of the most interesting examples of their somewhat marked use of the adverb, examining and explaining them in turn.

It has to be pointed out that in some cases the peculiarities we will observe are not of a syntactic nature, but pertain to the particular adverb used (semantics/pragmatics).

In other cases, the marked result obtained is due to the word order of the sentences in which the adverb appears, often reflected in the word order chosen by

the author for the adjectival phrase (style/emphasis).

Since we seek to limit our analysis to strictly
syntactic phenomena, we will not include these
examples in our study. Nevertheless, we will just list
a few of them below, to illustrate our point:

(230a)   Non importa - egli disse - la prendo uguale
          'NG, 'Famiglia', p.22)

(230b)   Parlò con lei del vento che s'era alzato
          improvviso
          (NG, 'Caro Michele', p.64)

(230c)   Dura, niente gentile
          (NG, 'Caro Michele', p.124)

(230d)   La riccioluta ora non è più niente una
          sconosciuta
          (NG, 'Caro Michele', p.166)

(230e)   E' la meglio stanza
          (NG, 'La Città e la Casa', p.59)

(230f)   Una volta sola lei era venuta
          (NG, 'Famiglia', p.26)

(230g)   Il neo-zelandese spiegò agli studenti

>francamente   che   l'università   esiste
>perché...
>(LM, 'Fiori Italiani', p.20)

(230h)   Le persone non specialmente devote
>(LM, 'Libera nos a malo', p.211)

(230a) and (230b) illustrate a fact noted in our general description of the adverb in Section 3. In all three sentences, in fact, we find adjectives being used adverbially; in (230a), 'uguale' (same, equal), which is used in place of 'ugualmente' (equally, anyway). In this sentence we have the further complication of ambiguity. The following reading is in fact available: 'I'll take the same'. In (230b), instead, the adjective 'improvviso' (sudden) is used adverbially to mean 'improvvisamente' (suddenly).

In (230c) and (230d) we find a very marked use of the adverb 'niente' (nothing). Although here we do not have any adjective used adverbially, the markedness of examples of this kind originates in that 'niente' on its own merely means 'nothing', as in: 'Non ho visto niente' (I have seen nothing), whereas for these two sentences to be in their Italian standard form, 'niente' should appear with a preposition placed before it (that is, in a 'locuzione avverbiale'), here in particular with the preposition 'per'.

(230e) constitutes a very marked example, probably derived from the regional variety of Italian spoken around Rome. The standard form of this sentence in Italian would be 'E' la migliore stanza' (or 'E' la stanza migliore'), with the adjective 'migliore' (better). Here, instead, the writer uses 'meglio', which despite meaning 'better' too, is only used adverbially and cannot be given the function of adjective. Sentences of this kind would be classified as ungrammatical in standard Italian.

In (230f), (230g) and (230h), we find examples of sentences which are somewhat marked in standard Italian. There is nothing special in the nature or meaning of the adverb used. Rather, the positioning of the adverb in the clause does not reflect the usual word-order associated with standard Italian.

Thus, in (230f) we have the reading 'Only on one occasion had she come', rather than the more common manner reading 'She had come only once' ('Era venuta una volta sola'). Here we are in the realm of style and emphasis.

The adverb 'francamente' (frankly) in (230g) has been moved from its manner-reading standard position after the verb ('spiegò') to a position after the object of the clause ('gli studenti'). In so doing, although the

correct reading is not very difficult to derive, the adverb placed just before the secondary clause seems somewhat to 'waver' between the manner reading of the main clause and the sentential reading in the secondary (embedded) clause.

Finally, in the Italian variety spoken by myself the adverb 'specialmente' (especially) in (230h) is odd in this sentence, where the intended meaning would be better conveyed by the adverb 'particolarmente' (particularly). 'Specialmente' here seems to mirror the use of 'especially' in the English language.

The above examples, as we have mentioned before, do not provide us with any syntactic fact about the adverb. Nevertheless, we hope that they have been of interest for the reader in presenting a more comprehensive picture of the use of adverbs in Italian.

From this point on, however, we will go back to the domain of syntax and concentrate on another set of adverbial data taken from the works of literature of the writers mentioned above.

We will try to show that all the syntactic phenomena we have observed in these examples are successfully explained in syntactic terms by the theory proposed by

Adriana Belletti (1990), and in many cases by the general notions of 'domain' or 'scope' of the adverb, proposed in various ways by Pecoraro and Pisacane (1984), and Lonzi (1991), among others.

The data we wish to analyze are set out in the list of sentences from the Italian novelists mentioned above, and they read as follows:

(231a)   Mi venne variamente riferita dopo

          (GB, 'Gli Occhiali d'Oro', p.29)

(231b)   Eseguito con debole grazia lateralmente

          (LM, 'Pomo Pero', p.24)

(231c)   Ma anche agivamo in pubblico

          (LM, 'Libera nos a malo', p.117)

(231d)   Una vocazione francamente scelta

          (GB, 'Dietro la Porta', p.263)

(231e)   Molto stentatamente avevo risposto anche in
          greco

          (GB, 'Il Giardino dei Finzi-Contini', p.41)

(231f)   Da lei non esattamente prevedute

          (GB, 'Il Giardino dei Finzi-Contini', p.186)

(231g)   Ancora   adesso,   nella   notte,   essa   si
           svegliava a volte in preda al terrore
           (NG, 'Famiglia', p.12)

(231h)   Di   sopra,   nella   redazione,   si   vedevano
           uomini che veramente parevano ombre
           (LM, 'Fiori Italiani', p.165)

(231i)   ... assiduo e puntuale quasi ugualmente
           (GB, 'Il Giardino dei Finzi-Contini', p.148)

(231j)   e al solito un po' barcollava
           (LM, 'Libera nos a malo', p.55)

(231k)   presto me ne vado a dormire
           (NG, 'La Città e la Casa', p.63)

(231l)   Con la bambina rimane Alberico solo
           (NG, 'La Città e la Casa', p.175)

(231m)   Probabilmente non andavano a letto bene
           (NG, 'Borghesia', p.103)

(231n)   Velocemente mandami i documenti
           (NG, 'Caro Michele', p.112)

(231o)   Comperata ugualmente col pellicano
           (NG, 'Caro Michele', p.135)

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(231p)   E anche era venuta l'amica

           (NG, 'Famiglia', p.15)

(231q)   O anche li metteva in bocca

           (NG, 'Borghesia', p.78)

(231r)   Dove Ivana sempre aspettava

           (NG, 'Famiglia', p.23)

(231s)   perché lei sempre conosceva tutti

           (NG, 'Borghesia', p.90)

Let us examine the above sentences in turn.

(231a) is ambiguous between the reading: 'I was told this later <u>from different sources</u>' and 'I was told this later <u>in different ways</u>'.

This is expected given our theory, for the ambiguity arises from the manner adverb not being in its proper, postverbal position, ie. it is out of its scope. The only way to resolve this ambiguity and give a manner reading is to postpose the adverb.

(231b) is again ambiguous, between a sentential reading of 'lateralmente' (secondarily) and a manner reading (sideways). This time, disambiguation can only take place through intonation, and the absence or

presence of a virtual pause before the adverb.

(231c) Here, the oddity of this sentence is due to the position of the focalising adverb 'anche'. Recall that we have said that its domain is local, and that it must be strictly adjacent to the word it refers to, that is, it must immediately precede or immediately follow it. Here, however, to obtain the reading 'But we acted <u>also in public</u>', 'anche' would have to be adjacent to 'in pubblico'. To obtain the reading 'But <u>we too</u> acted in public', 'anche' would have to be adjacent to (precede) the subject of the sentence, 'noi'. In this example, however, 'anche' is adjacent to 'ma' on the surface, so to obtain this latter reading, the subject must be expressed phonetically. In fact, since this sentence is a correlative, by referring to the immediately preceding context in the book we can easily disambiguate it and assign to it the first interpretation shown above.

(231d) is ambiguous between the sentential reading of 'francamente' ('really, in truth') and its manner reading ('in a frank, sincere way'). The same comments as for (231a) apply.

(231e) is ambiguous between the sentential reading of 'stentatamente' ('just about') and its manner reading ('with effort, in a laboured way'). The same comments

as for (231a) apply.

(231f) is ambiguous between the sentential reading of 'esattamente' ('really') and its manner reading ('in a precise, exact way'). The same comments as for (231a) apply.

In (231g) we have three available readings for the clause, due to the ambiguity of interpretation of the adverb. The first available reading for (231g) is 'Even now, on some occasions (on some nights) she would wake in the grips of terror'. Standardly, in this reading we would find the 'locuzione avverbiale' 'a volte' before the verb, as we would expect for a sentential reading.

The second available reading for (231g) is 'Even now, at night she would wake up several times in the grips of terror', where the adverb has the VP as its scope. Finally, the third reading for (231g) is 'Even now at night she would wake up, sometimes in the grips of terror', in which the adverb has a different domain, adjoined to the right of the sentence. To assign the sentence this third reading, we would need an intervening pause between the VP and the adverb. Without any pause, it would be necessary to rely on the phonetic representation of the sentence.

(231h) is ambiguous between the readings 'who really

seemed like shadows' (sentential) and 'who seemed like shadows indeed' (VP-adverb). The same comments as for (231a) apply.

(231i) is ambiguous, but here the ambiguity is due to the very peculiar use of the adverb 'ugualmente' (equally) in this sentence. The meaning of this example is in fact difficult to derive in the first place, in the variety of Italian spoken by myself. If we examine this sentence more closely and try to interpret it, it seems to us that two readings are available for the adverb. In the first reading, the sentence would roughly mean 'assiduous and punctual almost identically', with 'ugualmente' acquiring a manner adverb reading. The second reading would instead be 'almost as assiduous and punctual', with 'ugualmente' acquiring a sentential reading, rather closer to 'altrettanto'.

In (231j) we find yet another ambiguity, again due to the adverb being in one way or another outside its normal scope in the clause. In this particular instance, we have again two readings available for the 'locuzione avverbiale' 'un po''. In the first available reading, the sentence reads 'and usually he staggered a little'. The second available reading has 'un po'' as a time adverb, i.e. 'and as usual for a while he staggered',

with scope over the entire sentence. Notice that the ambiguity remains even if we move 'un po'' after the verb, for the two positions are both available for the adverb. Hence, we will have to resort to contextual information to resolve the ambiguity.

The interesting point about (231k) is that without relying on the context of Ginzburg's book, the sentence as it stands is not ambiguous at all. The only reading we can derive from this sentence considered in isolation is 'soon I'll go to sleep'. The verb here is in the present tense, which in standard Italian is commonly used in place of the future tense.

However, in Ginzburg's book this sentence is a general statement about the character's habits, and the meaning really is 'I go to bed early', which in standard Italian can only be expressed as '(Me ne) vado a dormire presto', with the adverb in its usual postverbal position.

What we have here is in our view not even an ambiguity, rather a reading unobtainable without resorting to previous contextual information, or intonation. However, it is obvious that if we insert this proviso, then all sentences given in this study can be disambiguated. What is important for us is that

contextual information and/or intonation are outside
the domain of syntax, and hence not the object of our
study.

With (2311) we return to the familiar scene of
focalizing adverbs like 'anche', which we have seen
before and will meet again later.

The meaning of this sentence is 'Only Alberico stays
with the little girl'. However, the representation of
this meaning in Italian would be 'Solo Alberico rimane
con la bambina'. By placing 'solo' away from the word
it refers to (Alberico) and outside of its local
domain, Ginzburg gives rise to an ambiguity, for a
second reading becomes available, that is, 'With the
child Alberico remains alone'.

In (231m) we have yet another ambiguous situation.
What the author means here is that the characters of
her book 'probably did not get on well in bed'. This
in the variety of Italian spoken by me would read
'Probabilmente non andavano bene a letto'. By placing
the adverb after the verb, the second meaning we can
derive is 'Probably they did not go to bed well'. I
must admit that this sentence causes me some
difficulty. I am still unable to derive promptly the
meaning intended by the author if the adverb is post-
verbal, although I am aware that if we take the

complete idiomatic expression 'andare a letto' (to make love) rather than the verb + prepositional phrase sequence, the meaning is fully derivable, albeit still ambiguous between the two readings outlined above. This is probably also due to the much-used expression 'andare bene' in Italian, which encourages me to treat this as the idiomatic element of the clause.

(231n) This sentence is ambiguous, for here 'velocemente' could mean 'send me the documents soon' or 'send me the documents using a quick means'. To obtain the second reading, 'velocemente' should appear after the object, sentence-finally. This is so because if we move the adverb in the auxiliary position, the ambiguity remains. This is foreseen by our theory, for the auxiliary position is available both to sentential and VP-adverbs. In this case, no syntactic tool will be able to eliminate the ambiguity, and we must resort to non-syntactic factors (contextual information, intonation, etc.) to disambiguate the sentence.

(231o) provides us with a further example of ambiguity, in this instance favoured by the nature of the adverb 'ugualmente' (equally, anyway). The first reading of this sentence respects the nature of this adverb. The sentence would in fact read '... (which was) bought anyway with the pelican' (a nickname for a character in Ginzburg's book).

However, this is not the reading sought by the writer, who in fact implies 'Also bought with the pelican'.

So, this sentence presents us with two problems, a semantic and a syntactic one. The first problem occurs because 'ugualmente' is used instead of 'anche'. The second problem is that, even if we can derive the meaning of 'anche' from 'ugualmente', because the adverb 'anche' to be unambiguous must have a local domain and precede the word it refers to, the reading for (231o) would be 'bought also with the pelican', and not 'also bought with the pelican'.

(231p) and (231q) exemplify the problem of focalizing adverbs being taken out of their scope and away from the lexical items they refer to.
We have explained this phenomenon in (230c). So, (231p) is ambiguous between the readings 'And as well her friend came' and 'And her friend came too'.

(231q), on the other hand, is ambiguous between 'Or she also put them in her mouth' and 'Or she put them also in her mouth'.

Finally, (231r) and (231s) show an unusual positioning of the adverb 'sempre' (always), which in Italian normally appears post-verbally.

(231r), moreover, is ambiguous between the readings 'Where on all occasions Ivana waited' and 'Where Ivana always waited'. This ambiguity does not apply to (231s) despite the identical linear word-order between the sentences, obviously due to the different semantic properties of the verb. The ambiguity of (231r) remains even if we place 'sempre' after the verb. This is because, as mentioned earlier, both positions are available for this class of adverbs, and only further contextual information can assist us in disambiguating the clause.

What also interests us in these examples is the fact that they reflect more closely the word-order of English, where 'always' appears preverbally.

It is worthwhile to note, however, that even the English adverb 'always' in its standard pre-verbal position can sometimes give rise to ambiguity, as we can observe in (232):

(232)   Always use adhesives in a well-ventilated area

This sentence, in fact, is ambiguous between the reading 'Always use adhesives only in well-ventilated areas' (because they are dangerous if inhaled), and the reading 'Always use adhesives whenever in a well-

ventilated area' (it is the thing to do in well-
ventilated areas).

8. The Italian Adverb - Discussion and Conclusions

We have now come to the end of our survey into the issues presented by the adverb in the grammar, both generally, in various languages, and more particularly in Italian.

We would venture to say that the picture we have offered is comprehensive and also balanced, for we have constantly tried to review all proposals considered with equal attention and - we hope - an open mind.

It is clear to everyone who takes the ill-fated decision to study adverbs, that these lexical items are very complex and multi-faceted, and those who look for a definite theory explaining the adverb would be deeply disappointed. We have noted several times that the linguists whose work we have reviewed recognized that the task of explaining the adverb is far from completed, and that many issues remain open questions. Moreover, as is perhaps clear from our study, there are theories which could be equally said to be theoretically adequate in explaining one or more aspects of the behaviour of adverbs, and there is often no way of preferring one over another.

One of the main aims of this study, and one that we

hope to have achieved with some success, has been to show that there is not - and there should not be - any fixed demarcation line between 'traditional' and generative grammar. Besides expressing our dissatisfaction with the term 'traditional' that seems somehow to portray non-generative grammar as a lesser discipline, we really believe that linguistics as a whole can and indeed does benefit from the studies found in traditional or reference grammars. We must not forget, after all, that every generative linguist has firstly been a student at school, and that his/her interest in linguistics, as indeed has mine, has originated from traditional grammar, its challenges and, well, limitations.

I would also say that despite the tremendous progress of generative linguistics, we still have to rely on non-generative grammar to a large extent, at least until generative linguistics can really be said to have succeeded in developing a complete theory of language, able to offer a better account than a descriptive one for many grammatical issues. Traditional grammar, in fact, still provides a lot of pre-theoretical notions which generative grammar needs anyway.

So, what are the conclusions that we can finally draw from our investigations?

As for the treatment afforded to adverbs by traditional grammars, we find it generally quite inadequate, at least until recently and still today in many cases, for the descriptions it gives are not even descriptively adequate, and ultimately do not tell us much about the adverb.

Let us see why. We have seen that the way in which non-generative grammars define the adverb is at the same time too restricted and too general. It is too restricted, because the adverb does not only modify the verb, as most grammars said up to the last century, and because it does not only modify an adjective or another adverb, as textbook and reference grammars have told us up to the present day. It is only very recently that the adverb has been said to be able to modify the entire sentence as well. Finally, no mention is made in any of the grammars we have analyzed, of adverbs referring to a previous context, such as 'dunque' in example (45) above, and not to the sentence they are contained in.

On the other hand, however, the definition given of the adverb is also too general, and gives rise to unpredictable and undesirable results. Such a definition, in fact, does not differentiate between the adverbs as to which syntactic categories they can modify. So, the attempt of non-generative grammars to

enlarge the adverbial definition and include adjectives, adverbs, etc. as modifiable categories, has had the drawback of leaving no way to explain why, for example, certain adverbs can only modify certain syntactic categories:

(233)   * very yesterday

(234)   * yesterday beautiful

If we put aside for a moment the problems posed by the definition given of the adverb, we still find many unsatisfactory aspects in the way in which non-generative grammars standardly present the adverb. Only in a handful of grammars have we found some remarks on the possible ordering of adverbs within the clause. To illustrate the problem, consider the contrast between (235a) and (235b):

(235a)   John probably was carefully wrapping the presents

(235b)   * John carefully was probably wrapping the presents

We can see from these examples that 'probably' must obligatorily precede 'carefully' in the clause, although both adverbs can appear in these positions.

Obviously, from the information given to us by textbook and reference grammars we have no way to explain facts such as the above.

Even the few grammars which consider this ordering of sequences of adverbs do nothing more that describe some of the possible combinations, like Varvaro (1981), who argued that manner adverbs precede circumstantial adverbs as in 'assolutamente mai', but with no proposal as to which underlying principle could be at work in these cases.

After giving us their definitions of the adverb and various rules as to their morphological formation, non-generative grammars proceed to what is one of the basic shortcomings of their explanatory capability: several lists of adverbs, which are subdivided and enumerated on the basis of their meanings, that is, of semantics. Therefore, we see manner adverbs separated from doubt adverbs, in their turn separated from place and time adverbs, and so on.

Obviously, this listing exercise is useful in providing information as to the semantic role played by the adverb in the sentence, but to a native speaker, who has been exposed to his/her language environment all his/her life, and hence knows the meaning of 'spesso' as opposed to 'forse', these lists

merely serve - in our opinion - to formalize the speakers' knowledge of the adverbial meaning.

Moreover, lists such as those we see in non-generative grammars are not sufficient or adequate to explain well-known and common adverbial facts, like the ones we present below:

(236a)   Incredibilmente, Gianni studia

(236b)   Gianni studia incredibilmente

(236c)   Mi venne variamente riferita dopo (GB, 'Gli Occhiali d'Oro', p. 29)

(236d)   O anche li metteva in bocca (NG, 'Borghesia', p. 78)

In (236a) and (236b), we have the adverb 'incredibilmente', which has two different semantic readings, in (236a) that of a sentential adverb, and in (b) that of an adverb of manner.

Given the semantics-based treatment of the adverb by non-generative grammar, would we need to list 'incredibilmente' and similar adverbs in two semantic categories, that of manner adverb and that of sentential adverb? And how can we formally predict

which reading 'incredibilmente' will have in a sentence?

Non-generative grammars have had, until very recently in some cases, or not yet in many others, no answers to offer for the above.

In (236c), 'variamente' is ambiguous between the reading 'from different sources' and 'in different ways'. Yet, grammars do not even recognize this problem or indeed attempt to make any proposals.

Finally, in (236d) 'anche' is generally odd or non-standard in this sentence, in a sense to be made more precise later, but, more importantly, is also ambiguous between the reading 'or she also put them in her mouth' and 'or she put them also in her mouth'.

In no non-generative grammar we have consulted, however, have we found any acknowledgement of this problem or any explanation for these facts.

So, it seems to us that the native speakers of Italian are largely "left to their own devices" by their school or reference grammars. What we mean is that the speaker of the language is assumed to have learnt through exposure to his/her own language the acceptable v. unacceptable environments for the

various adverbs within Italian utterances.

However, if we have found non-generative grammars to be inadequate for Italian native speakers, their limitations are much more serious for the teaching of the Italian adverbs to foreign students.

To discover more about this field, we have analyzed a few grammars of Italian for foreign students, to see the way in which they explain the adverb to non-Italian speakers. Surprisingly, we have found their information to be even more scant and far less helpful than grammars written in Italian, whereas if anything the opposite should be the case.

We have discovered that most of these grammars give little or no explanation of the use of the adverb in Italian.

Thus, Jones (1981) gives only a few notes on the morphological formation of adverbs, and does not even differentiate between semantic categories. There is no mention at all of positioning, and the number of adverbs described is very small.

It is our opinion that Jones's grammar offers no help at all to the foreign student of Italian, and this is reflected in the teachers' comments we will shortly

review.

Rapaccini (1986) still limited the definition of the adverb to modifiers of the verb. She then lists some morphological information, and divides adverbs into the categories of quantity, manner, time, place, affirmation, negation, doubt. There are a few examples, but no information whatsoever regarding the uses and possible positions of the adverbs.

Finally, McCormick (1988) only lists adverbs of manner, time and place. Unlike the two other grammars reviewed above, the author has some notes on the positioning of the adverbs, which we analyze here.

He says that "usually the position of Italian and English adverbs in the sentence corresponds very closely". "Italian adverbs, like English ones, most frequently follow the verb they modify, but they may also be placed elsewhere in the sentence". "However, Italian does not place an adverb between the subject and the verb as often happens in English". Finally, "with compound tenses some adverbs are often placed between the auxiliary and past participle (although they will also be found following the participle)" (p. 177).

While we congratulate McCormick for taking the trouble

to include the possible adverbial positions in his grammar, we sincerely find some of his claims rather surprising.

For example, it is simply not true that "usually the position of Italian and English adverbs in the sentence corresponds very closely". If anything, the opposite is generally true:

(237a)   John often sees Mary

(237b)   Gianni vede spesso Maria

Furthermore, it is not true that "Italian adverbs, like English ones, most frequently follow the verb they modify". We already see from the above example that this is true of Italian but not of English:

(238a)   John furtively closed the door

(238b)   Gianni chiuse furtivamente la porta

Finally, it is not always true that "Italian does not place an adverb between the subject and the verb":

(239)   Gianni spesso torna a casa senza aver comprato niente

And even if this were true, then it appears that McCormick actually contradicts the first claim he

made, namely that the position of Italian and English adverbs is very similar.

Even from these very few grammars it is clear that the difficulties faced by teachers of Italian as a foreign language must be great indeed.

My conversations with some of these teachers show that two particularly problematic areas exist. Generally, teachers complain that the grammars they use do not help them at all in teaching their students the differences we noted above between English and Italian.

Specifically, two of the most common problems encountered are that:

a. English students tend to put the adverb in "English" positions, as in:

(240)   * Sempre vado al cinema (from I always go to
           cinema)

and that

b. English students do not know the distribution of focalizing adverbs like 'anche' or 'solo' in Italian.

Specifically, the 'focalising' adverb 'anche' (also) behaves quite differently from its English counterpart, in that it is strictly local and must be immediately adjacent to the part of the phrase or the lexical item it refers to. So, whereas English students can happily say, for example:

(241a)   Also, Mary went to the cinema

(241b)   He said the same thing, too

Italian must obligatorily disambiguate these sentences by putting 'anche' immediately adjacent to the item concerned:

(242a)   Maria è andata anche al cinema

          (Maria went also <u>to the cinema</u>)

(242b)   Maria è anche andata al cinema

          (<u>Mary has also gone to the cinema</u>)

(242c)   Anche lui ha detto questo

          (<u>He</u> too said this)

(243d)   Lui ha detto anche questo

          (He said <u>this</u> too)

These facts are not surprising if we consider the lack of help English students suffer from their grammars of the Italian adverb.

So far, we have painted a fairly depressing and

damning picture of the non-generative grammars of the Italian language with specific regard to the adverb.

This said, however, it is with great excitement that we have reviewed Lonzi's (1991) study of the Italian adverbs, which really marks a huge step forward in a better understanding of the adverb and gives the reader/learner much more adequate and illuminating tools to understand and use the adverb. Continuing the way shown by Pecoraro & Pisacane (1985), Lonzi proposes an account of the adverb that combines traditional and innovative ideas, that gives a much bigger role to syntax than to semantics, and that successfully explains some of the more puzzling grammatical/ungrammatical uses of the adverb.

Among the most recent textbook grammars we have reviewed, 'Per Filo e Per Segno' by Corti, M and Caffi, C (1990) deserves a special mention.

This grammar, in fact, incorporates many of the fundamental notions proposed by generative grammar, and marks a genuine improvement in the treatment of the adverb by any Italian school grammars.

We now find that adverbs can serve to modify verbs, adjectives, another adverb and entire sentences.

Adverbs are now divided in 'avverbi di predicato' and 'avverbi frasali', that is, according to their domain within the clause.

The first group includes manner, time, place and quantity adverbs, while the second group comprises adverbs of 'valutazione' (expressing a judgement about a state of affairs), truth (expressing the speaker's degree of certainty about his/her statement) and 'sincerità' (with which the speaker declares his/her sincerity, to give more credibility to the utterance).

The authors also recognize that the same adverb can be used as a predicate or sentential adverb, according to its position and the intonation given to the sentence uttered (albeit with no strict rules). Normally the position occupied by sentential adverb is said to be at the beginning of the clause.

This division between sentential and VP-adverb still seems insufficient to us, however, for, as already noted by Belletti, it gives us no way to predict why two VP-adverbs like 'spesso' and 'completamente' cannot share the same positions within the clause, as (243a) and (243b) show:

(243a)   Il dottore spesso risolve i miei problemi

            (The doctor often solves my problems)

(243b)   * Il dottore completamente risolve i miei

problemi

(The doctor completely solves my problems)

Nevertheless, this grammar gives us a lot of hope for the way in which students will be taught the Italian adverb in future.

Turning now our attention to generative grammars, to which degree can we really say that they have been helpful or better at providing satisfactory accounts for the problems faced by non-generative grammars? Let us review their proposal in this respect.

In the previous sections of our study, we have followed the development of generative syntax and its analysis of the adverb, and from early accounts of the English adverb by Jackendoff (1972), we have gradually moved on to theories capable of better explaining the adverbs, and also taking into account an ever-increasing corpus of data across languages.

One of the general aims that generative grammar seeks to attain through its theoretical framework and proposals is that of a generalised, unified theory of language acquisition and explanation which goes beyond the boundaries of single languages through a set of highly generalised conditions of well-formedness of

constructions that apply, in a parametrized fashion, to different languages.

In trying to reach these objectives, generative grammar advocates a separation between purely syntactic phenomena and all other semantic, phonetic or pragmatic factors. Since generative grammar is the theory of linguistic competence, not of linguistic performance, it seeks to discover the underlying, purely syntactic principles that govern language.

It is clear that such an approach is of particular significance for the analysis of adverbs, for, as we have seen, non-generative grammars proposed a description of the adverb based on semantic terms.

What generative linguists have done, therefore, is to try and determine whether the distribution of adverbs in a language could be made to follow from syntactic conditions or principles.

One of the fundamental ideas introduced by generative grammar in the treatment of adverbs is that of 'domain' or 'scope' of the adverb. Linguists observed that the problems we have outlined above could receive satisfactory answers by employing the notion of 'domain'.

In fact, firstly let us return to the point of the ordering of sequences of adverbs in a clause. We will reproduce the relevant examples for the reader's convenience:

(244a)   John probably was carefully wrapping the
          presents

(244b)   * John carefully was probably wrapping the
          presents

Generative grammar proposals can now help us to explain this contrast. In (244a) we have 'probably', an adverb which modifies the entire sentence, and 'carefully', an adverb which modifies the verb (ie. a manner adverb).

If we say that 'probably' has the entire sentence as its domain, that is, it has scope or influence over the entire sentence, and 'carefully' has the verb phrase as its domain, then we can see that in (244a) the ordering of the two adverbs is correct, because the domains of the adverbs are respected and because (in a sense to be made more precise later) sentence-adverbs usually precede manner-adverbs.

The opposite, however, has happened in (244b), where the domains of the adverbs have been violated and

'carefully' has been extracted from its domain. This is not allowed in the intended reading. Notice in fact that if we substitute the sentence-adverb 'probably' with the manner-adverb 'busily', the sentence becomes acceptable:

(245)　　　John carefully was busily wrapping the presents

Here, however, 'carefully' has now taken a sentential reading, so not 'John probably was wrapping the presents in a careful way', but 'it was careful of John to wrap the presents in a busy way'.

Pecoraro and Pisacane (1984), following proposals by Jackendoff (1972), argued that adverbs with fixed domain, that is, that display no change of meaning with movement, have a wide freedom of positioning, for the logical relations between the constituents of the clause remains unchanged. Conversely, adverbs with mobile domain, ie. that display change of meaning with movement, can only have limited freedom of positioning within the sentence, to avoid altering such logical relations.

Their proposals are already sufficient to predict and explain the contrast seen in (245) and they are also useful in accounting for the ambiguity seen in (246):

(246)   Mi venne variamente riferita dopo

Notice in fact that the position of 'variamente' in this sentence (the auxiliary position) is available both to sentence-adverbs and VP-adverbs:

(247a)   Gianni ha sicuramente ballato
            (Gianni has surely danced)

(247b)   Gianni l'ha duramente colpito
            (Gianni has hit him hard)

Given this, it is not surprising that we should find ambiguity between the two possible semantic readings for these adverbs, although their scope here is not violated.

Finally, if we consider the behaviour of focalizing adverbs like 'anche', as in:

(248)   Ma anche agivamo in pubblico (LM, 'Libera
             nos a malo', p. 117)

through the notion of domain we can say that adverbs of this kind in Italian cannot be sentential and have a fixed domain over the lexical item or phrase they focalize, and because they require strict adjacency to them, they give rise to marginally acceptable results

or ambiguity if extracted from their domain.

We strongly believe that this first contribution of generative grammar to the explanation of the adverb, through the notion of 'domain', could and perhaps should be incorporated into textbook grammars for Italian speakers and foreign students. Lonzi (1991) and Corti and Caffi (1990) have done so and achieved marked improvements compared to previous grammars.

In particular, Corti and Caffi's (1990) distinction between sentential and VP-adverbs is far more useful to the Italian student, and even more so to the foreign student of the language, and the notion of domain could be employed to help them in learning the correct distribution of focalizing adverbs, for example.

However, generative grammar has not stopped here in its account of the adverb in the syntax. After considering the notion of domain, what was needed was a theory capable to explain in syntactic terms why adverbs occur where they do, and whether there is a principle governing the possible positions filled by the adverb in the clause. To come back to the problem of teaching the adverb to foreign students, how could we explain that:

(249)   * Sempre vado al cinema

is not correct in Italian but is well-formed in English (I always go to the cinema)?

After all, the notion of domain is not sufficient to account for this contrast. 'Sempre' (always) has the same domain in English and Italian, that of the verb phrase, so why is it that in Italian this sentence is not well-formed?

Also, recall that the distinction between sentence-adverbs and VP-adverbs is insufficient, as we can see in (250):

(250a)   Il dottore spesso risolve i miei problemi

(250b)   * Il dottore completamente risolve i miei problemi

Here we have two adverbs with identical domain, and in the same surface position, yet with different results.

It is for these reasons that generative grammars strived to provide a syntactic explanation for the positioning of the adverb.

It seems to us that all the generative grammar

theories we have considered have a certain appeal, some for their elegance and simplicity - albeit put to a test when other languages are considered - such as that of verb-movement by Pollock (1989) and Chomsky (1989), whereas others point to alternative accounts and interesting parallels with other constituents of the clause (above all, adjectives).

For the specific case of Italian, Belletti (1990), building on proposals by Pollock (1989) and Chomsky (1989) proposed that no specific syntactic process be postulated for the adverb in the grammar, and that the behaviour displayed by the adverb is the result of other syntactic processes taking place, that is, mainly verb-movement, and for some cases topicalization, dislocation and so on.

It is our opinion that Belletti's (1990) theory and proposals are the most effective and promising for Italian, for they give answers to the questions we raised when reviewing Pollock (1989) and Chomsky (1989), namely when we noted the differences in behaviour between Italian, French and English adverbs. It is in Belletti (1990) that sentential adverbs, not just VP-adverbs are given an explanation, and it is there that we find a possible answer to the differences displayed by Italian negation and adverbs in infinitive clauses.

Belletti argues that variations among languages for the positions which adverbs appear to fill in the clause can be interpreted as a function of a verb syntax working differently across languages (in a parametrized fashion). For Belletti, available adverbial positions remain invariant across (at least typologically close) languages, and the variations we observe can be made to follow from the different scope of application that the verbal movement operation can have.

Thus, for example, in Italian the verbal head systematically moves to the highest inflectional head position assumed (AGR), with no difference between tensed and infinitival environments. French follows Italian in tensed clauses, but not in infinitival clauses, where verb-movement is only allowed to the lowest functional head position, that is, the first head that it meets. Finally, English differs from these two languages in that the verb does not move out of the VP into a higher inflectional head position, except for auxiliary verbs like have/be.

This assumption is the key to solve the puzzle faced by teachers of Italian as a foreign language, which we reproduce below:

(251a)   * Sempre vado al cinema

(251b)   I always go to the cinema

Notice in fact that in the case of VP-adverbs, the order Adv V is acceptable in English, because English lexical verbs do not raise out of VP. Conversely, in Italian this sentence is ungrammatical, the verb must obligatorily raise, and therefore the only possible order if V Adv.

Thanks to the distinction proposed by Belletti for "lower" adverbs, the contrast seen between 'spesso' and 'completamente' in (252) receives an explanation:

(252a)   Il dottore spesso risolve i miei problemi

(252b)   * Il dottore completamente risolve i miei
          problemi

According to Belletti, in fact 'completamente' is unable to topicalize, hence it cannot appear clause-initially.

The ordering problem for sequences of adverbs is also answered. To recall the facts, let us reproduce the relevant examples:

(253a)   John probably was carefully wrapping the
          presents

(253b)   * John carefully was probably wrapping the
           presents

Now, if we take Belletti's proposals, we see that the
position filled by 'probably' in (253b) is not a
position available to sentence-adverbs but only to VP-
adverbs. So, 'busily' can appear here, but not
'probably', for which there is no ambiguous reading as
a "lower" adverb.

Notice however that this very same fact is also a
problem for generative grammar, as previously
mentioned. In fact, if we go back to the problem of
ambiguity illustrated in (254):

(254)   John carefully spilled the beans

the ambiguity of 'carefully' between a sentential and
manner reading is left unresolved in Belletti's
theory. This is because the auxiliary position is
available to both adverbial classes, no syntactic
criteria can solve this ambiguity, and we would need
to resort to intonation or previous contextual
information. Therefore, it seems that in certain cases
a combination of syntactic and non-syntactic skills
are called into play as far as the adverbs are
concerned.

Zanuttini's (1989 and 1990) alternative proposals for Italian have also been reviewed, and despite our reservations on her ordering of the AGR constituents, it seems to us that they could be integrated in Belletti's if we treat her negative adverbs in a similar fashion to 'più/mai/ancora', etc, which can appear in the same positions as 'nen', Milanese 'no', 'nigot', etc.:

(255a)   Non lo guarda/Non l'ha guardato più

         (He/she does not/has not watch(ed) him/it

         anymore)

(255b)   La guarda no/L'ha guardà no

         (He/she does not/has not watch(ed) her/it)

(255c)   La guarda nigot/L'ha guardà nigot

         (She looks at nothing/He/she has looked at

         nothing)

(255d)   La guarda minga/L'ha guardà minga

         (He/she does not watch her/He/she has not

         watched him/her)

It is also quite interesting that Belletti and Lonzi start from different assumptions but basically describe or explain adverbs in a very similar fashion. This is particularly so with focalising adverbs and adverbs like 'più/ben/ancora/sempre/mai', both in positive and negative sentences.

This seems promising in that their conclusions are well-attested, and further serve to underline the many interactions between non-generative and generative linguistics, hopefully increasing more and more our understanding of the adverb across languages.

Finally, if we take another look at the facts outlined in our Section 7 devoted to the Italian adverb in literature, we can see that the main marked stylistic effects were obtained by extracting focalising adverbs from their respective domains, and giving rise to ambiguity between a sentential and manner reading with the adverb in auxiliary position.

We have already outlined the differences in the way in which non-generative and generative grammar deal with the latter cases. As for focalizers, however, whereas non-generative grammars were unable to provide any explanation for the marginally acceptable or ambiguous results seen, through the notion of domain we can finally give a reason for these facts. Although no generative grammar theories have - to our knowledge - considered the case of focalizing adverbs, perhaps it could be maintained that these are base-generated adjoined to the item or phrase they focalize, and that their domain is strictly local.

When analyzing data from literary works, it has been

our impression that the inclusion of generative grammar criteria and tools can prove analytically very useful in discovering the very subtle relations that exist between the adverbs and their clauses, which would be otherwise lost if we rely solely on semantic or contextual information.

To conclude, then, what we have tried to show is that to solve the problematic nature of the adverbs, and to facilitate its learning by the foreign student, while providing the native speaker with a much better account of adverbial use and distribution in his/her language, we have come a long way, and many very desirable and attractive results have been achieved.

The way forward, in our opinion, is for non-generative grammar to study and elaborate the findings of generative linguists, especially in the case of grammars for foreign students, which are pitifully inadequate. This is necessary to bring to an end the inadequate treatment given of the adverb, which has only changed slightly from the first grammars of the past centuries we have taken into account. There are, as we have seen, many promising signs that this will indeed happen soon.

Footnotes

(1)　In Michael (1970) we read that in spite of his definition, Priscian did in fact recognise as comparative adverbs words like 'magis', 'minus', 'maxime' which regularly limit adjectives or adverbs (Priscian, xv. 36 (K.III.88)).

(2)　-mente adverbs are derived from the feminine form of the adjectives for etymological reasons. In Latin, for example, the phrase SERENA MENTE meant 'with a serene disposition', for 'MENTE' was simply the ablative form of the feminine noun MENS, MENTIS ('mind', 'disposition'). Hence the feminine agreement between the adjective and the noun, as expected. See also Serianni (1989).

(3)　For a more detailed account of the 'locuzioni avverbiali', see Serianni (1989:492). We will briefly list here the possible combinations. The 'locuzioni avverbiali' are formed with:
a-　a preposition, e.g. 'in breve' (briefly);
b-　double preposition 'a', e.g. 'a faccia a faccia' (face to face);
c-　prepositions 'di .... in', e.g. 'di male in peggio' (from bad to worse);
d-　duplicating the noun, e.g. 'passo passo' (step by step);
e-　duplicating the adjective, e.g. 'quatto quatto' (very quietly);
f-　duplicating the adverb, e.g. 'or ora' (just now).

(4)　It has to be noted that the quantity adverb 'assai' precedes the adjective in North and Central Italy, while it follows it in the South of the country ('assai bello' v. 'bello assai')

(5)　Serianni (1989) disagrees here. He claims that with many time adverbs the positioning of the adverb to the left or the right of the verb is semantically relevant:

a.　Domani farò quel che mi hai detto
　　(Tomorrow I'll do what you've told me (to do))
b.　Farò domani quel che mi hai detto
　　(I'll do tomorrow what you've told me (to do))

Serianni claims that in (a) 'domani' is a simple

'indice temporale' (temporal index) of the action, whereas in (b) the positioning tells us that 'domani' has been selected from other possible indexes of time.

[6] Here, Tekavčić uses the term 'performative' in a general sense, to refer to the action described in the sentence. Notice in fact that strictly speaking the term 'performative' refers to a verb describing an action of the subject, the enunciation of which consists in fulfilling the action expressed by the verb itself.

[7] For the sake of completeness, we note here (with Migliorini (1971)) that in vulgar Latin adverbs, particularly those having a local meaning, were strengthened with other prepositions, as in 'de post' (later 'di poi' e 'dopo'), 'de ubi' (later 'dove'), etc.

[8] For a discussion of the AG/PRO parameter for Italian, see Hyams (1983).

[9] Some useful definitions are given here below:

Empty Category Principle (ECP)
[$_\alpha$ e] must be governed

Theta-Theory concerns the fundamental logical notion "argument of".

[10] Theta-Criterion

A lexical NP must occupy one and only Theta-position.

[11] Williams (1989) notes in fact that in English, compounds are always right-headed, while in French they are left-headed:

a.   * stamp postage
b.   timbre-poste

[12] In our study, we have referred to Belletti's 1990 manuscript of her book 'Generalized Verb Movement'. Her book has since been published under the title 'Generalized Verb Movement - Aspects of verb syntax', 1990, Rosenberg & Sellier.

[13] (149b) is well-formed with 'ben(e)' as a manner adverb, but the positive adverb reading is not available.

[14] This sentence would be alright in Italian with two -mente adverbs of different classes (here: sentence

... manner)

Gianni probabilmente ballerà divinamente
(Gianni probably will dance divinely)

However, in Italian we cannot refer a -mente adverb to another -mente adverb: *studia grandemente attentamente (he/she studies greatly carefully) is out, but 'studia molto attentamente' (he/she studies very carefully) is well-formed (Lepschy & Lepschy, 1981:87).

(15) As a matter of fact, sentence-adverbs can co-occur with topicalization of some other phrase without giving rise to an ungrammatical result:

MARIA probabilmente/evidentemente Gianni incontrerà in vacanza

(16) (181b) is well-formed only with a different reading, where pure is used to reinforce the matrix clause and is the Spec of the matrix PosP, as in: 'E' pur vero che lei si è scusata' (it is indeed true that she has apologised).

(17) For a definition of c-command, see Lasnik & Uriagereka (1988), chapter 2.

For A, B nodes in a tree, A c-commands B iff every branching node dominating A dominates B and neither A nor B dominates the other:

```
          S
        /   \
      NP     VP
            /  \
           V    NP
```
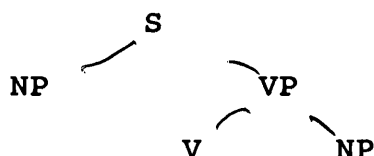
Here, the subject c-commands the object. The only branching node is S, and S dominates the object. The object, however, does not c-command the subject. There is a branching node dominating the object - namely, VP - which does not dominate the subject.

(18) To this Group 3 belongs also Milanese, the Italian regional dialect I speak, where negation is post-verbal. Here are some examples:

a.   El mangia no (He doesn't eat)
b.   L'è vegnü no (He has not come)
c.   El g'ha minga fam (He is not hungry)

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