

NPs in Right-Peripheral Positions

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In their recent paper Belletti and Shlonsky (1995) examine Italian and Hebrew which manifest relatively free ordering of two complements, NP and PP. Assuming that in Italian the basic order is NP PP, they propose transformational processes which produce the alternate configurations from the basic order. These processes are: movement as focalization (Light NP Postposing), PP scrambling, and HNPS. The aim of this paper is primarily to argue that the three processes in Italian can be also observed in English.

1.0 Transformational Processes in Italian

Belletti and Shlonsky (1995) argue that the distinct processes, which produce PP NP order, apply for independent reasons in Italian. When the NP is light, it is moved rightward over the PP: the NP is moved to the Specifier of Focal Phrase as focalization. When the object NP is heavy, there are two possible processes to apply: PP scrambling and HNPS. By PP scrambling PP is moved leftward over the NP, and the NP remains in the canonical object position. The third option, HNPS, moves the NP rightward to A'-position, presumably a VP-adjoined position.

1.1 Focalization

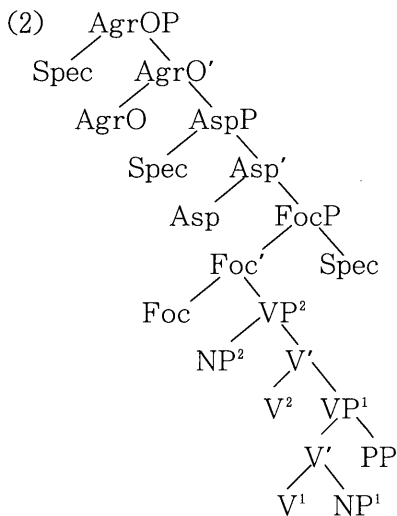
Subject postposing and object postposing are possible in Italian as in (1). According to Belletti and Shlonsky (1995), the postposed NPs in (1) can be construed as the focalized elements even though they are not stressed.

- (1) a. Hanno lavorato molti operai.
have worked many workers.

b. Ho restituito a Maria le chiavi.

I gave back to Maria the keys. (Belletti and Shlonsky (1995:498))

Belletti and Shlonsky (1995) assume, following recent proposals on the nature of various kinds of functional categories such as *negation* and *assertion*, that focus, the functional head, gives rise to its own X-bar projections, and that the focalization process is the movement to the Specifier of Focus phrase (hereafter FocP) where Spec-Head agreement between the Focus head and the shifted NP occurs. Under this proposal the focalized interpretation of the shifted NP is due to the Spec-Head agreement. The postverbal NP in the Specifier of FocP receives nominative case from AspP^0 under government. As to the tree diagram Belletti and Shlonsky (1995) propose (2) in which FocP is above VP and below AgrOP.



Belletti and Shlonsky (1995) further propose that the empty category left by the postposed NP is *pro*. Assuming that *pro* is licensed in the Specifier of AgrP, AgrSP and AgrOP respectively, the inverted NP is linked to the *pro*, and hence the parallelism between the subject inversion and the light NP postposing is expressed in terms of the articulated clause structure here. The availability of licensing *pro* also accounts for the difference between Italian and English. English lacks object *pro* because of its weak Infl system, so the light object NP

postposing is not possible. The ill-formedness of (3b) results. If HNPS applies, the sentence (3c) is grammatical.

- (3) a. ho messo sul tavolo quel libro. (Belletti and Shlonsky (1995:489))
 b. *I put on the table that book.
 c. I put on the table that book I bought yesterday.

The proposed structure (2) has some other consequences. Now consider (4). Both examples in (4) constitute extraction out of an NP in the Specifier of FocP, and they are ill-formed.

- (4) a. *?Ne hanno lavorato molti.
 of them have worked many. (Belletti and Shlonsky (1995:498))
 b. *?Ne ho dato/dati a Gianni uno/tre. (Belletti and Shlonsky (1995:499))
 of them (I) have given to Gianni one/three.

Belletti and Shlonsky (1995) argue that the ill-formedness of (4) is due to the Condition on Extraction Domain (CED) type effect.

Another consequence derives from the fact that the Specifier of FocP can only host a single XP. It can host either a postposed object or a postverbal subject, but it cannot host these two NPs at the same time. Thus the impossibility of (5) results.

- (5) *(?)Ha messo sul tavolo il libro Maria. (Belletti and Shlonsky (1995:501))
 has put on the table the book Maria.

1.2 PP Scrambling

Another process which yields PP NP order in Italian is PP scrambling. PP scrambling, the process which makes it possible for the object NP to fill in the canonical object position, is empirically motivated by *ne*-cliticization in Italian. As is well-known, *ne*-cliticization is possible only when the NP from which *ne* is extracted occupies the canonical object position. Consider (6).

- (6) a. Ho letto molti libri.
I read many books.
- b. Ne ho letti molti.
I of them read many.
- c. Hanno lavorato molti operai.
have worked many workers.
- d. *?Ne hanno lavorato molti.
of them have worked many. (Belletti and Shlonsky (1995:498))

The unacceptability of (6d) is attributed to the *ne*-cliticization from the postverbal non-unaccusative subject. Now notice that (7) parallels (6b).

- (7) Ne ho dato/dati a Gianni uno/tre che mi avevano consigliato
la settimana scorsa.
of-them (I) have given to Gianni one/three that to me (they)
have suggested last week.
I gave to Gianni one/three which they suggested to me last week.
(Belletti and Shlonsky (1995:499))

Although (7) includes a heavy NP object, *ne*-cliticization is possible. This fact indicates that the NP is in its canonical position. What makes this derivation possible is PP scrambling, which adjoins PP over the NP to a position above VP.

1.3 HNPS

PP scrambling is an operation which enables a heavy object NP to remain in its original position, and places it in the sentence-final position. Therefore the heavy NP displays similar behavior to the direct object NP as to the *ne*-cliticization. However, there are heavy NPs which display characteristics of A'-elements. These NPs can license parasitic gaps. Observe the sharp contrast between these NPs and light NPs in PP NP order.

- (8) a. Ho incrociato senza riconoscere quel compagno con cui avevo
frequentato le scuole elementari.

(I) crossed without to recognized that classmate with whom (I) attended primary school.

I crossed without recognizing a classmate with whom I attended primary school.

b.*Ho incrociato senza riconoscere quel compagno.

(I) crossed without to recognize that classmate.

(Belletti and Shlonsky (1995:520))

In order to account for the puzzle above, Belletti and Shlonsky (1995) argue that HNPS is not a unitary phenomenon. There are two possible ways in which heavy NPs can appear clause-finally: PP scrambling over the heavy NP and HNPS (rightward movement) to an A' -position. As noted earlier, when PP scrambling applies, the heavy NP is in A-position. When HNPS applies, on the other hand, the heavy NP is in A' -position since it can license a parasitic gap. The A / A' -distinction correctly predicts that *ne*-cliticization is possible only in the former case.

(9) a. Ne ho incrociato uno con cui avevo frequentato le scuole elementari.

Of-them (I) crossed one with whom (I) had frequented elementary school.

b.*Ne ho incrociato senza riconoscere uno con cui avevo frequentato le scuole elementari.

Of-them (I) crossed without to recognize one with whom (I) had frequented elementary school. (Belletti and Shlonsky (1995:521))

To summarize, Belletti and Shlonsky (1995) argue that there are three possible derivations which yield PP NP order in Italian: One is the movement to the Specifier of FocP as focalization process, and another is PP scrambling, by which the NP remains in the canonical object position. The third option which Italian allows is HNPS. The difference among these three processes can be obtained from a crucial property of *ne*-cliticization and A / A' -characteristics of the shifted NPs.

2.0 English

The first two processes which yield the derivations of PP NP order in Italian

may be involved in two distinct constructions in English. One is the construction known as *locative inversion* (hereafter, LI), and the other is *verb-preposition construction* (hereafter, VPC), exemplified in (10) and (11), respectively.

- (10) a. Under the palm tree stands a beautiful fountain.
 b. In the foliage fluttered a number of robins with stripes.
 c. In the swamp was found a missing child.

- (11) a. I switched off the radio.
 b. I looked up the information.

In these constructions an NP occupies the right-peripheral position. In what follows we will argue that in the first type of construction an NP is moved rightward by rightward focalization process, while in the latter type movement of PP over the object NP, namely PP scrambling, is involved.

2.1 NP Postposing in LI as Focalization, not as HNPS

It has been often argued in the literature that the postverbal NP in LI is postposed by HNPS. We will see in this section some properties of LI in English, focusing on the differences between LI and HNPS examples, and we will clarify the fact that HNPS does not apply in LI. The postposed NP derives the illusion of HNPS in English LI examples.

Like a postverbal subject in Italian, a postverbal NP in LI is always focalized. The NP conveys the most important, new information even when it does not bear any particular stress. In order to clarify this, consider (12).

- (12) a. Who walked into the building?
 b. Into the building walked John.

As is evident in (12), the postverbal NP is interpreted as the focalized element in virtue of the position it fills. What is more, (12b) can be paraphrased like (13).

(13) It is *John* that walked into the building.

The focalization of the NP in the right-peripheral position in LI is distinct from the focalization by a special stress, or by a heavy element. The NP moved by HNPS, for example, must be stressed by contrastive stress if it is a single noun, or it must be heavy.

(14) I put on the table A BOOK.

*I put on the table a book.

I put on the table a book I bought yesterday.

Another difference between HNPS and LI examples lies in the well-known property of HNPS in English: A heavy NP shifted by HNPS can license a parasitic gap. This property cannot be observed in an LI example.¹

(15) a. John offended, by not recognizing immediately, his favorite uncle from Cleveland.

b.*Into the woods ran, with the police chasing, two masked bank robbers.

The difference in (15) is due to A/A'-distinction of the positions in which the NPs fill, which will be seen in more detail later.

The third difference between an HNPS example and an LI example comes from Kayne's observation. Rizzi (1996) claims, based on Kayne's observation, that a wh-element in situ is possible in the heavy NP-shifted position. However, a wh-element in situ is not possible in the postposed-NP position in LI.²

(16) a. Which of the students borrowed *t* from you which of the theses?

b.??Out of which barn ran which horse?

c.*In which swamp was found which child?

d.*In which foliage fluttered which bird?

2.2 Focalization as Movement to FocP

We have seen in the previous section that HNPS is not involved in LI

constructions in English, observing the properties of LI. Based on the fact that the postverbal NP in LI is focalized, we assume that the focalization is brought about by Spec-Head agreement in the Focus Phrase. Then it follows that the postverbal NP in LI is in the Specifier of FocP in (2). There are several pieces of substantial evidence which support this possibility. First, observe the parallelism between the postverbal right NP in Italian and the NP in LI.

- (17) a. *Into the woods ran, with the police chasing, two masked bank robbers.
 b. *Ho incrociato senza riconoscere quel compagno
 (Belletti and Shlonsky (1995:520))

Given (2), it predicts that the postverbal NP cannot license a parasitic gap since it occupies the Specifier of FocP, namely A-position, in which nominative case is assigned to the NP by the aspectual head under government. This prediction is borne out, as illustrated in (17).

Second, given the fact that an adjunct, which involves PRO, is within VP, the proposed structure predicts that the postverbal NP in LI can control PRO since it c-commands PRO.

- (18) a. Near the oasis lay without talking two sheiks who rule the area.
 b. In the foliage fluttered without singing a number of robins with stripes.

Third, the position in which the postverbal NP fills is above VP in (2), so the structure predicts that the NP follows a VP-adverb. This prediction is supported by the following facts.

- (19) a. Into the deep sea sank *slowly* a group of ships.
 b. Into the room walked *carefully* the students of the college.
 c. In the swamp was found *carelessly* a missing child.

Fourth, on the assumption of the focalization process, the Specifier of FocP can only host a single XP, as illustrated in (5). This accounts for the impossibility of (20).

(20) *Into the room pushed his sister John. (Coopmans (1989:733))

We have seen that the postverbal NP in LI is focalized, and it is moved to the Specifier of FocP. One immediate question for this analysis is the nature of the empty category left behind by the postposed NP in LI. In Italian, as we have already seen before, Belletti and Shlonsky (1995) assume that the empty category is *pro*, which is licensed by rich Infl in Italian. Although it is often claimed that *pro* is not licensed in English, we assume that *pro* can be licensed somehow with the interaction of the preposed locative phrase and the movement to the Specifier of FocP, and hence the locative phrase exceptionally triggers pro-drop in English.³ Following the contention of Rizzi's proposal, we assume that LI in English has the structure (21).

(21) PP_i [IP *pro*_i I [VP [VP V...] NP_i

In the structure (21) the postverbal NP in LI is moved into the Specifier of FocP, and it forms an expletive chain with *pro* in the manner described for Italian inversion constructions, which Rizzi (1982) proposes. The *pro* subject is licensed by the fronted locative PP and the postposed NP by virtue of a shared index. The denotation of the location of the postposed NP is then seen as the result of coindexation. There is sufficient evidence to show that (21) is well-motivated. Now consider (22).

- (22) a. *In which park did you say that in the foliage fluttered a number of gray birds with black and white stripes and long tails?
 b. *Which park did you say that in the foliage fluttered a number of gray birds with black and white stripes and long tails in?
 c. In which park did you say that under the palm tree stood an elegant fountain?
 d. *Which park did you say that under the palm tree stood an elegant fountain in?
 e. *In which area did you say that in the swamp was found a missing child?

movement to FocP has to meet the locality condition. This comes from considerations of the upwardboundedness of LI. LI is clause-bound as in (29).

(29) *They said that on the table would be sitting yesterday a small black bowl with a key in it.

Suppose that FocP is generated as the constituent of the matrix clause while PP and *pro* are in the embedded clause. This would yield the undesired result that (29) should be acceptable. The ill-formedness in (29) implies that the postverbal NP in the embedded clause must move to the Specifier of FocP in the embedded clause. Therefore it is plausible to say that there is a locality condition on the movement of the NP under consideration.

2.3 Verb-Preposition Construction and PP Scrambling

English allows constructions which contain the string [V NP PP], exemplified in (30), and the analysis of the constructions has given rise to much debate in the literature.

- (30) a. I switched the radio off.
 b. I switched off the radio.
 c. I looked the information up.
 d. I looked up the information.

Traditionally, the verb-preposition constructions (hereafter, VPC) in (30) is known as particle movement. Recent work by Kayne (1985) and Arts (1989)(1992) argue that rightward movement, namely HNPS, is involved in the derivations of (30b) and (30d).⁹ However, we will see below that HNPS is not involved in the derivations of (30b) and (30d), but PP scrambling is.

First, observe a crucial property of VPC which does not manifest in an HNPS example.

- (31) a. What did you look up descriptions of? (Johnson (1991:598))
 b. Who did you write up a paper about? (Guéron (1990:155))
 c.*Who did you buy yesterday a beautiful picture of?

d.*Of whom did you buy yesterday a beautiful picture?

(Culicover and Rochemeont (1991:134))

e. Who did you see a friend of?

Extraction from the shifted NP gives rise to the ungrammaticality in (31c, 31d), while it is possible in (31a, 31b). Note that extraction from the moved NP in (31a, 31b) is parallel to the one from the canonical object position.

Another difference between HNPS and VPC is that HNPS licenses a parasitic gap, whereas VPC does not license it.

(32) a. John offended, by not recognizing immediately, his favorite uncle from Cleveland. (Engdahl (1983:12))

b.*??I cut out, without really looking at, a picture which I took last summer with my pocketknife.

The differences noted above can be attributed to which positions the shifted NPs occupy. Now assume that PP scrambling yields PP NP ordering in VPC. PP scrambling adjoins PP to a position above VP, and the process makes it possible for the object NP to remain in situ. According to Müller and Sternefeld (1993), scrambling does not create an island as in (33), and hence it does not have an effect on extraction.

(33) Wie_i meinst du [CP t_i da IP dieser Frau [IP der Ede t_i t_j geholfen hat?]]

Given PP scrambling analysis, the grammaticality of (31a) results. PP scrambling analysis also explains the ungrammaticality of (32b) since the NP is in A-position.

Belletti and Shlonsky (1995) characterizes PP scrambling as the process which is restricted to cases where the direct object is heavy, functioning as a reordering device so that the object NP comes last. This entails that PP scrambling does not apply if the NP is not relatively heavy. Consider (34).

- (34) a. I looked the information *right* up.
 b. I switched the light *completely* off.

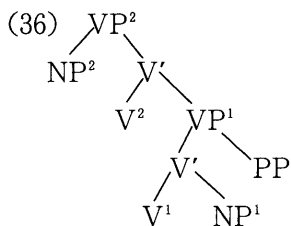
As is well-known, adverbial modifiers such as *right* and *completely* precede before PP in VPC. In (34) the object NP is not seen as heavy, so PP scrambling does not apply. Thus (34) results in ungrammaticality.

- (34) a. *I looked right up the information.
 b. *I switched completely off the light.

Unlike VPC, HNPS applies even when an adverbial modifier precedes the particle.

- (35) Darwin sent right to London every bug he caught. (Dikken (1995:106))

A question which we have not addressed so far is the D-structure of VPC construction. We assume, following Belletti and Shlonsky (1995), that the D-structure of VPC is (36).



The structure (36) entails that a-theme argument is projected onto the complement position of a verb, while a non-theme argument, namely the PP in VPC, is projected onto a higher position than the direct object NP. Even if we assume (36) as the D-structure for VPC, we have to assume 'reanalysis' to accommodate the following data.

- (37) a. This TV switches off easily.
 b. This article writes up easily. (Guéron (1990):155))

- (38) a. The switching off the light is mildly interesting.
 b. The calling out of his name is heart-wrenching.
- (39) a. Gary looked up Sam's number, and Mittie, my number.
 b. *Gary looked up Sam's number, and Mittie, up number.
- (40) a. Gary switched off the TV, and Mittie, the radio.
 b. *Gary switched off the TV, and Mittie, off the radio.

Sentences (37)-(40) show that verbs and particles must be closely related at some point of derivation. We assume that PPs, which are subcategorized and c-commanded by the verb, can be incorporated into the verb in the course of derivation. Thus the well-formedness of (37)-(40) results.

In this section we have seen that two processes in Italian, which put the NP in the sentence-final position, can be observed in the two distinct constructions in English. NP-movement to the Specifier of FocP is involved in LI, while PP scrambling is involved in VPC.

3.0 Conclusion

We have seen Belletti and Shlonsky (1995)'s observation on Italian which manifests the relative freedom of complement order, and the transformational processes involved in the derivation of the alternative order: They are structural focalization involving Focus projection, PP scrambling, and HNPS. Then we have argued that the structural focalization process is involved in LI construction in English, discussing the differences in the distribution of the postposed NPs between LI and HNPS constructions. Assuming the focalization process we are led to conclude that *pro* is optionally licensed in English. We have also argued that PP scrambling process yields PP NP order in VPC construction in English.

NOTES

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1. One might argue that the parallelism between the parasitic gap and the real gap plays a role in the parasitic gap construction, and there is no parallelism between the parasitic gap and real gaps in the quoted LI example. Consider the following example.

(1) *Into the woods ran, with the police hoping pg would run out of food, two masked bank robbers.

The parallelism between the parasitic gap and the real gap can be observed, but the sentence is not acceptable.

2. Coopman (1989), and Hoekstra and Mulder (1990) claim that (16b) is acceptable, but according to informants, (16b) is awkward.

3. One might consider that the focus phrase is projected in the embedded sentences. Hooper and Thompson (1973) point out that LI is possible in the embedded sentences which follow assertive predicates.

(2)a. The scout reported that beyond the next hill stood a large fortress.
 b. The scout discovered that beyond the next hill stood a large fortress.

Moreover, some speakers, including Peter Culicover (personal communication), find the following sentence acceptable. According to such speakers, Focus must be placed on the shifted NP.

(3) John expects on the STOOL to sit the man in the funny HAT.

The facts noted here suggest that in some dialects a focus phrase may be projected in the embedded sentences. This may be attributed to the fact that the licensing of the focus phrase in the embedded sentence is parameterized. The parametric account of the focus phrase in the embedded sentences provides us with an answer to the contrast between Norwegian and Icelandic.

(4) a. *Jeg spurte om pa brevet ble klistret frimeker.
 I wondered whether on the-letter be pasted stamps.
 b. Eg spur I Grim hvort pessum bil hef i fundist hass.
 I asked Grimur whether in this car had been-found pot.

4. (22d) shows that extraction over a topic phrase is not possible, so the availability of (22c) seems to be problematic for our analysis. Dikken (personal communication) suggested to me that (22c) derives from the sentence in which "in this park" is base-generated as a locative adverbial in the sentence-initial position. Thus PP extraction from a position which is higher than the inverted locative phrase is not blocked. I leave this matter open here.

5. We leave the exact nature of the 'Topic position' open in this paper.

6. One might argue, based on the domain of gapping, that the locative phrases are preposed to the Specifier of AgrSP. Jackendoff (1977) claims that the domain of gapping must be S(=AgrSP in recent terms).

- (5) a. It is hard to believe that Jack hates swimming and (*that) Fred fishing.
 b. In front of them was a large marble cross, and in the backyard an enormous column.
 (Nakamura 1994:167)
 c. One branch fluttered a number of red robins and on the other a number of gray birds with black and white stripes.

However, Culicover (personal communication) points out that a type of gapping applies to conjoined sentences with topics.

- (6) a. On this table I put a magazine, and on that one, a book.
 b. He says that on this table I had put a magazine, and one that one, a book.

Therefore the domain of gapping does not have an effect on the topicalization analysis of the preposed locative phrase.

7. Dikken and Naess (1995) argue that locative phrases in Norwegian also occupy topic-positions for independent reasons.

8. I owe examples (25a) and (25c) to Wasow (personal communication).

9. Arts (1989) and (1992) argue that (30a) can be differentiated from (30c). He argues [NP PP] in the former forms a small clause, and the sequence in the latter forms a VP. The categorial status of the sequence is not relevant in our discussion.

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