

Two Types of PP Extraposition

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0. Introduction

In this paper, we will argue that PP extraposition should be grouped into two types: focus extraposition (FEX) and reidentification extraposition (REX). We will show that the two types of PP extraposition are different in the definiteness effect, the predicate restriction, the subjacency condition, and intonational phrasing.

1. Definiteness Effect

As is well known, PP extraposition shows the definiteness effect:

- (1) a. John read a book over the summer by Chomsky.
- b. *John read that book over the summer by Chomsky.

Guéron (1980: 637), however, points out that (1b) “is acceptable if *that book by Chomsky* is interpreted as something alluded to but not present in the discourse context” as in (2):

- (2) John finally read that book over the summer by Chomsky, you remember, the one you had recommended to him.

Note that the adverb *finally* is added in (2), which modifies and emphasizes the verb *read*. In other words, the string *finally read* in (2) is semantically

richer than the verb *read* in (1b). Thus the focus of the sentence (2) seems to be the string *finally read*, and not the extraposed PP *by Chomsky*. This is confirmed by the following dialogues:¹

- (3) A: John read a book over the summer by Chomsky.
B: (a) No, he read a book over the summer by Langacker.
(b) ?No, he read a book over the winter by Chomsky.
- (4) A: John finally read that book over the summer by Chomsky,
you remember, the one you had recommended to him.
B: (a) ?No, he read that book over the summer by Langacker.
(b) No, he read that book over the winter by Chomsky.

As an answer to (3A), (3Ba) is more natural than (3Bb), which shows that the extraposed PP *by Chomsky* is focused in (3A = 1a). On the other hand, the fact that (4Bb) is a more natural answer to (4A) than (4Ba) shows that the focus of the sentence (4A = 2) is not the PP *by Chomsky* but some constituent in the VP, e.g. *over the summer*.

Note also that Guéron adds the part *you remember, the one you had recommended to him* in (2). This part seems to help the hearer to interpret the string *that book* as a deictic NP and the PP *by Chomsky* as an afterthought. The speaker first thought that the short form *that book* is enough for the hearer to identify the referent. But before ending the sentence, the speaker reconsidered and added the PP *by Chomsky* to help the hearer's identification. The part *you remember...* is another aid for this identification.

Thus we conclude that the function of the extraposed PP in (1) is focusing, but that in (2) is reidentifying the referent. We call the extraposition sentences like (1) focus extraposition (FEX) and those like (2) reidentification extraposition (REX).² As shown in (1b) and (2) above, FEX

shows the definiteness effect, but REX does not.

2. Predicate Restriction

The two types of extraposition also show a difference with respect to the semantic properties of predicates. Consider the following:³

- (5) a. A book appeared by Chomsky.
b. *A book fell apart by Chomsky.
- (6) a. That book finally appeared by Chomsky, you remember, the one you had mentioned.
b. That book finally fell apart by Chomsky, you remember, the one you had given me.

The contrast between (5a) and (5b) shows that there is a restriction on the predicate of FEX which allows only a verb of appearance.⁴ On the other hand, REX has no such predicate restriction as shown in (6a) and (6b) above.

3. Subjacency

The third argument for distinguishing between FEX and REX is the subjacency condition. Consider the following sentences:

- (7) a. [_{NP} A review of [_{NP} a book]] appeared [_{PP} by Chomsky].
b. [_{NP} A review of [_{NP} that book]] finally appeared [_{PP} by Chomsky], you remember, the one we were waiting for.

In FEX (7a) the PP *by Chomsky* can be interpreted as modifying only the head noun of the subject NP, *a review*, and not the embedded noun *a book*. In REX (7b), on the other hand, the PP can be interpreted as modifying either the head noun *a review* or the embedded noun *that book*.

We can explain the difference in the interpretation of (7a) and (7b) as follows. First consider the case in which the PP is interpreted as modifying the head noun of the subject NP. The structures of (7a) and (7b) are (8a) and (8b), respectively:⁵

- (8) a. [_{NP} A review of [_{NP} a book] *e*] appeared [_{PP} by Chomsky].
 b. [_{NP} A review of [_{NP} that book] *e*] finally appeared [_{PP} by Chomsky], you remember, the one we were waiting for.

In (8a) and (8b), there is only one NP boundary between the PP *by Chomsky* and the position *e*, and no subjacency violation occurs. Thus the construal of (7a) and (7b) as (8a) and (8b), respectively, is possible.

Turning to the second case in which the PP modifies the embedded noun, we have the following structures:

- (9) a. *[[_{NP} A review of [_{NP} a book *e*]]] appeared [_{PP} by Chomsky].
 b. [_{NP} A review of [_{NP} that book *e*]] finally appeared [_{PP} by Chomsky], you remember, the one we were waiting for.

In (9a), the PP is moved crossing two NP boundaries, violating the subjacency condition. Thus, the construal in (9a) is ruled out, and FEX (7a) has only one interpretation (8a). On the other hand, (9b) in fact is a possible interpretation for REX (7b). Thus, we conclude that the PP and the position *e* in (9b) are related not by movement, but by some kind of interpretive operation (cf. Rochemont and Culicover (1990: 33)).⁶ (9b) does not violate the subjacency condition which applies only to movement, and REX (7b) is ambiguous between (8b) and (9b).

4. Phonological Difference

Last but not least, FEX and REX are also different in phonological respects. The most natural intonation of FEX (7a) and REX (7b) are the following:⁷

- (10) a. //A book appeared by CHOMsky.//
b. //That book FInally appeared//by CHOMsky, //you reMEMber, //the one you had MENTioned.//

In (10a) the whole sentence is one intonational phrase, while in (10b) the PP *by Chomsky* is a separate intonational phrase. In other words, there is a comma pause between *appeared* and *by Chomsky* in (10b), and not in (10a).⁸

The difference of intonation between FEX and REX lend support to our argument in section 3 that FEX is movement but REX is not. In FEX (10a), the PP *by Chomsky* is moved from the subject position to the end of the sentence as the focus of the proposition. In REX (10b), the PP is added as an afterthought, independently of the main proposition.

5. Conclusion

We have argued that there are two types of PP extraposition: focus extraposition (FEX) and reidentification extraposition (REX). To sum up the argument so far, we illustrate the differences of these two types with the following diagram:

(11)		Focus EX	Reidentification EX
	a. Definiteness effect	+	—
	b. Predicate restriction	+	—
	c. Subjacency	+	—
	d. Intonational phrase(s)	1	2

From (11c) we have concluded that FEX is movement and REX is not. In fact, REX has more than one intonational phrase, as shown in (11d), which indicates that the PP in REX is added to the main clause as an afterthought. In a REX sentence, the NP from which extraposition occurs has a demonstrative *that*, which characteristically has an anaphoric reference. So the NP in REX refers to the referent already shared in the mind of the speaker and the hearer. Thus it is quite natural that REX does not show the definiteness effect, as in (11a). Finally, REX does not have the predicate restriction, as in (11b). The predicate of FEX must be a verb of appearance because the main function of FEX is to introduce a new entity into discourse. The function of REX is not to introduce a new entity, but to reidentify the referent which the speaker thinks is in the hearer's mind. Thus, the PP in REX can be added as an afterthought to the main proposition which may contain any kind of predicate.

NOTES

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¹ We owe to our informants the judgement of acceptability shown in (3) and (4).

² Takami (1992: 112) also uses the term “reidentification” in a somewhat different sense from here. He argues that the extraposed element *with blonde hair* works as a reidentification of *the woman* in (i):

(i) The woman appeared with blonde hair.

The PP *with blonde hair*, however, is the focus of the sentence (i), and not an afterthought. Thus, from our point of view, (i) is a focus extraposition, and not a reidentification extraposition.

The function of the extraposed PP in REX is similar to that of right dislocated NP in that the rightmost element is not a focus of the sentence but an afterthought to the main proposition. See Halliday (1967:239f.) and Kuno (1978:68, 79) for the right dislocation sentences as in (ii):

- (ii) a. They don't seem to match, these colours.
b. He arrived on time, the man I was telling you about.

³ The examples (1)-(4) above are extraposition from objects, and (5)-(10) below are extraposition from subjects. We argue that both kinds of extraposition can be either FEX or REX.

⁴ There are exceptional cases to this restriction. FEX can be acceptable, even if it does not have a verb of appearance, in some contexts (Guéron 1980:653):

- (i) a. First the Chilean military burned the books of all political figures sympathetic to the Allende government. And then some books were burned by Pablo Neruda.
b. Several visitors from foreign countries died in the terrible acci-

dent. A woman died from Peru and a man died from India.

⁵ We will directly argue that FEX is movement but REX is not. So we use *e* to show either the position from which the PP is moved or the position which the PP is related to by some kind of interpretive operation.

⁶ Johnson (1985:100-108) argues that PP extraposition is movement but relative clause extraposition is not. In this sense, REX is similar to relative clause extraposition, which does not have the definiteness effect as in (i) and is less restricted with respect to its predicate as in (ii) (cf. Fiengo (1980:151), Johnson (1985:107)):

- (i) a. That man came in that we talked about.
b. I met your friend yesterday who knows everything about everything.
- (ii) a. ??A man knows Godel who understands his Incompetence Theorem.
b. ??A woman said that Gary had arrived who knew him quite well.

⁷ The intonation patterns shown in (10a), (10b), and (i) in note 8 are from our observation of our informants' pronunciation. We use capitals to show accented syllables and a double slash (//) to show a boundary between two intonational phrases.

Erteschik-Shir and Lappin (1983:436) also point out that "the extraposed PP can also be interpreted as an afterthought, in which case we have a small pause preceding it."

⁸ An extraposed relative clause, as well as a PP in REX, will normally make a separate intonational phrase:

- (i) //I met your friend yesterday//who knows everything about everything.//

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