Multiple Interfaces Hypothesis and Multiple Phrases in Korea

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1. Data

The following data do not comprise the complete list of multiple phrases in Korean, nor the classifications are coherent in their criteria. They are suggested here just to confine our study.

1.1 Multiple Subjects ((1)-(3): 弁 1999, (4) Youn 1990, (5): Choi 1988)

- (1) Object Nominative Constructions
 - a. 내가 호랑이가 무섭다.
 - b. 철수가 사랑이 필요하다.
 - c. 내가 철수가 밉다.
- (2) Whole-Part(Generic-Specific) Constructions
 - a. 꽃이 장미가 예쁘다.
 - b. 생선이 도미가 맛있다.
- (3) Inalienable Possessive Constructions
 - a. 원숭이가 팔이 길다.
 - b. 코끼리가 코가 길다.
 - c. 토끼가 앞발이 짧다.
- (4) Locative Inversion Construction
 - 이 공장이 불이 났다.
- (5) Noun-Quantifier Construction 학생이 셋이 달려 왔다.

1.2 Multiple Objects ((6)-(8): 강 2002)

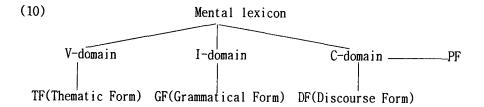
- (6) Inalienable Possessive Constructions
 - a. 철수가 순이를 팔을 잡았다.

- b. 철수가 순이를 가슴을 때렸다.
- (7) Whole-Part(Generic-Specific) Constructions
 - a. 철수가 테레비를 삼성을 샀다.
 - b. 철수가 자동차를 벤츠를 보았다.
 - c. 철수가 밥을 비빔밥을 먹었다.
- (8) Modifiee-Modifier Construction 철수가 자동차를 하얀색을 좋아한다.
- (9) Noun-Quantifier Construction 철수가 사과를 세 개를 먹었다

2. Assumptions

2.1 Multiple Interfaces

Platzack (2000) suggested the Multiple Interfaces; "Lexical entities are selected from the mental lexicon and merged into a phrase structure (the V-domain in (12). This structure is expanded to the I-domain by the merge of functional projections that attract the elements of the V-domain; the dual input to this domain from the lexicon and from the V-domain is indicated in (12). Finally, the I-domain is expanded to the C-domain, once again by dual input, this time from the I-domain and the lexicon."



2.2 Strong Derivation

Epstein and Seely (1999) assume that LF and PF access each syntactic object at each point in a derivation; "this is an iterated Y-model, i.e., after each transformation applies (be it Merge or Remerge), the derived representation is fed into both PF and LF."

(T=transformational operation, R=representation)

2.3. Information Checking

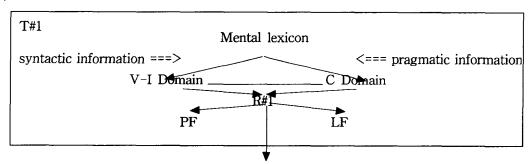
First of all, we adopt the idea of checking suggested since Chomsky (1993) with a modification. We assume, following Dik (1989), that every syntactic object bears phonological information, syntactic information and pragmatic information. Since the features of a syntactic object must be checked to converge, i.e., to be a legitimate object, each information just mentioned can be legible at the representation it enters only if the features of the information are checked in the proper domain.

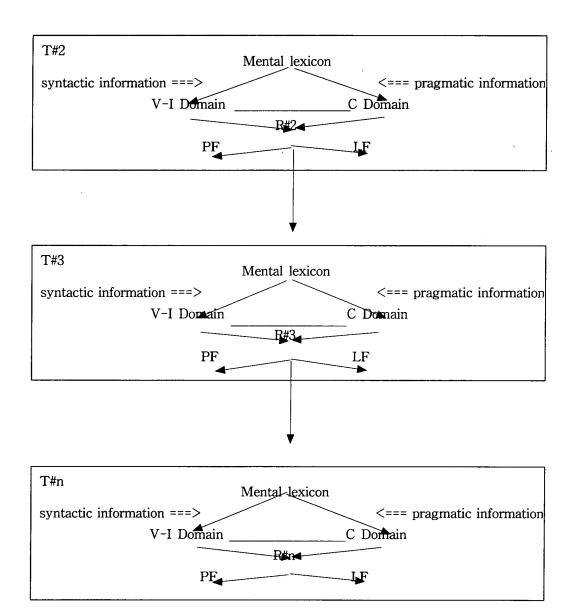
We also assume, adapting Platzack (1999) and Epstein & Seely (1999), that the phonological information of a syntactic object enters the PF to converge, the syntactic information, V-I Domain, and pragmatic information, C Domain.

3. Proposal

3.1. A Multi-Dimensional Model

(12)





We propose that when syntactic objects α and β come into numeration by Merge (T#1), they assume pragmatic information as well as syntactic information. A syntactic operation applies to α and β in V-I Domain (Merge by th-role assignment and/or Merge of functional projections), yielding R#1, which enters PF and LF where it converges or crashes. At the same time, a syntactic operation also applies to α and β in C Domain (Merge of pragmatic projections), yielding R#1, which enters PF and LF. And then R#1 is fed into T#2 where the same process of syntactic operations applies

until the "end of line".

We assert, contra the traditional Minimalist assumptions, that lexical insertion is possible at every stage of T induced by syntactic or pragmatic reasons. The syntactic features of the lexicon are checked in V-I Domain and the pragmatic features of the lexicon are checked in C Domain. If the features remain unchecked and undeleted (unerased), the output crashes at LF.

3.2. Multiple Phrases in Korean; Case or Focus

Let's call the successive appearance of phrases in (1)-(9) XP1 and XP2 based on their linear order. We assume that when one of the two XP comes into numeration, merging with the verb, in V-I Domain, it assumes the syntactic information such as the th-role and Case and the pragmatic information, if any; T#1. After the proper syntactic operation in V-I Domain and C Domain, we get the R#1, which is fed into LF and PF where the legibility of the structure is judged. The R#1 comes into T#2, where one of the other XP, assuming the syntactic information like Case and the pragmatic information, is introduced and merges with the already built structure, producing R#2 after the proper syntactic operation in V-I Domain and C Domain is completed. R#2 is also fed into LF and PF for the convergence.

Let's take a typical double Nominative structure (3b) for instance.

(13=3b) 코끼리가 코가 길다.

We assert that NP1 "코", assuming syntactic information, first merges with VP(AP) "길다" and gets its Nominative Case checked (or Case feature is valued) in V-I. Since "길다" contains tense "present" in this case, the functional projection is rightly done in this Domain. If this NP1 bears pragmatic information such as "topic" or "focus" depending the context, the information is checked in C Domain. If not, no operation occurs in C Domain.

Now, the structure, R#1, "코가 길다" comes into T#2, where "코끼리" with its pragmatic information "resumed topic (in the sense of Dik (1989)" or "focus" merges with R#1 in C Domain, yielding R#2.

The similar process applies to a typical double object structure (6a).

(14=6a) 철수가 순이를 팔을 잡았다.

We assert that NP1 "순이를", not NP2 "팔을", first merges with "잡았다" since when we are forced to choose between the following two, (15) is more natural than (16).

- (15) 철수가 순이를 잡았다/때렸다.
- (16) 철수가 팔을 잡았다/때렸다.

NP1 "순이", with its th-role, merges with "잡았다" and Case marked "accusative" in V-I Domain. I Domain, since the verb contains the tense "preterite". If "순이" assumes pragmatic information "resumed topic" or "focus" the information is checked in C Domain. If not, no operation occurs in C Domain.

Now, R#1 "순이를 잡았다" come into T#2, where NP2, "팔", bearing pragmatic information, "focus", enters into numeration in C Domain. It merges with R#1, yielding R#2. R#2, in turn, enters into T#3, where "철수", bearing syntactic information (and pragmatic information), comes into numeration, merges with R#2, yielding R#3.

Now the question is; why the NPs assume the marker "-이/-가" in (1)-(5) and "-을/-를" in (6)-(9)? The answer; NPs in the realm of IP assume the marker "-이/-가" and the NPs in the realm of VP assume the marker "-을/-를", whether it be a Case marker or a pragmatic marker.

4. Implications

Our approach 1) may dissolves the confusion of the syntactic function and the pragmatic function of the multiple NPs in Korean, 2) may explain the constructions like NP1-은/는, NP2-이/가, where NP1 bears the pragmatic information "topic"/"focus".

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