Three Types of PP in English

Chomsky (2008) claims that the subject island effect is caused because the external argument is External-Merged at the edge of a phase (in this case, v*P) and there is a cost to extracting something embedded in it. He states that the subject of unaccusative and passive is in fact the internal argument, so a wh-element can be extracted out of such a derived subject as shown in (1).

According to my informants, however, the acceptability of (2a) is as the same as that of (1a). If Chomsky’s account of the subject island is correct, the car/the picture of which man in (2a) must be External-Merged at the edge of some phase. Thus, I assume that there are three types of PP in English as in (3)–(5).

Svenonius (2003) claims that PPs may also take both the external argument and the internal argument. He calls the former ‘Figure’ and the latter ‘Ground’, adopting from Talmy (1978). According to him, the Figure is the entity in motion or at rest which is located with respect to the Ground. I assume PPs which take both Figure and Ground are phases because they are ‘propositional’ in Chomsky’s (2001) sense. I assume a man at the station in (6) is a kind of proposition. I suggest this kind of PP corresponds to the structure in (3) and I will call this type of PP ‘p*P’. In p*P, p* assigns accusative case to Ground and Figure is assigned the case by a probe outside p*P, such as v* or C. PPs which are subcategorized by Vs and take only the internal argument correspond to the structure in (4) and I will call this type of PP ‘pP’. In (4), p is not a probe and DP is assigned the case by a probe outside pP in the same way as the Figure in p*P. ‘P_OBL’ in (5) is a PP in which P_OBL assigns the inherent case to its complement DP and I assume that no element can be extracted out of this PP due to the incorporation of DP to P_OBL.

I suggest that unaccusative selects p*P while unergative selects pP. The structures of (7a) and (7b) correspond to (8a) and (8b), respectively. It follows that the subject of unaccusative is in fact External-Merged at the edge of the phase p*P. This is why (2a) is unacceptable. This suggestion also enables us to explain Preposition Stranding in English without so-called Reanalysis stated in Hornstein and Weinberg (1981). Their claim seems untenable under minimalism where D-structure and S-structure are eliminated. Let’s consider pseudopassive cases in (9). If my suggestion is on the right track, the derivation of (9b) is like (10). T, which inherits its Agree-feature from C, can access Mary in (10) and this derivation converges because T and Mary are in the same phase (see Hiraiwa (2005)). On the other hand, in the derivation of (9a), the station has already agreed with p* and T cannot access the station due to the Phase-Impenetrability Condition (PIC). One might disagree with this idea by pointing out the example like (11). According to my informants, however, such a sentence as in (11) is not a true unaccusative sentence since we can find the difference between (12a–b). In addition, if there is some parallelism between v* and p*, p* also has EF (edge-feature), which raises wh-elements to the outer-Spec of p*. Hence, wh-movement from PP is possible both in unergative and unaccusative as in (13) and the derivation of (13b) is like (14).

However, there are some cases where wh-movement from PP is impossible as shown in (15)–(16). In the derivation of (15), about who must be extraposed and then its base position must become an empty category (EC). If the principle (17) is correct, who in (15) cannot be raised by the probe v* because it is an EC. This is why (15) is ungrammatical. Next, let’s consider the reason why (16) is ungrammatical. The PP in (16) is at what time and this PP corresponds to the structure in (5). Hence, as I assumed above, extracting wh-elements from this type of PP is impossible and this makes (16) ungrammatical.

Finally, I will show some evidence that such a PP as (3) really exists in English. Compare the sentences in (18). In (18a), the PP on which bridge describes the location of the subject John, thus this PP corresponds to (5). On the other hand, in (18b), the PP on which bench can also describe the location of the object a snake, so this PP corresponds to (3) where a snake is Figure and which bench is Ground. The derivation of (18b) is like (19). Furthermore, the sentence (20) shows exactly that there must exist such a constituent as p*P.

To summarize, there must be at least three types of PP in English. Such an assumption enables us to explain why it is impossible to extract a wh-element from the subject of unaccusative and why there is Preposition Stranding in English.
Selected References


