## On adjunction of a non-head to a head

This paper will suggest that some head attracts a maximal projection even when the derivation operates the head adjunction (or the head-movement). In this case, the attracted maximal projection can be adjoined to a head by Uriagereka $\tilde{\Theta}$  (1999) Multiple-Spell-Out.

Chomsky (1995) assumes the structure of DP, which has the possessive -"whose book" as (1), following a proposal by Abney (1987).

However, since a head may move only to the next higher head position, due to Head Movement Constraint, we may not incorporate the possessive marker with æwhoî for deriving a word "whose". Taking this into consideration, more proper analysis of this phrase should be the head -head adjunction:

On the other hand, the English possessive marker can also draw a complex DP to it:

(3) [DP the man from Alabama] 's hat

How can we explain the phrase like (3) in terms of the analysis like (2)? There are many claims to prevent the adjunction of a maximal projection to a head, which stem from Emond's SPH which says that only YP can be adjoined to XP and Y-head can be adjoined to X-head. Chomsky (1995) suggests that if some larger unit appears within an X-zero, the derivation crashes. Kayne (1994) LCA also prevents this operation (cf. pp.18-19). I suggest that Multiple-Spell-Out (MSO) proposed by Uriagereka (1999) provides a solution, which argues that in order for a phrase to reach a left-branching, it must be Spelled-Out and a Spelled-Out phrase acts like a word. Given this device, the derivation of the DP where a maximal projection is adjoined to the possessive marker, is analyzed as below:

(4) 
$$DP$$
 $\uparrow$ 
 $Merge \rightarrow N$ 
 $|$  hat

 $D$ 
 $\uparrow$ 
 $Merge \rightarrow -\hat{Q}$ 
 $\downarrow$ 
 $\leftarrow$ Spell-Out -  $DP$ 

[the man from Alabama]

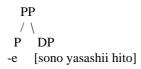
Since the DP, æthe man from Alabamaî has been already Spelled-Out, being like a giant lexical compound, it can be adjoined to the possessive marker, æ-sî, just like a typical head-head adjunction. This complex head merges with the noun, æhatî, to form the DP, æthe man from Alabama@ hatî. With this exploitation of MSO, a possible way to derive postpositions from prepositions will be shown, while dispensing with AGRP and the special status of the Spec-head relation, in order to maintain Kayne@ (1994) LCA within the framework proposed in Chomsky (1998). Kayne@ (1994) Linear Correspondence Axiom, which entails specifier-head-complement as the universal order of constituents in human language, assumes that word order obtains by raising the complement to some higher Spec position in the so-called @ead-final languages OFor example, Postposition must be derived by movement of the complement into the Spec of the PP or of a higher functional head (cf. Kayne (1994) pp.47-48). However, since the status of the Spec-head relations as the checking domain is eliminated in Chomsky (1998) along with AGRP in Chomsky (1995), it seems difficult to explain how to raise the complement of PP to some higher Spec position in the case of the head-final languages in Chomsky@ current framework. In order for the LCA to be congenial to Chomsky@ (1998) framework, I suggest that this MSO approach enable the complement of prepositions to be adjoined to the head of them, deriving postpositions from prepositions. First, Japanese is a strong head-last language and has only postpositions:

(5) a. uchi-de (house-at) b. gakkoo-e (school-to) c. hashi —de (chopstick-with) d. gozi-made (5 o'clock-until) e. yama-kara (mountain-from)

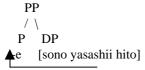
Notice that their postpositions are suffixes which cannot stand alone. Given the general assumption that stray morphemes motivate the head-to-head movement, Japanese adpositions as stray morphemes, motivate their complement to be adjoined to them so that Japanese postposition is derived from prepositions:

(6) sono yasashii hito -e the kind man —to æto the kind manî

a. P merges with D to form the PP.



b. Since Ps in Japanese are suffixes, they require some word to be left-adjoined to them. Notice that this time, the P attracts DP, a �hrase�not a �dead�.



c. The attracted DP, the complement of PP is Spelled-Out in order to be adjoined to the head P.

d. The Spelled-Out DP, which acts like a word can be adjoined to the head P with no problem.

Therefore, without AGRP and any special status of the Spec-head relation, this MSO approach which accounts for the English possessive structure above is applied to derive postpositions in Japanese from prepositions. Furthermore, Finnish has postpositions and they are suffixes which cannot stand alone.

(7) Postpositions in Finnish

a. auto-ssa (car-in) b. auto-on (car-to) c. auto-sta (car-from) d. tuoli-lla (chair-on) e. tuoli-lle (chair-to) f. tuoli-lta (chair-from) g. Virpin tuoli-lla (Virpi\tilde{\mathbb{O}}\text{ chair-on)}

These postpositions can be derived from prepositions in the same way that I treat the Japanese postpositions, as shown in (8).

More interestingly, Finnish is generally speaking a SVO language, unlike Japanese that is a strong head-last language:

(9) Pesin koiran

I washed dog-GEN-sg

æI washed a/the dog.î

Moreover, it has not only postpositions but also a few prepositions which are words not prefixes.

[PP[P ilman][NP[A narisevaa][NP tuolia]]]

[PP[P] without ][NP[A] squeaky ][NP] chair ][NP]

These irregularities of word order in Finnish are what my story expects; Finnish is a head-first language, as Kayne (1994) claims that all human languages should be. Then, their æsuffixalî prepositions attract their complement to their left adjacent position , on the other hand, the prepositions which are independent words maintain the basic head-first word order. But this observation in Finnish adpositions might cause serious problems for Head parameter approach.

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