On the Predicate Focus Construction in Korean and Japanese

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1 Introduction
It is well known that Korean and Japanese exhibit a complete symmetry in simple declarative sentences as in (1) modulo the lack of an overt declarative ending in Japanese.

(1) a. Yeonghee-ka chopap-ul mek-ess-ta (Korean)
    Yeonghee-nom sushi-acc eat-pst-decl
b. Yeonghee-ga sushi-o tabe-ta (Japanese)
    Yeonghee-nom sushi-acc eat-pst
   'Yeonghee ate sushi.'

However, the two languages diverge in so-called predicate focus constructions. In predicate focus constructions, a particle like -nun/wa separates the verb stem from the sentence-final chunk of inflectional elements. To put aside the presence of the post-verbal -(ki in Korean and its absence in Japanese, while Korean allows either the reduplicated (or "echoed") lexical verb or the dummy verb ha with the sentence-final inflectional elements, Japanese only allows the dummy verb su, as shown in (2) and (3).

(2) a. Yeonghee-ka chopap-ul mek-ki-nun ha-ess-ta (K: HFC)
    eat-ki-foc do-pst-decl
b. Yeonghee-ga sushi-o tabe-wa shi-ta (J: HFC)
    eat-foc do-pst
   '(What happened was that) Yoenghee ate sushi (, but ...)'
(3) a. Yeonghee-ka chopap-ul mek-ki-nun mek-ess-ta (K: EFC)
    eat-ki-foc eat-pst-decl
b. *Yeonghee-ga sushi-o tabe-wa tabe-ta (J: EFC)
    eat-pst

We will henceforth call the construction with ha or su as in (2) the ha focus construction (HFC) and the construction with a reduplicated verb as in (3) the echo focus construction (EFC). The examples in (2) and (3) show that Japanese lacks the EFC.

Furthermore, as exhibited in (4) and (5), Korean allows the tense morpheme to be reduplicated, but Japanese does not.1

(4) a. Yeonghee-ka chopap-ul mek-ess-ki-nun ha-ess-ta (K: HFC)
    eat-pst-ki-foc do-pst-decl
b. *Yeonghee-ga sushi-o tabe-ta-wa shi-ta (J: HFC)
    eat-pst-foc do-pst
    eat-pst-ki-foc eat-pst-decl
b.?*Yeonghee-ga sushi-o tabe-ta-wa tabe-ta (J: EFC)
    eat-pst-foc eat-pst
Since Japanese lacks the EFC, the ungrammaticality of (5)b is expected. However, even in the HFC, Japanese does not allow tense to be reduplicated, as shown in (4)b.

Recently, HFC and EFC have drawn much attention in the literature (e.g., Nishiyama and Cho 1998, Choi 2003, Cho, Kim and Sells 2004, Jo 2004a, b, to name a few). However, except for Nishiyama and Cho (1998), none of the existing analyses can readily account for the differences in these constructions between Korean and Japanese. This paper attempts to argue that the asymmetry in question results from the more restricted nature of the process for verbal agglutination in Japanese in comparison to that in Korean. Assuming that while Korean has V-raising in PF, Japanese only allows lowering in PF, we claim that the noted asymmetry automatically follows. It is further suggested that this divergence between Korean and Japanese ultimately comes from the difference in the morphological nature of verb stems and tense morphemes in the two languages.

2 Theoretical Assumptions

2.1 Phrase structure of Korean and Japanese

We will assume that transitive clauses in Korean and Japanese as in (1) take the syntactic form in (6) (surface positions of arguments immaterial).

(6)

```
CP  
TP  
  C  -ta/ø
  T  
    -ess/ta
DP1
  vP
  v'  -ess/ta
    Yeonghee
    v  
      V  
        chopap/sushi

DP2
VP  
  v  -ø/ø
  T  -ta/ø
  C

mek/tabe
```

2.2 Functional heads as bound morphemes

The fact of verbal agglutination in Korean and Japanese should come from the general morphological nature of their functional elements; i.e., they are bound morphemes that need a host. Due to the intervention of a particle, each of (7)b, c and (8)b is ill-formed because the relevant functional element does not have an appropriate host to lean on.

(7) a. mek-ess-ta
   b. *mek(-ki)-nun _ess-ta
   c. *mek-ess(-ki)-nun _ta

(8) a. tabe-ta
   b. *tabe-wa _ta

2.3 Morphological selection

Following Lieber (1992), we will assume that functional heads as affixes in Korean and Japanese morphologically select for a certain host. Namely, C selects for T, T selects for a light verb, and the light verb selects for a main verb, as summarized on table (9).
2.4 Agglutination as the result of PF process

Following Yoon (1994) and Sakai (1998), we will assume that (10) is correct for Korean and Japanese.

(10) Overt head raising is not existent in Korean or Japanese.

If (10) is correct, then the remaining candidates to account for verbal agglutination in these languages will be either (11)a or (11)b.

(11) a. Head raising in PF (as suggested by Chomsky 2001)
   b. Morphological merger as head lowering in PF (a la Embick and Noyer 2001)

In what follows, we will claim that while (11)a is the appropriate tool for Korean, (11)b is the appropriate one for Japanese. Furthermore, we will consider the set of assumptions in (12)a, b to be plausible.

(12) a. Lowering in PF is more restricted than raising, in that the former may not form a nontrivial chain (i.e., it may not leave a trace) or skip an adjunct (Embick and Noyer 2001).
   b. Traces are copies. Although, other things being equal, all chain links except the highest are deleted, certain morphological requirements put some links to pronunciation (Nunes 2004; also cf. Choi 2003 for an overt V-raising analysis for Korean).

3 The Proposals

3.1 French vs English

It is widely agreed that while the main verb raises to tense in French, but not in English, as indicated by the contrast between (13) and (14). Embick and Noyer (2001) claim that tense morphology on the main verb in English comes as the result of lowering of T to V, as indicated in (14)c (also cf. Bobaljik 1995, Lasnik 1995).

(13) a. Jean embrasse souvent Marie.
   b. *Jean souvent embrasse Marie.
   c. Jean [\( T \)-past] [\( VP \) souvenir [\( VP \) embrasse Marie]] raising of V to T

(14) a. John often kisses Mary.
   b. *John kisses often Mary.
   c. John [\( T \)-past] [\( VP \) often [\( VP \) kiss Mary]] lowering of T to V

3.2 Korean : Japanese (= French : English)

By analogy, we will argue that what Korean is to Japanese is what French is to English. While French and Korean are head-raising languages, English and Japanese are head-lowering languages. The only difference between French and Korean lies in the locus of head-raising: syntax for French, and PF for Korean. More specifically, our main claim can be stated as in (15).
While verbal agglutination of Korean results from successive cyclic head raising in PF, that of Japanese results from successive counter-cyclic head lowering in PF.

In our terms, verbal agglutination proceeds as exhibited in (16)a for Korean and in (16)b for Japanese. In simple cases as in (1)a, b, the resultant strings of verbal elements are the same, as shown in (17)a, b. However, as we will see shortly, the two mechanisms provide different results in the case of predicate focus constructions.

(16)

- **head raising for K**
  - CP
  - TP
  - t(P)
  - t(T)
  - T
  - C
  - V
  - P
  - t(T)
  - t(T)
  - C

- **head lowering for J**
  - (CP)
  - (t)
  - V
  - t(V)
  - T
  - C
  - VP
  - (vP)
  - (t)

(17)

- **V + v + T + C**
  - (mek + ø + ess + ta → mek-ess-ta) (K)
- **V + v + T + C**
  - (tabe + ø + ta + ø → tabe-ta) (J)

3.3 **Particles as cross-categorial clitic-like adjuncts**

Adopting intuitions of many authors, Aoyagi (1998a, b) proposed that particles like -nun/wa, -to/mo, and -cocha/sae are cross-categorial clitic-like adjuncts. They are cross-categorial, in the sense that they can attach to virtually any category, as exemplified in (18).

(18)

- **Yeonghee-ka** [DP chhapap]-un/to/cocha mek-ess-ta (DP)
  - nom sushi-foc/also/even eat-pst-decl
  - a’. Yeonghee-ga [NP sushi]-wa/mo/sae tabe-ta
    - ‘Yeonghee ate at least/also/even SUSHI.’
  - b. dayphyooca-ka [PP New York-eyse]-nun/to/cocha wa-ss-ta (PP)
    - representatives-nom -from-foc/also/even come-pst-decl
  - b’. daihyooya-ja [PP New York-qara]-wa/mo/sae ki-ta
    - ‘Representatives came at least/also/even FROM NEW YORK.’
  - c. Mary-ka [VP chayk-ul ilk-ki]-nun/to/cocha ha-ess-ta (VP)
    - nom book-acc read-ki-foc/also/even do-pst-decl
  - c’. Mary-ga [VP hon-o yomi]-wa/mo/sae shi-ta
    - ‘Mary at least/also/even READ A BOOK.’
  - d. sacang-i [AP cikwen-ul pappu-key]-nun/to/cocha ha-ess-ta (AP)
    - president-nom workers-acc busy-key-foc/also/even do-pst-decl
  - d’. shacho-ja [AP shain-o isogasi-ku]-wa/mo/sae shi-ta
    - ‘The president at least/also/even made HIS WORKERS BUSY.’
  - e. Chelswu-ka [CP Yeonghee-ka cwk-ess-ta ko]-nun/to/cocha
    - nom -nom die-pst-deck-comp-foc/also/even
    - malha-ess-ta say-pst-decl (CP)
More importantly, they are adjuncts since they have nothing to do with selection, as clearly illustrated by Sells (1995). Finally, they are clitic-like elements like other functional elements in the two languages, in the sense that they need a morphophonological host.

Drawing these facts, Aoyagi (1998a, b) concluded that particles like -nun/wa are non-projecting heads that can be adjoined to any category in syntax, but that they must be attached to the head of that category in PF, as represented in (19)a, b (also cf. Cho and Sells 1995, Sells 1995, Yoon 1995).

(19)

\[
\begin{align*}
(19)a. \text{Syntax} & \quad \text{XP} \quad \text{XP} \\
& \quad \vdots
\end{align*}
\]

If this is the correct view of particles like -nun/wa in Korean and Japanese, nothing seems to prohibit them from adjoining to VP, vP and TP, as shown in (20).

(20)

3.4 **Morphological motivation for raising of V and T in Korean (and its absence in Japanese)**

One significant difference between Korean and Japanese that draws our attention is that unlike their Japanese counterparts, Korean verbs and tense morphemes are bound on the right.

When two VPs or sentences are coordinated, the end of the first conjunct must be closed off by -ko in Korean, but the presence of its Japanese counterpart -te is only optional, as shown in (21) to (24). We consider that -ko (as well as -ki) is employed for morphological closure in the sense of Kang (1988). Furthermore, the tense morpheme in the second conjunct (or the tense morpheme in the root clause in general) in Korean definitely needs a sentence-ending element (presumably, C) on the right. This must be contrasted to the fact that the Japanese tense morpheme can end a sentence in its own right.

(21)a. Chelswu-nun swul-ul masi(-ess)-ko pap-ul mek-ess-* (ta/e) 
- top liquor-acc drink(-pst)-KO rice-acc eat-pst-decl

‘Chelswu drank liquor and ate rice.’

b. *Chelswu-nun swul-ul masi(-ess)-ø pap-ul mek-ess-ta
- top liquor-acc drink(-pst)-ø rice-acc eat-pst-decl

(22)a. Chelswu-nun pap-ul mek(-ess)-ko swul-ul masi-ess-* (ta/e)
- top rice-acc eat(-pst)-KO liquor-acc drink-pst-decl
From the observation made in (21)–(24), we can draw a conclusion in (25).

(25)While V and T in Japanese are [–bound] (i.e., free) on the right, their Korean counterparts are [+bound] on the right.5

(25) can be taken as a piece of evidence for the presence and absence of PF head-raising, as an instance of rightward movement, in Korean and Japanese. As long as Korean verbs and tense morphemes need a host on the right, their raising is not unmotivated.

3.5 Korean

In section 3.5, we will take a look at how predicate focus constructions in Korean are derived.

3.5.1 When -nun adjoined to VP

When -nun is adjoined to VP, the PF derivation provides the representation in (26). Note that since -nun is an adjunct by hypothesis, it does not block raising. In (26), precisely speaking, two-member chains are formed three times, but it can be taken that one four-member chain is formed, in the sense of Nunes (2004).

(26)

When a chain is formed, only the highest link is usually pronounced, as stated in (12)b. In the case of (26), however, since -nun requires a host, the lowest link mek must be pronounced. Hence, (27)b, that is, the EFC in (3)a, results. According to Nunes (2004), in cases like (26), the PF computation may well delete V* under identity with the underlined V, which is forced to be pronounced, for the purpose of minimization of the existing features. If it happens, the light verb contained in the highest link will lose its host, resulting in an ungrammatical surface string in (27)c. However, in such a case, Korean has a rescue operation, ha-support. If ha-support is employed
after the deletion of V*, the grammatical string in (27)d, that is, the HFC in (2)a, obtains.

(27) a. *... __-nun mek-o-ess-ta (nun having no host to cliticize to)
   b. √... mek-ki-nun mek-o-ess-ta (EFC in (3)a: -ki inserted for morphological closure; cf. Kang 1988, Jo 2004a, b)
   c. *... mek-ki-nun __-o-ess-ta (V* deleted under identity with the pronounced link (V); cf. Nunes 2004; v's morphological selection not satisfied)
   d. √... mek-ki-nun ha-o-ess-ta (HFC in (2)a: ha-support)

3.5.2 When -nun adjoined to vP
Next, when -nun is adjoined to vP, the PF derivation provides the representation in (28), where almost the same thing happens as in (26), due to the null phonetic content of the light verb. In (28), what -nun forces to be pronounced is the underlined light verb. In the straightforward case, (29)b, that is, the EFC in (3)a, results. If the starred light verb (v*) contained in the highest link is deleted under identity with the underlined v, the same rescue operation, ha-support, comes in to play a role, rendering (29)d, that is, the HFC in (2)a.

(28)

(29) a. *... __-nun mek-o-ess-ta (nun having no host to cliticize to)
   b. √... mek-o-ki-nun mek-o-ess-ta (EFC in (3)a: -ki inserted for morphological closure)
   c. *... mek-o-ki-nun __-ess-ta (v* deleted under identity with the pronounced link (v); T's morphological selection not satisfied)
   d. √... mek-o-ki-nun ha-o-ess-ta (HFC in (2)a: ha-support)

3.5.3 When -nun adjoined to TP
Finally, when -nun is adjoined to TP, the representation in (30) is derived in PF. In (30), the underlined T is forced to be pronounced by the presence of -nun. If nothing else happens, (31)b, that is, the EFC in (5)a, obtains.

As noted above, the PF computation may well delete a certain constituent in the highest link under identity with some other pronounced links. On the assumption that deletion may take place up to recoverability, and that tense in the root clause-final position is an obligatory element, the starred light verb (v*), but not T with a cross (T'), can be deleted because it can be rescued by the dummy verb ha. Hence, (31)d, that is, the HFC in (4)a, can result.

Furthermore, the PF computation can be “fooled” so that it will even delete T with a cross that is headed by the obligatory tense in (30), violating the recoverability of tense with C, in the sense of Nunes (2004). Surprisingly, ha-support in Korean has an extended use that rescues the stranded C as well, as noted by Jo (2004a, b). This is the source of the HFC with ha without tense in (31)f.
3.6 Japanese
In section 3.6, we will see how predicate focus constructions in Japanese are derived. Recall that we are proposing that while Korean takes the raising option, Japanese takes the lowering option in PF.

3.6.1 When -wa adjoined to VP
First, when -wa is adjoined to VP, the representation in (32) is derived. In Japanese, functional heads successive counter-cyclically lower. As stated in (12)a, lowering is more restricted than raising, in that it does not form a non-trivial chain, and it is blocked by an adjunct head. This blocking effect of an adjunct head is not unexpected. According to Embick and Noyer (2001), lowering of T to V in English is blocked by the presence of not which is a head adjoined to VP, as indicated by the contrast between (34) and (35). In (32), C lowers to T, and T lowers to the light verb, but lowering of the light verb to V is blocked by -wa. As a result, the light verb (ø) which selects for V on the left is stranded, as shown in (33)a. However, Japanese is also equipped with a rescue operation, su-support, which is an analogue of ha-support in Korean. Su-support rescues the stranded light verb, rendering (33)b, that is, the HFC in (2)b.

(32)

(35) a. John did not break the window.
b. John [+past] [\(v_p\) not [\(v_p\) break] the window]].
c. John do [+past] not break the window. (do-support)

3.6.2 When -\(wa\) adjoined to \(vP\)
Secondly, when -\(wa\) is adjoined to \(vP\), the PF derivation proceeds as indicated in (36). In this case, lowering of \(T\) to the light verb is prohibited by -\(wa\). As a result, \(T\) is stranded. However, \(su\)-support can save it, providing (37)b, that is, the HFC in (2)b, again.

(36)

(37) a. *... tabe-\(\emptyset\)-wa -ta-\(\emptyset\) (T's morphological selection not satisfied)
b. √ ... tabe-\(\emptyset\)-wa si-ta-\(\emptyset\) (HFC in (2)a: \(su\)-support)

3.6.3 When -\(wa\) adjoined to TP
Theoretically speaking, adjunction of -\(wa\) to TP should be possible in Japanese as well. If -\(wa\) is adjoined to TP, lowering of \(C\) to \(T\) is blocked, and as a result, \(C\) is stranded, as indicated in (38). The situation in (39)a in Japanese is comparable to that in (31)e in Korean. However, unlike \(ha\)-support in Korean, \(su\)-support in Japanese doesn't have an extended use that rescues a stranded \(C\). \(Su\)-support rescues the light verb and \(T\), which select for \(V\) and the light verb, respectively.

(38)

(39) a. *... tabe-\(\emptyset\)-ta-\(wa\) -ta-\(\emptyset\) (C's morphological selection not satisfied)
b. *... tabe-\(\emptyset\)-ta-\(wa\) su-\(\emptyset\) (No "extended" \(su\)-support available in J)

To sum up sections 3.5 and 3.6, all facts observed in our earlier examples in (2)–(5) can be straightforwardly accounted for by our proposal. Specifically, the presence of EFC in Korean and its absence in Japanese
follows from our contention that while Korean employs raising that forms a non-trivial chain, Japanese employs lowering that does not form a chain. Also, the lack of predicate focus constructions with reduplicated tense in Japanese follows from the same contention.

4 Implications

Our proposal that while the appropriate mechanism for verbal agglutination in Korean is head-raising, that in Japanese is head-lowering not only accounts for facts of predicate focus constructions, but it also makes interesting implications to some other facts of Korean and Japanese morphology.

4.1 Honorific suppletion in Korean

First, honorific suppletion in Korean seems to support our view that Korean opts for raising instead of lowering. Korean has a productive honorific suffix -(u)si-**, which can generally be attached to adjective and verbs, as exemplified in (40) and (41).

(40) a. ka-n-ta
go-npst-decl
ka-si-n-ta
go-hon-npst-decl
c. ka-ss-ta
go-pst-decl
da. ka-ss-ta
go-pst-decl
(41) a. ilk-nun-ta
read-npst-decl
ilk-nun-ta
read-npst-decl
c. ilk-ess-ta
read-pst-decl
da. ilk-ess-ta
read-pst-decl

However, some verbs take suppletive forms. For example, the past tense honorific forms of ca-ta and mek-ta are cwumwusi-ta and capswhusi-ta, respectively, but not *ca-si-ta or *mek-usi-ta. This suppletive process affects neither tense nor the declarative ending, as shown by the parallelism in the functional domain between the regular cases in (40)–(41) and the suppletive cases in (42)–(43).

(42) a. ca-n-ta
sleep-npst-decl
b. *ca-si-n-ta / cwumwusi-n-ta
sleep-hon-npst-decl / sleep-hon-npst-decl
c. ca-ss-ta
sleep-pst-decl
da. *ca-si-ess-ta / cwumwusi-ess-ta
sleep-hon-npst-decl / sleep-hon-npst-decl
(43) a. mek-nun-ta
eat-npst-decl
b. *mek-usi-n-ta / capswhusi-n-ta
eat-hon-npst-decl / eat-hon-npst-decl
c. mek-ess-ta
eat-pst-decl
da. *mek-usi-ess-ta / capswhusi-ess-ta
eat-hon-npst-decl / eat-hon-npst-decl

This indicates that this suppletive process only targets the verb stem (i.e. “root”) and the honorific feature. Given that the relevant honorific feature resides in the light verb or AGR, and only constituents can be targets of suppletion (or late lexical insertion in the sense of Halle and Marantz 1993), V+/AGR can form a constituent that excludes T and C only if the raising option is taken, as exhibited in (44).

(44) a. [c [T [V+AGR v/AGR[+hon] + T] + C]] (raising)

b. [v V + [V+AGR v/AGR[+hon] + [T + C]]] (lowering)

The raising option in (44)a produces a constituent that consists only of V+/AGR, which the lowering option in (44)b may not. In this vein, while the verb root (VV) suffixed with a [−honorific] v/AGR is spelled out as a
non-honorable verb, that with a [+honorable] /AGR as an honorable verb, as illustrated in (45)a, b, respectively.

(45)a.  /eat + /AGR_{hon}/ → mek (non-honorable verb)
    b.  /eat + /AGR_{hon}/ → capswu (honorable suppletive verb)

This is a welcome result for our analysis of Korean verbal morphology.7

4.2 Adjectival suppletion in Japanese
Furthermore, our proposal sheds light on the fact of adjectival inflection in Japanese. Adjectives in Japanese exhibit a seemingly irregular paradigm with respect to tense inflection, as shown in (46) and (47).

(46)a. (yama-ga) taka-i (mountain-nom) high-npst
    b. (yama-ga) taka-katta

'The mountain is high.'

(47)a. (michi-ga) hiro-i (road-nom) wide-npst
    b. (michi-ga) hiro-katta

'The road is wide.'

It is obvious that the past tense ending -katta in (46)b and (47)b comes from three separate morphemes; i.e., ku+ar+ta, of which -ku is a functional ending for an adjective stem (presumably, the light adjective a on the analogy of the light verb v (cf. Takano 1996)), ar is a be-verb, and -ta is past tense, as indicated in (50)a. Usually, replacing -ta with -ru provides the non-past tense form. However, the non-past ending of adjectives is -i, as shown in (46)a and (47)a, but not *-ku ar-(i)ru, which is impermissible under normal contexts. However, when a particle like -wa is inserted to the right of an adjective stem, the expected set of morphemes, -ku, ar and -ru, resurges, as shown in (48)b and (49)b.

(48)a.  *taka-i-wa / *taka-wa-i
        high-npst-foc / high-foc-npst
    b.  taka-ku-wa ar-ru

(49)a.  *hiro-i-wa / *hiro-wa-i
        wide-npst-foc / wide-foc-npst
    b.  hiro-ku-wa ar-ru

(50)a.  T_p ... V_p ... [P]_p ... [AP ... A]_p -ku_p ar_v -ta_t (for past tense)
    b.  T_p ... V_p ... [P]_p ... [AP ... A]_p -ku_p ar_v -ru_t (for non-past tense)

This can be explained if we assume that the complex ku+ar+ru ‘a+be+/AGR’ is replaced with -i by suppletion (or by late insertion in the sense of Halle and Marantz 1993), as indicated in (51)b.

(51)a.  ku + ar + ta_{(p)} → katta (simple phonological reduction)
    b.  ku + ar + ru_{(p)} → i (adjectival suppletion in J)

(52)a.  T [\[A + ku\] + ar + ru_{(p)}] (raising)
    b.  [\[A + ku\] + [v ar + ru_{(p)}]] (lowering)

On the other hand, if adjectival inflection in Japanese is the result of head-raising, the resultant complex headed by T necessarily includes the adjective stem A, as shown in (52)a. There is no constituent that includes ku+ar+ru but excludes the adjective stem. This means that we need to posit as many rules of suppletion as the number of adjectives in the registry of Japanese; in other words, the rule of suppletion which replaces hiro-ku ar-(i)ru with hiro-i ‘wide+/AGR’ should be separately set from that which replaces taka-ku ar-(i)ru with taka-i ‘high+/AGR’. This is an undesirable
situation. On the other hand, if adjectival inflection results from head-lowering, the complex head in (52)b derives from (50)b. (52)b includes a complex head that includes ku+ar+ru but excludes the adjective stem (i.e., the upper segment of a). This makes it possible to posit a single rule that replaces a constituent with -i, irrespective of the adjective stem. Thus, our proposal that head-lowering is the correct approach to verbal morphology in Japanese paves the way toward a principled account of otherwise mysterious facts of adjectival inflection in the language.

5 Conclusion
In this article, we have argued that the discrepancy between Korean and Japanese concerning predicate focus constructions (especially, the presence and absence of EFCs and tense reduplication) results from the choice between options for verbal agglutination allowed by UG. Korean takes the head-raising option, whereas Japanese takes the head-lowering option. Furthermore, we have also suggested that this choice difference should be ultimately attributed to the morphological properties of verb stems and functional affixes in the two languages.

Notes
1 The present work has been presented at ISOKL 2005 at Harvard University, Cambridge, MA and SICOGG 7 at Konkuk University, Seoul, Korea. I would like to thank the participants at these meetings. Especially, I have benefited from discussions with and questions from Hee-Don Ahn, Duk-Ho An, Dae-Ho Chung, Susumu Kuno, Chungmin Lee, Peter Sells, Yuji Takano, and Saeko Urushibara. However, all remaining errors are, of course, my own.

1 There are some Japanese speakers who accept EFCs like (5)b. I suspect that for those speakers, the abstract noun koto, literally meaning ‘thing,’ in the koto-wa construction can optionally be deleted.

Nishiyama and Cho (1998) deal with the koto-wa construction in Japanese on a par with the EFC in Korean.

(i) a. Chelswu-ga sake-o nom-da koto-wa nom-da
-nom liquor-acc drink-pst koto-foc drink-pst
b. Chelswu-ka swul-ul masi-ess-ki-nun swul-ul masi-ess-ta
-nom liquor-acc drink-pst-ki-foc liquor-acc drink-pst-decl

‘As far as drinking goes, Chelswu drank, but ...’

However, the koto-wa construction as in (i)a seems to be distinct from the EFC in Korean as in (i)b in some crucial points.

First and most importantly, different verb-object combinations may occur before and after koto-wa, which is disallowed in the EFC in Korean, as exemplified in (ii)a, b, respectively.

(ii) a. Chelswu-wa sake-o nom-da koto-wa biiru-o 1,2-hai var-ta (ga ...)
-top liquor-acc drink-pst koto-foc beer-acc 1or2-glass do-pst but
‘As far as drinking goes, Chelswu had a glass of beer or two, (but ...)

b. Chelswu-ka yak-ul mek-ess-ki-nun ssanghwathang-ul 1-pyeng
-nom medicine-acc eat-pst-ki-foc SHT-acc 1-bottle
(only) drink-pst-decl

‘As far as taking medicine, Chelswu had (only) a bottle of SHT,
(but ...’

Furthermore, as noted by Nishiyama and Cho, the first occurrence of the
verb in (i)a may be suffixed with non-past tense without changing the meaning of the sentence. Thus, (iii) is completely equal to (i)a in meaning.

(iii) Chelswu-wa sake-o nom-u koto-wa nom-da
   -top liquor-acc drink-npst koto-foc drink-pst
This is one of the characteristics of embedded adverbial clauses in Japanese, as exhibited in (iv).

(iv) Chelswu-wa chiisa-i/katta koro wanpaku datta
   -top little-npst/pst when naughty be.pst

‘Chelswu used to be naughty when he was little.’

It is generally the case that the tense of an adverbial clause is controlled by the tense of the main clause. Thus, since the tense of the main clause in (iv) is in the past, that of the adverbial clause is also interpreted as past, irrespective of the tense morpheme that appears with the predicate in the adverbial clause.

In conclusion, the koto-wa construction seems to include an adverbial clause of a sort. I will leave the exact analysis of this construction for future research.

2 Drawing several facts from OV languages like Japanese and Turkish, Takano (2005) makes a stronger claim that for OV languages in general, V-raising is not a permissible option in PF as well as in the overt syntax. However, we will assume that PF head-raising is possible at least in Korean.

3 Aoyagi (to appear) claims that verbal agglutination in Japanese comes as the result of Demerge in the sense of Takano (1996) and Fukui and Takano (1998) with a minimum assumption that bound morphemes must attach to an adjacent head as soon as the immediately dominating category is erased by Demerge. This analysis has at least one advantage over the lowering analysis; i.e., the assumptions in (12)a become unnecessary. However, we will keep on with the lowering analysis for Japanese verbal agglutination in this article.

4 What distinguishes clitic-like particles such as -nun/wa from (functional) affixes is their lack of categorial selection for their hosts.

5 In sum, while Japanese verb stems are free on both sides and its tense morphemes are bound only on the left, Korean verbs are bound on the right and its tense morphemes are bound on both sides (cf. table (9)).

6 Unlike the Korean ha, the Japanese su is not equipped with the ability to rescue a stranded C as a generalized tense morpheme.

7 Japanese honorific verbs are generally created in the way that verb stems are prefixed with the honorific o- and followed by -ni nar, as shown below.

(i) a. home-ru
   b. o-home-ni nar-u
   praise-npst
   hon-praise-to become-npst

(ii) a. kak-u
   b. o-kaki-ni nar-u
   write-npst
   hon-write-to become-npst

However, as noted by Peter Sells (p.c.), Japanese seems to be even more replete with suppletive honorific verbs, as exemplified in (iii)-(vi), where the regular honorific morphology does not apply.

(iii) a. su-ru
    b. ?*o-si-ni nar-u / nasar-u
   do-npst
   hon-do-to become-npst / hon.do-npst

(iv) a. ku-ru
    b. *o-ki-ni nar-u / irassyar-u
   come-npst
   hon-come-to become-npst / hon.come-npst

(v) a. tabe-ru
    b. ??o-tabe-ni nar-u / o-mesigari-ni nar-u
   eat-npst
   hon-eat-to become-npst / hon.hon.eat-to ...

(vi) a. sin-u
    b. *o-sini-ni nar-u / o-nakunari-ni nar-u
   die-npst
   hon-die-to become-npst / hon-pass.away-to ...

In fact, the suppletive honorific verbs nasar ‘hon.do’in (iii) and irassyar ‘hon.come’ in (iv) behave like the Korean suppletive honorific verbs with
respect to tense morphology. At this point, I am only able to point out the fact that the so-called s- and k-irregular verbs (i.e. sa-hen and ka-hen dooshi) are involved in these cases.

As for o-prefixsed honorific verbs (whether or not suppletive verb stems are employed), they seem to be nominalized, as suggested by examples like the following.

(vii)a. Kim-sensei-ga *(o)home-no gakusei (home: non-suppletive)
    -Prof.-nom hon-praise-gen student
    'the student that Prof. Kim praises'
  b. Kim-sensei-ga *(o)mesiagari-no pan (mesiagar: suppletive)
    -Prof.-nom hon-hon.eat-gen bread
    'the bread that Prof. Kim is eating'

As noted by Suzuki (1989), o-prefixsed honorific verbs can be suffixed with a genitive case marker, which is a fair piece of evidence for nominalization. If honorification of Japanese verbs generally involves nominalization, they might appear in a completely different structure from that which their Korean equivalents appear in.

As noted by Aoyagi (1998b), the non-suppletive non-past form of the adjective taka 'hight' is embedded under an archaic auxiliary in each case. As exhibited by its adnominal form beki, the deontic modal besi is in direct descent from Old Japanese spoken until circa the 15th century. Also, the negative prospective modal mai is the descendant of the Old Japanese auxiliary mazi. Thus it can safely be concluded that the expected chunk of morphemes for adjectives in the non-past tense is prohibited under normal contexts in the present-day spoken Japanese.

References
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