Two Types of Serial Verb Constructions in Korean: Subject-Sharing and Index-Sharing

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1. Introduction: Serial verb constructions (SVCs) have been much studied as an important part of complex predicate, and a central issue of SVC is how the arguments of verbs are realized in sentence. In the literature, it is generally assumed that the constituent verbs of an SVC share the subject (Foley and Olson 1985, Sebba 1987, Lee 1992, Andrews 1997, Aikhenvald 2006, Chung and Kim 2008, Müller and Lipenkova 2009, Kim 2010, among others) or they share the object or an internal argument (e.g. themes, instruments, goals) (Baker 1989, Collins 1997). In the Korean SVC (1a), for instance, both the subject and the object are shared by the component verbs, but in (1b) only the subject is shared by V1 *chc-a* and V2 *ka-ss-ta* (contra Baker 1989, Collins 1997).

(1) a. akma-ka   wenswungi-lul **cap**-a   **mek**-ess-ta.
         demon-Nom monkey-Acc   catch-Comp eat-Pst-Dec
          'The demon caught the monkey$_j$ and then ate it$_j$.'
     b. Jane-i   hakkyo-ey Tom-ul   **chc**-a   **ka**-ss-ta.
         Jane-Nom school-To Tom-Acc search.for-Comp go-Pst-Dec
         'Jane went to the school searching for Tom.'

Interestingly, however, the canonical SVC in (1a) that is normally used to support the subject- or object-sharing has its passive counterparts in (2) violating the subject- and object-sharing, and the argument saturation. Only the passive verb with *hi* (a passive affix in Korean) can take the subject and complement, whose CASE values are compatible only with it. That is, in (1a), *cap-* 'catch' shares the nominative subject with *mek-* 'eat', but in (2a), *cap-* 'catch' does not have its nominative subject, which thus entails no subject sharing. The same kind of problem applies to *mek-* 'eat' in (2b). Note that the SVCs in (2) are not idiomatic, but compositional, since the lexical semantics of the verbs compose the meanings of the verbal serializations (with the constructional meaning of the SVCs, a sequence).

(2) a. wenswungi-ka akma-eykey cap-a   mek-**hi**-ess-ta.
         monkey-Nom demon-By   catch-Comp eat-Pass-Pst-Dec
         'The monkey was caught and then eaten by the demon.'
     b. wenswungi-ka akma-eykey cap-**hi**-e   mek-ess-eyo.   (from the Web)
         monkey-Nom demon-By   catch-Pass-Comp eat-Pst-Dec
         'The monkey was caught and then eaten by the demon.'

Due to the lack of the subject and complement for V1 in (2a) and V2 in (2b), the SVCs are predicted to be ill-formed in the literature. However, they are well-formed SVCs in Korean.

In this paper I propose two hypotheses: i) Korean SVCs are broadly classified into two types, subject-sharing SVCs like (1) where the subject is structure-shared and index-sharing SVCs such as (2) where only indices of semantic arguments are structure-shared, and ii) a semantic argument sharing is a general requirement of SVCs in Korean. I also argue that an argument composition analysis can accommodate the novel data like (2b) with ease compared to alternative derivational analyses.

2. The existence of index-sharing SVCs: I show here that SVCs which have only index sharing exist in the system of Korean SVCs. That is, the sentences like (2) are real SVCs, but not coordination- or subordination-like construction. For instance, the sentence in (2b) has typical SVC properties that other non-SVCs like coordination or subordination do not have. First, the negation before V1 scopes over the whole verbal serialization, as shown in (3a). Second, an adverb cannot appear in between V1 and V2, as in (3b). Third, V1 cannot have a separate tense marking, as in (3c).

(3) a. wenswungi-ka akma-eykey **an**   cap-**hi**-e   mek-ess-eyo.
         monkey-Nom demon-By   Neg catch-Pass-Comp eat-Pst-Dec
         'It is not the case that the monkey was caught and then eaten by the demon.'

b. *wenswungi-ka akma-eykey cap-**hi**-e   **ppalli**   mek-ess-eyo.
    monkey-Nom demon-By   catch-Pass-Comp quickly eat-Pst-Dec
    (int.) 'The monkey was caught and then quickly eaten by the demon.'

c. *wenswungi-ka akma-eykey cap-**hi-ess-**e   mek-ess-eyo.
    monkey-Nom demon-By   catch-Pass-Pst-Comp eat-Pst-Dec
    (int.) 'The monkey was caught and then eaten by the demon.'

Other lexical passive SVCs like (4) and (5b) can be found in the Web, and in the survey I have conducted, about half the native speakers of Korean judged the sentences in (4) and (5b) acceptable. As for (2b), most participants (8 out of 11) judged it acceptable. But another serialization *ccic-ki-e mek-ess-eyo* 'tear-Pass-Comp eat-Pst-Dec' was judged unacceptable by most participants (8 out of 11).

(4) a. wenswungi-ka akma-eykey ssip-**hi**-e   mek-ess-eyo.
        monkey-Nom demon-By   chew-Pass-Comp eat-Pst-Dec
        'The monkey was chewed and then eaten by the demon.'

    b. ku-uy   phi-ka   akma-eykey ppal-**li**-e   mek-ess-eyo.
        he-Gen blood-Nom demon-By   suck-Pass-Comp eat-Pst-Dec
        (lit.) 'His blood was sucked and then eaten by the demon.'

SVCs involving more than two verbs systematically have at least one index sharing:

(5) a. wenswungi-ka akma-eykey cap-a   mek-**hi**-e   cwuk-ess-eyo.
        monkey-Nom demon-By   catch-Comp eat-Pass-Comp die-Pst-Dec
        'The monkey was caught and then eaten by the demon and then died.'

    b. wenswungi-ka akma-eykey cap-**hi**-e   mek-e   cwuk-ess-eyo.
        monkey-Nom demon-By   catch-Pass-Comp eat-Comp die-Pst-Dec
        'The monkey was caught and then eaten by the demon and then died.'

Summarizing, it seems plausible to consider some sentences like (2b) as genuine SVCs, and we have to deal with the lexical passive SVCs, which have rarely been noted and discussed.

3. Requirement of an argument sharing in SVCs: The passive SVCs in (2) lead us to posit the hypothesis that an index sharing (i.e. a semantic argument sharing) is necessary for SVCs in Korean, rather than the subject-sharing.

Some coordination or subordination constructions (without e.g. a pronoun and its antecedent) do not have an index sharing, and in general they are not categorized as an SVC (at least in Korean). This supports the contrapositive of the hypothesis, which thus supports the hypothesis:

(6) a. Jenny-ka$_i$ mwul-ul$_j$ sa-ss-**ko**   Tom-i$_k$ pica-lul$_l$ sa-ss-ta.   (coordination)
        Jenny-Nom water-Acc buy-Pst-Conj Tom-Nom pizza-Acc buy-Pst-Dec
        'Jenny bought the water, and Tom bought the pizza.'

    b. Mary-ka$_i$ Tom-i$_j$ ttokttokhata-**ko** sayngkakhay-ss-ta.   (subordination)
        Mary-Nom Tom-Nom smart-Comp   think-Pst-Dec
        'Mary thought that Tom was smart.'

However, some constructions that have an index sharing like auxiliary constructions, as in (7a), and typical subject or object control constructions, as in (7b,c), don't belong to SVCs in Korean. SVCs have significantly different properties (e.g. negation scope) from the constructions in (7). So a semantic argument sharing does not entail SVCs.

(7) a. ku-ka   o-ko   **siph**-ta.   b. ku-ka   o-n-ta-ko   **yaksokhay**-ss-ta.
        he-Nom come-Comp want-Dec   he-Nom come-Pres-Dec-Comp promise-Pst-Dec
        'He wants to come.'   'He promised to come.'

    c. ku-ka   Mary-lul o-tolok   **kangyohay-**ss-ta.
        he-Nom Mary-Acc come-Tolok force-Pst-Dec
        'He forced Mary to come.'

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In sum, no index sharing seems to entail non-SVCs in Korean, which supports the necessity of an index sharing in Korean SVCs.

4. Different approaches: It may be argued that two different underlying sentences are combined to derive an SVC (e.g. Stewart 1963, Bamgose 1974). If this is true, in order to generate the SVCs in (2), an ill-formed sentence should be licensed first. Or, the analysis should invent a complex derivational system to license SVCs like (2).

Baker (1989) argues that SVCs requires the object sharing, and the component verbs co-head the shared object. In the passive SVCs in (2), however, there is no shared object, and thus the object sharing is not necessary in Korean SVCs.

Collins (1997) argues that the internal argument sharing is the requirement of SVCs in Ewe, and V2 combines with an empty category coindexed with the explicit object of V1. However, in SVCs like (2a), *akma-eykey* 'demon-By' is not the object of V1, and also it is not immediately clear how the passive V2 assigns its CASE values to the subject and complement. If we assume that V2 somehow assigns its CASE values to the subject and complement to account for (2a), then we also need to explain why in (2b) V2 does not assign its CASE values to the subject and complement.

Choi (2003) assume that the index-sharing SVCs like (2b) are ill-formed. However, it seems plausible to consider them genuine SVCs (at least for some speakers), as illustrated above. According to Choi (2003), the subject and object of V1 are moved to the subject and object of V2, respectively. Then this analysis needs to explain how in (2a) the subject and object of V1 should be moved to the oblique complement and subject of V2, respectively, and how the CASE values of V1 are changed to the CASE values of V2. It should also account for how in (2b) V2 may not assign its CASE values to the moved arguments unlike V2 in (2a).
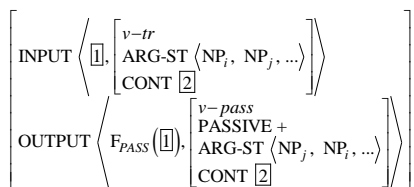
Sohn and Ko (2010) categorize the SVC like (2a) as L(ow)-SVC and analyze it as involving the passive form of the verbal serialization (i.e. *[cap-a mek]-hi*). However, the data like (2b) seem to be a considerable theoretical problem for them.

Although I do not prove that a new derivational analysis accommodating the data like (2) is impossible, I believe that an argument composition analysis (e.g. Andrews 1997, Chung and Kim 2008, Kim 2010) is able to account for the phenomenon of the lexical passive SVCs with ease. We can simply add a new SVC type of lexical passive SVCs requiring that the arguments of active verb be coindexed with those of passive verb and only the subject and complements of the passive verb be passed up to the subject and complements of the resulting combination, respectively, in a similar manner of controls.
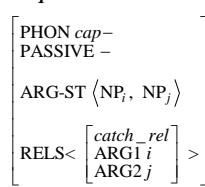
5. HPSG formalization: I present a formal analysis of the SVCs, focusing on those SVCs that have two verbs, in Head-driven Phrase Structure Grammar (Pollard and Sag 1994, Sag *et al*. 2003).

A VP- or S-complement analysis violates the locality constraint of CASE assignment of, say, the passive V2 in (2a) to its arguments. Rather, I adopt and adapt the argument composition analysis (e.g. Chung 1998, Chung and Kim 2008, Kim 2010) which captures the generalizations and idiosyncrasies via the type hierarchy of SVCs. Passive lexemes with active form (e.g. *mek*-1 'eat' vs. *mek*-2 'be eaten') may be posited or generated by a lexical rule, but this seems to lack independent motivation. So I assume that the passive lexeme (9b) is generated from (9a) by the Passive Lexical Rule in (8) adopted from Sag *et al*. (2003) and Kim (2004).
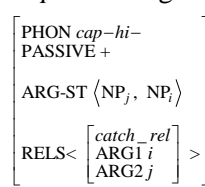
(8) Passive Lexical Rule:

$$\begin{bmatrix} \text{INPUT} \left\langle \boxed{1}, \begin{bmatrix} v-tr \\ \text{ARG-ST} \left\langle \text{NP}_i,\ \text{NP}_j, ... \right\rangle \\ \text{CONT } \boxed{2} \end{bmatrix} \right\rangle \\ \text{OUTPUT} \left\langle \text{F}_{PASS}(\boxed{1}), \begin{bmatrix} v-pass \\ \text{PASSIVE +} \\ \text{ARG-ST} \left\langle \text{NP}_j,\ \text{NP}_i, ... \right\rangle \\ \text{CONT } \boxed{2} \end{bmatrix} \right\rangle \end{bmatrix}$$

(9) a. *cap-* 'catch':

$$\begin{bmatrix} \text{PHON } cap- \\ \text{PASSIVE } - \\ \text{ARG-ST} \left\langle \text{NP}_i,\ \text{NP}_j \right\rangle \\ \text{RELS} < \begin{bmatrix} catch\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}$$

b. *cap-**hi***- 'caught':

$$\begin{bmatrix} \text{PHON } cap-hi- \\ \text{PASSIVE } + \\ \text{ARG-ST} \left\langle \text{NP}_j,\ \text{NP}_i \right\rangle \\ \text{RELS} < \begin{bmatrix} catch\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}$$

Some lexemes relevant to the SVCs under discussion are presented below. The lexemes become words that can be used in syntax through some (derivational and) inflectional lexical rules.

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(10) a. *mek-* 'eat: b. *mek-**hi**-* 'eaten':   (11) a. *chc-* 'search for':   b. *ka-* 'go:

$$\begin{bmatrix} \text{PHON } mek- \\ \text{PASSIVE } - \\ \text{ARG-ST } \langle \text{NP}_i, \text{ NP}_j \rangle \\ \text{RELS} < \begin{bmatrix} eat\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}$$
$$\begin{bmatrix} \text{PHON } mek-hi- \\ \text{PASSIVE } + \\ \text{ARG-ST } \langle \text{NP}_j, \text{ NP}_i \rangle \\ \text{RELS} < \begin{bmatrix} eat\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}$$
$$\begin{bmatrix} \text{PHON } chc- \\ \text{PASSIVE } - \\ \text{ARG-ST } \langle \text{NP}_i, \text{ NP}_j \rangle \\ \text{RELS} < \begin{bmatrix} search\_for\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}$$
$$\begin{bmatrix} \text{PHON } ka- \\ \text{PASSIVE } - \\ \text{ARG-ST } \langle \text{NP}_i, \text{ NP}_j \rangle \\ \text{RELS} < \begin{bmatrix} go\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}$$

In the type hierarchy of SVCs, I state in (12a) the generalization of an argument sharing (the structure-shared $\boxed{2}$) as constraint on the type *hd-svc* with the final verb as the morphosyntactic head. I claim this type has two subtypes, (12b) and (12e). (12b) in turn has two subtypes, (12c) and (12d); and (12e) has its subtypes, (12f) and (12g). Subtypes inherit more general constraints from all their supertypes.

(12) a.
$$\begin{bmatrix} hd-svc \\ \text{HD-DTR} < \boxed{1} > \\ \text{DTRS} < \begin{bmatrix} nonstative-v \\ \text{RELS} < [\text{ARG1 } \boxed{2}] > \end{bmatrix}, \boxed{1}\begin{bmatrix} nonstative-v \\ \text{RELS} < [\text{ARG1 } \boxed{2}] > \end{bmatrix} > \\ \text{C-CONT} [\text{RELS} < [svc\_rel] >] \end{bmatrix}$$

b.
$$\begin{bmatrix} hd-subj-sharing-svc \\ \text{SUBJ} < \boxed{1} > \\ \text{DTRS} < [\text{SUBJ} < \boxed{1} >], [\text{SUBJ} < \boxed{1} >] > \end{bmatrix}$$

c.
$$\begin{bmatrix} hd-non-comps-sharing-svc \\ \text{COMPS } \boxed{A} \oplus \boxed{B} \\ \text{DTRS} < [\text{COMPS } \boxed{A}], [\text{COMPS } \boxed{B}] > \end{bmatrix}$$

d.
$$\begin{bmatrix} hd-comps-sharing-svc \\ \text{COMPS} < \boxed{1} > \oplus \boxed{A} \oplus \boxed{B} \\ \text{DTRS} < \begin{bmatrix} \text{COMPS} < \boxed{1} > \oplus \boxed{A} \\ \text{RELS} < [\text{ARG2 } \boxed{2}] > \end{bmatrix}, \begin{bmatrix} \text{COMPS} < \boxed{1} > \oplus \boxed{B} \\ \text{RELS} < [\text{ARG2 } \boxed{2}] > \end{bmatrix} > \end{bmatrix}$$

e.
$$\begin{bmatrix} hd-index-sharing-svc \\ \text{SUBJ} < \boxed{1} > \\ \text{COMPS} < \boxed{2} > \\ \text{DTRS} < ..., \begin{bmatrix} \text{HEAD | PASSIVE } + \\ \text{SUBJ} < \boxed{1}\text{NP}[nom]_{\boxed{4}} > \\ \text{COMPS} < \boxed{2}\text{NP}[by]_{\boxed{3}} > \end{bmatrix}, ... > \\ \text{RELS} < \begin{bmatrix} \text{ARG1 } \boxed{3} \\ \text{ARG2 } \boxed{4} \end{bmatrix}, \begin{bmatrix} \text{ARG1 } \boxed{3} \\ \text{ARG2 } \boxed{4} \end{bmatrix} > \end{bmatrix}$$

f.
$$\begin{bmatrix} hd-first-passive-svc \\ \text{DTRS} < [\text{PASSIVE } +], [\text{PASSIVE } -] > \end{bmatrix}$$

g.
$$\begin{bmatrix} hd-second-passive-svc \\ \text{DTRS} < [\text{PASSIVE } -], [\text{PASSIVE } +] > \end{bmatrix}$$

Since subject-sharing SVCs basically require the subject sharing, in (12b) the SUBJ value (tagged $\boxed{1}$) of the verbs are structure-shared, and they are identified with the SUBJ value of the resulting combination. In (12c), the unshared COMPS values (marked with $\boxed{A}$ and $\boxed{B}$) compose the COMPS list of the combination, but in (12d), in addition to the unshared COMPS values, the shared COMPS value (marked with $\boxed{1}$) is added to the COMPS list of the combination. And in (12e), one component verb is passive (marked with PASSIVE +), and the SUBJ value and COMPS value of the passive verb are indentified with the SUBJ value and COMPS value of the resulting construction, respectively. Besides the index sharing of ARG1 inherited from (12a), (12e) requires the index sharing of ARG2 (the structure-shared $\boxed{4}$); and thus in (12f) and (12g), the unrealized SUBJ value and COMPS value of the other active verb (marked with PASSIVE –) are coindexed with the realized COMPS value and SUBJ value of the passive verb, respectively.

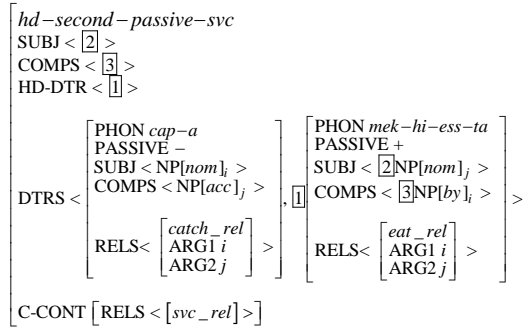With the lexical items and combination rules, the verbal serializations can be formally represented as follows:

(13) a. [***cap**-a **mek**-ess-ta*] in (1a):   b. [***chc**-a **ka**-ss-ta*] in (1b):

$$\begin{bmatrix} hd-comps-sharing-svc \\ \text{SUBJ} < \boxed{2} > \\ \text{COMPS} < \boxed{3} > \\ \text{HD-DTR} < \boxed{1} > \\ \text{DTRS} < \begin{bmatrix} \text{PHON } cap-a \\ \text{PASSIVE } - \\ \text{SUBJ} < \boxed{2}\text{NP}[nom]_i > \\ \text{COMPS} < \boxed{3}\text{NP}[acc]_j > \\ \text{RELS} < \begin{bmatrix} catch\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}, \boxed{1}\begin{bmatrix} \text{PHON } mek-ess-ta \\ \text{PASSIVE } - \\ \text{SUBJ} < \boxed{2} > \\ \text{COMPS} < \boxed{3} > \\ \text{RELS} < \begin{bmatrix} eat\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix} > \\ \text{C-CONT} [\text{RELS} < [svc\_rel] >] \end{bmatrix}$$

$$\begin{bmatrix} hd-non-comps-sharing-svc \\ \text{SUBJ} < \boxed{2} > \\ \text{COMPS} < \boxed{3}, \boxed{4} > \\ \text{HD-DTR} < \boxed{1} > \\ \text{DTRS} < \begin{bmatrix} \text{PHON } chc-a \\ \text{PASSIVE } - \\ \text{SUBJ} < \boxed{2}\text{NP}[nom]_i > \\ \text{COMPS} < \boxed{3}\text{NP}[acc]_j > \\ \text{RELS} < \begin{bmatrix} search\_for\_rel \\ \text{ARG1 } i \\ \text{ARG2 } j \end{bmatrix} > \end{bmatrix}, \boxed{1}\begin{bmatrix} \text{PHON } ka-ss-ta \\ \text{PASSIVE } - \\ \text{SUBJ} < \boxed{2} > \\ \text{COMPS} < \boxed{4}\text{NP}[to]_k > \\ \text{RELS} < \begin{bmatrix} go\_rel \\ \text{ARG1 } i \\ \text{ARG2 } k \end{bmatrix} > \end{bmatrix} > \\ \text{C-CONT} [\text{RELS} < [svc\_rel] >] \end{bmatrix}$$

(14) a. [*cap-a mek-**hi**-ess-ta*] in (2a): b. [*cap-**hi**-e mek-ess-eyo*] in (2b):

$$
\begin{bmatrix}
hd-second-passive-svc \\
\text{SUBJ} < \boxed{2} > \\
\text{COMPS} < \boxed{3} > \\
\text{HD-DTR} < \boxed{1} > \\[4pt]
\text{DTRS} <
\begin{bmatrix}
\text{PHON } cap-a \\
\text{PASSIVE } - \\
\text{SUBJ} < \text{NP}[nom]_i > \\
\text{COMPS} < \text{NP}[acc]_j > \\[2pt]
\text{RELS} <
\begin{bmatrix}
catch\_rel \\
\text{ARG1 } i \\
\text{ARG2 } j
\end{bmatrix} >
\end{bmatrix},
\boxed{1}
\begin{bmatrix}
\text{PHON } mek-hi-ess-ta \\
\text{PASSIVE } + \\
\text{SUBJ} < \boxed{2}\text{NP}[nom]_j > \\
\text{COMPS} < \boxed{3}\text{NP}[by]_i > \\[2pt]
\text{RELS} <
\begin{bmatrix}
eat\_rel \\
\text{ARG1 } i \\
\text{ARG2 } j
\end{bmatrix} >
\end{bmatrix} > \\[4pt]
\text{C-CONT} \begin{bmatrix} \text{RELS} < [svc\_rel] > \end{bmatrix}
\end{bmatrix}
$$

$$
\begin{bmatrix}
hd-first-passive-svc \\
\text{SUBJ} < \boxed{2} > \\
\text{COMPS} < \boxed{3} > \\
\text{HD-DTR} < \boxed{1} > \\[4pt]
\text{DTRS} <
\begin{bmatrix}
\text{PHON } cap-hi-e \\
\text{PASSIVE } + \\
\text{SUBJ} < \boxed{2}\text{NP}[nom]_j > \\
\text{COMPS} < \boxed{3}\text{NP}[by]_i > \\[2pt]
\text{RELS} <
\begin{bmatrix}
catch\_rel \\
\text{ARG1 } i \\
\text{ARG2 } j
\end{bmatrix} >
\end{bmatrix},
\boxed{1}
\begin{bmatrix}
\text{PHON } mek-ess-eyo \\
\text{PASSIVE } - \\
\text{SUBJ} < \text{NP}[nom]_i > \\
\text{COMPS} < \text{NP}[acc]_j > \\[2pt]
\text{RELS} <
\begin{bmatrix}
eat\_rel \\
\text{ARG1 } i \\
\text{ARG2 } j
\end{bmatrix} >
\end{bmatrix} > \\[4pt]
\text{C-CONT} \begin{bmatrix} \text{RELS} < [svc\_rel] > \end{bmatrix}
\end{bmatrix}
$$

If two verbs are both passive (e.g. *cap-**hi**-e mek-**hi**-ess-ta* 'catch-Pass-Comp eat-Pass-Pst-Dec'), the SVC is licensed by the rule in (12d) just like (1a) is:

(15) [*cap-**hi**-e mek-**hi**-ess-ta*]:

$$
\begin{bmatrix}
hd-comps-sharing-svc \\
\text{SUBJ} < \boxed{2} > \\
\text{COMPS} < \boxed{3} > \\
\text{HD-DTR} < \boxed{1} > \\[4pt]
\text{DTRS} <
\begin{bmatrix}
\text{PHON } cap-hi-e \\
\text{PASSIVE } + \\
\text{SUBJ} < \boxed{2}\text{NP}[nom]_j > \\
\text{COMPS} < \boxed{3}\text{NP}[by]_i > \\[2pt]
\text{RELS} <
\begin{bmatrix}
catch\_rel \\
\text{ARG1 } i \\
\text{ARG2 } j
\end{bmatrix} >
\end{bmatrix},
\boxed{1}
\begin{bmatrix}
\text{PHON } mek-hi-ess-ta \\
\text{PASSIVE } + \\
\text{SUBJ} < \boxed{2} > \\
\text{COMPS} < \boxed{3} > \\[2pt]
\text{RELS} <
\begin{bmatrix}
eat\_rel \\
\text{ARG1 } i \\
\text{ARG2 } j
\end{bmatrix} >
\end{bmatrix} > \\[4pt]
\text{C-CONT} \begin{bmatrix} \text{RELS} < [svc\_rel] > \end{bmatrix}
\end{bmatrix}
$$
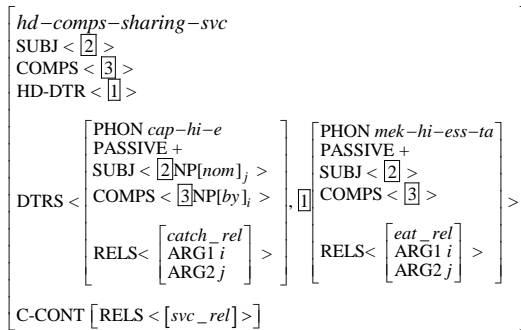
The current system of Korean SVCs can interact with pragmatic theories to restrict what specific verb combinations can appear in SVCs (see cultural factors noted in Durie 1997, Kroeger 2004). The formalization of the interaction is not handled in this paper.

6. Conclusion: I added the new type of index-sharing SVCs to the grammar of Korean SVCs adapting the argument composition analysis and argued that in a Korean SVC, V1 and V2 must share a semantic argument rather than the subject, the object, or an internal argument. I believe the conclusion has promise, and the prediction (existence of index-sharing passive SVCs) would be cross-linguistically valid. Examining this prediction remains as future research.

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