Typology of Morphological Causatives
A Syntactic Account

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Abstract: This poster discusses the typology of causatives focusing on the different strategies of deriving "morphological causatives" (Comrie 1989) in Hungarian, Japanese, and Korean. The causatives in these languages are all formed productively (to some extent) with regular morphology, and yet they show non-uniform properties with respect to the target predicates, the possibility of existential reading, the possible positions of the negation marker, the binding condition B effect, and the coordination facts, among others. The poster suggests that the causativizing affixes, *-tAt* in Hungarian, *-(s)ase* in Japanese, and *-Ci* in Korean, are all morphological realizations of a functional head *Caus(e)* (see Pylkkänen 2008), and that the different patterns between the languages arise because Caus in each language selects phrases of different size and type: active VoiceP in Hungarian, TP in Japanese, and either active or non-active VoiceP in Korean. Based on the proposal, it is concluded that a purely syntactic approach to causativization is more preferable in terms of both economy and empirical accuracy than the split-lexicalist approach of Horváth and Siloni (2011).

Introduction

Morphological causatives in Hungarian, Japanese, and Korean

(1) János el olvas-*tat*-ta a könyv-et Mari-val. (*Hungarian*)
János PRT read-CAUS-3SG.PST the book-ACC Mari-INS
'János made Mari read the book.'

(2) Hiro-ga Haruka-ni hon-o yom-*ase*-ta. (*Japanese*)
Hiro-NOM Haruka-DAT book-ACC read-CAUS-PST

(3) Cheli-ka Swuni-eykey chayk-ul ilk-*hi*-ess-ta. (*Korean*)
Cheli-NOM Swuni-DAT book-ACC read-CAUS-PST-DECL

Goals

- To provide an analysis of morphological causatives from a purely syntactic perspective
- To show that the split-lexicalist approach (Horváth and Siloni 2011; H&S hereafter) is not a proper way to account for the typology of the causative
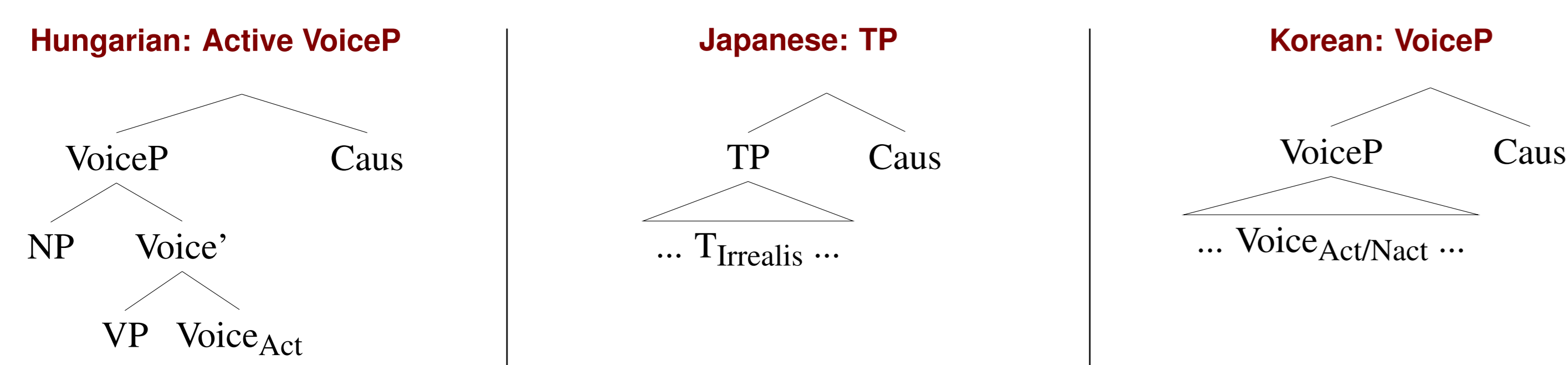
Proposal: Syntax and Semantics of Morphological Causatives

Background

Pylkkänen (2008): Causatives involve a functional head *Caus(e)*, and the typology of causatives is attributed to the phrases of different size that it selects in each language.

Syntax

The size and type of the complement of Caus in Hungarian, Japanese, and Korean:

Hungarian: Active VoiceP

```
        VoiceP      Caus
      /      \
    NP      Voice'
          /      \
        VP    Voice_Act
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Japanese: TP

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     TP      Caus
    /   \
  ... T_Irrealis ...
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Korean: VoiceP

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     VoiceP      Caus
    /      \
  ... Voice_Act/Nact ...
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When it takes an adjectival, *-(s)ase* requires an evidential marker *-gar* (Harley 2008), which generally appears very high in the structure.

(4) a. *iya-gar-sase* (hateful-GAR-CAUS) 'bother' (*Japanese*)
    b. *nop-i* (high-CAUS) 'raise' (*Korean*)

Semantics

$$\llbracket \textbf{Caus} \rrbracket = \lambda f_{\langle (e,s)t \rangle} \lambda x \lambda e \exists e'(\exists y).\ f(e'(,y))\ \&\ Causer(e,x)\ \&\ Cause(e',e)$$

Caus may existentially quantify a variable if its complement is semantically open.

Analysis: The Variation

Target predicates

(5) *Hungarian*
    a. János el olvas-tat-ta a könyv-et Mari-val. — Transitive verb
       János PRT read-CAUS-3SG.PST the book-ACC Mary-INS
       'János made Mary read the book.'
    b. Az edző ugrál-tat-ja Mari-t. — Unergative verb
       the coach jump-CAUS-PRS.DEF.DO Mari-ACC
       'The coach makes Mari jump.'
    c. *Anna olvad-tat-ja a jeg-et. — Unaccusative verb
       Anna melt-CAUS-PRS.DEF.DO the ice-ACC
       'Anna made the ice melt.'

(6) *Japanese*
    a. Hanako-wa Yosi-ni gohan-o tabe-sase-ta. — Transitive verb
       Hanako-TOP Yosi-DAT rice-ACC eat-CAUS-PST
       'Hanako made Yoshi eat rice.'
    b. Hanako-wa Yosi-o ik-ase-ta. — Unergative verb
       Hanako-TOP Yosi-ACC go-CAUS-PST
       'Hanako made Yoshi go.'
    c. Hanako-wa chirato honne-o nozok-ase-ta. — Unaccusative verb
       Hanako-TOP momentarily real.concern-ACC appear-CAUS-PST
       'Hanako momentarily showed her real concern.'

(7) *Korean*
    a. Cheli-ka aki-eykey wuywu-lul mek-i-ess-ta. — Transitive verb
       Cheli-NOM baby-DAT milk-ACC eat-CAUS-PST-DECL
       'Cheli fed milk to the baby' (*Lit.* 'Cheli made the baby eat milk.')
    b. Cheli-ka Swuni-lul wul-li-ess-ta. — Unergative verb
       Cheli-NOM Swuni-ACC cry-CAUS-PST-DECL
       'Cheli made Swuni cry.'
    c. Cheli-ka elum-ul nok-i-ess-ta. — Unaccusative verb
       Cheli-NOM ice-ACC melt-CAUS-PST-DECL
       'Cheli made the ice melt.'

Existential reading

(8) János fel olvas-tat-ta a könyv-et ∃x, de nem tud-om ki-vel. (*Hungarian*)
János PRT read-CAUS-PST the book-ACC but NEG know-1SG who-INS
'János caused (someone) to read the book aloud, but I don't know who.'

(9) a. Swuni-ka ∃x ceckkokci-lul mwul-li-ess-ta. (*Korean*; see Appendix 1)
       Swuni-NOM pacifier-ACC bite-CAUS-PST-DECL
       'Swuni made (someone) hold a pacifier in the mouth.'
    b. Cheli-ka *pro* mwul-ess-ta.
       Cheli-NOM bite-PST-DECL
       'Cheli bit (something).'

Positions of the negation marker

Hungarian, Korean: [_TP ...-Voice-Caus-Neg-T]
Japanese: [_TP2 [_TP1 ...-Neg-T_1]-Caus-T_2]
           [_TP2 [_TP1 ...-T_1]-Caus-Neg-T_2]

(10) *Énekel-nem-tet-t-em a gyerek-ek-et. (*Hungarian*)
     sing-NEG-CAUS-PST-1SG the kid-PL-ACC
     'I made the kids not sing.'

(11) a. Toru-wa Yoko-o ik-anaku-sase-ta. (*Japanese*)
        Toru-TOP Yoko-ACC go-NEG-CAUS-PST
        'Toru made Yoko not go.'
     b. Toru-wa Yoko-o ik-ase-nakat-ta.
        Toru-TOP Yoko-ACC go-CAUS-NEG-PST
        'Toru did not make Yoko go.'

(12) *Swuni-ka aki-eykey yak-ul mek-ci ani-ha-i-ess-ta. (*Korean*)
     Swuni-NOM baby-DAT medicine-ACC eat-CI NEG-DO-CAUS-PST-DECL
     'Swuni did not make the baby take medicine.'

Binding Condition B

Hungarian, Korean: [_TP NP_i ... NP_j ... Pronoun_{*i/*j} ...]
Japanese: [_TP2 NP_i ... [_TP1 NP_j ... Pronoun_{i/*j} ...]-Caus ...]

(13) Kati_i le-fotóz-tat-ta őt_{*i/*j} Mari_j-val. (*Hungarian*; H&S:667)
     Kati down-photograph-CAUS-PST she.ACC Mari-INS
     'Kati made Mari photograph her.'

(14) Toru_i-wa Kitahara_j-ni kare_{i/*j}-o syookai s-ase-ta. (*Japanese*; H&S:667)
     Toru-TOP Kitahara-DAT he-ACC introduction do-CAUS-PST
     'Toru made Kitahara introduce him.'

(15) Cheli_i-ka khikun chinkwu_j-eykey ku_{*i/*j}-lul an-ki-ess-ta. (*Korean*)
     Cheli-NOM tall friend-DAT he-ACC hold-CAUS-PST-DECL
     'Cheli made his tall friend hold him.'

Coordination

In Hungarian, bound morphemes in the verbal extended projection cannot select a coordinated structure; and in Korean, the bound morphemes except for a tense marker cannot select a coordinated structure.

(16) *Mari olvas-és/vagy énekel-tet-te az osztály-t. (*Hungarian*; H&S:673)
     Mari read-and/or sing-CAUS-PST.DEF.DO the class-ACC
     'Mari made the class read and/or sing.'

(17) Hanako-ga Masao-ni uti-o soozisuru-ka heya-dai-o haraw-aseru
     Hanako-NOM Masao-DAT house-ACC clean-or room-rent-ACC pay-CAUS
     kotoni si-ta. (*Japanese*; H&S:672)
     that do-PST
     'Hanako decided to make Masao clean the house or pay room rent.'

(18) *Swuni-ka ai-eykey os-ul ip-ko/kena sinpal-ul sin-ki-ess-ta.
     Swuni-NOM child-DAT clothes-ACC wear-and/or shoes-ACC put.on-CAUS-PST-DECL
     'Swuni made the child wear clothes and/or put on shoes.' (*Korean*)

Discussion and Conclusion

H&S claim that causativization is parameterized, and that it applies in the lexicon in Hungarian while it applies in the syntax in Japanese. However, the causatives exhibit more than two patterns across languages.

	Hungarian	**Japanese**	**Korean**
Targets	verbs w/ ext. arg.	verbs, adjectives	verbs, adjectives
Existential reading	possible	possible	possible
Positions of NEG	not possible	possible	not possible
Condition B	not possible	possible	not possible
Coordination	not possible	possible	not possible

Table 1: Behaviors of morphological causatives in Hungarian, Japanese, and Korean

On top of that, the native speakers of Hungarian that we have consulted report that the judgments H&S present may not be entirely correct: e.g., ambiguous readings of adverbials (Appendix 2) or of 'do so' substitution (Appendix 3), etc. Also, according to H&S's logic, the entire verbal expression should be derived in the lexicon in Hungarian, as no verbal bound morphemes, including a tense marker, is allowed to take a coordinated structure (Appendix 4). This is in contrast to the common view in the generative literature, according to which a tense marker heads an independent projection in the syntax. What these cases suggest is that the split-lexicalist approach to causativization is not empirically tenable.

It has long been claimed by many researchers that the computationally active lexicon should be dispensed with in the theory of grammar, for what it is believed to do can be done in the syntax as well, and accordingly, a more constrained theory can be attained. The present analysis suggests that a purely syntactic perspective on grammar may provide an economically and empirically more preferable account of morphological causatives as well.

References: Comrie, Bernard. 1989. *Language Universals and Linguistic Typology*. Oxford: Blackwell. · Harley, Heidi. 2008. On the causative construction. In *The Oxford Handbook of Japanese Linguistics*, edited by Shigeru Miyagawa and Mamoru Saito, 20–53. Oxford: Oxford University Press. · Horváth, Julia, and Tal Siloni. 2011. Causatives across components. *Natural Language & Linguistic Theory* 29:657–704. · Pylkkänen, Liina. 2008. *Introducing Arguments*. Cambridge, Mass.: MIT Press.

Appendix 1

(1) A: Swuni-ka   ∃x ceckkokci-lul mwul-li-ess-e.   (*Korean*)
      Swuni-NOM   pacifier-ACC bite-CAUS-PST-DECL
      'Swuni made (someone) hold a pacifier in the mouth.'
    B: Nwukwu-eykey?
      Who-DAT
      'To whom?'
    A: Molla,   haciman Swuni-nun cham sangnyanghan ai-i-ya.
      not.know but   Swuni-TOP very caring   child-COP-DECL
      'I don't know, but Swuni is a very caring child.'

(2) A: Cheli-ka   *pro* mwul-ess-e.   (*Korean*)
      Cheli-NOM   bite-PST-DECL
      'Cheli bit (something).'
    B: Mwuel?
      what.ACC
      'Bit what?'
    A: #Molla,   haciman Cheli-nun cham mostoyn ai-i-ya.
      not.know, but   Cheli-TOP very bad   child-COP-DECL
      'I don't know, but Cheli is a very bad person.'

Appendix 2

(3) a. János Mari-val akarata ellenére ír-at-ta   a   level-et.   (*Hungarian*)
       János Mari-INS will   against write-CAUS-PST the letter-ACC
       'John made Mary write the letter against his/her will.'
    b. János kéz-zel ír-at-ta   meg Mari-val a level-et.
       János hand-INS write-CAUS-PST PRT Mari-INS the letter-ACC
       'John made Mary write the letter with his/her hand.'

Appendix 3

(4) Anna ugrál-tat-ta   a kutyá-t, mert   a   macska is   azt csinál-ta.   (*Hungarian*)
    Anna jump-CAUS-PST the dog-ACC because the cat   also that do-PST
    'Anna made the dog jump, because the cat was also jumping.'
    or 'Anna made the dog jump, because the cat was also making the dog jump.'

Appendix 4

(5) a. * olva- és süllye-szt.   (*Hungarian*)
       melt- and sink-TRZ

    b. * olva- és süllye-szt-et
       melt- and sink-TRZ-CAUS

    c. Janos olva-szt-ja   a jeget és szüllye-d.
       John melt-TRZ-3SG the ice   and sink-3SG

    d. * olvas- és föz-ött
       read   and cook-3SG.PST