Mirror Principle violations in Greek prefixed verbal complexes

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INTRODUCTION: This study investigates the formation of prefixed verbal complexes in Greek. I provide evidence that, in their base position, prepositional prefixes are generated in [Spec, VP], below Tense. However, after spell-out, they surface in a position preceding Tense, showing a case of Mirror Principle violations. I argue that the traditional Head Movement (Koopman 1984, Travis 1984, Baker 1985) is inadequate to model the linear order of morphemes in prefixed verbal complexes. Instead, they require the use of two main mechanisms: the syntactic operation of Generalized Head Movement (Arregi & Pietraszko 2018, 2019), which unifies upward and downward head movement by creating a single complex head, and the postsyntactic operation of Merger (Matushansky 2006, Harizanov 2014, Martinović 2019), which combines a head with its specifier.

PREFIXES ARE GENERATED LOW: (1) shows Greek verbal complexes involving prepositional prefixes:

(1) a. *anti- graf- o*
instead.of-write-1SG
'I copy'

b. *syl- leg-o*
with-say-1SG
'I collect'

c. *ant- e- graf- a*
instead.of-PST-write-1SG
'I was copying'

I argue that these prefixes are generated in a low position, as P[reposition]s in [Spec, VP] (*Figure 1*) functioning as arguments selected by the verb. This analysis is supported first by the fact that, since Greek allows more than one prepositional prefix to attach to the verb stem (cf. Svenonius 2004, Gribanova 2013 for Slavic), additional specifiers have to be added into the derivation.

(2) *I naftiki peri- syn- eleksan tus navagus*.
the naval around-with-said.3SG the shipwrecked.PL
'The navy collected around the shipwrecked people.'

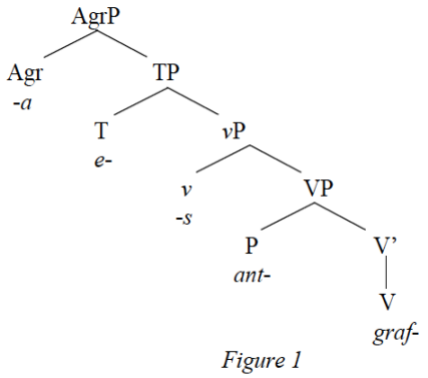

Figure 1

Furthermore, we find idiosyncratic combinations of prefixes and verbs showing that prefixes are selected by the verb they attach to (3a), while any other relative ordering is not acceptable (3b-c):

(3) a. *peri- syl- lego*
around-with-say.1SG
'to collect around'

b. **syn- peri- lego*
with-around-say.1SG

c. **apo- syl- lego*
from-with-say.1SG

In addition to this, their idiomatic reading can be explained by the local domain of the combinations (being introduced inside VP) (see Marantz 1984 for idioms):

(4) a. *dro* 'to act' *anti-dró* 'to react'
instead.of-act

b. *gráfo* 'to write' *anti-gráfo* 'to copy'
instead.of-write

PREFIXES SURFACE OUTSIDE TENSE: Interestingly, in the past forms of prefixed verbal complexes, the T head is realized by *e-*, a past tense morpheme being generated higher than the prepositional prefix. Given the Mirror Principle, we expect them to be spelled out according to

their structural height, i.e. the expected order to be T-P-V (*__e__-*ant-grafa*). Instead they are spelled out in the P-T-V order (e.g. *ant-__e__-grafa* 'I was copying' in (1c)). Therefore, this is case of Mirror Principle violation.

ANALYSIS: Given that prepositional prefixes are introduced low as Ps in [Spec, VP], whereas the past morpheme *e-* is generated high, i.e. in T-head, I argue that Head Movement is not an adequate operation to capture this Mirror Principle violation, since this operation is designed to derive the Mirror Principle. Rather, the mechanisms of *Generalized Head Movement* (GenHM) and *Merger* are needed to model the linear order of the past form of a verbal complex, like *antegrafa* 'I was copying' in (1c).

The complex verb *antegrafa* requires the V, *v*, T, and Agr terminal nodes with V_m, v_m, T_m, and Agr_m being the set of each node's morphological features, respectively. As a first step, GenHM applies syntactically to the *v*-head and the head of its complement, i.e. V-head. The output is a V-*v* complex head that contains the M-values of the input heads, i.e. the set of the morphological features of V and *v*. GenHM applies to all the heads that trigger the operation, and the output of the previous complex head is merged with the next higher head. Therefore, the extended head chain that includes the V, *v*, T, and Agr nodes share the same newly formed M-value with the morphological features of all terminal nodes participating in the operation (*Figure 2*). If there is no prefix, the complex head is pronounced in the topmost position, i.e. Agr, as *egrafa* 'I was writing'.

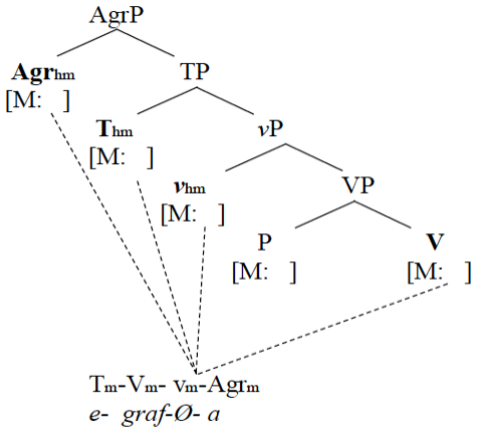

Figure 2

However, in the presence of prefixes attached the verb stem, I argue that the postsyntactic operation of Merger is needed, which applies before the verb is pronounced in the highest position. This operation is used to combine a head with its specifier. Here, the rule applies combining the V-head with P (*Figure 3*). Since V contains not only its M-value but the GenHM-generated head chain with the M-values of all the nodes, P_m is added to the M-value of the head chain in an outer position, i.e. being peripheral to the morphological terminals in the complex head. And then, the verbal complex is spelled out in Agr position.

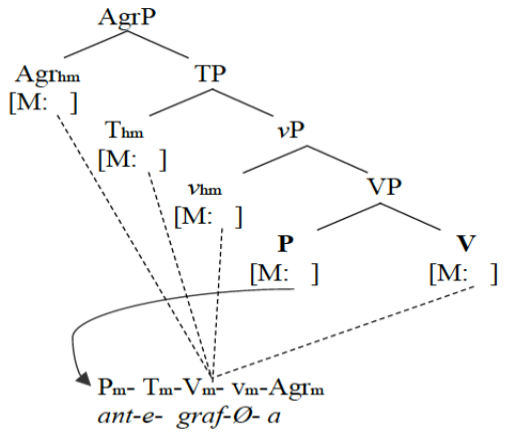

Figure 3

CONCLUSION: The analysis accounts for the formation of prefixed verbal complexes in Greek as a case of Mirror Principle violations. I show that prepositional prefixes are introduced as Ps in [Spec, VP], below Tense. However, they are spelled out in a higher position, as evidenced by the fact that they precede the past tense morpheme after spell-out. I argue that the traditional operation of Head Movement cannot be used to attach the prepositional prefixes and the past morpheme to the verb. Rather, they are formed as subject to the syntactic operation of Generalized Head Movement (here as an upward displacement) and the postsyntactic operation of Merger.

Subject and object clitic pronouns in Valdostan Francoprovençal

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Subject pronouns in Standard French were shown by Cardinaletti & Starke (1999) to be weak pronouns and not clitics. Poletto (2000) argued that subject pronouns in Francoprovençal are also weak pronouns. By relying on data from a specific variety of Valdostan Francoprovençal (Fénis, Aosta Valley, North-Western Italy, henceforth VF), I show that this claim is problematic in several respects. First, following Roberts (2010a), VF may be seen as a (partial) null-subject language, as only the 2nd person subject pronoun is obligatory in some structures while verbal inflection manifests a full set of person-number distinctions. Secondly, a subject pronoun may double a quantificational subject (which is not possible in Standard French).

(1) koˈkøn iɯ ˈgetɛ pɛ la faˈnitʁa
Someone CL3.NOM looks through the window

Given that quantifiers cannot be topicalized, *koˈkøn* in (1) should be taken to be a structural subject. It follows that the doubling pronoun *iɯ* cannot be a full (albeit weak) pronoun and must be a clitic. Other tests used by Poletto (2000) and others (Kayne, 1975; Cardinaletti, 2015), such as coordination, word stress, etc., argue for the same conclusion.

Another argument to analyze subject pronouns as clitics is given by their particular behavior with the verb *have* in contrast with the other verbs. Indeed, in that respect, subject clitics (SCLs) behave exactly like object and partitive clitics. Several authors have shown that *have*, be it the auxiliary or the possessive verb, behaves differently in several respects from lexical verbs (Chomsky 1993, Pollock 1989, Roberts 1998, a.o.). In VF, differences between *have* and other verbs arise when clitics are affixed to them. All clitic pronouns (subject, object and partitive) undergo obligatory elision of the rime with *have* as in the (a) examples of (2)-(4), whereas this elision is optional or ungrammatical with lexical verbs (see the (b) examples).

(2) a. dz/*dzʏ aˈvijɔ ˈtʁɛj ˈtsat
SCL.1SG had.1SG three cats
b. dzʏ/??dz aˈkuktɔ
SCL.1SG listen.1SG

(3) a. ty l/*lɔ ˈo ˈtø
SCL.2SG CL.3SG.ACC.M have.2SG you
'You have it.'
b. ty l/lɔ aˈtsœtɛ pwe
SCL.2SG CL.3SG.ACC.M buy.2SG FUT
'You will buy it.'

(4) a. iɯ n/*nɛn aˈvijɛ ˈtʁɛj
SCL.3SG PART.CL had.3SG three
'He/she had three (of them).'
b. *n/nɛn aˈtsœtɔ pwe ˈdo
PART.CL buy.1SG FUT two.M
'I will buy two (of them).'

In addition, plural object clitics undergo obligatory liaison with *have* while there is no possible liaison with a lexical verb (compare (5a,b)).

(5) a. lɛ- h- ˈe ˈmɛ
CL.3PL.ACC LC have.1SG STR.PR.1SG
'I have them.'
b. lɛ *h- aˈtsœtɔ pwe
CL.3PL.ACC LC buy.1SG FUT
'I will buy them.'

Furthermore, *have* seems to be able to host only a single clitic, as SCLs paradigm is the same with lexical verbs (see (6)) and with *have* (example (7)), when it hosts another proclitic.

(6) a. (dzʏ) lɔ aˈkuktɔ
SCL.1SG CL.3SG.ACC.M listen.1SG
b. *(ty) lɔ aˈkuktɛ
SCL.2SG CL.3SG.ACC.M listen.2SG
c. (iɯ) lɔ aˈkuktɛ
SCL.3 CL.3SG.ACC.M listen.3SG
d. (nɔ) lɔ akukˈtɛn
SCL.1PL CL.3SG.ACC.M listen.1PL
e. (vɔ) lɔ akukˈtodɛ
SCL.2PL CL.3SG.ACC.M listen.2PL
f. (iɯ) lɔ aˈkuktʊŋ
SCL.3 CL.3SG.ACC.M listen.3PL

(7) a. (dzʏ) l ˈe
SCL.1SG CL.3SG.ACC have.1SG
b. *(ty) l ˈo
SCL.2SG CL.3SG.ACC have.2SG
c. (iɯ) l ˈa(t)
SCL.3 CL.3SG.ACC have.3SG
d. (nɔ) l ˈɛn
SCL.1PL CL.3SG.ACC have.1PL
e. (vɔ) l ˈɛj
SCL.2PL CL.3SG.ACC have.2PL
f. (iɯ) l ˈʌ̃
SCL.3 CL.3SG.ACC have.3PL

Roberts (2015, 2018) observes in some Valdostan varieties a related phenomenon that he calls *OCL-for-SCL*: an SCL cannot occur on the auxiliary if a proclitic object pronoun appears (compare (8a,b)). The object clitic (OCL) seems to "take the place" of the SCL.

(8) a. Gnunc l' a viu -me
noone 3SG.SCL=has seen =1SG.ACC
'No one has seen me.'

b. Gnunc m' a viu
noone 1SG.OCL= has seen
(Roberts, 2018, VF of Ayas)

Roberts considers subject pronouns in VF as the morphophonological realization of fission (in the sense of Distributed Morphology, Halle & Marantz 1993) of the φ-features on T and proposes that the presence of the proclitic object pronoun blocks fission. The drawback of this approach is that it is restricted to subject pronouns that occur with the auxiliary. However, the pronouns that cooccur with *have* and with lexical verbs are strikingly similar in form so that if fission occurs when Aux merges with T, it should also occur when lexical verbs merge with T.

(9) a. subject pronouns with lexical verbs: dzʏ, ty, iɯ, nɔ, vɔ, iɯ
b. subject pronouns with *have*: dz, t, j, n, v, j
I you.SG he/she/it we you.PL they

Moreover, while object and partitive clitics appear in proclisis on the verb with possessive *have*, and are enclitic on the past participle in complex tenses, subject clitics behave the same way with auxiliary and possessive *have*. The above considerations lead me to argue that there is only one series of subject pronouns in VF, merged in the same position. My explanation of *OCL-for-SCL* hinges not on properties of the (subject) clitics but on a fundamental difference between *have* and other verbs in the language.

My account for *OCL-for-SCL* and for the behavior of clitics with *have* is supported by the two following claims. First, I assume that both subject and object clitics are base-generated in argumental positions inside vP/VP (Cardinaletti & Repetti 2010 on SCLs; Cardinaletti and Starke 1999; Belletti 2009 on OCLs). Second, I argue that the phonological differences in clitics on *have* and on lexical verbs is syntactically driven, a consequence of the featural specification of the verb *have*, which requires the clitic pronoun to incorporate (Roberts 2010b). Relying on Roberts' (2018) proposal that clitics bear φ-features and a D-feature and on Longobardi's (2008) claim that the D category consists of the Person feature, I assume, following Roberts (2010b), that clitics only bear φ-features and that they count as defective goals in relation to their probe. Following Roberts' definition, a goal is defective iff its features are a proper subset of those of its probe. This implies that *have* probes for φ-features, while lexical verbs do not. Exploiting Chomsky's (2013, 2015) approach to labeling, I argue that the clitic undergoes elision of its rime only when the label of the node that dominates both the clitic and the verb is the same as the label of the verb. In other words, when the verb labels the complex head, which the clitic has incorporated, the elision of the clitic's rime applies. This means that a phonological rule can be sensitive to labeling.

This work provides a new perspective on the nature of subject clitics in Francoprovençal. It sheds light on the features involved in the cliticization mechanism and shows that labeling is not limited to the semantic interface but can also be relevant for the phonological interface.

References: **Belletti, A.** 2009. Italian/Romance clitics: Structure and derivation. In *Structures and strategies*, 130–158. New York: Routledge. **Cardinaletti, A.** 2015. Cases of apparent enclisis on past participles in Romance varieties. *Isogloss* 1.2: 179-197. **Cardinaletti, A., Repetti, L.** 2010. Proclitic versus enclitic pronouns in northern Italian Dialects and the null subject parameter. In Roberta D'Alessandro, Adam Ledgeway, Ian Roberts (eds), *Syntactic Variation. The Dialects of Italy*, 119–134. Cambridge: Cambridge University Press. **Cardinaletti, A., Starke, M.** 1999. The typology of structural deficiency: On the three grammatical classes. In H. van Riemsdijk, ed., *Clitics in the Languages of Europe*, 145–233. Berlin: Mouton de Gruyter. **Chomsky, N.** 1993. A minimalist program for linguistic theory. In *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, ed. Kenneth Hale and Samuel Jay Keyser, 1–52. Cambridge, Mass.: MIT Press. **Chomsky, N.** 2013. Problems of Projection. *Lingua* 130: 33-49. **Chomsky, N.** 2015. Problems of Projection: Extensions. In E. Di Domenico, C. Hamann & S. Matteini (eds.). *Structures, Strategies and Beyond*, 1-16. Amsterdam: John Benjamins. **Halle, M., Marantz, A.** 1993. Distributed morphology and the pieces of inflection. In *The View from Building 20. Essays in Linguistics in Honor of Sylvain Bromberger*, Kenneth Hale & Samuel Jay Keyser (eds), 111-176. Cambridge MA: The MIT Press. **Kayne, R.** 1975. *French Syntax*. Cambridge, MA: MIT Press. **Longobardi, G.** 2008. Reference to Individuals, Person, and the Variety of Mapping Parameters. In *Essays on Nominal Determination: From Morphology to Discourse Management*, ed. H. Høeg Müller & A. Klinge. 189–211. Amsterdam: Benjamins. **Poletto, C.** 2000. *The Higher Functional Field in the Northern Italian Dialects*. Oxford: Oxford University Press. **Pollock, J.-Y.** 1989. Verb movement, Universal Grammar, and the structure of IP. *Linguistic Inquiry* 20:365–424. **Roberts, I.** 1998. Have/Be Raising, Move F, and Procrastinate. *Linguistic Inquiry* 29(1). 113–125. **Roberts, I.** 2010a. A deletion analysis of null subjects. In T. Biberauer, A. Holmberg, I. Roberts, and M. Sheehan, *Parametric Variation: Null Subjects in Minimalist Theory*. Cambridge: Cambridge University Press. **Roberts, I.** 2010b. *Agreement and head movement*. Cambridge: MIT Press. **Roberts, I.** 2015. OCL for SCL in Piedmontese and elsewhere. Talk given at the 10th Cambridge Italian Dialect Syntax-Morphology Meeting (CIDSM X), University of Leiden. **Roberts, I.** 2018. Object clitics for subject clitics in Francoprovencal and Piedmontese. In M. Grimaldi, R. Lai, L. Franco and B. Baldi, *Structuring Variation in Romance Linguistics and Beyond: In Honour of Leonardo M. Savoia*, 257-267. Amsterdam: John Benjamins.

Verbal "infixation" as partial deletion: a case in Cantonese verbs

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An apparent infixation pattern. In Cantonese, verbal suffixes like the perfective *zo* may alternatively serve as an infix-like element, e.g. (1)-(2) (Chan & Cheung forthcoming). Notably, the two syllables (referred to as A and B) of the disyllabic monomorphemic verb *feilou* 'fail' (an English loanword) is separated by *zo* (referred to as x). The same is true of other monomorphemic verbs such as *pisen* 'present', *sowi* 'sorry', *kuilou* 'bribe', *haaihau* 'meet (by chance)', etc.

(1) *feilou-**zo** sap-gei ci* fail-PFV ten-several time "failed a dozen times" (AB-x)
(2) *fei**<zo>**lou sap-gei ci* fail<PFV> ten-several time =(1) (A-x-B)

The apparent infixation pattern invites a metathesis analysis (e.g. Harris & Halle 2005): (2) is derived via a hypothetic rule, whichs rearranges adjacent elements.

(3) A hypothetic metathesis rule: A [B⟩⟨-x] → A <B-x><B-x> = A-x-B

However, (4) shows that phrases like frequency phrases may appear after *zo*, positing a challenge to the metathesis analysis, since it would need to rearrange multiple elements.

(4) *fei**<zo><sap-gei ci>**lou* fail<PFV><ten-several time> =(1) (A-x-XP-B)

Allowing the metathesis rule to rearrange multiple elements at the same time leads us to (wrongly) predict word orders like (5) to be possible: being blind to the syntactic structure, the rule breaks down the constituency of the frequency phrase *sap-gei ci* 'a dozen times'. This is contrary to facts.

(5) *fei [lou ⟩⟨ zo sap] gei ci → fei <lou zo sap> <lou zo sap> gei ci → *fei<zo sap>lou gei ci*

The proposal. We suggest that (2) and (4) do not involve genuine infixation. Instead, we motivate a hybrid (syntactic + phonological) approach that preserves the constituency while allowing syllable separation. Assuming that verbal suffixes head a projection above the verb, we suggest that verbal suffixation generally involve syntactic verb movement to the suffix (Tang 2003, Tsai 2001). Crucially, we propose an optional PF deletion rule triggered by affixes in (6).

(6) Affix-induced Syllable Deletion
Affixes optionally trigger deletion on an *adjacent* syllable of their hosts.

Implementation. Under the copy theory of movement (Chomsky 1995 *et seq*.), verb movement creates two copies, i.e. (7a-b). If (6) does not apply, copy deletion will erase the lower copy, giving rise to (7ci) as suffixation. If (6) applies, the second syllable (i.e. B adjacent to the suffix) is deleted as in (7cii(I)). Then when copy deletion applies to the lower copy, it only *partially* deletes the complement syllable (i.e. A) for recoverability. In effect, a suffix is now sandwiched between A and B (=7cii(II)).

(7) Derivation steps for suffixation and "infixation"
a. [-x [AB]] (base structure)
b. [<AB>-x [<AB>]] (verb movement)
ci. [<AB>-x [<AB>]] = AB-x (copy deletion targeting the lower copy, deriving (1))
cii. (I) [<AB>-x [<AB>]] (affix-induced syllable deletion in (6))
(II) [<A>-x [<AB>]] = A-x-B (partial copy deletion, deriving (2))

An immediate consequence is that it explains why the following patterns in (8) are unattested.

		adjacent syll. deletion	recoverability	copy deletion
(8) a. **lou<zo>fei*	(*B-x-A)	✗ non-adjacent deletion		
b. **fei<zo>fei*	(*A-x-A)		✗ unrecoverable	
c. **lou<zo>feilou*	(*B-x-AB)	✗ non-adjacent deletion		✗ fail to apply
d. **fei<zo>feilou*	(*A-x-AB)			✗ fail to apply

Deriving (4). We assume that the frequency phrase is (left-)adjoined to the *v*P, below the projection headed by the suffix, as in the base structure in (9a). Crucially, (9b) indicates that the verb moves across the frequency phrase to head-adjoin to the suffix. Then (6) applies and deletes *lou*, followed by the partial copy deletion on *fei* only.

(9) a. [$_{AspP}$ *-zo* [$_{vP}$ *sapgei ci* [$_{vP}$ … [$_{VP}$ *feilou*]]]] (base structure)
b. [$_{AspP}$ <*feilou*>*-zo* [$_{vP}$ *sapgei ci* [$_{vP}$ … [$_{VP}$ <*feilou*>]]]] (verb movement)
c. [$_{AspP}$ <*feilou*>*-zo* [$_{vP}$ *sapgei ci* [$_{vP}$ … [$_{VP}$ <*feilou*>]]]] (by (6) and partial copy deletion)

An extension to prefix. It is argued that the *lin…dou*-focus construction can target verbs, leading to verb doubling (Shyu 1995, Cheng & Vicente 2013). In cases of disyllabic monomorphemic verbs, it is possible to double the whole verb A+B (as in (10)). Crucially, it is possible to for B to occupy the higher position (stranding A), but not vice versa, as contrasted in (11) and (12).

(10) *Lin* ***pisen*** *keoi dou mou* ***pisen*** (*lin*-AB … AB)
even present 3SG also NEG.PFV pre(sent) "He even didn't do the presentation."
(11) *Lin* ***-sen*** *keoi dou mou* ***pi-*** (*lin*-AB … AB)
even (pre)sent 3SG also NEG.PFV pre(sent) =(10)
(12) **Lin* ***pi-*** *keoi dou mou* ***-sen*** (*lin*- AB … AB)
even (pre)sent 3SG also NEG.PFV pre(sent)

The pattern in (11) mirrors (2) and immediately follows from the proposal if we assume *lin* is a *prefix*: by (6), *lin* triggers syllable deletion on A (adjacent to *lin*), and copy deletion partially applies to the lower copy, deleting B. (12) is disallowed since syllable deletion is not adjacent.

Against a reanalysis approach. A (syntactic) reanalysis approach suggests that the disyllabic verbs like *feilou* are indeed reanalyzed as a Verb-Object phrase, a prevailing approach for separable compounds in Mandarin (Chao 1968, Huang 1984, Packard 2000, *i.a.*). However, the second syllable in disyllabic verbs barely displays nominal/object properties. First, it cannot be preceded by the nominal modifier marker *ge* (=*sen* in (13)), which is otherwise allowed on a genuine object (=*hei* 'movie' in (14)).

(13) *pi-zo sam ci* ***(*ge)*** *sen*
present-PFV three time MOD present
"presented three times."

(14) *tai-zo sam ci* ***(ge)*** *hei*
look-PFV three time MOD movie
"watched movies three times"

Also, the second syllable does not saturate the thematic requirement of the transitive verb, since the verb can still take a (preposed) thematic object (=(15)), which is surprising if the second syllable is reanalyzed as an object (*cf.* the true object in (16)).

(15) *zeong* *ni-fan-je* *pi<**zo**>sen*
DISP this-CL-thing present<PFV>
"presented on this document"

(16) (**zeong* *ni-coet-hei*) *tai-zo hei*
DISP this-CL-movie look-PFV movie
Int.: "watched this movie"

Implications. **(a)** A monosyllabic preference in Cantonese for verbs has been noted (Tang 2002, 2003, Li et al. 2016). While (6) is proposed to capture a subset of the phenomenon, it may potentially extend to capture other cases: (i) syllable deletion may be obligatory in some other environments (e.g., when suffixed by *-dak* and *-ngaang*, Tang 2002, 2003), (ii) syllable deletion may apply recursively (e.g., in A-not-A formation) (iii) idiosyncratic properties of the verb may display varying resistance to deletion (e.g., different registers, frequency, morpho-phonological structures). **(b)** We offer novel evidence for a non-lexicalist view that verbal suffixes are *syntactic heads* (*contra.* Gu 1993, Huang et al 2009). **(c)** Affixation, at least in Cantonese, is achieved by *head raising* rather than lowering (*contra.* Cheng, Yi & Xiong 2016). Only the former creates copies for partial deletion. **(d)** Copy deletion interacts with PF operations such as (6) and can be disturbed (*cf.* Lee 2020), leading to partial deletion on the word level (*cf.* Fanselow & Cavar 2002).

Selected References: **Chan**, S. S.-L., & L. Y.-L. **Cheung**. Forthcoming. "Morpho-syntax of non-VO separable compound verbs in Cantonese". *Stud. in Chi. Ling* 41(2). **Tang** S.-W. 2003. "Properties of Ngaang and the Syntax of Verbal Particles in Cantonese." *J. Chin. Linguist.* 31(2), 245-269. **Li**, D. C. S., C. S. P. **Wong**, W. M. **Leung**, and S. T. S. **Wong**. 2016. "Facilitation of transference: The case of monosyllabic salience in Hong Kong Cantonese." *Linguistics*. 54(1), 1–58.

Korean case stacking and the nominal template

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Overview. Korean exhibits a phenomenon known as case stacking, where a single nominal can bear two markers traditionally associated with case. Stacked dative–nominative marking, for instance, appears on the subject in (1) and stacked honorific nominative–nominative on the subject in (2), with the particle *man* 'only' preferably intervening between the two case markers.

(1) halameni-**hantey**?(-man)**-i** Jill-**i** kulip-ta.
grandma-DAT-only-NOM Jill-NOM miss-DECL 'Only grandma misses Jill.'

(2) halameni-**kkeyse**?(-man)**-i** Jill-**i** kulip-ta.
grandma-HON.NOM-only-NOM Jill-NOM miss-DECL 'Only grandma misses Jill.' (polite)

We show that while the inner markers in stacked nominals reflect genuine case, the outer markers are instead associated with discourse marking. Stacked "nominative" and "accusative" are in fact focus markers, whose distributions are distinct from those of genuine case marking (Schütze 2001). We propose that the inner markers are associated with the argument introducing heads Voice and Appl, and the outer markers are associated with topic and focus. By assigning inner markers low and outer markers high, our analysis derives the templatic ordering of morphemes in Korean nominals (Cho & Sells 1995) and furthermore explains the difference in distribution of honorific nominative (HON.NOM) and plain nominative (NOM).

Nominal template. Previous approaches to case stacking have assumed that HON.NOM and NOM are assigned in the same way (Levin 2016), possibly as allomorphs (Kim & Chung 2015). However, Korean nominal markers are subject to morphological co-occurrence restrictions, following the template given in (3), adapted from Cho & Sells (1995) (we omit an additional template slot that is not directly relevant to case stacking). As shown in (3), HON.NOM and NOM appear in different slots in the nominal template, while HON.DAT and DAT appear in the same slot with HON.NOM, a fact which remains unexplained in previous approaches to case in Korean. We present a syntactic approach to case stacking which also explains the morphological distribution of these nominal markers. In particular, HON.NOM is assigned by Voice and NOM by T, which captures their relative position in the nominal template.

(3)

$\text{Noun}_{\text{root}}$	Postposition		X-lim		Z-lim	
	kkeyse	HON.NOM	*man*	'only'	*i*∼*ka*	NOM
	kkey	HON.DAT	*kkaci*	'even'	*(l)ul*	ACC
	hantey	DAT			*(n)un*	TOP
	ey	LOC				

NOM as focus. Schütze (2001) provides a number of arguments showing that so-called NOM is not genuine case marking in Korean. For instance, NOM can appear on multiple constituents in the same clause, including on adjuncts. (NOM on the object is conditioned by the predicate.)

(4) a. ecey-**ka** halmeni-**kkeyse**(/**-ka**) aitie-ka manha-ss-ta.
yesterday-NOM grandmother-HON.NOM(/-NOM) idea-NOM a.lot-PST-DECL
'Yesterday, grandmother had a lot of ideas.'

Rather, NOM is associated with focus, appearing with the focus particle *man* 'only', as in (1,2), and on answers to subject *wh*-questions. NOM is also obligatory in the presence of the negated copula *anila* inducing contrastive focus (Schütze 2001), with or without case stacking, as shown in (5).

(5) halmeni(-kkeyse)*(**-ka**) anila Yenghi-ka John-ul poa-ss-ta.
grandmother-HON.NOM-NOM but.not.be Yenghi-NOM John-ACC see-PST-DECL
'Yenghi, not grandmother, saw John.'

(HON.)DAT and HON.NOM are assigned low. While plain NOM is assigned high, in the TP/CP domain, (HON.)DAT and HON.NOM are assigned low, in the VoiceP domain. This is indicated by the interaction of case marking with scope of negation in Korean (Levin 2017). In scrambled OSV clauses,

a plain NOM-marked subject with a universal quantifier always takes scope over negation, whereas a (HON.)DAT-marked subject does not. This suggests that NOM-marked subjects are located above NEG, whereas (HON.)DAT-marked subjects are located below NEG.

(6) a. holangi-ka, motun namhaksayng-**i** an-mwusewe
tiger-NOM all male.student-NOM NEG-be.afraid ($\forall > \neg$; $*\neg > \forall$)

b. holangi-ka, motun namhaksayng-**hanthey** an-mwusewe
tiger-NOM all male.student-DAT NEG-be.afraid ($\forall > \neg$; $\neg > \forall$)
'Tigers, every male student doesn't fear (them).' (Levin 2017)

Choi & Harley (2019) provide independent evidence from Korean verbal suppletion that the locus of honorific marking is low. In addition to honorific case marking, Korean can also mark honorification on the verb. Choi & Harley show that the honorific-conditioned suppletion of the verb *kyey∼eps∼iss* 'to exist' bleeds suppletion conditioned on negation (7a,b).

(7) a. $\sqrt{}$EXIST ↔ *kyey* / (NEG) — HON

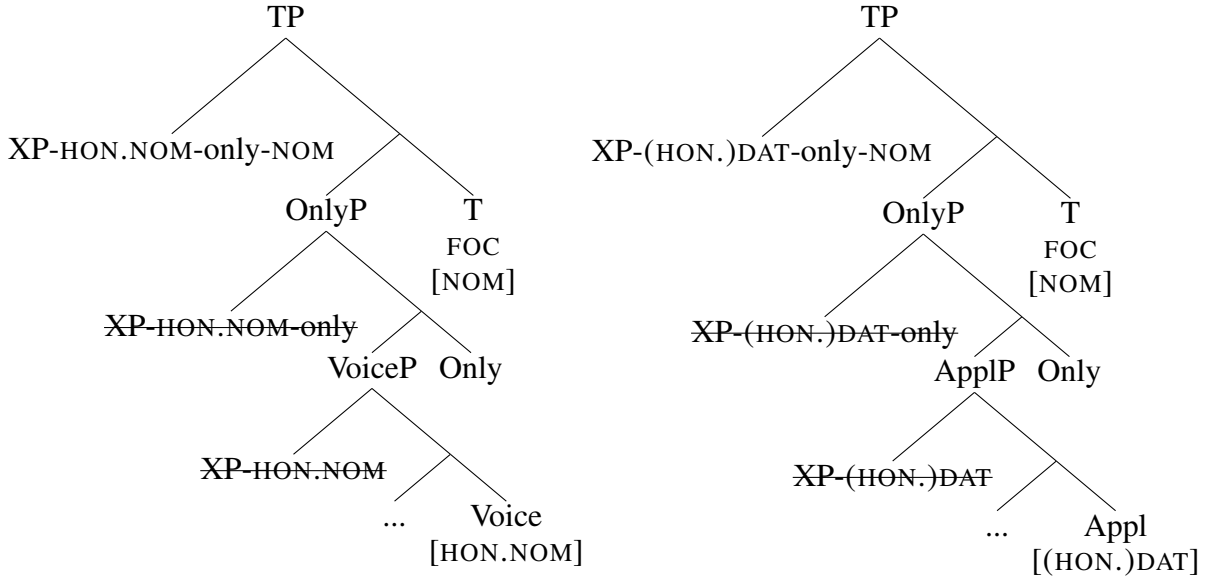
b. $\sqrt{}$EXIST ↔ *eps* / NEG — (*HON)

c. $\sqrt{}$EXIST ↔ *iss* / (*NEG) — (*HON) [elsewhere]

We propose that Voice is responsible for honorific marking on the verb as well as on the subject. HON.NOM is assigned by Voice, and (HON.)DAT is assigned by an applicative (Pylkkänen 2008), such that all honorific marking in Korean is associated with external argument-introducing heads.

Analysis. Case stacking proceeds as follows. A nominal is assigned HON.NOM or (HON.)DAT by Voice or Appl, respectively. If focused, the nominal can raise to the specifier of any overt focus-marking head, such as *man* 'only', on its way to Spec-TP, where it receives NOM and a focused interpretation from T. There may be additional focus heads above T that assign NOM, which results in multiple NOM marking when there are multiple foci.

(8)



Our analysis not only captures the syntactic and semantic properties of Korean nominal markers, but also provides an independent explanation for their templatic ordering. Only external argument-introducing heads such as Voice and Appl can assign honorific-sensitive case markers, which captures an independent fact about Korean, that the case paradigm contains HON.NOM and HON.DAT but no *HON.ACC.

Selected references. Levin, T. 2017. Successive-cyclic case assignment: Korean nominative-nominative case-stacking. *Natural Language and Linguistic Theory* 35. 447–498. Schütze, C. 2001. On Korean 'case stacking': The varied functions of the particles *-ka* and *-lul*. *The Linguistic Review* 18. 193–232.